Dump Road Area Characterization of Possible Source Areas Report
Martin State Airport
701 Wilson Point Road
Middle River, Maryland

Prepared for:

Lockheed Martin Corporation

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ACRONYMS AND ABBREVIATIONS

ASTM	ASTM International
B	analyte detected in blank sample
BaPEq	benzo(a)pyrene equivalent
$BaPEq_{HALFND}$	BaPEq half non-detect
$BaPEq_{PD}$	BaPEq positive detects
bgs	below ground surface
BTAG	Biological Technical Advisory Group
BTEX	benzene, toluene, ethylbenzene, and xylenes
CEC	cation-exchange capacity
C_i	effective solubility (mg/L) of chemical
$C_{i(1\%)}$	1% of effective solubility
cis-1,2-DCE	*cis*-1,2-dichloroethene
C_D	DNAPL saturation threshold concentration (mg/kg)
COC	chain of custody
CPT	cone-penetration test(ing)
CRA	Compass Rose Area
C^T	partitioning threshold concentration (mg/kg)
cVOC	chlorinated volatile organic compound
DA	Drum Area
DO	dissolved oxygen
DNAPL	dense non-aqueous-phase liquid
DPT	direct-push technology
DRA	Dump Road Area
DRO	diesel-range organic
EGIS	environmental geographic information system
EM	electromagnetic
Enviroscan	Enviroscan, Inc.
f_{oc}	fraction of organic carbon (unitless)
ft/day	feet per day
g/cm^3	gram(s) per cubic centimeter
GPR	ground-penetrating radar
GPS	global positioning system

GRO	gasoline-range organics
GSP	Greater Strawberry Point
H'	Henry's Constant (unitless)
HASP	health and safety plan
HI	hazard index
IDW	investigation-derived waste
J	estimated concentration
K_d	soil/water partition coefficient (milliliters per gram) ($Kd = K_{oc}f_{oc}$)
K_{oc}	organic-carbon/water partition coefficient (milliliters per gram)
L	result biased low
LNAPL	light non-aqueous phase liquid
Lockheed Martin	Lockheed Martin Corporation
MAA	Maryland Aviation Administration
MDANG	Maryland Air National Guard
MDE	Maryland Department of the Environment
µg/kg	microgram(s) per kilogram
µg/L	microgram(s) per liter
mg/kg	milligram(s) per kilogram
mg/L	milligram(s) per liter
mL/g	milliliter(s) per gram
MIP	membrane-interface probe
MRC	Middle River Complex
MSA	Martin State Airport
mV	millivolt(s)
NAVD 1988	North American Vertical Datum of 1988
NJ	tentatively identified compound
NOAA	National Oceanic and Atmospheric Administration
ORP	oxidation-reduction potential
PA	preliminary assessment
PAH(s)	polycyclic aromatic hydrocarbon(s)
PCB(s)	polychlorinated biphenyl(s)
PDF	portable document format
PHA	Petroleum Hydrocarbon Area
Ø	effective porosity (unitless)
PID	photoionization detector
PM	project manager
PPE	personal protective equipment

ppm	part(s) per million
ppmv	part(s) per million per volume
PVC	polyvinyl chloride
pVOC	petroleum volatile organic compound
QA/QC	quality assurance/quality control
RI	remedial investigation
RSL	regional screening level
ρ_b	dry-soil bulk density (gram[s] per cubic centimeter)
ρ_N	DNAPL density (gram[s] per cubic centimeter)
SP	Strawberry Point
S_r	threshold DNAPL saturation
SVOC	semivolatile organic compound
TCE	trichloroethene
Tetra Tech	Tetra Tech, Inc.
θ_w	water-filled porosity (unitless) from moisture content
θ_a	air-filled porosity (unitless)
TKN	total Kjeldahl nitrogen
TINC	total inorganic carbon
TOC	total organic carbon
TPH	total petroleum hydrocarbon(s)
TT	Taxiway Tango
TT East	Taxiway Tango Area East
TT Median Area	Taxiway Tango Median Anomaly Area
TT North	Taxiway Tango Area North
TT South	Taxiway Tango Area South
U	not detected
UJ	analyte not detected; quantitation/detection limit is greater than reported value
UR	analyte not detected; result not reliable
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UXO	unexploded ordnance
VAS	vertical aquifer sampling
VC	vinyl chloride
VOC	volatile organic compound

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Section 1
Introduction

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech, Inc. (Tetra Tech) has prepared this report documenting the 2013 field sampling and chemical analysis program at the Dump Road Area (DRA) of Martin State Airport (MSA) in Middle River, Maryland. The locations of Martin State Airport and the Dump Road Area are shown on Figure 1-1. The Dump Road Area is along the northeastern side of the runway at Martin State Airport. A portion of the area extends across Taxiway Tango into the median between the taxiway and airport runway.

This investigation performed additional characterization of the 0.7-acre wetland area east of Ponds 1 and 2 and immediately west of Frog Mortar Creek. It included (1) installation and sampling of additional groundwater monitoring-well clusters adjacent to Frog Mortar Creek along the limits of buried waste, (2) additional soil and groundwater sampling, and (3) additional sediment and surface water sampling in the wetland near the Frog Mortar Creek shoreline. Additional characterization included test pit excavations, soil borings and soil sampling, direct-push groundwater profiling, installation and monitoring of multi-level monitoring wells, and sediment and surface water sampling in the Dump Road Area site.

This investigation further evaluates the extent of hazardous materials that were historically placed or spilled in the Dump Road Area of Martin State Airport. The depth and volume of the source areas were further defined to help select and design remedial options. This investigation also incorporated additional scope to address comments from the Maryland Department of the Environment (MDE) regarding Tetra Tech's *Dump Road Source Areas Investigation Work Plan* (Tetra Tech, 2012a) and *Technical Memorandum for the Dump Road Area, Source Area Delineation* (Tetra Tech, 2012b). Specific activities of this investigation include:

- characterizing soil, surface water, sediment, groundwater, and waste conditions in the 0.7-acre wetland area west of Frog Mortar Creek and downgradient of Ponds 1 and 2, and along the creek shoreline downgradient of the landfilled waste material

- further characterizing the chemical characteristics of surface water and sediment in Pond 1

- characterizing additional areas in the Dump Road Area, based on Maryland Department of the Environment comments for Tetra Tech's *Dump Road Source Areas Investigation Work Plan* (Tetra Tech, 2012a) and *Technical Memorandum for the Dump Road Area, Source Area Delineation* (Tetra Tech, 2012b)

- assessing groundwater flow direction and gradient

- determining aquifer parameters

- assessing contaminant concentrations (horizontally and vertically) to support and update the site conceptual model

- determining the source and extent of chemicals of potential concern (COPC) detected in soil and groundwater during direct-push technology (DPT) investigations

In 2012, Tetra Tech compiled available existing data relating to possible source areas in the Dump Road Area into a technical memorandum (Tetra Tech, 2012b). Tetra Tech evaluated historical soil and groundwater data from borings, monitoring wells, membrane-interface probes (MIPs), and temporary monitoring wells (i.e., the PA-series from the Petroleum Area and the DA-series from the Drum Area) to prepare the memorandum. The memorandum summarizes the evaluated data and identifies possible source areas.

The known or suspected horizontal and vertical extent of contamination was detailed using cross-sections of the identified source areas. The memorandum also identifies data gaps and provides recommendations for additional characterization. Recommendations from this memorandum and the data obtained during the 2012 Dump Road Area source-areas investigation are the basis for the technical approach implemented in this investigation. Tetra Tech, Inc. prepared this document for Lockheed Martin Corporation as part of continuing environmental investigations at Martin State Airport, under the oversight of the Maryland Department of the Environment (MDE) Controlled Hazardous Substances Enforcement Division, formerly the state Superfund program.

This report is organized as follows:

Section 2—Site Background: Presents an overview and history of the site and describes surface and subsurface conditions observed in the field during investigations to date. This section also describes the regional geology and hydrogeology, as determined from site soil borings and the scientific literature.

Section 3—Investigation Approach and Methodology: Describes the technical approach and field methodologies for the investigation conducted in 2013.

Section 4—Investigation Results: Discusses data evaluation and results for the 2013 investigation and the distributions of primary site contaminants.

Section 5—Source Areas Evaluation Methodology: Discusses the methods used to evaluate source areas for chlorinated and petroleum volatile organic compounds at the Dump Road Area.

Section 6—Source Areas Characterization: Describes site conditions and past operations and evaluates the current distributions of volatile organic compounds in possible source areas.

Section 7—Summary: Summarizes the major findings presented in Sections 4 and 6.

Section 8—References: Cites references used in compiling this report.

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA and Dump Road Area location map_7 29 11.mxd)
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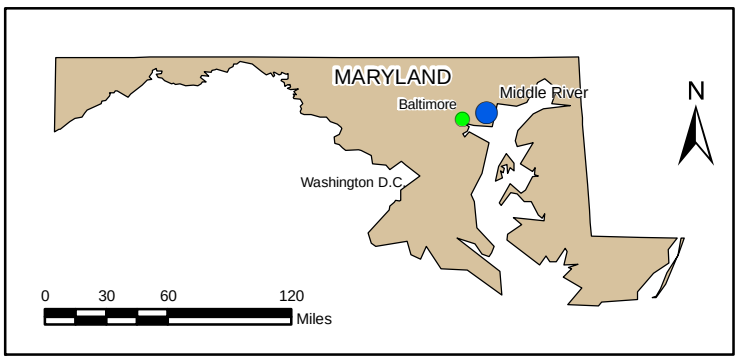

FIGURE 1-1

MARTIN STATE AIRPORT AND DUMP ROAD AREA LOCATION MAP

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

DATE MODIFIED:	CREATED BY:
10/05/11	MP

TETRA TECH

Section 2
Site Background

2.1 SITE DESCRIPTION

2.1.1 Location

Martin State Airport (MSA) is at 701 Wilson Point Road in Middle River, Maryland, and is bounded by Frog Mortar Creek to the east and Stansbury Creek to the west (Figure 2-1). Both creeks are tidal tributaries of the Chesapeake Bay and join the bay at the south side of the airport. The Dump Road Area (DRA) is in the southeastern portion of MSA and is bounded by Frog Mortar Creek to the east and the airport runway to the west. This area has been investigated since the 1990s, and Lockheed Martin Corporation (Lockheed Martin) designated the site as the DRA to distinguish it from other MSA areas under investigation (e.g., Frog Mortar Creek, Strawberry Point [SP], Greater Strawberry Point [GSP], and the Main Terminal area).

2.1.2 History

The current MSA property was part of the Glenn L. Martin Company's original 1,260-acre property, which previously included both the MSA and the manufacturing portion of the original facility now known as Lockheed Martin's Middle River Complex (MRC) (see Figure 2-1). In the spring and summer of 1929, the Glenn L. Martin Company purchased six parcels of land from private landowners. During the 1940s and 1950s, nine additional parcels were acquired from private landowners; together these parcels comprise the current areas of MSA and the MRC.

In 1932, the B-10 bomber was one of the first aircraft produced at the Glenn L. Martin Company Baltimore facility. Three runways, Hangars 1–3, and the airport administration building were built at the MSA in 1939 and 1940. Hangars 4–6 and the SP hangar were completed in 1940 and 1941, respectively. After World War II, commercial transports and jet aircraft were produced at the manufacturing portion of the facility. In July 1955, the Maryland Air National Guard (MDANG) 104th Tactical Fighter Group began leasing property from the Glenn L. Martin Company. On April 1, 1960, the 135th Tactical Airlift, previously based in Baltimore, was

transferred to MSA, and by October 1962, the 104th Tactical Fighter Group had been reorganized and designated the 175th Tactical Fighter Group.

The Glenn L. Martin Company consolidated with American Marietta Corporation in September 1961 to form Martin Marietta Corporation. On September 20, 1975, the Maryland Aviation Administration (MAA) purchased 747 acres that are now used as the airfield, of which 175 acres in the northeastern portion are now leased to MDANG. In 1995, Lockheed Corporation and Martin Marietta merged to form Lockheed Martin Corporation. Lockheed Martin, northwest of the airport, occupies 338 acres of the original 1,260-acres, and currently conducts environmental investigations and remediation at MSA and the MRC.

2.1.3 Current Conditions

MAA currently operates MSA on behalf of the Maryland Department of Transportation. MSA has an administration building (Main Terminal building), aircraft hangars, a 7,000-foot long runway, several taxiways, and the SP Hangar. MAA manages more than 130,000 square feet of heated hangar space and 190 smaller aircraft "T-hangars." The southwestern portion of MSA contains numerous aboveground fuel storage tanks for Jet A and Avgas 100LL fuels. MSA is also home to more than 20 commercial tenants providing fuels and lubricants, helicopter avionics repair, and flight instruction, as well as the Baltimore County Police aviation and marine units and the Glenn L. Martin Museum (MAA, 2012).

The DRA consists mostly of mowed grass surrounding Taxiway Tango and the runway, with heavily wooded areas in the northern, eastern, and southeastern portions of the site, and open meadows in the east–central and southeastern portions of the site. The DRA also includes portions of Taxiway Tango and the airport runway, and two small ponds (Ponds 1 and 2). Site topography is generally flat and slopes gently to the northeast toward Frog Mortar Creek. Along the Frog Mortar Creek shoreline lies a steeply sloped embankment comprised of fill placed there as part of airport construction.

2.1.4 Land Use

MSA is generally characterized as a moderately developed tract in a largely suburbanized, moderate density, populated setting. Land use surrounding MSA is, to a significant degree, a combination of mixed suburban, industrial, commercial, lightly to moderately developed tracts,

and woodland tracts. MSA is bordered to the north by Eastern Boulevard (Maryland Route 150) and Amtrak railroad lines.

Undeveloped woodland tracts and low-density residential properties are north of MSA and the Amtrak line. The MSA's eastern, southern, and western boundaries are bordered by Frog Mortar Creek and Stansbury Creek, which are wide, brackish, tidal tributaries of the middle Chesapeake Bay. The MRC lies along MSA's northwestern boundary. The Old Navy Depot—Bengies (Plant 2) is across from the MSA on Eastern Avenue. Low- to medium-density residential and light commercial land uses (e.g., shopping centers, convenience stores, restaurants, etc.) are beyond the creeks east, south, and west of MSA. Farther east and west of MSA are the high-density residential communities of Bengies Corner and Hawthorne Park. The town of Middle River is approximately 1.5 miles northwest of MSA.

2.1.5 Climate

The MSA has a humid, temperate climate, with hot humid summers and relatively mild winters. The Middle River, Maryland area receives an average of 42 inches of precipitation annually, distributed evenly throughout the year. Rainfall normally occurs in the summer as showers and thunderstorms. In winter, precipitation is typically light to heavy rainfall or snow. Tropical storms in late summer and fall, and occluded, meso-scale frontal systems (i.e., coastal low pressure systems) in winter and spring occasionally provide short-term above-average precipitation.

2.1.6 Physiography

MSA is in the western shore of the Coastal Plain physiographic province. The Coastal Plain consists of sediments composed of alluvium from the Pleistocene Epoch and Potomac Group sediments from the Cretaceous Period. Coastal Plain sediments begin at the Fall Line and follow a regional dip to the southeast at approximately 110 feet per mile (Hansen and Edwards, 1986). The Fall Line is the division between the Piedmont and Atlantic Coastal physiographic provinces. It refers to an imaginary line connecting changes in stream flow characteristics between the hard-rock upland areas of the Piedmont and the soft-sediment lowland areas of the Coastal Plain. The Coastal Plain is generally characterized by low topographic relief. However, steep embankments and hills are found along stream channels, rivers, and Chesapeake Bay.

2.1.7 Topography

Most of MSA's land surface is generally flat to gently sloping in the areas of the runway, taxiways, and surrounding support operations. The MSA runway forms a trending topographic ridge, or drainage divide, that slopes gently from the northwest to the southeast. Runway elevations range from slightly more than 20 feet above the North American Vertical Datum of 1988 (NAVD 1988) at the northern end to slightly more than 10 feet above NAVD 1988 at the southern end. The land slopes away from the runway toward Frog Mortar Creek to the northeast, and Stansbury Creek to the southwest.

In the northern portion of the DRA, land elevations range from approximately 11 feet above NAVD 1988 near the runway to approximately seven feet above NAVD 1988 at Pond 2. In the southeastern portion of the site near Frog Mortar Creek, land elevations are approximately 20 feet above NAVD 1988 at a mounded area near the creek embankment. The elevation at the top of the creek embankment ranges from approximately 10 feet above NAVD 1988 at the northern portion of the DRA to approximately 20 feet above NAVD 1988 in the southern portion. Land surface elevation at the Frog Mortar Creek shoreline is near zero feet, relative to NAVD 1988.

2.1.8 Surface Water Hydrology

MSA is bordered to the east, south, and west by Frog Mortar Creek and Stansbury Creek, which are wide, brackish, tidal tributaries of the middle Chesapeake Bay. Surface water runoff from MSA enters these creeks via localized gullies in the eastern and western undeveloped portions of the site, or via storm sewers that drain the airport runway, taxiways, and developed portions of the facility. MSA encompasses 47 drainage areas in three watersheds, forming a total drainage area of 700 acres (MAA, 2008). The airport drainage areas range from seven to more than 170 acres.

In the DRA, six drainage areas drain the runway, taxiways, and wooded areas, discharging to Frog Mortar Creek on the east side of MSA. The DRA has two small ponds (Pond 1 and Pond 2), wetlands, and a stormwater-management pond near the fire pump-house in the western portion of MSA. Pond 1 and the wetland are contained within each drainage area and do not discharge to Frog Mortar Creek. The stormwater pond near the fire pump-house discharges to the upper reaches of the Stansbury Creek tidal area.

All stormwater runoff originating from MSA discharges to outfall areas that are monitored monthly to ensure that no oily discharges to surface water occur. Secondary containment drains are also routinely inspected and emptied of stormwater. The facility maintains a "General National Pollutant Discharge Elimination System" permit (No. MDR 05501, "General Discharge" permit No. 05-SF-5501), with an effective date of November 12, 2004 and an expiration date of November 12, 2009. However, the current permit remains in effect because the Maryland Department of the Environment (MDE) has administratively extended it until they issue a new general permit.

The site general industrial permit has no monitoring requirements. However, limited monitoring is performed for the municipal storm-sewer system permit required per the federal Illicit Discharge Detection and Elimination program. This limited monitoring occurs annually and includes laboratory analysis for ammonia, dissolved oxygen, surfactants, fecal coliform, potassium, water temperature, conductivity, pH, and fluoride. Visual inspections are also routinely performed. Annual reports are submitted to MDE.

2.1.9 Geology and Hydrogeology

MSA is in the western shore of the Coastal Plain physiographic province. Regional and local studies (Vroblesky and Fleck, 1991; Chapelle, 1985) indicate that MSA lies on the Patapsco Formation. This formation consists of complex and interbedded mixtures of gray, brown, and red sands, silts, and clays originating from sediment deposition in a low coastal plain traversed by low-gradient meandering streams. The Patapsco aquifer in the Baltimore area has been divided into a sand facies and a clay facies. The sand facies consists predominantly of medium to fine sand and has moderate permeabilities (approximately 0.1 foot per day). In the Baltimore area, the Patapsco aquifer coincides with the sand facies of the Patapsco Formation and is mostly unconfined. Storage coefficients for unconfined portions of the Patapsco aquifer have been estimated at 0.01 to 0.1 (dimensionless parameter). In the confined portions of the aquifer, transmissivity values range between 1,900–3,800 square feet per day, and storativity ranges between 0.0027–0.000053 (dimensionless parameter), with an average of 0.00061 (Chapelle, 1985). Recharge to the Patapsco aquifer occurs primarily where the Patapsco Formation outcrops subparallel to the Fall Line (Vroblesky and Fleck, 1991). In the Middle River area, the Patapsco Formation outcrops within and west of the MSA. The Patapsco aquifer is the aquifer of concern at the DRA.

Below the Patapsco Formation lies a regionally extensive thick-clay confining-unit known as the Arundel Formation. It is a massive and probably impermeable unit underlying the site and surrounding area. The Arundel Formation outcrops northwest of the site and dips and thickens to the southeast. The Arundel Formation extends as far east as Cambridge, Maryland, where it is more than 600 feet thick. Regional lithologic information indicates that the Arundel Formation may be up to 150 feet thick at MSA (Vroblesky and Fleck, 1991; Chapelle, 1985). The formation probably acts as an impermeable barrier to the downward movement of any constituents found in the surficial aquifer. The base of the Arundel Formation (i.e., the top surface of the deeper Patuxent Formation) is approximately 225 feet below NAVD 1988 near MSA (Vroblesky and Fleck, 1991; Chapelle, 1985). The depth to the base of the Arundel Formation may therefore range from 235–255 feet below grade at MSA.

Below the Arundel Formation is the Patuxent Formation. The Patuxent Formation is a multi-aquifer unit comprised of various interbedded sand and silt/clay layers and rapid changes of deposited material types over short distances. Permeable sand-rich units range from bounded sand sheets to isolated sand bodies (Glaser, 1969). In the MSA area, potentiometric maps of the Patuxent Formation indicate that groundwater flows to the south and southwest, in response to industrial wells withdrawing water southwest and west of the site (Chapelle, 1985 and Curtin, 2006).

2.1.10 Vicinity Subsurface Conditions

An extensive subsurface investigation of the DRA continues. Less extensive environmental investigations have been conducted at SP and GSP, which are south and southwest of the DRA. As part of the DRA investigation, numerous shallow and deep soil borings have been advanced to collect soil samples for subsurface lithologic information. Synoptic water-level measurements, single-well permeability tests, and pumping tests have been conducted to characterize subsurface hydraulic conditions at the DRA. Figure 2-2 is a fence diagram of the generalized geology at the DRA, based on the lithology encountered in the course of subsurface investigations.

Early studies at the DRA indicated that the subsurface hydrogeology is comprised of a surficial aquifer (i.e., the Patapsco Formation) containing highly heterogeneous mixtures of unconsolidated sand, silt, gravel/sand mixtures, and clay. A layer of fill, consisting of heterogeneous sand, silt, clay, and localized industrial debris and wastes overlies these native

sediments. In the northern portion of the DRA and south of the current MDANG munitions storage area, a former tidal cove (identified as Limehouse Cove on a 1951 United States Geological Survey [USGS] topographic map) was filled in with hydraulically placed fill beginning sometime between 1938 and 1945, with most the filling work completed by 1960 (Tetra Tech, Inc., [Tetra Tech], 2013a). Current topography suggests that 10 or more feet of fill is likely present in portions of the former cove.

For data evaluation and correlation, the surficial aquifer is divided into upper, intermediate, and lower surficial-aquifer zones. The lower surficial-aquifer zone is encountered up to approximately 45–73 feet below NAVD 1988. It overlies at least several feet of stiff, dense clay. A deep groundwater study investigated the lithology beneath the lower surficial-aquifer in the DRA of MSA (Tetra Tech, 2009). Lithologic data from four deep wells indicate six to 40 feet of clay beneath the lower surficial-aquifer. Deep-well logs also indicate alternating sand and silt aquifers and clay aquitards beneath the lower surficial-aquifer. These sandy units are referred to as the deep confined-aquifer zones.

2.2 AREAS OF CONCERN

From the 1930s through the 1960s, three pits were reportedly used to dump spent battery acid, acid-type strippers, and other acidic solutions. Dredge spoils and construction debris associated with industrial operations were also reportedly placed in the pits. MDE found only two of three pits during site visits made as part of a preliminary assessment (PA) conducted in 1989 (MDE, 1989). MDE referred to the two pits as ponds in the PA; these pits were later named Acid Pit #1 (Pond 1) and Acid Pit #2 (Pond 2) in subsequent studies. Pond 1 and Pond 2 are shown in Figure 2-3. Additionally, aerial photographs from 1952 and 1957 reviewed during a 1996 DRA investigation (i.e., the July 1996 expanded investigation [Maryland Environmental Service, 1996]) show an open “burial area” or “dump” adjacent to what is now Taxiway Tango.

In July 1991, four drums containing dried zinc-chromate paint were uncovered during installation of underground electric cables adjacent to Taxiway Tango (Figure 2-3). This discovery prompted MDE to order MAA to conduct additional studies of the Taxiway Tango area. Early investigations from 1991–1996 identified four areas of concern known as the Taxiway Tango Median Anomaly Area (TT Median Area), the Drum Area (DA), two ponds

(Pond 1 and Pond 2), and the Petroleum Hydrocarbon Area (PHA). These four areas are shown in Figure 2-3. Brief descriptions of these four areas follow:

- *Taxiway Tango Median Anomaly Area*—In 1991, four buried drums containing dried zinc-chromate paint were unearthed and removed from the area between Taxiway Tango and the airport runway, northwest of Taxiway D. A construction drawing indicates fill and trash, and an initial geophysical survey indicates several electromagnetic (EM) anomalies, suggesting buried metal.

- *Drum Area*—In the forested area near wells MW-2 and MW-5, northeast of Taxiway Tango, several drums were uncovered when surface vegetation was cleared during a 1996 site investigation.

- *Two ponds*—Historical records indicate that acids may have been discharged at the present location of these ponds (approximately 450 feet and 600 feet northeast of Taxiway Tango, respectively) sometime during the 1930s through the 1960s. A third pond in the area is shown on a USGS topographic map (photo-revised in 1985) in the PA, but MDE could not locate a third pond during the 1989 site visits.

- *Petroleum Hydrocarbon Area*—The PHA is approximately 200 feet west of the ponds. Petroleum hydrocarbons were encountered while drilling a soil boring in this area during the 1996 site investigation.

These four areas became the focus of subsequent studies when chemical constituent impacts to soil, pond sediment, and groundwater became apparent. MAA first investigated Frog Mortar Creek in 1998.

From 1999–2010, Lockheed Martin conducted a remedial investigation (RI) (Tetra Tech, 2012c) and supplemental work to further delineate the extent of soil, groundwater, and pond sediment chemical contamination indicated by earlier studies at MSA. Through geophysical surveys, membrane-interface probes (MIPs), test pits, soil borings, and chemical analyses of soil and pond sediment samples, the RI identified large areas of buried fill and debris, and surface and subsurface soil contamination in and around the buried fill material and in pond sediment. Buried fill and debris were estimated to be present over approximately 25 acres of the DRA.

The fill material consists of soil, stained soil, and debris, the latter of which is comprised of concrete rubble and disposed industrial items (e.g., batteries, deteriorated drums, tires, paint cans, burned items, sludge, buckets, glass, wood, etc.). Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and several metals have been detected in soil at concentrations exceeding human health risk screening levels.

Chlorinated VOCs (cVOCs) (trichloroethene [TCE] and its degradation products), petroleum VOCs (pVOCs) (e.g., benzene, toluene, etc.), and metals have also been detected in surficial aquifer groundwater at concentrations exceeding Maryland groundwater and drinking water standards.

2.3 SOURCE AREAS CHARACTERIZATION

The DRA investigation area was initially identified in the 1989 PA as possible acid pits and was investigated in 1991 after the MAA encountered four drums adjacent to Taxiway Tango during trenching to install an electrical cable. Preliminary investigations from 1992–1996 and follow-on work to date have identified soil and groundwater contaminant-source areas through geophysical surveys, soil-gas surveys, trenches, test pits, MIP screening, soil borings, soil sample analyses, and groundwater sampling and analyses. These investigations identified a large area of soil fill and buried debris east of Taxiway Tango, extending to the base of the embankment at Frog Mortar Creek. Investigation of this fill area identified geophysical EM anomalies and areas containing buried debris, soil containing VOCs, and soil containing other contaminants such as polycyclic aromatic hydrocarbons (PAHs) and metals from past dumping and backfilling. Past dumping and backfilling has resulted in VOC contamination in soil and pond sediment at the DRA, and the development of large contaminant plumes of VOCs in groundwater in the upper, intermediate, and deep portions of the surficial aquifer east of Taxiway Tango that extend to Frog Mortar Creek.

2.3.1 Dump Road Fill Characteristics

Several events indicate that fill, debris, and wastes have been placed in the area of the DRA. According to the 1989 PA, the MSA facility manager reported that former aircraft facility employees had told him that spent battery acid, acid-type strippers, and other acidic solutions had been routinely dumped into three ponds, or "acid pits," east of Taxiway Tango. The former aircraft facility employees also told the MSA facility manager that dredge spoils and construction debris had been disposed of in these ponds. The PA investigation did not include follow-up work at the acid pits (MDE, 1989).

A recent study of historical drawings and aerial photographs identified the locations of several disposal pits and open burning areas that were present in the 1950s (Tetra Tech, 2013a). One as-built engineering drawing identified what is now Pond 1 as a designed "acid and oil disposal"

pit (see feature #1 in Figure 2-4). Historical aerial photographs show a second, slightly smaller pit southeast of and adjacent to Pond 1 (feature #2 on Figure 2-4), and a small linear pond (feature #24 on Figure 2-4) along the eastern end of feature #2. These photographs show dark, stained soil on the sides of both pits, presumably from chemical and/or fuel dumping. One photograph shows what appears to be dark product floating on the surface of the smaller pit adjacent to Pond 1. A pit and an open burning area (features #44 and #15 on Figure 2-4) are visible in the photographs near DRA wells MW-45S and DMW-1A. Other pits were identified beneath Taxiway Tango approximately 600 feet northwest of Taxiway Delta, between wells MW-24S and MW-2 (feature #43 on Figure 2-4); northwest of the PHA (features #46 and #47 on Figure 2-4); and east of wells MW-18S/I/D (feature #42 on Figure 2-4). Another open burning area and more debris piles were identified west–southwest of the DA (see features #45 and #51 on Figure 2-4).

The aerial photograph study confirms that, before filling done in the 1950s, a cove in Frog Mortar Creek existed in the northern portion of the DRA (see blue dashed outline of Limehouse Cove in Figure 2-4). These photographs show the upper reach of Limehouse Cove as near present-day Taxiway Tango. The upper reaches of Limehouse Cove were filled between 1938 and 1945, and filling of the cove continued into the 1950s, with much of it during the mid-1950s. The cove appears completely filled in in a 1959 photograph. Present day topography suggests that more than 10 feet of fill was placed in certain portions of the former cove area. The aerial photograph study also found evidence of grading and filling in areas south of the cove and in the Compass Rose Area (CRA).

A 1956 United States Army Corps of Engineers map and soil profile found during a subsequent file review indicates an area of fill and trash west of the ponds, approximately 900 feet long and five feet deep, underlying Taxiway Tango. This discovery prompted MAA to conduct a geophysical survey of a 200- by 1,600-foot area adjacent to Taxiway Tango between the taxiway and the runway. Numerous geophysical anomalies were detected, indicating possible buried metal within the survey area. This area became known as the TT Median Area because of these anomalies. The top surfaces of the anomalies were estimated to be at shallow depths of 2–3 feet below grade. During a 1996 environmental investigation of the DRA (Maryland Environmental Service, 1996), several drums were uncovered in the forested area near wells MW-2 and MW-5

northeast of Taxiway Tango. These discoveries indicate that industrial debris and wastes may possibly be in the subsurface at the DRA.

In 2000, trenches and two test pits were excavated in the TT Median Area and DA of the DRA (Tetra Tech, 2000). Debris types were noted in the field and fill depths and thicknesses were determined for each test pit and trench. A geophysical survey of the TT Median Area and the area east of Taxiway Tango in 2007 identified EM anomalies suspected of containing conductive metallic/magnetic objects in the subsurface (Tetra Tech, 2012c). These anomalous areas were investigated via test pits A1 through A44 in 2008–2009 to confirm the geophysical investigation findings, to evaluate fill depth, and assess any buried materials.

The 2007 geophysical survey and follow-on test-pit investigation (Tetra Tech, 2012c) delineated several geophysical anomaly areas at the DRA. The EM anomaly areas range in size from 0.18 acres for Area 3 to 5.10 acres for Area 2. Non-anomalous EM areas were also found on-site that do not indicate buried metal or debris. The geophysical survey indicated areas and buried debris suspected of containing waste. These were designated Areas 1–10, and the fill/debris thicknesses and fill/debris maximum depths of the test pits and trenches were plotted and contoured in figures included in the *Dump Road Area Characterization of Possible Source Areas Report* (Tetra Tech, 2013b). Detailed descriptions of the 10 areas and test pit results are in that report and are therefore not repeated herein. However, the findings described below are for the areas related to the scope of work of this investigation (Tetra Tech, 2013b).

- *Area 2*, in the northern portion of the site, includes Pond 2 to the east and extends past Taxiway Tango to the west. This area includes test-pit excavations TT-EX-1, A1, A2, A14, A15, A24, A25, A34, and A36. Test pits A26, A35, and A42 are immediately south, north, and east, respectively, of the Area 2 boundaries. Elevated field measurements of VOCs in soil (jar head-space analysis) range from 1.2 parts per million per volume (ppmv) at A26 to greater than 2,000 ppmv at excavation TT-EX1.

- *Area 9* is a 2.07-acre area in the northeastern portion of the site. It is a densely vegetated area outside the MSA security fence bordering Frog Mortar Creek where geophysical surveying could not be conducted due to steep terrain and dense vegetation. Three test pits (A16, A17, and A44) were excavated in this area to determine the presence, thickness, and depth of possible fill and buried debris. Fill was not encountered at A16, although a black sludge-like soil and a strong odor of what was described as paint thinner was found at eight to 10 feet below grade.

- *Non-anomalous areas*—Test pits N2, N3, N4, N6, N7, and N8 were excavated in non-anomalous areas outside of Areas 1 through 10. The fill material at test pit N4 (north of Pond 1) is three feet thick and contained a greenish-black liquid and an odor that provided a field reading of 700 ppmv for VOC. Debris encountered in this pit includes glass and wood.

2.3.2 Soil Borings B-8 and B-15

MAA expanded its investigation of soil and groundwater quality in 1996 to include the fill area between Taxiway Tango and Frog Mortar Creek (Maryland Environmental Service, 1996). This investigation involved the area east of Taxiway Tango, including the two former acid pits (i.e., ponds) that had been identified in the 1989 PA. Three groundwater monitoring wells (MW-4, MW-5, and MW-6) were installed during the expanded investigation. In addition, 25 DPT soil borings and five manual soil-probe borings were advanced in this area to depths ranging from six to 22 feet below grade. Boring B-8 was advanced in the DA southwest of current well MW-5, and soil boring B-15 was advanced near the unpaved road in the PHA, adjacent to current well cluster DMW-9S/I/D.

A void was encountered while advancing soil boring B-8. Neither the boring log nor the report includes clear details regarding this void; however, the boring log does indicate that the void may be from a buried tank or container at depths of eight to 13 feet. No lithology is listed from two to eight feet in the soil lithology column of the boring log for B-8, but soil samples from five and 10 feet are described, and continuous lithology is shown in the log from eight to 14 feet (the bottom depth of the soil boring). The report indicates that the void is 11 feet long.

Soil at the 12 to 14 feet depth interval in boring B-8 was reported as having a strong odor and a high field reading (greater than 2,500 ppmv for total VOCs using a portable photoionization detector [PID]). The boring log also indicates that pure product was observed at this depth. Soil samples from the 12–14 foot depth interval (as noted in the soil boring log) were submitted to both the field laboratory and to an off-site analytical laboratory for chemical analyses (note, however, that Table 1 in the 1996 expanded investigation report lists the sampling depth as 10–14 feet). The field laboratory-analyses of soil from boring B-8 found high concentrations of TCE (6.2 milligrams per kilogram [mg/kg]) and total petroleum hydrocarbons (TPH)-diesel-range organics (DRO) (19,000 mg/kg). However, the off-site laboratory analyses reported a much lower TCE concentration (130 micrograms per kilogram [µg/kg], which is equivalent to 0.130 mg/kg).

Monitoring well MW-5 was installed in January 1996 directly downgradient and 12 feet east of boring B-8; this well is screened from 19 to 39 feet below grade. In January 1996, TCE, *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and toluene were detected in groundwater samples collected from MW-5 at concentrations of 63,000, 38,000, and 6,900 micrograms per liter (µg/L), respectively. The January 1996 TCE concentration (63,000 µg/L) indicated the likely presence of TCE dense non-aqueous phase liquid (DNAPL) at or near well MW-5.

During the same investigation, "free product" was also observed at depths of four to seven feet in boring B-15, located in the dirt access road near the PHA. The type of product observed was not described in the report. A soil VOC reading of 9,300 ppmv was recorded at the groundwater table six feet below grade. This was presumably petroleum-related product (light non-aqueous-phase liquid), based on elevated field analysis of soil samples from four to seven feet indicating elevated diesel-range organics (17,000 parts per million) and a subsequent laboratory analysis indicating elevated xylenes (13,000 µg/kg). Laboratory results also reported TCE in boring B-15 soil at 140 µg/kg.

Well MW-4 was installed in January 1996 near borings B-1 and B-15 to assess the strong petroleum odor observed at B-1. In January 1996, TCE was not detected, and only low concentrations of other VOCs were detected in groundwater from this well. MW-4 is screened from four- to 30-feet below grade.

From March to May 2000, the source identification and assessment program (Tetra Tech, 2000) further investigated areas previously identified as possible chemical-release areas. Each area was investigated through a combination of excavations, localized trenching, drilling of soil borings, and sampling and laboratory chemical analyses of soil, sediment, and groundwater samples. Shallow soil from Pond 1, Pond 2, and the PHA was investigated by collecting 15 soil samples at depths of 11 feet or less (typically four to five feet deep) from drilled soil borings. The PHA soil borings were near soil boring B-15 (advanced during the 1996 confirmation investigation), which contained petroleum hydrocarbons.

The highest reported concentration of the petroleum-related compounds of benzene, toluene, ethylbenzene, and xylenes (BTEX) at the PHA was 2,138,900 µg/kg, detected in a sample collected from test pit DR-A33 (six-feet deep). Soil boring PHA-SB-1, advanced adjacent to soil boring B-15 (where free product had been observed at 4–7 feet), had a field VOC reading of

9,300 ppmv for soil at six feet below grade. BTEX were detected at 1,470 µg/kg adjacent to boring B-15 in sample PHA-SB-1–4 collected at a depth of four feet. Many elevated BTEX concentrations, including the concentration detected at DR-A33, were detected at depths near the water table. BTEX were detected at low concentrations ranging from 2.97 to 20.47 µg/kg in deep subsurface soil samples at borings DR-SB-7 (16 and 20 feet), DR-SB-17 (19 feet), DR-SB-10 (24 feet), and MIP-25 (40 feet).

In general, however, current (2012-2013) TCE concentrations from wells DMW-7S (4,700 µg/L), MW-5 (not detected), MW-40S/I (3,900 and 6,800 µg/L, respectively) and probe groundwater-samples CPT-11 through CPT-15 (10-9600 µg/L) do not indicate the presence of DNAPL. However, TCE concentrations of 9,600 µg/L at CPT-13 (40 feet deep), 8,000 µg/L at CPT-12 (30 feet deep), and 7,200 µg/L at CPT-11 (35 feet deep) suggest that additional probe groundwater sampling are required to further assess the possible presence of DNAPL in these areas. High concentrations of *cis*-1,2-DCE and vinyl chloride at many DA probe–groundwater sampling locations, particularly those downgradient of DMW-7, indicate that degradation of TCE is occurring at the DA. This higher level of degradation is likely in response to past injections of substrate during a pilot-scale test in 2007.

2.3.3 Soil and Groundwater Contaminant Sources

As discussed in Section 2.2, previous investigations have identified four primary contaminant source areas for TCE (and other associated cVOCs) and BTEX:

- TT Median Area
- DA
- Ponds 1 and 2
- PHA

Review of existing data confirms all but Pond 2 as primary source areas for DRA soil, pond sediment, and groundwater contamination. Results for shallow sediment samples collected from Pond 2 do not indicate that this pond is a VOC source for the DRA. The four possible source areas were the focus of the initial investigations conducted in the 1990s and of follow-on work conducted to date. However, the *Dump Road Source Areas Investigation Work Plan* (Tetra Tech, 2012a) and *Technical Memorandum for the Dump Road Area, Source Area Delineation* (Tetra Tech, 2012b) identified three additional areas of elevated VOCs in soil and groundwater that require further investigation. These areas were identified as:

- *Taxiway Tango Area*—East (TT East)
- *Taxiway Tango Area*—North (TT North)
- *area east of Pond 1*

The 2012 source area investigation was designed to gather additional environmental data at all seven identified areas. The 2012 historical aerial photograph and document review (Tetra Tech, 2013a) confirmed the location and use of Pond 1 as an acid and oil pit, and identified other operational features such as debris piles at the DA (feature #51 on Figure 2-4) and an open burning area and open pit at TT East (features #44 and #15 on Figure 2-4). Based on the review of aerial photographs, historical documents, and previous chemical data, the *Dump Road Area Characterization of Possible Source Areas Report* (Tetra Tech, 2013b) also identified other features that may be possible chemical source areas. That investigation identified the following possible source areas:

- *former Pond 3 and linear pond*—ponds south of Pond 1 (features #2 and #24 on Figure 2-4)
- *former open burning area and pit*—features #15 and #44 on Figure 2-4
- *former Ponds 5 and 6*—features #46 and #47 on Figure 2-4
- *DMW-4 former debris pile area*—feature #51 on Figure 2-4
- *Taxiway Tango South—former disturbed area*—feature #53 on Figure 2-4
- *former Pond 7*—feature #42 on Figure 2-4 and currently a wetland
- *former ammunition or fuel bunkers*—features #20 and #26 on Figure 2-4 (same area as TT North)

The former ammunition or fuel bunkers (features #20 and #26) are in TT North, feature #51 (former debris piles) is in the DA, and the former open burning area and pit (features #15 and #44) are in TT East. Therefore, these features are combined with the previously identified TT North, DA, and TT East source areas. Combining previous sites and historical (former) features, the following areas and media have been identified as possible TCE source areas:

- *PHA, Pond 1*—surface sediment/subsurface soil, groundwater
- *TT Median Area*—subsurface soil, groundwater

- *TT East, former open burning area and pit (features #44 and #15)*—subsurface soil, groundwater
- *DA, former debris piles (feature #51)*—surface and subsurface soil, groundwater
- *TT North, former ammunition or fuel bunkers (features #20 and #26)*—subsurface soil, groundwater
- *area east of Pond 1*—subsurface soil, groundwater
- *former Pond 3 and former linear pond (features #2 and #24)*—groundwater, soil is unknown
- *DMW-4 former debris pile area (feature #50)*—soil, groundwater

The affected media are unknown for the following possible source areas:

- *former Pond 4/open burning (OB) area (features #43 and #45)*—surrounding samples indicate trace to low concentrations of TCE in soil and groundwater
- *former Ponds 5 and 6 (features #46 and #47)*
- *former Pond 7 (feature #42)*
- *Taxiway Tango South*—former disturbed area (feature #53)

The following areas and media are considered possible BTEX sources, as identified through previous investigations (Tetra Tech, 2013b) and combining sites with historical (former) features:

- *PHA, Pond 1*—surface sediment/subsurface soil, groundwater
- *TT Median Area*—subsurface soil, groundwater
- *TT East-former open burning area and pit (features #44 and #15)*—subsurface soil, groundwater
- *DA, former debris pile (feature #51)*—groundwater
- *DMW4 former debris pile area (feature #50)*—soil (groundwater is unknown)

Affected media are unknown for the following possible BTEX source areas:

- *former Pond 3 and linear pond (features #2 and #24)*—soil is unknown
- *former Pond 4/open burning (OB) area (features #43 and #45)*—samples collected nearby indicate trace to low concentrations in soil and groundwater
- *former Ponds 5 and 6 (features #46 and #47)*

- *former Pond 7 (feature #42)*
- *Taxiway Tango South*—former disturbed area (feature #53)

Detailed discussions of known and possible VOC source areas, along with the chemical results of historical and 2012 sampling, are in the DRA source area characterization report (Tetra Tech, 2013b) and are not repeated herein. The known and possible VOC source areas listed above are shown in figures of the current report.

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Main Terminal and Surrounding Features_revised 1 13 12.mxd)
1/13/2012 -- 1:01:35 PM



Source: Google Earth Pro, 2010

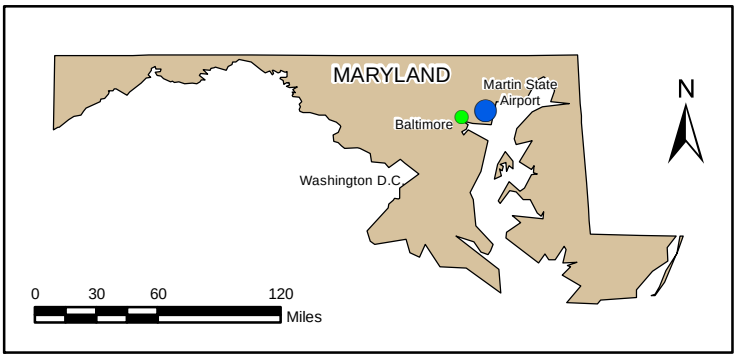

FIGURE 2-1

MARTIN STATE AIRPORT AND SURROUNDING FEATURES

Frog Mortar Creek
Lockheed Martin, Martin State Airport
Middle River, Maryland

DATE MODIFIED:	CREATED BY:
1/13/12	MP

TETRA TECH

P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\FENCE_SEP2009_G.MXD 10/06/11 JEE

A
MW34S
MW34I
B
MW33I
MW-15S
MW-15I
MW-15D
W'
MW17S
MW17I
D
W
MW07
MW04
DMW09S
DMW09I
DMW09D
MW16S
MW16I
MW16D
MW18S
MW18I
C
MW26S
X'
DMW03S
DMW03I
DMW03D
X
DMW02S
MW25S
MW25I
DMW10S
DMW10I
MW20S
MW20I
MW20D
Y
Y'
DMW04S
DMW04I
DMW11S
DMW11I
MW22D
MW21D
DMW05S
Z'
DMW05I
DMW05D
DMW08S
DMW08I
DMW08D
Z
TT12
MW23S
MW23D
DMW06S
DMW06I
DMW06D
MW01
DMW07S
DMW07I
DMW07D
A'
V'
TT13
MW19S
MW19I
MW19D
MW24S
MW24I
MW06
B'
MW29D
AIRPORT RUNWAY
MW32S
MW32I
MW30D
D'
V
Deep
Confined
Aquifers
MW31D
C'
TAXIWAY TANGO
Frog Mortar Creek
Surficial Aquifers

FIGURE 2-2

GEOLOGIC FENCE DIAGRAM OF THE DUMP ROAD AREA

LEGEND

MATERIALS

- HIGHER PERMEABILITY (TYPICALLY >10 FT/DAY): SAND AND SAND & GRAVEL
- MEDIUM PERMEABILITY (TYPICALLY 1-10 FT/DAY): MIXTURE OF SAND, SILT, AND/OR SOME CLAY
- LOWER PERMEABILITY (TYPICALLY <1 FT/DAY): CLAY AND SILT & CLAY

Hydrostratigraphic units were interpreted from lithology information of boring logs and slug test results.

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

DATE MODIFIED: 10/06/11

CREATED BY: JEE

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Dump Road Features Fig 2-1_revised 1 13 12.mxd)
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FIGURE 2-3

AREAS OF CONCERN
DUMP ROAD AND RUNWAY AREA

LEGEND

- POND
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- MARYLAND AIR NATIONAL GUARD BOUNDARY

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 100 200 Feet

N

DATE MODIFIED: 11/1/13

CREATED BY: MP

TETRA TECH

FIGURE 2-4

DUMP ROAD AREA
HISTORICAL FEATURES
MARTIN STATE AIRPORT

Legend

Historical Features

- Bermed Structure
- Bunker Ammo or Fuel
- Debris Piles
- Dike/Berm
- Dike/Berm Terraced
- Disturbed Earth
- Earthen Mound
- Fill
- Fuel Truck Bunker
- Open Burning
- Pond
- Pond/Pit

Site Area Boundary

- Maryland Air National Guard

Shorelines from Aerials

- 1959
- 1952
- 1945
- 1941
- 1938

NOTE: Locations of features 43 and 45 were taken from oblique aerials and are approximate in size and location.

Background Photo Source: USDA - July 27, 2011

Well & Test Pit Legend

- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- TEST PIT

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 75 150 300 Feet

N

DATE MODIFIED: 1/17/13

CREATED BY: LR

TETRA TECH

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Section 3
Investigation Approach and Methodology

Tasks conducted in 2013 at the Dump Road Area (DRA) were intended to assess the subsurface conditions adjacent to Frog Mortar Creek and east of monitoring wells MW-18I, DMW-3I, and DMW-2, and to determine potential contaminant pathways and concentrations toward the creek. Additional samples were also collected to further delineate known source areas in the DRA and to help define the possible source areas identified in the DRA source area characterization report (Tetra Tech, Inc. [Tetra Tech], 2013b). The 2013 DRA field program entailed the following activities:

- obtaining utility clearances, an access agreement, and associated permits for intrusive investigations from Lockheed Martin Corporation (Lockheed Martin), Martin State Airport (MSA) and the Maryland Aviation Administration (MAA) to conduct the planned field activities

- excavating a total of seven test pits in three areas based on comments from the Maryland Department of the Environment (MDE) for the previous version of this DRA source area characterization report (Tetra Tech, 2013b):

    - the area east of Ponds 1 and 2 and along Frog Mortar Creek, and in the area near four test pits (at soil boring locations B8 and B15, advanced in 1996), to further assess free product and/or subsurface anomalies described on the boring and test pit logs

    - test pit location N4, to further evaluate the black/green liquid described on the N4 test pit log

    - test pit location A16, where a black sludge-like soil and a strong solvent odor were previously encountered

- advancing 10 soil borings for lithological characterization using a direct-push technology (DPT) drill rig, and collected discrete soil samples to a depth of approximately 30 feet below grade

- collecting more than 100 discrete groundwater samples from 22 locations to depths of up to 60 feet below grade (typically at five-foot intervals) using a DPT drill rig

- installing six monitoring well clusters (each consisting of three two-inch-diameter groundwater monitoring wells, including a shallow, intermediate, and deep well screened at approximately 20, 40, and 60 feet below grade, respectively) to characterize groundwater conditions downgradient of the wetlands west of Frog Mortar Creek, downgradient of Ponds 1 and 2, and along the Frog Mortar Creek shoreline downgradient of the landfilled waste material

- conducting a synoptic round of water level measurements that included existing monitoring wells throughout MSA and the 18 newly installed groundwater monitoring wells

- collecting groundwater samples from the 18 new monitoring wells

- collecting surface water samples from three locations in the 0.7-acre wetland near the Frog Mortar Creek shoreline and from two sampling points in Pond 1

- collecting sediment samples from three locations in the 0.7-acre wetland near the Frog Mortar Creek shoreline, and from three sampling points in Pond 1

- surveying the locations of test pits, soil borings, DPT groundwater borings, and newly installed groundwater monitoring wells using a Maryland-licensed surveyor

- collecting, storing, and characterizing investigation-derived waste (IDW), and disposing of that waste at an off-site, Lockheed Martin-approved treatment or disposal facility

- performing laboratory chemical analyses and chemical-data validation on soil, groundwater, surface water, and sediment samples

3.1 MOBILIZATION/DEMOBILIZATION

Tetra Tech procured the required subcontractors and began mobilization in July 2013. Mobilization included:

- coordinating site access with Lockheed Martin and MSA facilities personnel

- obtaining utility clearance for the proposed soil borings and groundwater monitoring wells, using both the Miss Utility clearinghouse and a private utility-locating firm, as described in Section 3.2

- mobilizing subcontractors, equipment, personnel, and materials to the site

- implementing a site-specific health and safety plan (HASP)

- arranging a decontamination area

Demobilization activities included:

- demobilizing equipment and materials from the site
- performing general site cleanup and trash removal at work completion
- repairing landscaping, ground, and other surfaces as necessary at work completion
- managing IDW (as described in Section 3.10)

The Tetra Tech field operations leader coordinated mobilization/demobilization, including an equipment inventory to ensure availability, purchasing and leasing of equipment as required, and staging equipment for efficient loading and transport to and from the site after each activity.

Appropriate Tetra Tech personnel familiarized themselves with the site-specific HASP and the respective safe work permits therein. Tetra Tech held mandatory health and safety tailgate meetings for all involved workers, including subcontractors, before each day's field events. All personnel working on-site received site-specific safety training from the Lockheed Martin safety manager. Subsequent to this training, subcontractors were issued a security pass allowing site access.

3.2 SITE ACCESS, PERMITS, AND UTILITY CLEARANCE

Tetra Tech obtained the required access agreements and permits and completed the required utility-clearance activities before starting fieldwork. Site preparation included:

- notifying the underground utility-location center Miss Utility (1-800-257-7777; www.missutility.net)
- reviewing facility and site utility maps
- following Enterprise Operation 28 (Lockheed Martin, 2008) and the Lockheed Martin "digging authorization" form and obtaining the required signatures (Lockheed Martin, 2009). Activities described in this report were not carried out on Lockheed Martin-owned or operated property, so signatures of Lockheed Martin representatives were obtained at the discretion of the approving personnel.
- obtaining required permits from MAA (airport zoning permit, building inspection permit, and the digging authorization permit) for the proposed work before beginning any drilling
- obtaining monitoring well permits
- contracting a private utility-locating firm (Enviroscan, Inc. of Lancaster, Pennsylvania) to identify and mark any subsurface utilities/anomalies

Tetra Tech worked closely with MSA, MAA, and their tenants to inform all parties of the field schedule. The project team conducted a site walk to observe current operations, structures, and ground conditions, including topography, vegetation, and ground-surface anomalies that could represent possible constraints on field activities.

Each drilling location was screened for subsurface utilities. In addition to calling in a Miss Utility ticket, Enviroscan was contracted to mark any underground utilities and subsurface geophysical anomalies. This private utility-locating firm used typical utility-locating equipment representing the best available technology, including a Fisher TW-6 electromagnetic pipe and cable locator/tracer, a Radiodetection cable-avoidance tool and Genny pipe and cable locator/tracer, a Radiodetection model RD4000 multi-frequency pipe and cable tracer, and a GSSI SIR-2000 ground-penetrating radar (GPR) system. All utilities within a 30-foot radius of each designated location were located and marked with paint on the ground.

Soil boring and monitoring well locations were offset as necessary based on the location of subsurface utilities. Borings were located at the minimum allowable distances from underground utilities, as stipulated in the HASP. Permits, the Miss Utility clearance, and the Enviroscan utility screening report are in Appendix A. Access to the DRA was coordinated through MSA operations. Tetra Tech maintained radio communication with the MSA air traffic control tower during field activities with regard to the daily field schedule.

3.3 FIELD METHODOLOGY

Methods used for the 2013 DRA field investigation are discussed in the following sections. Methods are provided for:

- test pit excavation and associated sampling
- installation of groundwater monitoring wells and associated soil sampling
- sampling and chemical analyses of soil, groundwater, surface water, and sediment
- DPT soil and groundwater sampling
- collection of groundwater levels

3.3.1 Test Pit Investigation

Four test pits (TP-A76 through TP-A79) were excavated in the following areas (Figure 3-1):

1) **Test pit location A16 in Area 9 (TP-A76)—**to investigate the black sludge-like soil and a strong solvent odor previously encountered

2) **Test pit location N4 (TP-A77)—**to further evaluate the black/green liquid described in the N4 test pit log

3) **Near 1996 soil borings B-8 (TP-A79) and B15 (TP-A78)—**to evaluate the presence of strong odors and product (likely petroleum product) in soil in areas with elevated VOC levels (near previous soil borings B-8 and B-15, advanced in 1996)

Three additional test pits (TP-A80 through TP-A82) were excavated in areas of concern indicated by historical observations and detections. Figure 3-1 is a map showing the test pit locations. The summary and rationale for the test pit locations are in Table 3-1.

Test pits were excavated using an excavator (rubber-tired backhoe) to depths that extended through the waste material to natural subsurface soils, or until further excavation was precluded by equipment limitations or by encountering groundwater. At each test pit excavation, soils were described and logged by a qualified geologist. Soils were screened for volatile organic compounds (VOCs) using a photoionization detector (PID) and a consistent-headspace screening methodology (e.g., zip-top bag technique). Waste materials, soil type, and anthropogenic (human-made) material encountered in the test pits were described in the test pit logs and photographed (field-sample log sheets and test pit logs/photographs are in Appendix B and Appendix C, respectively). Each test pit was located using a global positioning system (GPS), and final locations were surveyed by a Maryland-licensed surveyor.

One composite soil sample was collected from each test pit, as requested by MDE, and submitted for laboratory analyses. These composite samples consisted of a minimum of five grab samples from the excavated soil and waste pile, focusing on material exhibiting clear evidence of contamination (i.e., odor, PID readings, appearance, etc.). Two grab soil-samples were also collected from the three remaining test pits using the same criteria and methodology. In the absence of identifiable impacts, grab samples were collected from the upper three feet of the test pit and from the interval directly above the water table. Large debris such as pieces of glass, metal, fabric, or masonry was not included with the samples. The presence of such debris and the grab-sampling location(s) were recorded on the test pit log. Approximate percentages of debris

types based on volume (e.g., 50% concrete, 10% plastic, etc.) were estimated for each test pit and recorded on the test pit log sheet. Soil samples were analyzed for VOCs; semi-volatile organic compounds (SVOC), including 1,4-dioxane; polychlorinated biphenyls (PCB); total petroleum hydrocarbons (TPH) -diesel-range organics (DRO)/gasoline-range organics (GRO); and priority pollutant metals.

Test pits were backfilled after environmental characterization was completed. Excavated material was used as backfill; any large debris was placed in the bottom of the excavation. The backfill material was compacted in lifts using the excavator bucket, to prevent subsidence, and the ground surface was restored to its original grade. Surface soil that had been set aside during test pit excavation was restored at the surface to complete the site restoration. No personnel were allowed to enter the pits, and test pits did not remain open overnight. No debris or excess soil were left near the test pit. Test pit excavations in 1999 uncovered several inactive (i.e., dummy) bombs; Tetra Tech therefore provided visual monitoring for unexploded ordnance (UXO) during test pit excavations. No UXO were found during this investigation.

3.3.2 DPT Soil Investigation

Ten soil borings (SB-187 through SB-196) were advanced to depths of approximately 30 feet below grade using a mobile all-terrain-vehicle track-mounted DPT drill-rig. These borings specifically targeted the following three areas of the DRA, as shown in Figure 3-2:

- *boring SB-187*—in Taxiway Tango Area—North (TT North), where elevated levels of trichloroethene (TCE) have been detected in soil at SB-31
- *borings SB-188 through SB-192*—in the eastern portion of the DRA near Frog Mortar Creek and downgradient of wells that have exhibited elevated VOC concentrations (i.e., monitoring wells MW-18S/I/D, DMW-3S/I/D, and DMW5S/I/D)
- *borings SB-193 through SB-196*—in the Drum Area (DA), where elevated concentrations of TCE have been detected in shallow soil, but no deep soil samples have been collected here

Locations of the soil borings were based on MDE comments regarding the 2012 DRA source areas work plan (Tetra Tech, 2012a), historical observations and detections, and the results of the test pit investigation discussed in the previous section. Figure 3-2 shows the locations of the DPT soil borings. Table 3-2 provides a summary and the rationale for the boring locations.

Continuous soil samples (DPT macro-cores) were collected for lithologic description and field screening. Soil borings were advanced by a Maryland-licensed driller and continuously logged and screened in the field for VOCs. Soils were described on a lithologic log prepared by a qualified geologist and screened with a PID using a consistent headspace screening methodology (e.g., foil-sealed jar or zip-top bag technique).

Two soil samples from each boring were collected for laboratory analysis based on the water table depth, DPT/vertical–aquifer sampling (VAS) groundwater-data field-screening results, and visual evidence of possible contamination, such as staining, discolorations, and odors. When no contamination was evident and no preferential migration or preclusion layers were identified, shallow and deep soil samples were collected. Soil samples were analyzed for VOCs, SVOCs including 1,4-dioxane, PCBs, TPH-GRO and TPH-DRO, and priority pollutant metals. A subset of these soil samples were analyzed for total organic carbon (TOC), total inorganic carbon (TINC), cation-exchange capacity (CEC), nitrates, phosphates, total Kjeldahl nitrogen (TKN), and pH. These parameters are used to assess soil reactivity and buffering of metals, nutrient availability, and buffering capacity for possible *in situ* remediation technologies.

Borings were located using a GPS, and final locations were surveyed by a Maryland-licensed surveyor. Brush and small trees had to be cleared to enable the DPT rig to access boring locations; MAA approved this clearing. Upon completion, all boreholes were pressure-grouted from the bottom of the borehole to ground surface, using a tremie pipe.

3.3.3 DPT Groundwater Investigation

Discrete groundwater samples were collected from 22 locations using DPT (DPT-23 through DPT-43B) to undergo VOC chemical analyses at an off-site laboratory. At each DPT location (shown on Figure 3-3), groundwater samples were collected approximately every five feet below the depth at which groundwater was first encountered, to a maximum target depth of 60 feet below grade. However, all but one DPT boring were terminated at depths less than 60 feet due to probe refusal.

Groundwater samples were collected using a reusable, three-foot-long stainless steel groundwater-sampling probe fitted with a one-foot screen. The push rods and stainless steel sampling probe were decontaminated before each sample collection to minimize sample

cross-contamination. After the groundwater samples had been collected at each location, the DPT borehole was grouted using bentonite chips.

Groundwater was analyzed by TestAmerica of North Canton, Ohio at their off-site laboratory. Analytical results are in Appendix D, as are the data-validation reports. The summary and rationale for the DPT groundwater sampling locations is in Table 3-3.

3.3.4 Borehole Drilling and Monitoring Well Installation

Eighteen groundwater-monitoring wells were installed at the DRA as part of this investigation. Soil samples were collected during borehole drilling. The locations of the new wells are shown in Figure 3-4. A summary and rationale for their location is in Table 3-4.

The objectives of these wells were to:

- characterize groundwater conditions east of previously existing downgradient perimeter wells and at locations closer to Frog Mortar Creek to update the conceptual site model
- provide data to further assess chemical loadings and groundwater flow (i.e., vertical flow components) near Frog Mortar Creek in support of the groundwater modeling program
- provide data to further evaluate the hydraulic relations between groundwater and Frog Mortar Creek for the groundwater modeling program
- provide locations to estimate surficial aquifer parameters near Frog Mortar Creek for the groundwater modeling program
- provide long-term monitoring locations to evaluate the performance of the groundwater remedy at locations near Frog Mortar Creek

Six well clusters were installed (MW-46S/I/D, MW-47S/I/D, MW-48S/I/D, MW-49S/I/D, MW-50S/I/D, and MW-51S/I/D), comprised of three wells each: the shallow- ["S"] and intermediate- ["I"] depth wells were nested, and the deep ["D" level] well was independently installed nearby. Screen midpoints for the shallow, intermediate, and deep monitoring wells were set at approximately 20 feet, 40 feet, and 60 feet below grade, respectively. The screen depths were selected to monitor zones with maximum VOC concentrations that had been identified by the DPT VAS program, and in some cases to monitor lower VOC concentration zones above or below the zones containing the maximum detected VOC concentrations.

Drilling and soil sampling—Well boreholes were advanced using the Roto-Sonic drilling method to provide methods consistent with existing DRA monitoring wells. Cascade Drilling, L.P., (formerly Boart-Longyear) conducted borehole drilling and well installation/construction under the supervision and direction of a Maryland-licensed driller. The Roto-Sonic method uses a four-inch by six-inch drill-rod/override-casing configuration (with temporary casing) to install the well to the target depth. Soil was continuously sampled via a four-inch-diameter by 10-foot-long core-barrel while drilling each borehole. Soil samples were collected for soil screening, including lithologic characterization, visual observations (e.g., staining, discoloration, etc.), and odor detection. A qualified and experienced geologist documented soil descriptions via lithologic logs, and then placed samples into sealable plastic bags where they were screened for VOCs using a PID. The boring log forms are in Appendix E.

Twenty-seven soil samples were collected from well borings for laboratory chemical analyses. Sampling depths were based on the location of the water table, DPT lithologic and groundwater VOC data, PID field-screening results, and evidence of possible contamination such as staining, discoloration, and odors. Samples collected from each boring are summarized in Table 3-2. Soil sample record sheets are in Appendix B. Soil samples were analyzed VOCs, SVOCs, PCBs, TPH-GRO, TPH-DRO, and priority pollutant metals. A subset of representative soil samples were analyzed for TOC, TINC, CEC, nitrates, phosphates, TKN, and pH. These parameters are used to assess soil reactivity and buffering of metals, nutrient availability, and buffering capacity for possible *in situ* remediation technologies.

Trip blanks were provided by the laboratory. One trip blank was analyzed daily per cooler of VOC samples collected; no other quality assurance/quality control (QA/QC) samples were collected. Duplicate samples for matrix-spike purposes were collected and analyzed on a 1:20 basis (two duplicate samples were collected, in addition to the 27 standard samples).

Monitoring well construction—A summary of the wells installed and their depths is in Table 3-4. Monitoring wells were constructed of Schedule 40 polyvinyl chloride (PVC) solid-riser casing and 10-slot Schedule 40 PVC well screen. The 18 newly installed wells have 10-foot-long screens. Construction details for the newly installed wells are on the well construction forms in Appendix E.

A filter pack consisting of #1-size factory-washed sand was placed around each well screen from one foot (minimum) below the bottom of the well screen to two feet (minimum) above the top of the well screen. The depth to sand was measured using a weighted tape or known length of tremie pipe. Following placement of the sand pack, the well was pre-developed by purging to settle the sand pack around the screen. If settlement of the sand pack was noticed, additional sand was placed in the borehole annulus to bring the sand pack up to the desired depth.

The nested shallow and intermediate wells contain a bentonite seal placed above the sand pack of the "I-interval." This seal was allowed to hydrate before installing the sand pack for the upper "S-interval" well screen. A two-foot (minimum) bentonite seal was then placed above the "S-interval" sand pack and hydrated. A grout mixture of cement/bentonite was used to completely fill the remaining annular space to approximately two feet below the ground surface.

Protective steel stick-up casings were secured around the PVC well casings using concrete. The highest point on the top of the PVC well casing was marked with an indelible marker. The marked location of each PVC well casing, the ground elevation, and the outer protective casing were surveyed by a Maryland-licensed land surveyor.

Monitoring well development—Following installation, each monitoring well was developed to remove fines from the well filter-pack and casing, and to ensure a hydraulic connection between the well and the geologic formation. Wells were developed by hand bailing to remove heavy sediments, then by gentle surging and purging with a submersible pump or air lifting to remove fines and sediment from the sand pack and well screen. Development began at the bottom of the well screen and continued incrementally to the top of the screened interval then back down to the bottom of the well.

Water-level-drawdown measurements and physical parameters (including pH, temperature, specific conductance, dissolved oxygen [DO], and oxidation-reduction potential [ORP]) were collected during well development until pumping was complete; these parameters were recorded in the appropriate site-specific logbook and on a well development record. Water quality parameters were measured using a portable water quality meter. Well development records are in Appendix E.

Development was considered complete when the monitored water-quality parameters stabilized or when a minimum of three saturated well-casing volumes had been removed (if wells were pumped dry). Stabilization of water quality parameters was considered achieved when three consecutive readings were within ±0.1 standard unit for pH, ±3% for specific conductance and temperature, ±10% for DO and ORP, and less than 50 nephalometric turbidity units for turbidity. All development water was collected in United States Department of Transportation (USDOT)-approved 55-gallon steel drums, properly labeled, and stored at a facility-approved location until the wastes were removed for disposal.

3.3.5 Water Level Measurements

Monitoring wells—Groundwater levels were measured at the 92 existing and 18 newly installed DRA groundwater monitoring wells on October 14, 2013. These water-level data provide information regarding groundwater flow characteristics and were used to create groundwater contour maps for the upper, intermediate, and deep surficial-aquifer zones. Static water levels were measured by lowering the meter's probe into the well until the liquid level indicator emitted an audible tone, indicating the air/water interface. Each water level was recorded to the nearest 0.01 foot as the depth to water from the marked location on top of the PVC well casing, or from the highest point of the top of the PVC well casing. Water level measurements were recorded on a groundwater-level measurement field form. The groundwater-level measurement forms are in Appendix F.

3.3.6 Monitoring Well Sampling

Groundwater samples were collected from the newly installed monitoring wells on October 16-21, 2013. All groundwater monitoring wells were sampled using the low-flow, minimal drawdown method (USEPA, 1996a). This method removes groundwater from the well at a low-flow rate (typically less than 300 milliliters per minute) while monitoring and recording the groundwater level and water quality parameters (such as pH, temperature, conductivity, ORP, DO, and turbidity).

A peristaltic pump and Teflon™ tubing were used to purge and sample the monitoring wells. Groundwater purging continued until at least four water quality parameters stabilized, indicating that fresh groundwater from the formation was being pumped, or for a maximum of two hours, whichever occurred first. Stabilization of the field parameters was considered complete when

three consecutive readings were within ±0.1 standard unit for pH, ±3% for conductivity, ±10 millivolts (mV) for ORP, and ±10% for turbidity. Sample information was recorded on the sample log sheets in Appendix B.

Groundwater samples from the monitoring wells were analyzed for the following parameters (see Table 3-4):

- VOCs by SW846 Method 8260B
- SVOCs and 1,4-dioxane by SW846 Method 8270D
- TPH-GRO and TPH-DRO by SW846 Method 8015D
- total and dissolved priority pollutant metals by SW846 Method 6010C/7470A
- hexavalent chromium by SW846 Method 7199

Three groundwater samples (MW-51S, MW-51I, and MW-51D) were also analyzed for natural-attenuation parameters, which include: nitrate, nitrite, ammonia nitrogen, phosphate, sulfate, total alkalinity, dissolved organic carbon, total iron, total manganese, total potassium, total calcium, total magnesium, total chloride, total sodium, total silica, total dissolved solids, and methane, ethene and ethane (Microseeps® AM 20GAX protocols). Groundwater samples for VOCs and TPH-GRO were collected first, followed by samples to be analyzed for SVOCs/1,4-dioxane, TPH-DRO, metals, and hexavalent chromium. Groundwater samples to be analyzed for dissolved metals were filtered in the field before sample preservation using a dedicated, disposable, 0.45-micron filter and a peristaltic pump. Trip blanks were analyzed at a rate of one per cooler containing VOC samples; no other QA/QC samples were collected because sufficient data quality has been indicated by previous DRA sampling and analyses. One duplicate sample was collected for matrix-spike purposes.

3.3.7 Pond and Wetland Surface Water Sampling

Surface water samples were collected on October 15 and 18, 2013 from Pond 1 and from the 0.7-acre wetland near the Frog Mortar Creek shoreline. Pond water sampling locations are shown on Figure 3-5. The rationale for sampling locations and sample analytical parameters is in Table 3-5. As shown in Figure 3-5, five water samples were collected: two from Pond 1 (EP1-SW15, and EP1-SW16) and three from the wetland area near the Frog Mortar Creek

shoreline (EWT-SW1, EWT-SW2, EWT-SW3). Sufficient water was not available to collect a sample at EWT-SW3. Therefore, a small-diameter perforated PVC pipe was pushed into the first foot of sediment to collect a water sample at this location; however, only a small sample aliquot was obtained for VOC analysis.

Samples were collected from Pond 1 using a small rowboat. To obtain the samples from the wetland area, field personnel wore waders and walked through the shallow water until sampling locations were reached. At locations where surface water and sediment samples were co-located, the surface water sample was collected before the sediment sample to avoid sediment disturbance in the surface water samples. Pond water samples were collected as grab samples, using direct-fill sampling techniques.

All samples were collected from approximately one foot below the water surface by submerging a pre-cleaned, unpreserved bottle and allowing it to fill. The collected sample volume was decanted into the appropriate sample containers, taking care to minimize agitation of the collected water. Water quality parameters (including temperature, pH, specific conductance, hardness, salinity, turbidity, DO, and ORP) were measured at all surface water sampling locations and on both sides of the pond during sample collection. The water depth at the time of sampling was also recorded. Sampling information was recorded on surface water sample forms provided in Appendix B.

Pond water samples were analyzed for the following parameters:

- VOCs by SW846 Method 8260B
- 1,4-dioxane by SW846 Method 8270D
- TPH-GRO and TPH-DRO by SW846 Method 8015D
- total and dissolved priority pollutant metals by SW846 Method 6010C/7470A
- hexavalent chromium by SW846 Method 7199
- perchlorate by USEPA Method 314
- hardness by USEPA SW846 protocol

Trip blanks were provided by the laboratory and analyzed daily at a rate of one per cooler of VOC samples collected; no other quality control samples were collected because data obtained

from previous DRA investigations are satisfactory. All surface water sampling locations were surveyed using a handheld GPS receiver and the Maryland State Plane North American Datum 1983 (in feet).

3.3.8 Pond and Wetland Sediment Sampling

Pond sediment samples were collected to assess sediment contaminant concentrations (both horizontally and vertically), to update the conceptual site model, to further assess the extent of constituents detected in Pond 1 sediment (locations EP1-SD15, EP1-SD16, and EP1-SD17 on Figure 3-5), and to determine the presence or absence of site contaminants within the wetland area sediment (locations EWT-SD1, EWT-SD2, and EWT-SD3 on Figure 3-5) near the Frog Mortar Creek. Sediment samples were collected using means similar to those used for collecting surface water samples (i.e., via manual methods using a small rowboat. Field personnel wore waders and walked through shallow water until reaching the sampling locations in the wetland area.

At each location (shown on Figure 3-5), sediment samples were collected using a stainless steel corer to a depth of approximately two feet below the sediment surface. Samples for laboratory analyses were collected at two depths at each location: a shallow sediment sample was collected from the sediment surface to one foot below the sediment surface, and a deeper sediment sample was collected from one to two feet below the sediment surface. The rationale for sampling locations is shown in Table 3-6.

Sediment for VOC analyses was transferred directly from the sampling device into the sample container. The remaining portion of the sample was placed in a stainless steel bowl and homogenized before placing the sediment in sample containers. Excess water in the sample was decanted from the sample container before sealing, and care was taken to retain the fine sediment fraction during decanting.

Sediment samples were analyzed for the following parameters:

- VOCs by SW846 Method 8260B
- SVOCs including 1,4-dioxane by SW846 Method 8270D
- PCBs by SW846 Method 8082

- TPH including GRO and DRO by SW846 Method 8015B
- priority pollutant metals by SW846 Method 6010

Trip blanks were provided by the laboratory, and were analyzed daily per cooler of VOC samples collected; no other QA/QC samples were collected because satisfactory data quality was obtained during previous DRA sampling and analyses programs.

Additionally, grain-size distribution analyses (ASTM International [ASTM] Method D422) and soil permeability tests (ASTM Method D2434) were conducted on the six wetland area sediment samples. Two samples were collected at depth intervals of 0–1 feet, and 1–2 feet below the surface water/sediment interface from each of the three wetland sediment sampling locations shown on Figure 3-5. The geotechnical test results are in Appendix G.

3.3.9 Surveying

A qualified Maryland-licensed land surveyor provided horizontal and vertical coordinates for each test pit, soil boring, DPT groundwater boring, and for new groundwater monitoring well locations. Surveyed locations are accurate to the nearest 0.01 foot for vertical elevations (at the top of the well casings) in the North American Vertical Datum 1988, and to the nearest 0.1 foot for horizontal coordinates in the North American Datum 1983. This information was used to update the MSA environmental geographic information system (EGIS). Appendix H contains the survey report.

3.3.10 General Sampling Procedures, Nomenclature, and Handling

A master site-logbook was maintained at the site as an overall record of field activities. Each sample received a unique sample-identification consisting of the site location; the test pit, DPT soil boring, DPT water, surface water, sediment sample, or well number; a sampling depth for soil or DPT water samples; and a six-digit sampling date for groundwater samples, as follows:

- Soil samples collected from test pits carry the designation DR-TP (for Dump Road test pit), followed by the unique identifier "A," and then the test pit number. The sample identification ends in a two-digit label indicating the depth of the soil sample. For example, "DR-TP-A67-08" designates that the sample was collected from the DRA at test pit location A67 at eight feet below grade.

- Soil samples collected from the soil borings and monitoring wells bear a sample identification tag with the designation DR-SB (for Dump Road soil boring), followed by the boring number, followed by the depth range of the soil sample. For example, DR-SB-190-10-12 designates that the soil sample was collected from the DRA at soil boring 190 from 10 to 12 feet below grade.

- DPT water samples carry the designation DR-DPT (for Dump Road direct-push technology), followed by the boring number, followed by the depth of the water sample. For example, DR-DPT-23-20 designates that the DPT water sample was collected from the DRA at DPT location 23, from a depth of 20 feet below grade.

- Surface water samples collected from Pond 1 and the wetland area carry the designation EP1-SW (for existing Pond 1 surface water) and EWT-SW (for existing wetland surface water), followed by the sample number, followed by the depth of the sample below the water surface. For example, EP1-SW-15-1 designates that the surface water sample was collected from Pond 1, at location 15, and at a depth of 1 foot below the water surface.

- Sediment samples collected from Pond 1 and the wetland area carry the designation EP1-SD (for existing Pond 1 sediment) and EWT-SD (for existing wetland sediment), followed by the sample number, followed by the depth of the sample below the sediment surface. For example, EWT-SD-15-0-1 designates that the sample was collected from the wetland area, at location 15, from the top of the sediment surface to a depth of one foot below the sediment surface.

- Groundwater monitoring-well samples are designated by MSA-MW followed by the well location number and a six-digit number indicating the date of sample collection. For example, a groundwater sample collected on July 24, 2013 from the DRA monitoring well MSA-MW-46S would be labeled MSA-MW46S-072413.

- Trip blanks (TB) were labeled with a TB prefix followed by a six-digit submittal date (e.g., TB-072413).

Sample handling includes field-related considerations concerning the selection of sample containers, preservatives, allowable holding times, and analyses requested. Proper custody procedures were followed throughout all phases of sample collection and handling. Chain of custody protocols were used throughout sample handling to establish the evidentiary integrity of sample containers. These protocols demonstrate that the samples were handled and transferred in a manner that would eliminate (or detect) possible tampering. Water samples to be analyzed for hexavalent chromium were expedited to the laboratory so they could be analyzed within 24 hours of collection, as required by the analytical method. Samples were analyzed by TestAmerica, Inc. of North Canton, Ohio, a laboratory accredited by the United States Department of Defense Environmental Laboratory Accreditation Program, the United States Department of Agriculture,

the National Environmental Laboratory Accreditation Program (10 states), and seven state programs.

Sample containers were released under signature from the laboratory and were accepted under signature by the samplers or other individual responsible for maintaining custody until the sample containers were transferred to the sampling team. Each sample container was placed in a cooler with ice immediately after each sample container had been filled in the field. Trip blanks were placed in the coolers with ice at the beginning of each day, and remained in the cooler along with the VOC samples at all times. Coolers returning to the laboratory with samples were sealed with strapping tape and a tamper-resistant custody seal. The custody seal contains the signature of the individual releasing the sample transport container, along with the release date and time.

3.3.11 Equipment Decontamination

A decontamination area and a clean zone were established at the perimeter of the restricted work zone to prepare, assemble, and disassemble sampling equipment. Dedicated and/or disposable equipment was used whenever possible (e.g., dedicated stainless steel spoons and bowls for sediment samples). Reusable equipment (e.g., samplers, DPT drill rods, water level meters) was decontaminated before and after each use. Dedicated stainless steel spoons and bowls were cleaned before use, and reusable equipment was decontaminated according to the following procedures:

- laboratory-grade, phosphate-free, ionic-anionic surfactant (Alconox®, Liquinox®, or equivalent) and potable-water wash
- potable-water rinse
- analyte-free water rinse
- air drying
- collection of decontamination solutions for disposal

All down-hole drilling equipment, including the rear of the DPT rig, Roto-Sonic drill rig, and other equipment, was cleaned before arriving on-site using heated high-pressure water. This equipment was cleaned before beginning work, between drilling locations, any time the drill rig left the site, and at the conclusion of the drilling program. All equipment decontamination associated with a given drilling location was conducted at that location. Decontamination rinsate

was collected in USDOT-approved 55-gallon drums and properly labeled for waste characterization and disposal.

3.3.12 Waste Management

A waste management plan conforming to Lockheed Martin *EESH Remediation Waste Management Procedure No. EROP-03, Revision 4* (effective April 17, 2009) was included in the 2013 DRA soil and groundwater work plan (Tetra Tech, 2013c) and was followed during this investigation to store, manage, test, and dispose of project IDW. IDW for this project consisted of soil cuttings from drilling, decontamination rinsate, well-development water, groundwater-sampling purge water, and used personal protective equipment (PPE). PPE IDW was brushed off, placed in trash bags, and disposed of in an MSA facility trash receptacle designated by facility personnel. Soil cuttings from drilling, decontamination rinsates, well-development water, and groundwater sampling purge water were stored in USDOT-approved 55-gallon steel drums.

All drums were properly labeled and logged on a drum inventory form in accordance with the waste management plan. Drums were moved to a designated staging area in the Maryland Air National Guard (MDANG) equipment storage area near well MW-34S/I. Wastes were characterized and disposed of in accordance with applicable state and federal regulations. IDW was removed from the facility and properly disposed of at a Lockheed Martin-approved disposal facility in accordance with federal, state, and local regulations.

3.4 DATA REVIEW

Data validation involves having a party independent of the analytical laboratory review the laboratory data to ensure that specific criteria were met. These criteria are concerned with specifications that are not sample-dependent; they specify performance requirements that should be fully under a laboratory's control. For organic data analyses, specific validation areas include blanks, performance-evaluation-standard materials, and instrument-performance checks. For metals data analyses, specific validation areas include blanks, calibration standards, calibration-verification standards, laboratory-control standards, and interference-check standards. The chemical data were validated by Tetra Tech's data validation group in Pittsburgh, Pennsylvania.

Chemical data were supplied by the laboratory as hard-copy reports and electronic databases. After sampling was complete, chemical data were validated to assess their reliability and accuracy, in accordance with established USEPA protocols. This review was based on USEPA Region 3 guidelines (USEPA, 1993 and 1994) and the specifics of the analytical method employed. Data validation reports with chains of custody (COC) and data tables that include all sampling results (including non-detects) are in Appendix D.

Collectively, these data are acceptable for their intended use, except for data that have been qualified as unreliable. For this validation, the following data qualifiers (i.e., flags) were applied to the chemical results presented in this report:

B The analyte was not detected substantially above the level reported in the laboratory or field blank (i.e., the result is considered an artifact of the laboratory analysis and is not considered a site contaminant).

J The analyte is considered present in the sample. However, the value is estimated and may not be accurate or precise.

K The analyte is considered present in the sample. However, the value is biased high and the actual value is expected to be lower than the reported value.

L The analyte is considered present in the sample. However, the value is biased low and the actual value is expected to be higher than the reported value.

U Not detected. The analyte is considered not detected at the reported value.

NJ The analyte has been tentatively identified. This qualifier indicates presumptive evidence of a compound. Special methods may be required to confirm its presence or absence in future sampling efforts.

UJ The analyte was not detected. However, the quantitation or detection limit may be inaccurate or imprecise.

UL The analyte was not detected. However, the quantitation or detection limit is likely greater than the reported value.

UR The result is considered qualitatively or quantitatively unreliable. Non-detected results for 2-butanone, tertiary butyl alcohol, and vinyl acetate were the only results flagged with "UR" data qualifiers.

The "*J,*" "*K,*" and "*L*" qualifiers appear in the chemical results tables and the figures in Section 4. All flags appear in Appendix D.

Common laboratory or field contaminants occasionally may be detected in the samples. Analysis of quality control blanks and other internal laboratory blanks (e.g., method blanks, etc.) is used to determine the significance of the analytical results versus possible laboratory or field contaminants. Common laboratory contaminants for VOCs include acetone, methylene chloride, and 2-butanone. According to USEPA *National Functional Laboratory Guidelines*, any compound detected in both the sample and an associated blank must be qualified (i.e., flagged with a "*B*").

For the common laboratory contaminants listed above, results were qualified with a "*B*" flag when the sample concentration was less than 10 times the blank concentration in accordance with USEPA protocol. For other analytes, the results were flagged with a *"B"* qualifier when the sample concentration is less than five times the concentration detected in the blank in accordance with USEPA protocol. In addition to the common laboratory blanks listed above, several TPH and common metals were reported as blank contamination. Qualified results are in the chemical tables in Section 4 and in Appendix D.

3.5 DATA MANAGEMENT

Laboratory data handling procedures met the requirements set forth in the laboratory subcontract. All analytical and field data are maintained in the project files. The project files contain copies of the COC forms, sampling log forms, sampling location maps, and data quality-assurance documentation.

3.5.1 Data Tracking and Control

A "cradle to grave" sample tracking system was used from the beginning to the end of the sampling event. The field operations leader coordinated sample tracking before field mobilization. Sample jar labels were handwritten in the field or pre-printed. Labels were reviewed to ensure their accuracy and adherence to work plan requirements. The project manager's (PM) assistant coordinated with the analytical laboratory to ensure that they were aware of the number and type of samples and analyses to expect.

When field sampling was underway, the field operations leader forwarded the chain of custody forms to the PM's assistant and to the laboratory for each day that samples were collected. The PM's assistant confirmed that the COC form provided the information required by the work plan.

This allowed early detection of errors made in the field so adjustments could be made while the field team was mobilized. The laboratory submitted an electronic deliverable for the sample delivery groups. When all electronic deliverables were received from the laboratory, the PM's assistant confirmed that the laboratory performed all analyses requested.

3.5.2 Sampling Information

Data from field measurements were recorded using the appropriate log sheets, as per Tetra Tech standard operating procedures. Reduction of field data entailed summarizing and presenting these data in tabular form. Reduction of laboratory data entailed manipulation of raw data-instrument output into reportable results. Laboratory data were verified by the group supervisor and by the laboratory's quality control/documentation department.

3.5.3 Project Data Compilation

The analytical laboratory generated an Adobe *Acrobat*® portable document format (PDF) file of the analytical data packages, as well as an electronic database deliverable. The electronic database was checked against the PDF file provided by the laboratory and updated as required, based on data qualifier flags applied during data validation. Data generated during implementation of the sampling and analysis plan were incorporated into the MSA EGIS database. All data (such as units of measure and chemical nomenclature) were checked to maintain consistency with the project database.

3.5.4 Geographical Information System

The data management system for this effort consists of a relational database and EGIS to manage environmental information pertaining to MSA. The relational database stores chemical, geological, hydrogeological, and other environmental data collected for the MSA environmental investigations. The EGIS is built from the relational database and contains subsets of the larger data pool. Using the EGIS, environmental data were posted onto base maps to represent the information graphically for this report.

Table 3-1

Test Pit Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland
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Test pit number	Test pit location	Approximate dimensions	No. of samples	Analysis (method)	Rationale/purpose[1]
A76	Dump Road Area 9 east of Pond #2	Length—10 feet Width—2 feet Depth—15 feet maximum	Two grab samples focusing on areas of suspected contamination	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH-GRO and -DRO by (8015D); priority pollutant metals (6010C, 7471A)	To further investigate the area of historical test pit A16 in Dump Road Area 9 where black sludge-like soil with a strong solvent odor was previously encountered
A77	Dump Road Area 2 north of Pond #1	Length—10 feet Width—2 feet Depth—15 feet maximum	One VOC grab sample; one composite sample for non-VOC analytes consisting of a minimum of five grab samples from the test pit	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH-GRO/DRO (8015D); priority pollutant metals (6010C, 7471A)	To further investigate area of 2008 test pit N4 where a green-black liquid with a very strong solvent odor was encountered

Table 3-1

Test Pit Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland
Page 2 of 3

Test pit number	Test pit location	Approximate dimensions	No. of samples	Analysis (method)	Rationale/purpose[1]
A78	West of monitoring well cluster DMW-9S/I/D in the Petroleum Hydrocarbon Area	Length—10 feet Width—2 feet Depth—15 feet maximum	One VOC grab sample; one composite sample for non-VOC analytes consisting of a minimum of five grab samples from the test pit	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH-GRO/DRO (8015D); priority pollutant metals (6010C, 7471A)	To further investigate 1996 soil boring B-15 where free product was identified
A79	Northeast of the Drum Area and southwest of monitoring well MW-5	Length—10 feet Width—2 feet Depth—15 feet maximum	One VOC grab sample; one composite sample for non-VOC analytes consisting of a minimum of five grab samples from the test pit	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH-GRO/DRO (8015D); priority pollutant metals (6010C, 7471A)	To further investigate 1996 soil boring B-8 where a suspected buried tank/container and pure product were identified

Table 3-1

Test Pit Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland
Page 3 of 3

Test pit number	Test pit location	Approximate dimensions	No. of samples	Analysis (method)	Rationale/purpose[1]
A80	West of the 0.7 acre wetland area west of Frog Mortar Creek and east of well cluster DMW-3S/I/D	Length—10 feet Width—2 feet Depth—15 feet maximum	Two grab samples focusing on areas of suspected contamination	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH-GRO/DRO (8015D); priority pollutant metals (6010C, 7471A)	To further investigate the area downgradient (east) of well cluster DMW-3S/I/D where elevated VOC concentrations have been detected
A81	Dump Road Area 2 west of Pond #2 and north of Pond #1 between the location of historical test pits A2 and A14	Length—10 feet Width—2 feet Depth—15 feet maximum	One VOC grab sample; one composite sample for non-VOC analytes consisting of a minimum of five grab samples from the test pit	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH-GRO/DRO (8015D); priority pollutant metals (6010C, 7471A)	To investigate Dump Road Area 2 where field measurements of VOCs, ranging from 1.2 to 2,000 parts per million (ppm) per volume, were detected in soil in the location of a possible source area (former pit/pond; feature #46 in Figure 2-4) visible in the 1956 aerial photo survey
A82	Dump Road Area 9 east/southeast of Pond #2	Length—10 feet Width—2 feet Depth—15 feet maximum	Two grab samples focusing on areas of suspected contamination	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH-GRO/DRO (8015D); priority pollutant metals (6010C, 7471A)	To further investigate the area downgradient (east) of well cluster DMW-18S/I/D where elevated VOC concentrations have been detected

[1]Rationale and purpose partially based on MDE comments (Appendix B) on the 2012 *Dump Road Source Areas Investigation Work Plan* (Tetra Tech, *2012a)* and *Technical Memorandum for the Dump Road Area, Source Area Delineation* (Tetra Tech, 2012b).

DRO = diesel-range organics
GRO = gasoline-range organics
MDE = Maryland Department of the Environment
PCBs = polychlorinated biphenyls
SVOCs = semi-volatile organic compounds
TPH = total petroleum hydrocarbons
VOCs = volatile organic compounds

Table 3-2

DPT Soil Boring Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland
Page 1 of 2

Direct-push-technology (DPT) soil boring number	Location	Number of direct-push-technology (DPT) soil samples/depth (feet)	Analysis (method)	Rationale/purpose[1]
SB-187	Taxiway Tango Area North	Two soil samples based on the water table depth and visual evidence of possible contamination, such as staining, discolorations, and odors	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH-GRO and -DRO by (8015D); priority pollutant metals (6010C, 7471A) one representative soil sample will also be analyzed for TOC/TINC (SW-848 9060), CEC (SW-846 9081), nitrates/phosphates (SW-846 9056), TKN (USEPA 351.3), and pH (SW-846 9045C)	To further investigate soil conditions in the southern end of the VOC source area (Taxiway Tango Area-North) based on elevated TCE (11,000 µg/kg in boring SB-27 and 1,100 µg/kg in boring SB-31), vinyl chloride (580 µg/kg in boring SB-31) and *cis*-1,2-DCE (4,400 µg/kg in boring SB-31) concentrations detected in 2011
SB-188 through SB-191	East of Pond #2 and west of Frog Mortar Creek	Two soil samples based on the water table depth and visual evidence of possible contamination, such as staining, discolorations, and odors	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH GRO/DRO (8015D); priority pollutant metals (6010C, 7471A) representative soil samples will also be analyzed for TOC/TINC (SW-848 9060), CEC (SW-846 9081), nitrates/phosphates (SW-846 9056), TKN (USEPA 351.3), and pH (SW-846 9045C)	To further investigate soil and waste conditions in the area east of Pond #2 and west of Frog Mortar Creek (former Pond 7, feature #42) along with the areas downgradient of monitoring well clusters MW-18S/I, DMW-3S/I, and DMW-2A/B that have exhibited elevated VOC concentrations

Table 3-2

DPT Soil Boring Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland
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Direct-push-technology (DPT) soil boring number	Location	Number of direct-push-technology (DPT) soil samples/depth (feet)	Analysis (method)	Rationale/purpose[1]
SB-192	East of wells DMW-5S/I/D and west of Frog Mortar Creek	Two soil samples based on the water table depth and visual evidence of possible contamination, such as staining, discolorations, and odors	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH GRO/DRO (8015D); priority pollutant metals (6010C, 7471A); one representative soil sample will also be analyzed for TOC/TINC (SW-848 9060), CEC (SW-846 9081), nitrates/phosphates (SW-846 9056), TKN (USEPA 351.3), and pH (SW-846 9045C)	To further investigate soil and waste conditions in the area west of Frog Mortar Creek and east and hydraulically downgradient of well DMW-5S, which has exhibited elevated VOC concentrations in upper surficial-aquifer groundwater
SB-193 through SB-196	Drum Area	Two soil samples based on the water table depth and visual evidence of possible contamination, such as staining, discolorations, and odors	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH GRO/DRO (8015D); priority pollutant metals (6010C, 7471A); representative soil samples will also be analyzed for TOC/TINC (SW-848 9060), CEC (SW-846 9081), nitrates/phosphates (SW-846 9056), TKN (USEPA 351.3), and pH (SW-846 9045C)	To further investigate the Drum Area based on elevated TCE concentrations detected in soil and groundwater in 2000 and 2002. Areas of elevated TCE concentrations include: former DA Trench 2 (highest surface soil TCE concentration detected in the DRA site); groundwater from boring DA-7 collected from 26 feet below grade east of the DA trenches and excavation (191,384 µg/L); and the indication of DNAPL extending from the DA Trench area west of sampling location DA-1 to several hundred feet northeast between DA-6 and DA-9

[1]Rationale and purpose partially based on MDE Comments on Tetra Tech's *2012 Dump Road Source Areas Investigation Work Plan* and *Technical Memorandum for the Dump Road Area, Source Area Delineation*.

CEC = cation-exchange capacity
COPC = chemical(s) of potential concern
DA = Drum Area
1,2-DCE = 1,2-dichloroethene
DNAPL = dense non-aqueous-phase liquid
DRO = diesel-range organics
GRO = gasoline-range organics
PCBs = polychlorinated biphenyls
SVOCs = semi-volatile organic compounds
TCE = trichloroethene
TINC = total inorganic carbon
TKN = total Kjeldhar nitrogen
TOC = total organic carbon
TPH = total petroleum hydrocarbons
USEPA = United States Environmental Protection Agency
VOCs = volatile organic compounds

Table 3-3

DPT Groundwater Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland
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Direct-push-technology (DPT) groundwater boring number	Location	Number of direct-push-technology (DPT) water samples/total depth (feet)	Analysis (method)	Rationale/purpose
DPT-23 through DPT-29	East of Ponds 1 and 2 and immediately west of Frog Mortar Creek along the limits of buried waste	4–7 each/40–60	Volatile organic compounds (VOCs) by SW846 Method 8260B	To provide vertical-aquifer sampling to assess shallow subsurface groundwater conditions immediately west of Frog Mortar Creek. The boring locations are strategically placed to coincide with the proposed groundwater monitoring well locations, which will provide groundwater data to help determine the position of the well screens.
DPT 30, DPT-31 and DPT-33	Taxiway Tango Area-North	4–5 each/40–45	VOCs by SW846 Method 8260B	To characterize groundwater conditions in the southern end of the possible VOC source area (Taxiway Tango Area-North) based on elevated TCE (11,000 µg/kg in boring SB-27 and 1,100 µg/kg in boring SB-31), vinyl chloride (580 µg/kg in boring SB-31) and *cis*-1,2-DCE (4,400 µg/kg in boring SB-31) concentrations detected in 2011.TCE has been detected in groundwater at wells MW-33S (TCE at 1,500 µg/L in 2009 and 690 µg/L in 2010), MW-15S/I (TCE at 63 and 1,500 µg/L for MW-15S and MW-15I in 2011) and MW-28I (TCE at 1,000 µg/L in 2011), which are hydraulically downgradient of the Taxiway Tango Area—North possible VOC source area. These groundwater TCE concentrations exceed the Maryland groundwater standard of 5 µg/L.

Table 3-3

DPT Groundwater Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland
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Direct-push-technology (DPT) groundwater boring number	Location	Number of direct-push-technology (DPT) water samples/total depth (feet)	Analysis (method)	Rationale/purpose
DPT-32 and DPT-39	Taxiway Tango Median Area	5 each/38–50	VOCs by SW846 Method 8260B	DPT-32: to characterize groundwater south/southeast of well DMW-11S to delineate VOCs in the area of highest chlorinated VOC (cVOC) concentrations in monitoring well groundwater samples in the Dump Road Area. DPT-39: to further investigate elevated TCE concentrations in CPT-01 down to 55 feet below grade (highest concentration of 630 µg/L at 23–25 feet). Boring is adjacent to the runway to investigate the source area contributing to the elevated concentrations detected in DMW-11S/I, and whether the source is west/southwest of CPT-01 or possibly on the western side of the runway.
DPT-34	South of the Petroleum Hydrocarbon Area (PHA)	4/45	VOCs by SW846 Method 8260B	To further characterize groundwater quality upgradient of the Petroleum Hydrocarbon Area, where elevated VOCs have been detected at CPT-16, MW-42S/I and DMW-9S/I/D. DPT-34 is upgradient of CPT-16 and MW-42S/I/D (elevated VOC concentrations); doing so will help determine whether the contamination in the Taxiway Tango Median Area (DMW-11S/I and CPT-03, which exhibited the highest TCE and second highest BTEX groundwater concentration at the site) extends under Taxiway Tango toward the Petroleum Hydrocarbon Area.

Table 3-3

DPT Groundwater Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland
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Direct-push-technology (DPT) groundwater boring number	Location	Number of direct-push-technology (DPT) water samples/total depth (feet)	Analysis (method)	Rationale/purpose
DPT-35	Between the Drum Area (DA) and the Petroleum Hydrocarbon Area (PHA)	6/45	VOCs by SW846 Method 8260B	North of monitoring well MW-45S and CPT-08, where elevated concentrations of VOCs were detected in 2012
DPT-36 and DPT-37	West/upgradient of the Drum Area (DA)	5–6 each/45–50	VOCs by SW846 Method 8260B	To further characterize groundwater conditions near former Pond 4/open burning area—features #43 and #45

Table 3-3

DPT Groundwater Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland
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Direct-push-technology (DPT) groundwater boring number	Location	Number of direct-push-technology (DPT) water samples/total depth (feet)	Analysis (method)	Rationale/purpose
DPT-38, DPT-43 and DPT-43B	Area of Former Pond #3 and a former linear pond	3–5 each/20–40	VOCs by SW846 Method 8260B	To further characterize groundwater conditions in former Pond 3 (feature #2) and a former linear pond (feature #24) south and southeast of previous sampling location CPT-22. CPT-22 is in an area southeast of Pond 1, which is indicated as a third pit or pond in historical aerial photographs and on a historical U.S. Geological Survey topographic map. Interviews conducted as part of the 1989 preliminary assessment indicate that a third pit was used to dump wastes; however, the third pit was not found during the preliminary assessment site visits. The third pit, as well as an earlier linear pond or pit, were identified in historical aerial photographs of the site. TCE in groundwater at well DMW-2A (13,000 µg/L), which is hydraulically downgradient of the former third pond and linear pond area, indicates possible TCE DNAPL in this area. Additionally, a groundwater sample collected near the third pond area (MIP-26 with a TCE groundwater concentration of 8,000 µg/L and $TCE_{(EQ)}$ of 58,006 µg/L in the intermediate surficial-aquifer) also indicates the possible presence of TCE DNAPL in this area.

Table 3-3

DPT Groundwater Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland
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Direct-push-technology (DPT) groundwater boring number	Location	Number of direct-push-technology (DPT) water samples/total depth (feet)	Analysis (method)	Rationale/purpose
DPT-40 through DPT-42	Upgradient/ downgradient of the Drum Area	4–6 each/35–45	VOCs by SW846 Method 8260B	High cVOC concentrations are in the upper surficial-aquifer, and TCE concentrations detected in the wells and temporary wells in this area suggest the presence of DNAPL. VOCs have not been sufficiently delineated to the north, east, south, and west in this area. Therefore, three sampling locations are distributed around the Drum Area and wells DMW-7S and MW-5S. These sampling locations will provide additional characterization of the upgradient side of the Drum Area and areas north and east (downgradient) of wells DMW-7S and MW-5S, will delineate the extent of VOCs in the upper surficial-aquifer, and will confirm lower concentrations in the intermediate surficial-aquifer.

Abbreviations:

bgs = below ground surface
BTEX = benzene, toluene, ethylbenzene, xylenes
COPC = chemicals of potential concern
cVOCs = chlorinated volatile organic compounds
DCE = dichloroethene
DNAPL = dense non-aqueous-phase liquid
DPT = direct-push technology
DRO = diesel-range organic
GRO = gasoline-range organic
MDE = Maryland Department of the Environment
MIP = membrane-interface probe
µg/kg = microgram(s) per kilogram
µg/L = microgram(s) per liter
PCBs = polychlorinated biphenyls
SVOCs = semi-volatile organic compounds
TCE = trichloroethene
$TCE_{(EQ)}$ = trichloroethene equivalents
TPH = total petroleum hydrocarbons
USEPA = United States Environmental Protection Agency
VOCs = volatile organic compounds

Table 3-4
Groundwater Monitoring Well Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland

Well number	Location	Well bottom depth	Soil sample analysis (method)	Groundwater sample analysis (method)	Rationale/purpose
MW-46S/I/D through MW-51S/I/D	East of Ponds 1 and 2 and immediately west of Frog Mortar Creek along the limits of buried waste	"S" shallow wells to an approximate depth of 20 feet below grade "I" intermediate wells to an approximate depth of 40 feet below grade "D" deep wells to an approximate depth of 60 feet below grade	Up to two soil samples will be collected from each monitoring well boring for VOCs (8260B); SVOCs including 1,4-dioxane (8270D); PCBs (8082A); TPH GRO/DRO (8015D); priority pollutant metals (6010C, 7471A)	VOCs (8260B); SVOCs including 1,4-dioxane (8270D); TPH-GRO and -DRO by (8015D); priority pollutant metals—total and dissolved (6010C, 7471A); hexavalent chromium (7199) Ferrous iron (Hach test kit or equivalent)—Three groundwater samples from one well cluster were analyzed for the following natural-attenuation parameters: nitrate, nitrite, ammonia nitrogen, phosphate, sulfate, total alkalinity, dissolved organic carbon, total iron, total manganese, total potassium, total calcium, total magnesium, total chloride, total sodium, total silica, total dissolved solids, methane, and ethane using Microseeps® AM 20GAX protocols	To provide soil and groundwater chemical-monitoring data and to provide shallow, intermediate, and deep monitoring points to assess the shallow subsurface groundwater conditions immediately west of Frog Mortar Creek

Abbreviations:
DRO = diesel-range organics
GRO = gasoline-range organics
PCBs = polychlorinated biphenyls
SVOCs = semi-volatile organic compounds
TPH = total petroleum hydrocarbons
USEPA = United States Environmental Protection Agency
VOCs = volatile organic compounds

Table 3-5
Sediment Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization, Martin State Airport, Middle River, Maryland

Sediment sample number	Location	Sampling depth	Sample analysis and method	Rationale/purpose
EP1-SD15 EP1-SD16 EP1-SD17 EP1-SD18	Pond 1	Two samples from each location at 0–1 feet and 1–2 feet	VOCs by USEPA SW846 Method 8260B; TPH-GRO and -DRO by 8015D; PCBs by USEPA SW846 Method 8082 A; total priority pollutant metals by USEPA SW846 Method 6010C	Sediment samples were collected to assess sediment contaminant concentrations (both horizontally and vertically) in support of updating the conceptual site model, to provide for a more complete characterization of Pond 1 sediment, and evaluate trends of COPC.
EWT-SD1 EWT-SD2 EWT-SD3	0.7 acre wetland area east of Ponds 1 and 2 and immediately west of Frog Mortar Creek	Two samples from each location at 0–1 feet and 1–2 feet	VOCs by USEPA SW846 Method 8260B; TPH-GRO and -DRO by USEPA SW846 Method 8015D; PCBs by USEPA SW846 Method 8082A; total priority pollutant metals by USEPA SW846 Method 6010C ***Geotechnical analyses:*** soil grain-size analyses (ASTM Method D422 with hydrometer; requires one quart of soil) and soil permeability testing (ASTM Method D5084; requires undisturbed samples)	Sediment samples were collected to assess sediment contaminant concentrations (both horizontally and vertically), grain size, and vertical permeability in support of updating the conceptual site model; to determine the source and extent of COPC detected in the sediment in the 0.7 acre wetland near the Frog Mortar Creek shoreline; and evaluate trends of COPC.

Abbreviations:
ASTM = ASTM International, Inc.
COPC = chemical(s) of potential concern
DRO = diesel-range organic
GRO = gasoline-range organic
PCBs = polychlorinated biphenyls
SVOCs = semi-volatile organic compounds
TPH = total petroleum hydrocarbons
USEPA = United States Environmental Protection Agency
VOCs = volatile organic compounds

Table 3-6

Surface Water Sample Summary and Rationale
Dump Road Source Area Soil and Groundwater Characterization,
Martin State Airport, Middle River, Maryland

Sample number	Location	Sampling depth	Sample analysis and method	Rationale/purpose
EP1-SW15 EP1-SW16	Pond 1	One sample from each location at one foot below the water surface	VOCs by SW846 Method 8260; 1,4-dioxane by SW826 Method 8270D; TPH-GRO and -DRO by 8015D; total and dissolved priority pollutant metals including hexavalent chromium by SW846 Method 6010; perchlorate by USEPA Method 314; hardness by USEPA SW846 protocol ***Field measurements***: temperature, pH, specific conductance, hardness, salinity, turbidity, DO, ORP	Surface water samples were collected to update and characterize pond water contaminant concentrations. Surface water from Pond 1 was previously sampled in 2004 and 2012. The sample analyses provide updated and additional chemical data to assess contaminant concentrations possibly dissolving/migrating into the pond water-column from highly contaminated sediments, and to gather data to evaluate potential risks to human health and ecological receptors.
EWT-SW1 EWT-SW2 EWT-SW3	0.7 acre wetland area east of Ponds 1 and 2 and immediately west of Frog Mortar Creek	One sample from each location at one foot below the water surface	VOCs by SW846 Method 8260; 1,4-dioxane by SW826 Method 8270D; TPH including -GRO and -DRO by Method 8015D; total and dissolved priority pollutant metals including hexavalent chromium by SW846 Method 6010; perchlorate by USEPA Method 314; hardness by USEPA SW846 protocol ***Field measurements***: temperature, pH, specific conductance, hardness, salinity, turbidity, DO, ORP	Surface water samples were collected to characterize wetland water quality. To date, surface water from the wetland area has not been sampled. The sample analyses provide chemical data to assess possible dissolved contaminant concentrations that could migrate from the water column to groundwater, and data to evaluate potential risks to human health and ecological receptors.

Abbreviations:

DRO = diesel-range organic
GRO = gasoline-range organic
PCBs = polychlorinated biphenyls
SVOCs = semi-volatile organic compounds
TPH = total petroleum hydrocarbons
VOCs = volatile organic compounds

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FIGURE 3-1

TEST PIT LOCATION MAP - 2013
DUMP ROAD AREA

LEGEND

- TEST PIT - 2013
- TEST PIT - PRE-2013
- SOIL BORING SAMPLE LOCATION (1996)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- TAXIWAY TANGO AREA- NORTH
- FORMER POND
- FORMER POND/PIT
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

BTEX = benzene, toluene, ethylbenzene and xylenes
TCE = trichloroethene

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 100 200 Feet

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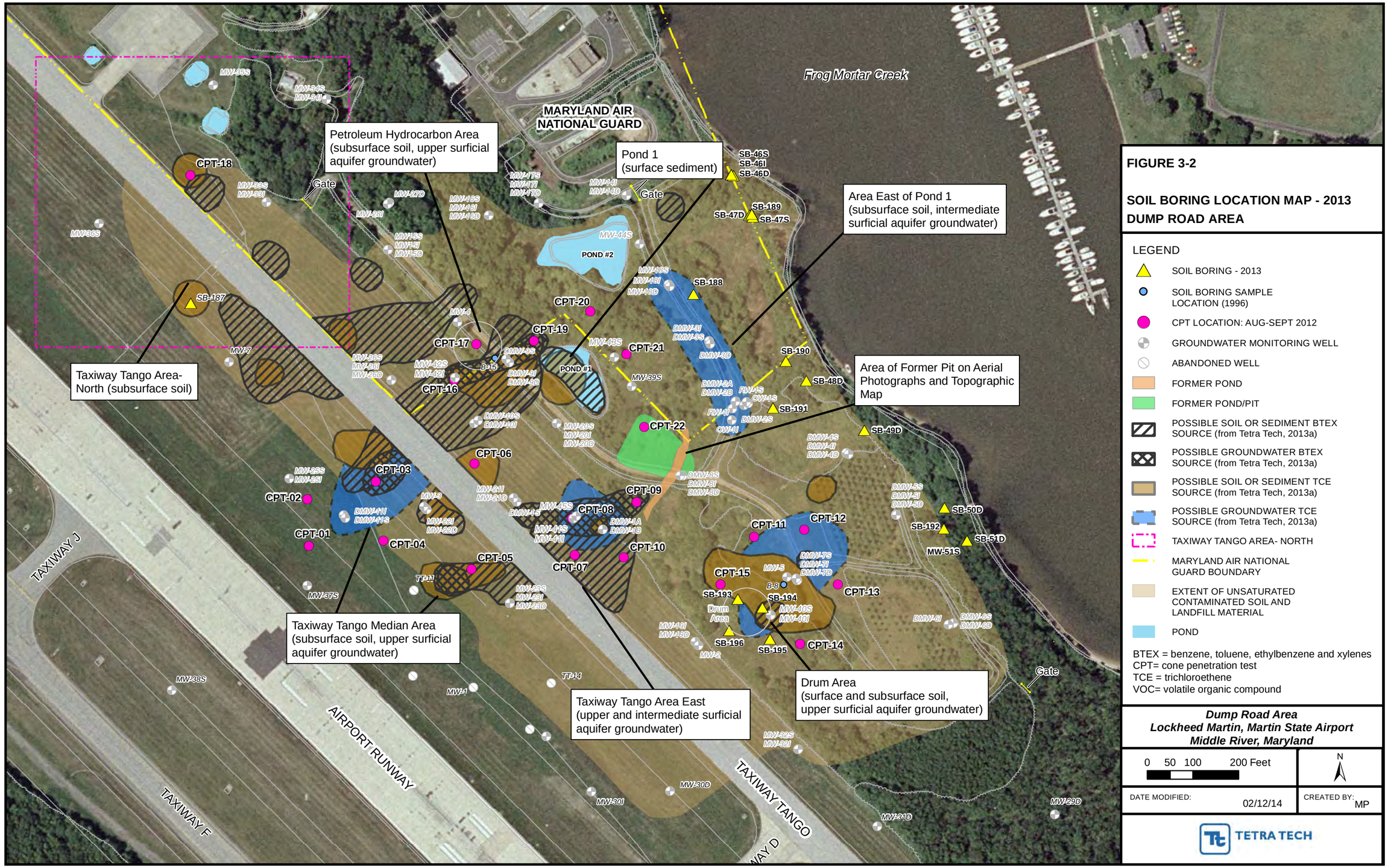

FIGURE 3-2

SOIL BORING LOCATION MAP - 2013
DUMP ROAD AREA

LEGEND

- SOIL BORING - 2013
- SOIL BORING SAMPLE LOCATION (1996)
- CPT LOCATION: AUG-SEPT 2012
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- FORMER POND
- FORMER POND/PIT
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)
- TAXIWAY TANGO AREA- NORTH
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

BTEX = benzene, toluene, ethylbenzene and xylenes
CPT= cone penetration test
TCE = trichloroethene
VOC= volatile organic compound

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

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DATE MODIFIED: 02/12/14

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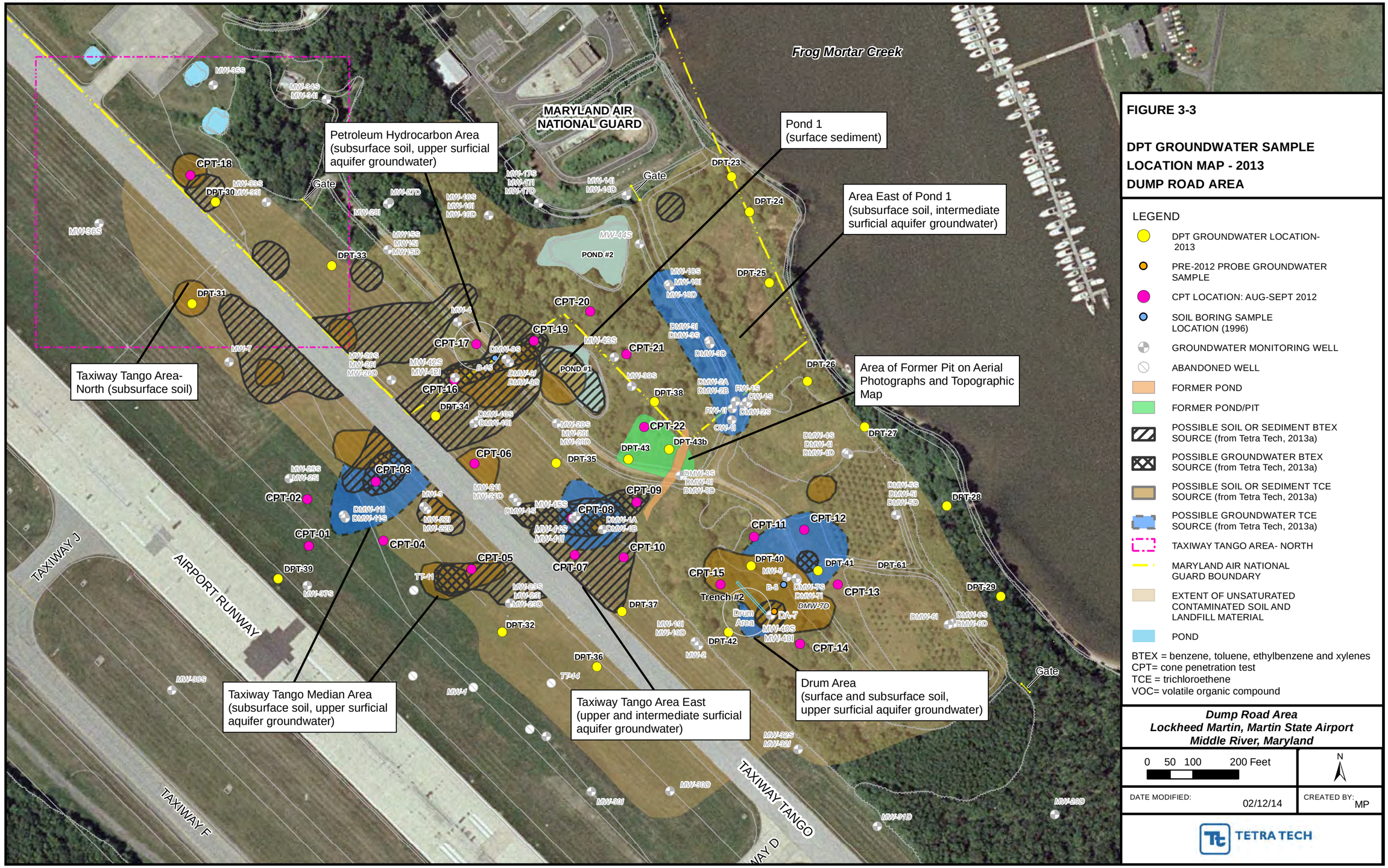

FIGURE 3-3

DPT GROUNDWATER SAMPLE LOCATION MAP - 2013
DUMP ROAD AREA

LEGEND

- DPT GROUNDWATER LOCATION-2013
- PRE-2012 PROBE GROUNDWATER SAMPLE
- CPT LOCATION: AUG-SEPT 2012
- SOIL BORING SAMPLE LOCATION (1996)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- FORMER POND
- FORMER POND/PIT
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)
- TAXIWAY TANGO AREA- NORTH
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

BTEX = benzene, toluene, ethylbenzene and xylenes
CPT= cone penetration test
TCE = trichloroethene
VOC= volatile organic compound

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

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DATE MODIFIED: 02/12/14

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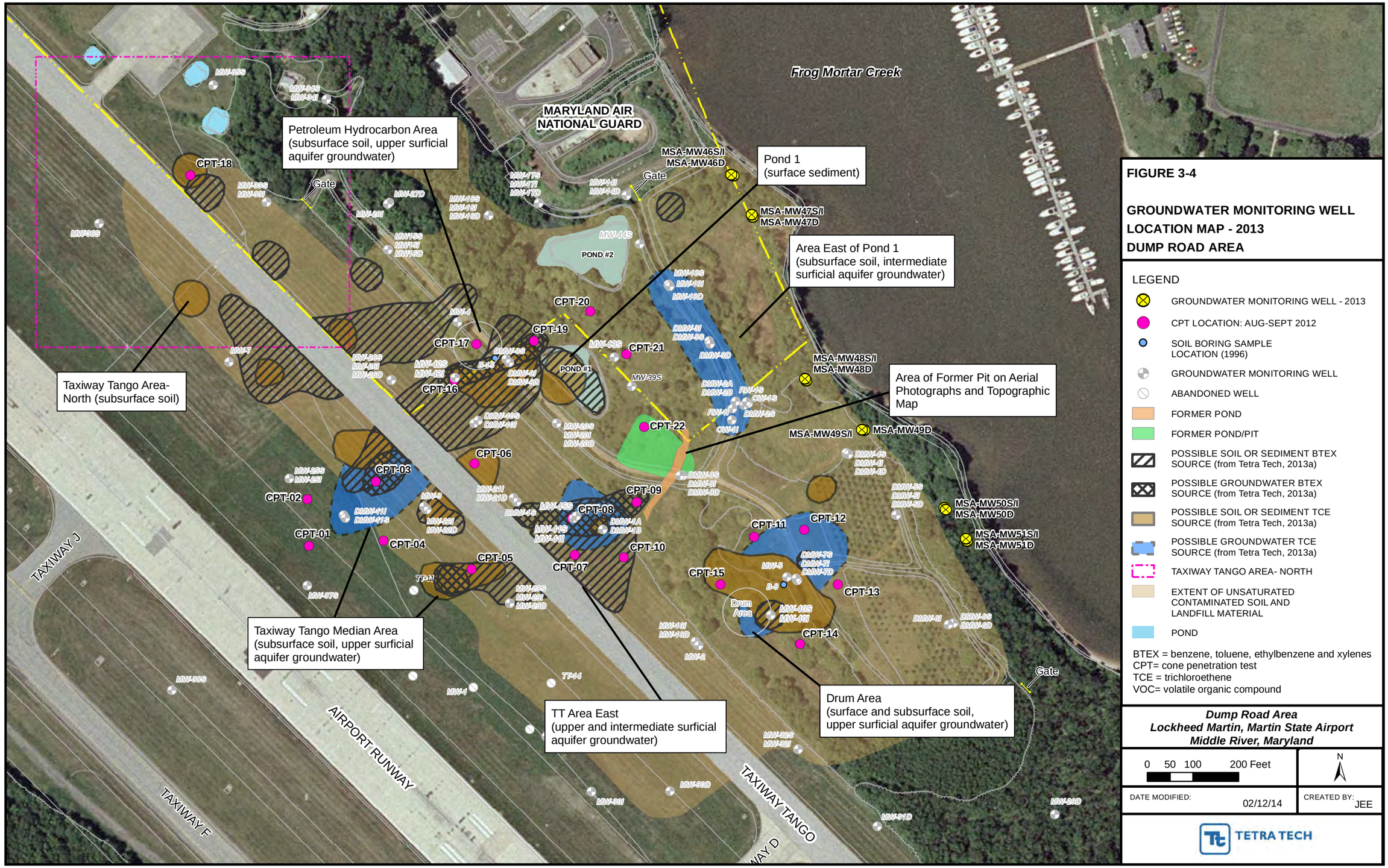

FIGURE 3-4

GROUNDWATER MONITORING WELL LOCATION MAP - 2013
DUMP ROAD AREA

LEGEND

- GROUNDWATER MONITORING WELL - 2013
- CPT LOCATION: AUG-SEPT 2012
- SOIL BORING SAMPLE LOCATION (1996)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- FORMER POND
- FORMER POND/PIT
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)
- TAXIWAY TANGO AREA- NORTH
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

BTEX = benzene, toluene, ethylbenzene and xylenes
CPT= cone penetration test
TCE = trichloroethene
VOC= volatile organic compound

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

DATE MODIFIED: 02/12/14

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Sediment Sample location map_May2013_revised 060513.mxd)
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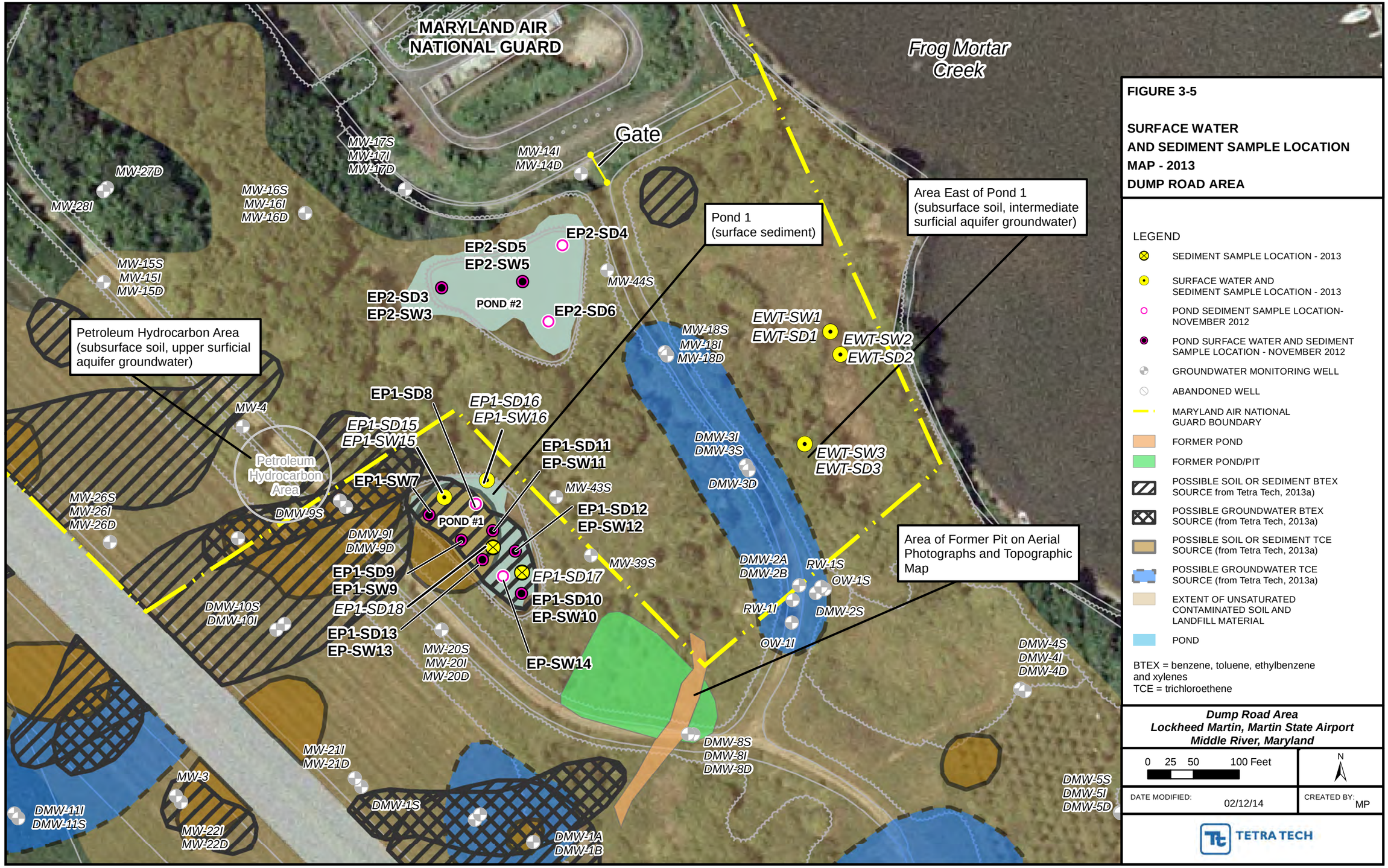

FIGURE 3-5

SURFACE WATER AND SEDIMENT SAMPLE LOCATION MAP - 2013 DUMP ROAD AREA

LEGEND

- SEDIMENT SAMPLE LOCATION - 2013
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION - 2013
- POND SEDIMENT SAMPLE LOCATION-NOVEMBER 2012
- POND SURFACE WATER AND SEDIMENT SAMPLE LOCATION - NOVEMBER 2012
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- FORMER POND
- FORMER POND/PIT
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

BTEX = benzene, toluene, ethylbenzene and xylenes
TCE = trichloroethene

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 25 50 100 Feet

N

DATE MODIFIED: 02/12/14

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Section 4
2013 Investigation Results

This section presents the results of the source area investigation tasks conducted from July to November 2013. Results are included for test pit excavation and soil sampling, soil and groundwater sampling by direct-push technology (DPT), installation and sampling of groundwater monitoring wells, groundwater-level monitoring, and surface water and sediment sampling. Results of the chemical analyses of soil, groundwater, pond and wetland water, pond and wetland sediment, and physical analyses of soil samples, are also detailed in this section.

Chemical-specific screening criteria are used to evaluate concentrations of constituents detected in soil, groundwater, surface water, and sediments. Screening objectives are to: (1) gauge the degree of observed contamination in relation to regulatory standards/criteria, and its potential adverse effects on human health or the environment, and (2) to evaluate the need for further sampling or remedial action. Therefore, regulatory risk-based criteria are used whenever possible.

Soil and groundwater results are screened against the Maryland Department of the Environment (MDE) *Cleanup Standards for Soil and Groundwater* (MDE, 2008). Soil results are screened against non-residential soil standards, because site access is restricted and the site is likely to remain a commercial facility for the indefinite future. Surface water results are screened against the lower of the United States Environmental Protection Agency (USEPA) Region 3 Biological Technical Advisory Group (BTAG) freshwater and saltwater screening-benchmarks (USEPA, 2006).

Chemical results for sediment samples are compared to both human health and ecological screening criteria. For human health screening, the results are compared against 10 times the USEPA regional screening level (RSL) for soil. RSLs not adjusted for sediment exposure are based on hazard indices (HIs) of 1 for noncarcinogenic chemicals, or a lifetime cancer risk for carcinogenic chemicals of 1×10^{-6} (i.e., a one in a million probability). RSLs are normally

adjusted by a factor of 10 for sediment screening because human exposures to bottom sediment are anticipated to be less than exposures to soil. For carcinogens, these adjusted values correspond to a carcinogenic risk level of 10^{-5} (i.e., a one in 100,000 probability). The 10^{-5} risk level is considered within the USEPA acceptable-risk range for human exposure, assuming no other chemical risks are present.

Human health sediment-screening criteria are used only as a reference to identify and highlight constituents that could adversely affect human health as a result of hypothetical exposure to contaminated sediment; they are not considered fully applicable because the Dump Road Area (DRA) is essentially restricted, and Martin State Airport (MSA) is likely to remain a commercial facility for the indefinite future. For ecological-exposure screening, sediment results are compared to the USEPA Region 3 BTAG sediment screening benchmarks (USEPA, 2006), USEPA ecological toxicity levels (USEPA, 1996b), and the National Oceanic and Atmospheric Administration (NOAA) quick-reference screening tables (NOAA, 2008).

Medium-specific (i.e., soil, groundwater, surface water, and sediment) tables in the following sections summarize chemical results. Shaded cells in these tables indicate constituent concentrations exceeding screening criteria. These tables provide complete lists of detected concentrations and data validation qualifiers for the 2013 investigation samples. Tables showing all sampling results (detected and not-detected, including detection limits) are in Appendix D.

4.1 GROUNDWATER LEVEL DATA

Table 4-1 presents the October 2013 groundwater level measurements and computed groundwater elevations for DRA wells. Figures 4-1 through 4-3 show the October 2013 groundwater-elevation contour maps for the upper, intermediate, and lower surficial-aquifer zones, respectively. Figure 4-4 shows the October 2013 groundwater-elevation contour map for the deep confined-aquifer below the surficial aquifer. As presented in Table 4-1, static groundwater levels are reported at depths measured from the top of the well casings. Accounting for well-casing stickup associated with aboveground well-casing risers, and well stick-downs for flush-mounted well designs, depth to groundwater ranges from approximately 5–21 feet below grade in each of the upper, intermediate, and lower surficial-aquifer wells. Shallow groundwater is encountered in the western part of the site near the airport runway, whereas deeper groundwater is found in the eastern portion of the site.

As shown in Figures 4-1 through 4-3, groundwater in the upper, intermediate, and lower surficial-aquifer generally flows east–northeast from the runway and taxiway to Frog Mortar Creek. Elevated groundwater at wells MW-43S, MW-39S, DMW-3S, and MW-44S (Figure 4-1) indicates local groundwater mounding east and northeast of Pond 1 and Pond 2. Wells MW-39S, MW-43S, and DMW-3S are installed in clay-rich soil, above the more permeable sands in which the surrounding upper surficial-aquifer wells are installed. Therefore, groundwater levels in these wells may reflect localized perched groundwater in this portion of the DRA. The groundwater elevations of wells MW-39S, MW-43S, and MW-44S in Figure 4-1 indicate that a portion of the higher groundwater surface may also be due to infiltrating water from Pond 1 and Pond 2. Groundwater flow in the deep confined-aquifer is toward the southeast (Figure 4-4).

4.2 TEST PIT EXCAVATION AND SOIL SAMPLING

Test pit locations DR-A76 through DR-A82 were selected to further investigate substances encountered during previous investigations, as detailed in Table 3-1. The general lithology of the soils excavated from the test pits consists primarily of slightly moist to moist clay with varying amounts of silt and sand. Soils at shallow depths often include increased amounts of gravel and sand.

Ten subsurface-soil grab samples (two each from test pits DR-A76, DR-A80, and DR-A82, and one each from test pits DR-A77, DR-A78, DR-A79, and DR-A81) and four composite samples (from test pits DR-A77, DR-A78, DR-A79, and DR-A81) were collected and submitted for laboratory analysis. The test pits were documented on the field sheets and photographed (photos, logs, and data tables are in Appendices C and D, respectively). Chemical results for the test pit soil samples are summarized in Tables 4-2 and 4-3 and described below. Analytes exceeding the industrial screening criteria are highlighted in Table 4-3 and shown in Figure 4-5.

4.2.1 Test Pit DR-A76

Test pit DR-A76 is slightly northeast of previous test pit DR-A-16. Debris was uncovered during the excavation, including wood, metal pieces, pipes, asphalt, and concrete. The debris was found from 1.5 feet below grade to 10 feet below grade. VOC readings collected using a portable photoionization detector (PID) range from 1.7 parts per million (ppm) near the surface to 46.3 ppm at 11 feet below grade. Two samples (DR-A76-10 and DR-A76-11) were collected from this location at 10 feet and 11 feet below grade. Sample DR-A76-10 contained exceedances

of industrial screening-levels for benzo(a)pyrene (2.4 milligrams per kilogram [mg/kg]), benzo(a)pyrene-equivalent (BaPEq) half-non-detect ($BaPEq_{HALFND}$) [3.59 mg/kg], BaPEq-positive-detect ($BaPEq_{PD}$) [3.59 mg/kg], and total petroleum hydrocarbon (TPH)-diesel-range organics (DRO) [1,200 mg/kg]. Sample DR-TP-DR-A76-11 had exceedances for benzo(a)anthracene (27 mg/kg), benzo(a)pyrene (24 mg/kg), benzo(b)flouranthene (28 mg/kg), dibenz(a,h)anthracene (3.3 mg/kg), indeno(1,2,3-cd)pyrene (12 mg/kg), $BaPEq_{HALFND}$ (34.1 mg/kg), $BaPEq_{PD}$ (34.1 mg/kg), vanadium (82 mg/kg), and TPH-GRO (630 mg/kg).

4.2.2 Test Pit DR-A77

Test pit DR-A77 was excavated slightly north of previous test pit DR-N-04. From three to 15.5 feet below grade, minor debris including glass, asphalt, some electrical components, and some wood was encountered. PID readings range from 0.0 ppm near the surface to 115 ppm at 14 feet below grade. Samples collected for laboratory analysis include a grab sample (DR-A77-14) collected from 14 feet below grade and a composite sample (DR-A77-C) comprised of soil from seven, nine, 11, 14, and 13 feet below grade. Concentrations of benzo(a)pyrene (0.64 mg/kg) and TPH-DRO (1,110 mg/kg) were detected in sample DR-A77-14 above industrial screening levels. No exceedances were detected in the composite sample from this test pit.

4.2.3 Test Pit DR-A78

Test Pit DR-A78 was excavated southwest of previous test pit DR-A-33 and groundwater monitoring well cluster DMW-9S/I/D. A white material was observed from 3–3.5 feet below grade, and wet, black, silty sand with a visible sheen and noticeable petroleum odor was encountered from four to six feet below grade. The PID readings range from 1.6 ppm near the surface to 222 ppm at five feet below grade, with another notable concentration of 201 ppm detected at eight feet below grade. Samples collected for laboratory analysis include a grab sample (DR-TP-A78-05) collected from five feet below grade and a composite sample (DR-TP-A78-C) comprised of soil from 5–9 feet below grade. No industrial screening-standard was exceeded for any of the analyzed compounds in these samples.

4.2.4 Test Pit DR-A79

Test pit DR-A79 was excavated slightly south of groundwater monitoring well MW-5. Significant debris was encountered in this test pit at depths from four to eleven feet below grade, consisting of copper wire, cinderblocks, masonry, metal shards (possibly deteriorated drums), and concrete. PID readings range from 4.4 ppm near the surface to 24.7 ppm at four feet below grade. A grab sample (DR-A79-04) from four feet below grade and a composite sample (DR-TP-A79-C) were collected for laboratory analysis. Sample DR-TP-A79-04 contained trichloroethene (TCE) at 13,000 µg/kg, which exceeds the industrial screening level (7,200 micrograms per kilogram [µg/kg]). Nine analytes exceeded industrial screening levels in composite sample DR-TP-A79-C: benzo(a)anthracene (6.8 mg/kg), benzo(A)pyrene (9.6 mg/kg), benzo(b)flouranthene (14 mg/kg), dibenz(a,h)anthracene (1.3 mg/kg), indeno(1,2,3-cd)pyrene (4.2 mg/kg), $BaPEq_{HALFND}$ (13.4 mg/kg), $BaPEq_{PD}$ (13.4 mg/kg), chromium (430 mg/kg), and lead (1,500 mg/kg).

4.2.5 Test Pit DR-A80

Test pit DR-A80 was excavated slightly southeast of groundwater monitoring well cluster DMW-3S/I/D. The debris uncovered in this test pit includes concrete and burned wood from two to three feet below grade, and some glass and rock from 6.5 to 10 feet below grade. The PID readings range from 0.1 ppm near the surface to 1.3 ppm at three feet below grade. Two grab samples were collected from the test pit for laboratory analysis: one from three feet below grade (DR-TP-A80-03) and one from 11 feet below grade (DR-TP-A80-11). Sample DR-TP-A80-03 contained exceedances of industrial screening levels for Aroclor-1242 (4,100 mg/kg), total Aroclor (4100 mg/kg), chromium (360*J* mg/kg), and TPH-DRO (910 mg/kg). None of the analyzed compounds exceeded industrial screening levels in the sample collected at 11 feet below grade (DR-TP-A80-11).

4.2.6 Test Pit DR-A81

Test pit DR-A81 was excavated approximately 100 feet west of test pit DR-A77. No significant debris was uncovered during excavation of this test pit. PID readings range from 3.9 ppm at five feet below grade to 15.8 ppm near the surface. A grab sample (DR-TP-A81-07) from seven feet below grade and a composite sample (DR-TP-A81-C) were collected for laboratory analysis. Four analytes in composite sample DR-TP-A81-C exceeded their respective industrial

screening levels: benzo(a)pyrene (3.1 mg/kg), benzo(b)flouranthene (4.4 mg/kg), $BaPEq_{HALFND}$ (4.3 mg/kg), and $BaPEq_{PD}$ (4.3 mg/kg).

4.2.7 Test Pit DR-A82

Test pit DR-A82 was excavated approximately 100 feet east of monitoring well cluster MW-18S/I/D. Significant debris, including metal shards, plastic bags, lumber, Styrofoam™, and asphalt, was uncovered during excavation of this test pit, at depths from three feet to 7.5 feet below grade. PID readings were 2.9 ppm at three feet below grade and 2.2 ppm at eight feet below grade. Two grab samples (DR-TP-A82-03 and DR-TP-A82-08) were collected for laboratory analysis from three feet below grade and eight feet below grade, respectively. Sample DR-TP-A82-03 had industrial screening-level exceedances for benzo(a)pyrene (3.1 mg/kg), benzo(b)flouranthene (4.8 mg/kg), dibenz(a,h)anthracene (0.62 mg/kg), $BaPEq_{HALFND}$ (4.76 mg/kg), $BaPEq_{PD}$ (4.76 mg/kg), and TPH-DRO (930 mg/kg). No compounds exceeded the industrial screening levels in sample DR-TP-A82-08.

4.3 SOIL SAMPLING

Soil borings were advanced in 16 locations throughout the DRA. As described in Section 3, 10 soil borings were advanced by direct-push drilling (DR-SB-187 through DR-SB-196) for lithological characterization and soil sampling, and six borings (DR-SB-46 through DR-SB-51) were advanced during installation of new groundwater monitoring well clusters. Chemical results for the soil samples are shown in Tables 4-4 and 4-5; analytes exceeding their respective industrial screening criteria are highlighted in Table 4-5 and shown in Figure 4-6.

Four of the10 soil borings (DR-SB-188, DR-SB-191, DR-SB-194, and DR-SB-196) advanced by DPT produced samples with compounds exceeding industrial screening levels. Soil from 22 to 24 feet below grade in soil boring DR-SB-191 had exceedances for benzo(a)anthracene (6.9 mg/kg), benzo(a)pyrene (6.4 mg/kg), benzo(b)flouranthene (9.4 mg/kg), dibenz(a,h)anthracene (1.2 mg/kg), $BaPEq_{HALFND}$ (9.63 mg/kg), and $BaPEq_{PD}$ (9.63 mg/kg) at concentrations exceeding industrial screening levels. The three other samples with industrial soil exceedances were collected from 24–25 feet below grade in soil boring DR-SB-188 (benzo[a]pyrene 1 mg/kg and cadmium 52 mg/kg), from 13 to 15 feet below grade in soil boring DR-SB-194 (vanadium 82 mg/kg), and from two to four feet below grade in soil boring DR-SB-196 (vanadium 69K mg/kg). Only one soil sample (DR-SB-46S-19-20) with industrial screening level

exceedances was collected during installation of the new monitoring wells. Arsenic (21 mg/kg) and vanadium (130 mg/kg) were detected in those wells at 19–20 feet below grade.

4.4 DIRECT-PUSH TECHNOLOGY GROUNDWATER SAMPLING

Twenty-two DPT-probe groundwater sample borings were advanced throughout the DRA. Chemical results for the DPT groundwater samples are shown in Tables 4-6 and 4-7. Analytes exceeding the groundwater standards are highlighted in Table 4-7. Exceedances for the chlorinated volatile organic compounds (cVOCs) trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC) are shown in Figure 4-7. Exceedances for benzene, toluene, ethylbenzene, and xylenes (BTEX) are shown in Figure 4-8.

4.4.1 Frog Mortar Creek Western Shoreline

DPT-23 through DPT-29 were advanced near the edge of the DRA embankment or constructed berm area adjacent to the western shoreline of Frog Mortar Creek. As shown on Figures 4-7 and 4-8, these locations were positioned east of Ponds 1 and 2 and along the eastern limits of the buried waste, near the newly installed monitoring well clusters (MW-46 through MW-51). TCE concentrations were highest at locations DPT-25 (40-foot depth) and DPT-26 (30-foot depth), with detections of 25,000 micrograms per liter (µg/L) and 26,000 µg/L, respectively. TCE concentrations generally decreased at DPT locations north and south of DPT-25 and DPT-26.

Maximum TCE concentrations at the surrounding DPT borings (DPT-24, DPT-27, and DPT-28) occurred at depths of 25–30 feet below grade (i.e., -8 to -20 feet elevation). The highest concentrations of two additional cVOCs were also detected at location DR-DPT-26: *cis*-1,2-DCE (24,000 µg/L) and VC (7,600 µg/L) were detected at 25 feet below grade. Several exceedances for other cVOCs, one exceedance for benzene, and two exceedances for acetone were also detected in these samples, but TCE is the prevailing contaminant in this area.

4.4.2 Taxiway Tango Area North

DPT-30, DPT-31, and DPT-33 were advanced in the northern region of the Taxiway Tango area. Elevated concentrations of at least one cVOC were detected in all samples. The highest TCE (9,900*J* µg/L) and *cis*-1,2-DCE concentrations (4,200 µg/L) were at DPT-33 (30-foot depth). TCE and *cis*-1,2-DCE exceeded screening levels in all samples collected at DPT-30, except for the shallowest sample (15-foot depth). Exceedances of TCE (ranging from 6 µg/L to

1,000 µg/L), *cis*-1,2-DCE (ranging from 100 µg/L to 2,000 µg/L), and VC (ranging from 2.6*J* µg/L to 580 µg/L) were also detected in DPT-30 and DPT-31. However, the elevated TCE concentration (9,900 µg/L) detected at a depth of 40 feet (-30 feet elevation) at DPT-33 indicates a possible TCE source area. TCE exceedances were also detected in previously collected groundwater samples from nearby monitoring well clusters: MW-15S/15I (63 µg/L and 1,500 µg/L, respectively, in 2011), MW-28I (1,000 µg/L in 2011), and MW-33S (1,500 µg/L in 2009 and 690 µg/L in 2010). These historical exceedances are lower than the TCE groundwater concentrations at DPT-33. This evidence strongly suggests that DPT-33 is near the source area. Slight exceedances for benzene (ranging from 5.7*J* µg/L to 9.4*J* µg/L) were detected in four of 20 samples collected. All benzene exceedances except the highest detected concentration were from DPT-30. The maximum benzene concentration (9.4*J* µg/L) was detected in a sample from DPT-33 at a 45-foot depth.

4.4.3 Petroleum Hydrocarbon Area

DPT-34 was advanced to further characterize the groundwater quality upgradient of the Petroleum Hydrocarbon Area and downgradient of elevated TCE at well DMW-11S and CPT-03 (Taxiway Tango Median Area). However, samples from DPT-34 produced significantly higher concentrations of TCE (up to 16,000*J* µg/L), *cis*-1,2-DCE (820*J* µg/L to 75,000 µg/L), and VC (210*J* µg/L to 87,000 µg/L). Benzene, toluene, and xylenes were also detected in this location at maximum concentrations of 120*J* µg/L, 37,000 µg/L, and 670 µg/L, respectively, but only benzene and toluene concentrations exceeded groundwater screening levels. Acetone (in one of four samples), chloroform (in three of four samples), and methylene chloride (in one of four samples) also exceeded their respective groundwater standards. The TCE and toluene concentrations at DPT-34 indicate the eastward continuation of the Taxiway Tango Median Area TCE source area (i.e., well DMW-11S and CPT-03) and the westward continuation of the Petroleum Hydrocarbon Area source.

4.4.4 Taxiway Tango East

DPT-35 is north of the Taxiway Tango East area where elevated cVOCs have been detected at wells MW-45S and DMW-1B, and at CPT-08. The relatively low detections of cVOCs at DPT-35 (maxima for TCE, *cis*-1,2-DCE, and VC at 230 µg/L, 860 µg/L, and 720 µg/L, respectively) indicate that this DPT location is north of the Taxiway Tango East source area.

4.4.5 Former Pond 4/Open Burning Area—Features #43 and #45

DPT-36 and DPT-37 were advanced adjacent to Taxiway Tango in areas suspected of being the former locations of a chemical dumping pit and an open burning area (both observed in historical aerial photographs). These DPT locations are also west/northwest of and hydraulically upgradient/cross-gradient to the Drum Area. The maximum cVOC concentration (260 µg/L of *cis*-1,2-DCE at DPT-37) does not indicate a cVOC source in this area. Only infrequent trace concentrations of benzene, toluene, and xylenes were detected at these two locations.

4.4.6 The Drum Area

DPT-40, DPT-41, and DPT-42 were advanced near the Drum Area. DPT-40 and DPT-41 are northeast and downgradient of the Drum Area, and DPT-42 is upgradient and to the southwest. As expected, the upgradient location produced samples with relatively low contaminant concentrations, similar to concentrations detected at DPT-32, DPT-36, and DPT-37 farther to the west, while the downgradient locations produced significantly higher concentrations. DPT-41 produced the sample with the highest TCE concentration in this area: 28,000*K* µg/L at 35 feet below grade, and an elevated *cis*-1,2-DCE concentration (17,000 µg/L) at 30 feet below grade. DPT-40 produced considerably lower TCE concentrations (maximum concentration of 5,800 µg/L) as compared to DPT-41, but had consistently high *cis*-1,2-DCE concentrations, ranging from 1,100 µg/L to 9,100 µg/L. Samples collected from these three locations indicate a northeast trending contaminant plume extending from the Drum Area.

4.4.7 Taxiway Tango Median Area

DPT-32 was advanced to characterize groundwater south/southeast of well DMW-11S and CPT-05 and to delineate the boundary of cVOCs in the area where some of the highest cVOC concentrations have been detected in DRA groundwater samples. DPT-32 is also near the location of a probe groundwater sample collected at MIP-61, with a high TCE concentration (3,630 µg/L) in the upper surficial-aquifer. Groundwater results from DPT-32 indicate the presence of TCE, with increasing concentrations down to a depth of 50 feet below grade (elevation of -40 feet).

The maximum TCE concentration (130 µg/L) was detected at DPT-32 at 50 feet; this concentration is nearly 30 times less than the TCE concentration (3,630 µg/L) at MIP-61. TCE

concentrations at DPT-32 are also less than those to the north at CPT-05, and show a gradual decrease in TCE concentrations from DMW-11S to CPT-04, CPT-05, and DPT-32. Slight exceedances for carbon tetrachloride (6.6 µg/L and 12 µg/L) and vinyl chloride (8.6 µg/L and 19 µg/L) were detected in samples from the 50-, 40-, 35-, and 30-foot depths, respectively.

DPT-39 was advanced near (previously sampled) CPT-01, along the eastern edge of the runway, to further investigate elevated TCE concentrations in CPT-01 and monitoring well DMW-11S/I. The samples collected from DPT-39 contained no significant concentrations indicating contamination. However, one TCE concentration (16 µg/L) collected at a depth of 30 feet (elevation of -19 feet) is three times higher than the MDE groundwater standard of 5 µg/L.

4.4.8 Area of Former Pond 3 and Former Linear Pond

DPT-38, DPT-43, and DPT-43B were advanced in the area that was suspected of being the location of a former chemical pit (Pond 3) and a former linear pond. DPT-38 is north of this area; only slight cVOC exceedances were detected there. In contrast, elevated concentrations of TCE at DPT-43 and DPT-43B (490,000 µg/L at 35 feet below grade, and 30,000 µg/L at 40 feet below grade, respectively) indicate a possible source area. TCE concentrations at DPT-43B were 22,000 µg/L at 20 feet below grade, and 3,700 µg/L at 15 feet below grade. Toluene exceedances (up to 10,000 µg/L) were also detected in DPT-43 and DPT-43B. These concentrations indicate sources for cVOCs and petroleum hydrocarbons. Downgradient of these locations, highly elevated contaminant concentrations have been detected in historical investigations as well as in the newly installed monitoring wells and the DPT groundwater samples collected for this investigation.

4.5 WELL GROUNDWATER SAMPLING

Groundwater sampling results from the new monitoring wells are shown in Tables 4-8 and 4-9. Analytes exceeding groundwater standards or other screening levels are highlighted in Table 4-9 and shown on Figure 4-9. As shown in Table 4-9 and Figure 4-9, cVOCs, 1,4-dioxane, metals, TPH-GRO, and TPH-DRO exceed groundwater standards at wells installed at the top of the embankment or berm near Frog Mortar Creek. Of note is the elevated TCE concentration in well MW-51S (13,000 µg/L). This well is installed at a shallow depth (20 feet) at the southern end of the DRA between wells MW-50S/I/D and DPT-29, the latter of which had mostly no detections

of cVOCs and only three trace concentrations (i.e., 2.1 µg/L and less) of cVOCs in vertical-aquifer screening groundwater samples.

Farther north, the next highest concentrations of TCE were detected in wells MW-49D and MW-49I, at concentrations of 9,300 µg/L and 6,900 µg/L, respectively. These wells are east of DMW-4S/I/D. The next highest TCE concentrations are from MW-47I (4,300 µg/L) east of Pond 2 and MW-18I, and from MW-48I (3,900 µg/L) east of wells DMW-2S/A/B. Overall, TCE concentrations in the new wells are less than those detected in the DPT groundwater samples. TCE results for wells MW-46S/I/D, MW-47S/I/D, MW-48S/I/D, and MW-50S/I/D are less than concentrations for upgradient wells MW-18I, DMW-3I, DMW-2A, and DMW-5S, whereas TCE concentrations for MW-49I/D are greater than for upgradient wells DMW-4I/D. Although TPH-GRO exceeds the groundwater standard in several new wells, BTEX were detected infrequently and at low to trace concentrations (typically less than 1 µg/L), well below groundwater standards.

4.6 SURFACE WATER SAMPLING

Chemical results for the Pond 1 and wetland area water samples are shown in Tables 4-10 and 4-11. Analytes exceeding the screening criteria are highlighted in Table 4-11 and shown on Figure 4-10. Only metals, TPH-GRO, and TPH-DRO exceed their respective screening levels. (EWT-SW3-1 was only analyzed for VOCs due to limited water available in the shallow drive-point sampler.) Cadmium and chromium concentrations in Pond 1 samples are lower than concentrations in 2012 Pond 1 samples, and mercury was not detected in 2013. Pond 1 barium concentrations in 2013 (39–41 µg/L) are approximately five to eight times higher than the concentrations in 2012 samples (5–8.7 µg/L); however, the Pond 1 barium concentrations in 2013 are consistent with barium levels reported for other nearby water bodies, such as Pond 2 and Frog Mortar Creek. Barium and cadmium concentrations in wetland water samples (EWT-SW1 and EWT-SW2) are higher than those in Pond 1 samples. Additionally, concentrations of cobalt, cooper, nickel, and zinc exceed their screening levels in two wetland water samples, and hexavalent chromium exceeds its lowest screening level in one wetland water sample (EWT-SW1).

4.7 SEDIMENT SAMPLING

Chemical results for sediment samples collected from Pond 1 and the wetland area are in Tables 4-12 and 4-13. Analytes exceeding screening criteria are highlighted in Table 4-13, and major analytes exceeding their criteria are shown in Figure 4-11. Major analytes exceeding the screening levels in the pond sediment samples include BTEX, cVOCs (TCE, *cis*-1,2-DCE, and VC), 2-methylnaphthalene, naphthalene, PCBs, cadmium, chromium, copper, lead, zinc, TPH-DRO, and TPH-GRO. Numerous PAHs (e.g., benzo(a)pyrene, benzo(b)fluoranthene, chrysene, fluoranthene, etc.) also exceed screening levels. Similar to previous Pond 1 sediment samples, higher concentrations of chemicals were detected in deeper (1–2 foot) samples. Constituents exceeding the screening levels in wetland area sediment samples (EWT-SD-1 through EWT-SD3) are primarily metals. PAHs also exceeded the screening levels (see Table 4-13), but are not shown on Figure 4-11. Primary cVOCs (TCE, *cis*-1,2-DCE, and VC) and BTEX were not detected in the wetland area sediment samples.

Consistent with previous sampling, results for EP1-SD15 and EP1-SD16 in the northern portion of Pond 1 show non-detect or low concentrations of cVOCs in sediment. However, BTEX were detected in these samples, with the maximum total BTEX concentration (737,000 µg/kg) detected at 1–2 feet at EP1-SD16. The maximum TCE concentrations detected in the central and southern portions of Pond 1 were 5,400 µg/kg at EP1-SD17-1–2 (southern portion of Pond 1) and 2,400 µg/kg at EP1-SD18-1–2 (central portion of Pond 1). Maximum BTEX concentrations in southern and central portions of the pond were 883,100 µg/kg at EP1-SD17-1–2 and 4,480 µg/kg at EP1-SD18-1–2, respectively (ethylbenzene concentration is below the screening levels and is therefore not shown on Figure 4-11).

The geotechnical analyses indicate that the wetland sediment samples consist primarily of fines with some sand and trace gravel. Samples were comprised of 71.6–90.3% fines, 9.7–25.9% sand, and, in one instance, 2.1% fine gravel. Permeabilities range from 5.09×10^{-6} to 1.23×10^{-5} centimeters per second, and were consistently higher in the zero- to one-foot interval than in the one- to two-foot interval.

Table 4-1
Groundwater Levels and Elevations - October 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Well ID	Aquifer Level	Elevation - top of well casing NAVD88 Feet	Depth to groundwater - top of well casing 10/14/2013 Feet	Groundwater elevation - NAVD88 10/14/2013 Feet
DMW-1S	S	11.08	8.58	2.50
DMW-2S	S	21.75	20.31	1.44
DMW-3S	S	16.52	11.39	5.13
DMW-4S	S	20.52	19.07	1.45
DMW-5S	S	21.34	20.01	1.33
DMW-6S	S	18.62	17.23	1.39
DMW-7S	S	21.84	19.92	1.92
DMW-8S	S	15.80	14.21	1.59
DMW-9S	S	11.45	8.22	3.23
MW-10S	S	10.29	7.65	2.64
MW-11S	S	9.20	NM	--
MW-15S	S	8.60	6.04	2.56
MW-16S	S	10.20	8.70	1.50
MW-17S	S	7.61	6.25	1.36
MW-18S	S	8.89	7.12	1.77
MW-20S	S	12.44	10.21	2.23
MW-23S	S	10.01	7.45	2.56
MW-24S	S	7.72	NM	--
MW-25S	S	9.69	5.62	4.07
MW-26S	S	11.72	8.87	2.85
MW-3	S	11.19	8.70	2.49
MW-32S	S	7.27	5.14	2.13
MW-33S	S	9.97	6.91	3.06
MW-34S	S	7.44	5.84	1.60
MW-35S	S	12.63	9.55	3.08
MW-36S	S	11.88	7.33	4.55
MW-37S	S	10.70	6.21	4.49
MW-38S	S	10.81	7.66	3.15
MW-39S	S	15.70	13.19	2.51
MW-4	S	10.34	7.65	2.69
MW-40S	S	17.48	15.39	2.09
MW-41S	S	10.23	7.75	2.48
MW-42S	S	8.88	6.55	2.33
MW-43S	S	18.08	14.11	3.97
MW-44S	S	9.21	2.32	6.89
MW-45S	S	10.03	7.55	2.48
MW-46S	S	11.26	9.22	2.04
MW-47S	S	11.96	10.21	1.75

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Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Well ID	Aquifer Level	Elevation - top of well casing NAVD88 Feet	Depth to groundwater - top of well casing 10/14/2013 Feet	Groundwater elevation - NAVD88 10/14/2013 Feet
MW-48S	S	19.92	18.21	1.71
MW-49S	S	19.84	18.49	1.35
MW-5	S	22.65	20.67	1.98
MW-50S	S	12.55	10.90	1.65
MW-51S	S	9.69	8.08	1.61
MW-6	S	15.72	13.81	1.91
MW-7	S	10.90	7.54	3.36
OW1-S	S	19.17	NM	--
RW1-S	S	19.09	NM	--
DMW-1A	I	12.05	9.56	2.49
DMW-2A	I	21.65	20.09	1.56
DMW-3I	I	16.45	14.71	1.74
DMW-4I	I	20.48	18.92	1.56
DMW-5I	I	21.39	19.98	1.41
DMW-6I	I	18.64	17.21	1.43
DMW-7I	I	21.90	20.21	1.69
DMW-8I	I	16.30	14.41	1.89
DMW-9I	I	11.40	9.20	2.20
MW-1[(1)]	I	10.69	NA	--
MW-10I	I	10.27	7.75	2.52
MW-11I	I	9.15	NM	--
MW-14I	I	11.72	10.11	1.61
MW-15I	I	8.79	6.19	2.60
MW-16I	I	10.06	7.61	2.45
MW-17I	I	7.68	5.61	2.07
MW-18I	I	8.91	7.32	1.59
MW-19I	I	7.90	6.02	1.88
MW-2	I	8.40	6.29	2.11
MW-20I	I	12.39	10.15	2.24
MW-21I	I	10.83	8.55	2.28
MW-22I	I	11.01	8.59	2.42
MW-23I	I	10.07	7.55	2.52
MW-24I	I	7.68	NM	--
MW-25I	I	9.72	7.15	2.57
MW-26I	I	11.67	9.03	2.64
MW-28I	I	8.65	6.11	2.54
MW-30I	I	7.52	5.10	2.42
MW-32I	I	7.28	5.25	2.03

Table 4-1
Groundwater Levels and Elevations - October 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Well ID	Aquifer Level	Elevation - top of well casing NAVD88 Feet	Depth to groundwater - top of well casing 10/14/2013 Feet	Groundwater elevation - NAVD88 10/14/2013 Feet
MW-33I	I	10.02	7.02	3.00
MW-34I	I	7.37	4.84	2.53
MW-40I	I	17.59	15.66	1.93
MW-41I	I	10.23	7.76	2.47
MW-42I	I	8.87	6.51	2.36
MW-46D	I	11.67	9.97	1.70
MW-46I	I	11.19	9.58	1.61
MW-47D	I	12.04	10.45	1.59
MW-47I	I	11.94	10.38	1.56
MW-48D	I	20.12	18.35	1.77
MW-48I	I	19.94	18.21	1.73
MW-49D	I	19.60	18.10	1.50
MW-49I	I	19.59	18.18	1.41
MW-50D	I	13.12	11.54	1.58
MW-50I	I	12.64	10.99	1.65
MW-51D	I	9.55	8.05	1.50
MW-51I	I	9.61	7.97	1.64
OW1-I	I	18.05	NM	--
RW1-I	I	18.44	NM	--
DMW-1B	D	12.04	9.75	2.29
DMW-2B	D	21.66	19.85	1.81
DMW-3D	D	16.46	14.52	1.94
DMW-4D	D	20.44	19.00	1.44
DMW-5D	D	21.38	20.04	1.34
DMW-6D	D	18.51	17.17	1.34
DMW-7D	D	21.94	20.12	1.82
DMW-8D	D	16.35	14.36	1.99
DMW-9D	D	11.41	9.25	2.16
MW-15D	D	8.77	6.18	2.59
MW-16D	D	10.22	7.80	2.42
MW-17D	D	7.56	6.24	1.32
MW-18D	D	8.88	7.35	1.53
MW-19D	D	7.94	6.08	1.86
MW-20D	D	12.40	10.35	2.05
MW-21D	D	10.78	8.59	2.19
MW-22D	D	11.02	8.60	2.42
MW-23D	D	10.03	7.81	2.22
MW-26D	D	11.66	9.55	2.11

Table 4-1
Groundwater Levels and Elevations - October 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Well ID	Aquifer Level	Elevation - top of well casing NAVD88 Feet	Depth to groundwater - top of well casing 10/14/2013 Feet	Groundwater elevation - NAVD88 10/14/2013 Feet
MW-14D	D1	11.56	7.03	4.53
MW-27D	D2	8.39	2.45	5.94
MW-29D	D2	11.43	7.86	3.57
MW-30D	D2	8.26	4.25	4.01
MW-31D	D2	6.95	3.51	3.44

1 Well is abandoned (i.e., removed and borehole sealed in accordance with state regulations).
-- elevation not computed (water level not measured or not available)
NA - not available
NM - not measured
S - upper surficial aquifer
I - intermediate surficial aquifer
D - lower surficial aquifer
D1 - clay unit underlying lower surficial aquifer
D2 - deep confined aquifer below the lower surficial aquifer
NAVD88 = North American Vertical Datum of 1988

Table 4-2
Statistical Summary of Analytes Detected in Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximumm Qualifier	Location of Max Detect	Sample of Max Detect	Average Of All Results	Average Of Positive Results
Inorganics (mg/kg)												
ARSENIC	10/10	100			1.3	J	7.5		DR-A-82	DR-TP-A82-03A	5.45	5.45
BARIUM	10/10	100			8.8	J	260		DR-A-79	DR-TP-A79-C	66.28	66.28
BERYLLIUM	10/10	100			0.11	J	1.3		DR-A-82	DR-TP-A82-03A	0.87	0.87
BERYLLIUM	10/10	100			0.11	J	1.3		DR-A-76	DR-TP-A76-11	0.87	0.87
CHROMIUM	10/10	100			11		430		DR-A-79	DR-TP-A79-C	144.70	144.70
COBALT	10/10	100			0.98		18		DR-A-82	DR-TP-A82-03A	9.38	9.38
COPPER	10/10	100			3.6		1200		DR-A-79	DR-TP-A79-C	182.16	182.16
LEAD	10/10	100			20	J	1500		DR-A-79	DR-TP-A79-C	240.10	240.10
NICKEL	10/10	100			2	J	240		DR-A-80	DR-TP-A80-03	47.91	47.91
VANADIUM	10/10	100			13		82		DR-A-76	DR-TP-A76-11	34.70	34.70
ZINC	10/10	100			16		2000		DR-A-79	DR-TP-A79-C	368.60	368.60
CADMIUM	9/10	90	0.035	0.035	0.73	J	26		DR-A-79	DR-TP-A79-C	6.64	7.38
MERCURY	9/10	90	0.016	0.016	0.052	J	0.95		DR-A-81	DR-TP-A81-C	0.28	0.31
MOLYBDENUM	9/10	90	0.26	0.26	0.6	J	16		DR-A-80	DR-TP-A80-03	3.37	3.73
SILVER	7/10	70	0.098	0.17	0.39	J	32		DR-A-79	DR-TP-A79-C	3.90	5.54
ANTIMONY	3/10	30	0.42	2	2.6	J	35		DR-A-79	DR-TP-A79-C	4.53	13.93
SELENIUM	3/10	30	0.44	0.78	0.56	J	0.65	J	DR-A-79	DR-TP-A79-C	0.36	0.60
Semivolatile Organics (ug/kg)												
BAP EQUIVALENT-HALFND	10/10	100			17.61785		34124		DR-A-76	DR-TP-A76-11	6163	6163
BAP EQUIVALENT-POS	10/10	100			17.118		34124		DR-A-76	DR-TP-A76-11	6162	6162
BENZO(A)ANTHRACENE	10/10	100			14		27000		DR-A-76	DR-TP-A76-11	4486	4486
BENZO(A)PYRENE	10/10	100			14		24000		DR-A-76	DR-TP-A76-11	4316	4316
BENZO(B)FLUORANTHENE	10/10	100			17		28000		DR-A-76	DR-TP-A76-11	5628	5628
CHRYSENE	10/10	100			14		24000		DR-A-76	DR-TP-A76-11	4269	4269
FLUORANTHENE	10/10	100			26		59000		DR-A-76	DR-TP-A76-11	8795	8795
PYRENE	10/10	100			26		48000		DR-A-76	DR-TP-A76-11	7303	7303
BENZO(G,H,I)PERYLENE	9/10	90	0.5	0.5	10	J	12000		DR-A-76	DR-TP-A76-11	2161	2401
BENZO(K)FLUORANTHENE	9/10	90	0.97	0.97	6.7	J	10000		DR-A-76	DR-TP-A76-11	1812	2013
ACENAPHTHENE	8/10	80	1.5	17	28		6700		DR-A-76	DR-TP-A76-11	869	1086
FLUORENE	8/10	80	1	12	51		8200		DR-A-76	DR-TP-A76-11	1079	1348
INDENO(1,2,3-CD)PYRENE	8/10	80	0.5	7.7	8.4	J	12000		DR-A-76	DR-TP-A76-11	2103	2629
NAPHTHALENE	8/10	80	0.95	18	11	J	7400		DR-A-76	DR-TP-A76-11	1425	1780
PHENANTHRENE	8/10	80	0.84	16	16		42000		DR-A-76	DR-TP-A76-11	5862	7326
2-METHYLNAPHTHALENE	7/10	70	0.58	11	18		1500		DR-A-76	DR-TP-A76-11	307	437
ANTHRACENE	7/10	70	0.9	17	11		15000		DR-A-76	DR-TP-A76-11	1906	2722
DIBENZOFURAN	7/10	70	0.76	15	15	J	12000		DR-A-76	DR-TP-A76-11	1385	1978
CARBAZOLE	6/10	60	31	600	110		5500		DR-A-76	DR-TP-A76-11	883	1412
DIBENZO(A,H)ANTHRACENE	6/10	60	0.76	15	120		3300		DR-A-76	DR-TP-A76-11	603	1003
1,1-BIPHENYL	4/10	40	4	77	6.4	J	1100	J	DR-A-76	DR-TP-A76-11	158	374

Table 4-2
Statistical Summary of Analytes Detected in Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximumm Qualifier	Location of Max Detect	Sample of Max Detect	Average Of All Results	Average Of Positive Results
ACENAPHTHYLENE	4/10	40	0.4	7.7	53		3400		DR-A-76	DR-TP-A76-11	418	1043
BIS(2-ETHYLHEXYL)PHTHALATE	3/10	30	22	1500	39	J	710	J	DR-A-76	DR-TP-A76-10	269	326
1,4-DIOXANE	1/10	10	25	1400	93	J	93	J	DR-A-77	DR-TP-A77-C	150	93
3&4-METHYLPHENOL	1/10	10	23	1300	34	J	34	J	DR-A-77	DR-TP-A77-C	133	34
ACETOPHENONE	1/10	10	11	590	40	J	40	J	DR-A-77	DR-TP-A77-C	63	40
Volatile Organics (ug/kg)												
2-BUTANONE	5/10	50	38	79	2.1	J	31		DR-A-81	DR-TP-A81-07	20.64	16.58
TRICHLOROETHENE	5/10	50	0.38	8.9	2.8	J	13000		DR-A-79	DR-TP-A79-04	1319.14	2637.16
NAPHTHALENE	5/10	50	0.21	0.38	35	J	1700		DR-A-76	DR-TP-A76-10	262.97	525.80
ACETONE	4/10	40	37	310	26		170		DR-A-80	DR-TP-A80-11	98.45	119.00
CIS-1,2-DICHLOROETHENE	4/10	40	0.33	7.4	7		330	J	DR-A-79	DR-TP-A79-04	65.08	160.75
VINYL CHLORIDE	4/10	40	0.35	33	1.8	J	340		DR-A-76	DR-TP-A76-11	51.98	121.18
1,2,3-TRIMETHYLBENZENE	3/10	30	0.15	0.34	19	J	160	J	DR-A-76	DR-TP-A76-10	31.98	106.33
1,2,4-TRIMETHYLBENZENE	3/10	30	0.59	9.2	26	J	54	J	DR-A-76	DR-TP-A76-11	12.00	37.00
1,2-DICHLOROETHANE	3/10	30	0.31	18	52	J	170	J	DR-A-76	DR-TP-A76-11	30.07	95.33
4-ISOPROPYLTOLUENE	3/10	30	0.19	8.8	7.5	J	25	J	DR-A-77	DR-TP-A77-14	4.78	13.50
CARBON DISULFIDE	3/10	30	0.4	95	0.76	J	1.9	J	DR-A-80	DR-TP-A80-11	11.68	1.29
ETHYLBENZENE	3/10	30	0.24	9.9	73	J	130	J	DR-A-76	DR-TP-A76-10	32.13	104.33
ISOPROPYLBENZENE	3/10	30	0.14	12	16	J	59	J	DR-A-77	DR-TP-A77-14	11.05	33.67
M+P-XYLENES	3/10	30	1.1	11	49	J	92	J	DR-A-77	DR-TP-A77-14	20.83	65.33
N-BUTYLBENZENE	3/10	30	0.21	15	27	J	110	J	DR-A-77	DR-TP-A77-14	18.69	58.33
O-XYLENE	3/10	30	0.32	16	23	J	59	J	DR-A-77	DR-TP-A77-14	13.40	40.33
SEC-BUTYLBENZENE	3/10	30	0.16	8.6	14	J	110	J	DR-A-77	DR-TP-A77-14	15.90	50.67
TOTAL XYLENES	3/10	30	0.32	11	78	J	150	J	DR-A-77	DR-TP-A77-14	32.55	105.33
TRANS-1,2-DICHLOROETHENE	3/10	30	0.37	9.8	0.55	J	85	J	DR-A-79	DR-TP-A79-04	14.88	44.85
1,2-DICHLOROBENZENE	2/10	20	0.33	16	50	J	780		DR-A-76	DR-TP-A76-10	84.69	415.00
BENZENE	2/10	20	0.21	22	13	J	37	J	DR-A-76	DR-TP-A76-11	7.28	25.00
CHLOROBENZENE	2/10	20	0.3	6.8	12	J	22	J	DR-A-76	DR-TP-A76-10	4.42	17.00
N-PROPYLBENZENE	2/10	20	0.36	26	39	J	39	J	DR-A-76	DR-TP-A76-11	10.48	39.00
N-PROPYLBENZENE	2/10	20	0.36	26	39	J	39	J	DR-A-76	DR-TP-A76-10	10.48	39.00
TERT-BUTYLBENZENE	2/10	20	0.26	12	10	J	160	J	DR-A-78	DR-TP-A78-05	18.32	85.00
TETRACHLOROETHENE	2/10	20	0.47	13	11		310	J	DR-A-79	DR-TP-A79-04	34.63	160.50
1,3-DICHLOROBENZENE	1/10	10	0.32	8.8	22	J	22	J	DR-A-76	DR-TP-A76-10	3.44	22.00
1,4-DICHLOROBENZENE	1/10	10	0.6	15	79	J	79	J	DR-A-76	DR-TP-A76-10	10.00	79.00
PCBs (ug/kg)												
TOTAL AROCLOR	6/10	60	0	0	39		4100000		DR-A-80	DR-TP-A80-03	410132	683554
AROCLOR-1254	3/10	30	20	190000	82		330	J	DR-A-79	DR-TP-A79-C	9575	201
AROCLOR-1242	2/10	20	15	84	160	J	4100000		DR-A-80	DR-TP-A80-03	410029	2050080
AROCLOR-1260	2/10	20	20	190000	39	J	150	J	DR-A-82	DR-TP-A82-03	9536	95
AROCLOR-1248	1/10	10	20	190000	370		370		DR-A-82	DR-TP-A82-03	9555	370

Table 4-2
Statistical Summary of Analytes Detected in Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximumm Qualifier	Location of Max Detect	Sample of Max Detect	Average Of All Results	Average Of Positive Results
Petroleum Hydrocarbons (mg/kg)												
TPH (C10-C32)	9/10	90	18	18	34		1200		DR-A-76	DR-TP-A76-10	582.30	646.00
TPH (C06-C10)	5/10	50	0.049	0.09	0.085	J	7.9		DR-A-77	DR-TP-A77-C	2.07	4.11
TIC VOCs (ug/kg)												
1,3-DIMETHYL-1-CYCLOHEXENE	1/1	100	--	--	2900	NJ	2900	NJ	DR-A-78	DR-TP-A78-05	2900	2900
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO	1/1	100	--	--	820	NJ	820	NJ	DR-A-76	DR-TP-A76-11	820	820
1H-INDENE, 1-METHYL-	1/1	100	--	--	730	NJ	730	NJ	DR-A-76	DR-TP-A76-11	730	730
1H-INDENE, 2,3-DIHYDRO-4,6-DIMETHYL-	1/1	100	--	--	810	NJ	810	NJ	DR-A-76	DR-TP-A76-10	810	810
2-OCTENE, 2,6-DIMETHYL-	1/1	100	--	--	1300	NJ	1300	NJ	DR-A-77	DR-TP-A77-14	1300	1300
3-BROMOMETHYL-BICYCLO[3.3.1]NON-1(8)-	1/1	100	--	--	2100	NJ	2100	NJ	DR-A-78	DR-TP-A78-05	2100	2100
BENZENE, 1,2,4,5-TETRAMETHYL-	1/1	100	--	--	820	NJ	820	NJ	DR-A-76	DR-TP-A76-10	820	820
BENZENE, 1-ETHYL-2,3-DIMETHYL-	1/1	100	--	--	660	NJ	660	NJ	DR-A-76	DR-TP-A76-10	660	660
BENZO[B]THIOPHENE	1/1	100	--	--	650	NJ	650	NJ	DR-A-76	DR-TP-A76-10	650	650
BICYCLO[5.3.0]DECANE	1/1	100	--	--	2100	NJ	2100	NJ	DR-A-78	DR-TP-A78-05	2100	2100
BIPHENYL	1/1	100	--	--	680	NJ	680	NJ	DR-A-76	DR-TP-A76-11	680	680
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CI	1/1	100	--	--	2300	NJ	2300	NJ	DR-A-78	DR-TP-A78-05	2300	2300
CYCLOHEXANE, 1,2-DIETHYL-3-METHYL-	1/1	100	--	--	1000	NJ	1000	NJ	DR-A-77	DR-TP-A77-14	1000	1000
CYCLOHEXANE, 2-PROPENYL-	1/1	100	--	--	1300	NJ	1300	NJ	DR-A-77	DR-TP-A77-14	1300	1300
CYCLOHEXENE, 1-ETHYL-	1/1	100	--	--	2100	NJ	2100	NJ	DR-A-78	DR-TP-A78-05	2100	2100
CYCLOPENTA[C]THIAPYRAN	1/1	100	--	--	970	NJ	970	NJ	DR-A-76	DR-TP-A76-11	970	970
CYCLOPENTANE	2/2	100	--	--	17	NJ	19	NJ	DR-A-80	DR-TP-A80-03	18	18
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAP	1/1	100	--	--	770	NJ	770	NJ	DR-A-76	DR-TP-A76-10	770	770
DECANE	1/1	100	--	--	1800	NJ	1800	NJ	DR-A-77	DR-TP-A77-14	1800	1800
HEPTANE, 3-ETHYL-2-METHYL-	1/1	100	--	--	2800	NJ	2800	NJ	DR-A-77	DR-TP-A77-14	2800	2800
HEXANE	1/1	100	--	--	67	J	67	J	DR-A-79	DR-TP-A79-04	67	67
HEXANE, 1-(HEXYLOXY)-3-METHYL-	1/1	100	--	--	2200	NJ	2200	NJ	DR-A-77	DR-TP-A77-14	2200	2200
HEXANE, 2,2,5-TRIMETHYL-	1/1	100	--	--	2100	NJ	2100	NJ	DR-A-78	DR-TP-A78-05	2100	2100
INDANE	2/2	100	--	--	710	NJ	760	NJ	DR-A-76	DR-TP-A76-11	735	735
METHYL ACETATE	2/1	200	--	--	5.1	NJ	84	J	DR-A-79	DR-TP-A79-04	44.55	44.55
METHYL ACETATE	2/1	200	--	--	5.1	NJ	84	J	DR-A-79	DR-TP-A79-04	44.55	44.55
NAPHTHALENE, 1-METHYL-	1/1	100	--	--	1000	NJ	1000	NJ	DR-A-76	DR-TP-A76-10	1000	1000
NAPHTHALENE, 2-METHYL-	1/1	100	--	--	830	NJ	830	NJ	DR-A-76	DR-TP-A76-11	830	830
NAPHTHALENE, DECAHYDRO-	1/1	100	--	--	4200	NJ	4200	NJ	DR-A-78	DR-TP-A78-05	4200	4200
NAPHTHALENE, DECAHYDRO-2-METHYL-	2/2	100	--	--	860	NJ	1000	NJ	DR-A-77	DR-TP-A77-14	930	930
NONANE, 2,6-DIMETHYL-	1/1	100	--	--	930	NJ	930	NJ	DR-A-77	DR-TP-A77-14	930	930
OCTANE, 2,6-DIMETHYL-	1/1	100	--	--	1800	NJ	1800	NJ	DR-A-77	DR-TP-A77-14	1800	1800
PENTANE, 2,2,4-TRIMETHYL-	1/1	100	--	--	2600	NJ	2600	NJ	DR-A-78	DR-TP-A78-05	2600	2600
PENTANE, 2,3,3-TRIMETHYL-	1/1	100	--	--	6	NJ	6	NJ	DR-A-81	DR-TP-A81-07	6	6
SILANE, (4-ETHYLPHENYL)TRIMETHYL-	1/1	100	--	--	680	NJ	680	NJ	DR-A-76	DR-TP-A76-11	680	680
UNDECANE	1/1	100	--	--	970	NJ	970	NJ	DR-A-77	DR-TP-A77-14	970	970

Table 4-2
Statistical Summary of Analytes Detected in Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximumm Qualifier	Location of Max Detect	Sample of Max Detect	Average Of All Results	Average Of Positive Results
UNKNOWN [RT=11.92]	1/1	100	--	--	690	NJ	690	NJ	DR-A-76	DR-TP-A76-11	690	690
UNKNOWN [RT=12.32]	1/1	100	--	--	770	NJ	770	NJ	DR-A-76	DR-TP-A76-11	770	770
UNKNOWN [RT=12.96]	1/1	100	--	--	810	NJ	810	NJ	DR-A-76	DR-TP-A76-10	810	810
UNKNOWN [RT=13.78]	1/1	100	--	--	1000	NJ	1000	NJ	DR-A-76	DR-TP-A76-11	1000	1000
UNKNOWN [RT=13.93]	1/1	100	--	--	650	NJ	650	NJ	DR-A-76	DR-TP-A76-10	650	650

NJ - tentatively identified compound
B - analyte detected in blank
J - estimated value
µg/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
DRO - diesel-range organics
GRO - gasloine-range organics
TPH - total petroleum hydrocarbons
TIC - tentatively identified compound

Table 4-3
Detected Analytes and Screening Criteria for Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[(1)]	Non-Residential Screening Level[(1)]	DR-A-76 DR-TP-A76-10 8/12/2013	DR-A-76 DR-TP-A76-11 8/12/2013	DR-A-77 DR-TP-A77-14 8/13/2013	DR-A-77 DR-TP-A77-C 8/13/2013	DR-A-78 DR-TP-A78-05 8/13/2013	DR-A-78 DR-TP-A78-C 8/13/2013	DR-A-79 DR-TP-A79-04 8/13/2013	DR-A-79 DR-TP-A79-C 8/13/2013
Volatile organic compounds (µg/kg)										
1,2,3-TRIMETHYLBENZENE	NA	NA	160 J	19 J	140 J	NA	--	NA	--	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	31 J	54 J	26 J	NA	--	NA	--	NA
1,2-DICHLOROBENZENE	700000	9200000	780	50 J	--	NA	--	NA	--	NA
1,2-DICHLOROETHANE	7000	31000	64 J	170 J	52 J	NA	--	NA	--	NA
1,3-DICHLOROBENZENE	23000	310000	22 J	--	--	NA	--	NA	--	NA
1,4-DICHLOROBENZENE	27000	120000	79 J	--	--	NA	--	NA	--	NA
2-BUTANONE	4700000	61000000	--	--	--	NA	--	NA	--	NA
4-ISOPROPYLTOLUENE	NA	NA	8 J	7.5 J	25 J	NA	--	NA	--	NA
ACETONE	7000000	92000000	--	--	--	NA	--	NA	--	NA
BENZENE	12000	52000	13 J	37 J	--	NA	--	NA	--	NA
CARBON DISULFIDE	780000	10000000	54 B	95 B	35 B	NA	19 B	NA	--	NA
CHLOROBENZENE	160000	2000000	22 J	--	--	NA	--	NA	12 J	NA
CIS-1,2-DICHLOROETHENE	78000	1000000	--	220 J	86 J	NA	--	NA	330 J	NA
ETHYLBENZENE	780000	10000000	130 J	73 J	110 J	NA	--	NA	--	NA
ISOPROPYLBENZENE	780000	10000000	26 J	16 J	59 J	NA	--	NA	--	NA
M+P-XYLENES	NA	NA	49 J	55 J	92 J	NA	--	NA	--	NA
METHYLENE CHLORIDE	85000	380000	--	--	--	NA	--	NA	200 J B	NA
NAPHTHALENE	160000	2000000	1700	820	38 J	NA	36 J	NA	35 J	NA
N-BUTYLBENZENE	NA	NA	38 J	27 J	110 J	NA	--	NA	--	NA
N-PROPYLBENZENE	NA	NA	39 J	39 J	--	NA	--	NA	--	NA
O-XYLENE	NA	NA	39 J	23 J	59 J	NA	--	NA	--	NA
SEC-BUTYLBENZENE	NA	NA	28 J	14 J	110 J	NA	--	NA	--	NA
TERT-BUTYLBENZENE	NA	NA	--	10 J	--	NA	160 J	NA	--	NA
TETRACHLOROETHENE	1200	5300	--	--	--	NA	--	NA	310 J	NA
TOLUENE	630000	8200000	90 B	150 B	90 J B	NA	39 J B	NA	78 J B	NA
TOTAL XYLENES	1600000	20000000	88 J	78 J	150 J	NA	--	NA	--	NA
TRANS-1,2-DICHLOROETHENE	160000	2000000	--	49 J	--	NA	--	NA	85 J	NA
TRICHLOROETHENE	1600	7200	18 J	35 J	130 J	NA	--	NA	**13000**	NA
VINYL CHLORIDE	90	4000	--	340	140 J	NA	--	NA	--	NA

Table 4-3
Detected Analytes and Screening Criteria for Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[(1)]	Non-Residential Screening Level[(1)]	DR-A-76 DR-TP-A76-10 8/12/2013	DR-A-76 DR-TP-A76-11 8/12/2013	DR-A-77 DR-TP-A77-14 8/13/2013	DR-A-77 DR-TP-A77-C 8/13/2013	DR-A-78 DR-TP-A78-05 8/13/2013	DR-A-78 DR-TP-A78-C 8/13/2013	DR-A-79 DR-TP-A79-04 8/13/2013	DR-A-79 DR-TP-A79-C 8/13/2013
Semivolatile organic compounds (µg/kg)										
1,1-BIPHENYL	NA	NA	370 J	1100 J	NA	--	NA	--	NA	--
1,4-DIOXANE	NA	NA	--	--	NA	93 J	NA	--	NA	--
2-METHYLNAPHTHALENE	31000	410000	1300	1500	NA	78	NA	--	NA	62 J
3&4-METHYLPHENOL	NA	NA	--	--	NA	34 J	NA	--	NA	--
ACENAPHTHENE	470000	6100000	920	6700	NA	240	NA	47	NA	290
ACENAPHTHYLENE	470000	6100000	630	3400	NA	--	NA	--	NA	89
ACETOPHENONE	NA	NA	--	--	NA	40 J	NA	--	NA	--
ANTHRACENE	2300000	31000000	1400	15000	NA	200	NA	--	NA	700
BAP EQUIVALENT-HALFND	22	390	**3585.2**	**34124**	NA	996.47	NA	97.23	NA	**13442.5**
BAP EQUIVALENT-POS	22	390	**3585.2**	**34124**	NA	996.47	NA	96.85	NA	**13442.5**
BENZO(A)ANTHRACENE	220	3900	3100	**27000**	NA	810	NA	110	NA	**6800**
BENZO(A)PYRENE	22	390	**2400**	**24000**	NA	**640**	NA	73	NA	**9600**
BENZO(B)FLUORANTHENE	220	3900	3500	**28000**	NA	1100	NA	93	NA	**14000**
BENZO(G,H,I)PERYLENE	230000	3100000	1400	12000	NA	450	NA	41	NA	4200
BENZO(K)FLUORANTHENE	2200	39000	1200	10000	NA	360	NA	42	NA	3500
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	710 J	--	NA	140 B	NA	--	NA	1500 B
CARBAZOLE	32000	140000	1500	5500	NA	110	NA	--	NA	380 J
CHRYSENE	22000	390000	3200	24000	NA	870	NA	130	NA	7500
DIBENZ(A,H)ANTHRACENE	22	390	380	**3300**	NA	120	NA	--	NA	**1300**
DIBENZOFURAN	7800	100000	1200	12000	NA	170	NA	--	NA	130 J
FLUORANTHENE	310000	4100000	8000	59000	NA	1700	NA	320	NA	6700
FLUORENE	310000	4100000	1600	8200	NA	88	NA	75	NA	190
INDENO(1,2,3-CD)PYRENE	220	3900	1300	**12000**	NA	410	NA	30	NA	**4200**
NAPHTHALENE	160000	2000000	6300	7400	NA	100	NA	--	NA	200
PHENANTHRENE	2300000	31000000	6000	42000	NA	670	NA	--	NA	2700
PYRENE	230000	3100000	6300	48000	NA	1500	NA	290	NA	6300
Semivolatile organic compounds (mg/kg)										
BAP EQUIVALENT-HALFND	0.022	0.39	**3.59**	**34.1**	NA	0.996	NA	0.097	NA	**13.4**
BAP EQUIVALENT-POS	0.022	0.39	**3.59**	**34.1**	NA	0.996	NA	0.097	NA	**13.4**
Polychlorinated biphenyls (mg/kg)										
AROCLOR-1242	0.32	1.4	--	--	NA	--	NA	--	NA	0.160 J
AROCLOR-1248	0.32	1.4	--	--	NA	--	NA	--	NA	--
AROCLOR-1254	0.32	1.4	--	--	NA	0.190	NA	--	NA	0.330 J
AROCLOR-1260	0.32	1.4	0.039 J	--	NA	--	NA	--	NA	--
TOTAL AROCLOR	0.32	1.4	0.039	--	NA	0.190	NA	--	NA	0.49

Table 4-3
Detected Analytes and Screening Criteria for Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	DR-A-76 DR-TP-A76-10 8/12/2013	DR-A-76 DR-TP-A76-11 8/12/2013	DR-A-77 DR-TP-A77-14 8/13/2013	DR-A-77 DR-TP-A77-C 8/13/2013	DR-A-78 DR-TP-A78-05 8/13/2013	DR-A-78 DR-TP-A78-C 8/13/2013	DR-A-79 DR-TP-A79-04 8/13/2013	DR-A-79 DR-TP-A79-C 8/13/2013
Metals (mg/kg)										
ANTIMONY	3.1	41	1.3 B	2 B	NA	4.2	NA	0.66 B	NA	35
ARSENIC	0.43	1.9	**5.8**	**7.2**	NA	**4.6**	NA	1.3 J	NA	**5.5**
BARIUM	1600	20000	42 K	45 K	NA	92	NA	8.8 J	NA	260
BERYLLIUM	16	200	0.77	1.3	NA	0.49 J	NA	0.11 J	NA	1.2
CADMIUM	3.9	51	20 K	3.6 K	NA	4.3	NA	--	NA	26
CHROMIUM	23	310	270 J	100 J	NA	85	NA	11	NA	**430**
COBALT	NA	NA	7.5	6.8	NA	6.3	NA	0.98	NA	16
COPPER	310	4100	46 L	35 L	NA	190	NA	3.6	NA	1200
LEAD	400	1000	45 J	86 J	NA	320	NA	45	NA	**1500**
MERCURY	2.3	31	0.079 J	0.056 J	NA	0.11 J	NA	--	NA	0.68
MOLYBDENUM	NA	NA	3.1 J	0.82 J	NA	1.6 J	NA	--	NA	9.1
NICKEL	160	2000	18	20	NA	16	NA	2 J	NA	81
SELENIUM	39	510	--	--	NA	--	NA	--	NA	0.65 J
SILVER	39	510	0.62 J	1.5 K	NA	2.9	NA	--	NA	32
VANADIUM	55[2]	55[2]	38	**82**	NA	26	NA	13	NA	34
ZINC	2300	31000	280	180	NA	400	NA	16	NA	2000
Petroleum hydrocarbons (mg/kg)										
TPH-DRO	230	620	**1200**	**630**	**1100**	NA	NA	550	NA	190
Petroleum hydrocarbons (µg/kg)										
TPH-GRO	230000	620000	5600	340	NA	7900	NA	6600	NA	85 J

Table 4-3
Detected Analytes and Screening Criteria for Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	DR-A-80 DR-TP-A80-03 8/14/2013	DR-A-80 DR-TP-A80-11 8/14/2013	DR-A-81 DR-TP-A81-07 8/14/2013	DR-A-81 DR-TP-A81-C 8/14/2013	DR-A-82 DR-TP-A82-03 8/12/2013	DR-A-82 DR-TP-A82-03A 8/12/2013
Volatile organic compounds (µg/kg)								
1,2,3-TRIMETHYLBENZENE	NA	NA	--	--	--	NA	--	--
1,2,4-TRIMETHYLBENZENE	NA	NA	--	--	--	NA	--	--
1,2-DICHLOROBENZENE	700000	9200000	--	--	--	NA	--	--
1,2-DICHLOROETHANE	7000	31000	--	--	--	NA	--	--
1,3-DICHLOROBENZENE	23000	310000	--	--	--	NA	--	--
1,4-DICHLOROBENZENE	27000	120000	--	--	--	NA	--	--
2-BUTANONE	4700000	61000000	2.1 J	28	31	NA	2.8 J	19 J
4-ISOPROPYLTOLUENE	NA	NA	--	--	--	NA	--	--
ACETONE	7000000	92000000	37 B	170	120	NA	26	160
BENZENE	12000	52000	--	--	--	NA	--	--
CARBON DISULFIDE	780000	10000000	--	1.9 J	0.76 J	NA	--	1.2 J
CHLOROBENZENE	160000	2000000	--	--	--	NA	--	--
CIS-1,2-DICHLOROETHENE	78000	1000000	--	7	--	NA	--	--
ETHYLBENZENE	780000	10000000	--	--	--	NA	--	--
ISOPROPYLBENZENE	780000	10000000	--	--	--	NA	--	--
M+P-XYLENES	NA	NA	--	--	--	NA	--	--
METHYLENE CHLORIDE	85000	380000	--	--	--	NA	--	2.5 B
NAPHTHALENE	160000	2000000	--	--	--	NA	0.28 B	--
N-BUTYLBENZENE	NA	NA	--	--	--	NA	--	--
N-PROPYLBENZENE	NA	NA	--	--	--	NA	--	--
O-XYLENE	NA	NA	--	--	--	NA	--	--
SEC-BUTYLBENZENE	NA	NA	--	--	--	NA	--	--
TERT-BUTYLBENZENE	NA	NA	--	--	--	NA	--	--
TETRACHLOROETHENE	1200	5300	11	--	--	NA	--	--
TOLUENE	630000	8200000	--	0.58 B	0.52 B	NA	--	--
TOTAL XYLENES	1600000	20000000	--	--	--	NA	--	--
TRANS-1,2-DICHLOROETHENE	160000	2000000	--	0.55 J	--	NA	--	--
TRICHLOROETHENE	1600	7200	--	2.8 J	--	NA	--	--
VINYL CHLORIDE	90	4000	--	1.8 J	--	NA	--	2.9 J

Table 4-3
Detected Analytes and Screening Criteria for Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	DR-A-80 DR-TP-A80-03 8/14/2013	DR-A-80 DR-TP-A80-11 8/14/2013	DR-A-81 DR-TP-A81-07 8/14/2013	DR-A-81 DR-TP-A81-C 8/14/2013	DR-A-82 DR-TP-A82-03 8/12/2013	DR-A-82 DR-TP-A82-03A 8/12/2013
Semivolatile organic compounds (µg/kg)								
1,1-BIPHENYL	NA	NA	--	6.4 J	NA	21 J	--	--
1,4-DIOXANE	NA	NA	--	--	NA	--	--	--
2-METHYLNAPHTHALENE	31000	410000	--	18	NA	46	56	--
3&4-METHYLPHENOL	NA	NA	--	--	NA	--	--	--
ACENAPHTHENE	470000	6100000	--	28	NA	310	150	--
ACENAPHTHYLENE	470000	6100000	--	--	NA	--	53	--
ACETOPHENONE	NA	NA	--	--	NA	--	--	--
ANTHRACENE	2300000	31000000	--	11	NA	1100	640	--
BAP EQUIVALENT-HALFND	22	390	285.2	17.6	NA	**4303**	**4760**	19.9
BAP EQUIVALENT-POS	22	390	277.4	17.1	NA	**4303**	**4760**	19.2
BENZO(A)ANTHRACENE	220	3900	210	14	NA	3500	3300	15
BENZO(A)PYRENE	22	390	220	14	NA	**3100**	**3100**	15
BENZO(B)FLUORANTHENE	220	3900	350	17	NA	**4400**	**4800**	18
BENZO(G,H,I)PERYLENE	230000	3100000	120 J	--	NA	990	2400	10 J
BENZO(K)FLUORANTHENE	2200	39000	110 J	--	NA	1200	1700	6.7 J
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	--	31 B	NA	--	230 J	39 J
CARBAZOLE	32000	140000	--	--	NA	700	280 J	--
CHRYSENE	22000	390000	260	18	NA	3300	3400	14
DIBENZ(A,H)ANTHRACENE	22	390	--	--	NA	300 J	**620**	--
DIBENZOFURAN	7800	100000	--	15 J	NA	200 J	130 J	--
FLUORANTHENE	310000	4100000	360	39	NA	7100	4700	26
FLUORENE	310000	4100000	--	51	NA	450	130	--
INDENO(1,2,3-CD)PYRENE	220	3900	--	--	NA	980	2100	8.4 J
NAPHTHALENE	160000	2000000	--	43	NA	85	100	11 J
PHENANTHRENE	2300000	31000000	--	25	NA	4800	2400	16
PYRENE	230000	3100000	380	38	NA	5900	4300	26
Semivolatile organic compounds (mg/kg)								
BAP EQUIVALENT-HALFND	0.022	0.39	0.285	0.018	NA	**4.30**	**4.76**	0.020
BAP EQUIVALENT-POS	0.022	0.39	0.277	0.017	NA	**4.30**	**4.76**	0.019
Polychlorinated biphenyls (mg/kg)								
AROCLOR-1242	0.32	1.4	**4100**	--	NA	--	--	--
AROCLOR-1248	0.32	1.4	--	--	NA	--	0.37	--
AROCLOR-1254	0.32	1.4	--	--	NA	0.082	--	--
AROCLOR-1260	0.32	1.4	--	--	NA	--	0.150 J	--
TOTAL AROCLOR	0.32	1.4	**4100**	--	NA	0.082	0.52	--

Table 4-3
Detected Analytes and Screening Criteria for Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	DR-A-80 DR-TP-A80-03 8/14/2013	DR-A-80 DR-TP-A80-11 8/14/2013	DR-A-81 DR-TP-A81-07 8/14/2013	DR-A-81 DR-TP-A81-C 8/14/2013	DR-A-82 DR-TP-A82-03 8/12/2013	DR-A-82 DR-TP-A82-03A 8/12/2013
Metals (mg/kg)								
ANTIMONY	3.1	41	2.6 J	--	NA	1.6 B	0.44 B	--
ARSENIC	0.43	1.9	**6**	**6.8**	NA	**4.7**	**5.1**	**7.5**
BARIUM	1600	20000	27 K	22 K	NA	62 K	73 K	31 J
BERYLLIUM	16	200	0.66	1.1	NA	0.55	1.2	1.3
CADMIUM	3.9	51	1.3 J	6.9 J	NA	0.73 J	1.6 K	2 K
CHROMIUM	23	310	**360 J**	62	NA	38	42	49
COBALT	NA	NA	8.2	16	NA	4.2	9.8	18
COPPER	310	4100	160 J	22 J	NA	110 J	37 L	18 L
LEAD	400	1000	240 J	26 J	NA	64 J	55 J	20 J
MERCURY	2.3	31	0.67	0.052 J	NA	0.95	0.17	0.066 J
MOLYBDENUM	NA	NA	16	0.87 J	NA	0.6 J	0.68 J	0.83 J
NICKEL	160	2000	240	26	NA	9.1	39	28
SELENIUM	39	510	0.6 J	--	NA	--	0.56 J	--
SILVER	39	510	0.47 J	--	NA	0.93 J	0.39 J	--
VANADIUM	55[2]	55[2]	22	32	NA	29	36	35
ZINC	2300	31000	240 J	150 J	NA	190 J	120	110
Petroleum hydrocarbons (mg/kg)								
TPH-DRO	230	620	**910**	34	NA	270	**930**	--
Petroleum hydrocarbons (µg/kg)								
TPH-GRO	230000	620000	--	--	NA	--	--	--

Table 4-3
Detected Analytes and Screening Criteria for Test Pit Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Notes:

1 Maryland Department of the Environment soil cleanup standards (MDE, 2008) unless noted otherwise.

2 Benzo(a)pyrene equivalent (BaPEq), Aroclor-1248, and arsenic criteria are the Preliminary Remedial Goal for soil based on a 10-5 target cancer risk level under the industrial worker future use scenario per the Dump Road Remedial Investigation, Table 6-36 (Tetra Tech, 2012c).

Cells shaded gray indicate values that exceed the residential screening level.

Cells shaded black indicate values that exceed residential and non-residential/industrial worker screening criteria.

B - analyte detected in laboratory blank

DRO - diesel-range organics

GRO - gasloine-range organics

HI - hazard index (non-carcinogenic)

J - Positive result is considered estimated as a result of technical noncompliance.

K - Positive result is considered biased high as a result of technical noncompliance.

L - Positive result is considered biased low as a result of technical noncompliance.

MDE - Maryland Department of the Environment

µg/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

NA - not analyzed, not applicable

-- = not detected

TPH - total petroleum hydrocarbons

Table 4-4

Statistical Summary of Analytes Detected in Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Maximum Result	Sample of Max Detect	Average Of All Results	Average Of Positive Results	Standard Deviation
Volatile Organics (ug/kg)										
TRICHLOROETHENE	38/47	81	0.33	46	0.69 J	3300	DR-SB-187-18-20	341.64	421.90	660.30
CIS-1,2-DICHLOROETHENE	37/47	79	0.28	8.9	0.68 J	7600	DR-SB-194-13-15	392.02	497.81	1307.49
VINYL CHLORIDE	20/47	43	0.31	26	0.49 J	340	DR-SB-48D-19-21	22.80	49.02	64.29
ACETONE	15/47	32	5	310	15 J	200 J	DR-SB-48D-28-31	57.97	71.87	49.90
1,2-DICHLOROETHANE	12/47	26	0.26	14	0.36 J	67 J	DR-SB-188-24-25	3.86	9.08	10.01
2-BUTANONE	8/47	17	1.1	65	1.9 J	24 L	DR-SB-50D-18-20	9.55	6.75	10.88
TETRACHLOROETHENE	7/47	15	0.41	44	0.49 J	45 J	DR-SB-195-04-06	4.32	7.70	8.06
CARBON DISULFIDE	6/47	13	0.35	17	0.34 J	110 J	DR-SB-188-24-25	4.63	19.32	15.96
CHLOROFORM	6/47	13	0.22	13	0.79 J	13 J	DR-SB-48D-24-26	2.24	5.53	3.15
CHLOROFORM	6/47	13	0.22	13	0.79 J	13 J	DR-SB-47D-29-31	2.24	5.53	3.15
NAPHTHALENE	6/47	13	0.15	10	7.4 J	110 J	DR-SB-188-24-25	5.75	37.23	18.28
TOLUENE	6/47	13	0.21	24	0.54 J	190 J	DR-SB-188-24-25	8.21	41.14	28.36
TRANS-1,2-DICHLOROETHENE	6/47	13	0.32	13	1.9 J	140 J	DR-SB-195-04-06	6.23	38.12	21.20
1,2,4-TRICHLOROBENZENE	5/47	11	0.21	20	0.74 J	220	DR-SB-190-28-30	7.92	59.75	32.28
1,2,4-TRIMETHYLBENZENE	5/47	11	0.5	9.3	1.8 J	550	DR-SB-188-24-25	13.79	120.44	80.07
4-ISOPROPYLTOLUENE	4/47	9	0.16	6.8	0.2 J	110 J	DR-SB-188-24-25	3.47	31.08	16.00
M+P-XYLENES	4/47	9	0.93	43	1.7 J	3100	DR-SB-188-24-25	68.28	777.88	451.85
N-BUTYLBENZENE	4/47	9	0.18	12	0.47 J	71 J	DR-SB-194-26-28	4.04	31.61	12.73
TOTAL XYLENES	4/47	9	0.27	43	3.5 J	3200	DR-SB-188-24-25	70.27	804.75	466.46
1,1-DICHLOROETHENE	3/47	6	0.4	27	0.69 J	20 J	DR-SB-49D-44-46	3.82	8.30	5.11
1,2,3-TRICHLOROBENZENE	3/47	6	0.29	15	3.8 J	28 J	DR-SB-190-28-30	2.75	13.73	4.65
1,2,3-TRIMETHYLBENZENE	3/47	6	0.13	0.48	1.8 J	110 J	DR-SB-188-24-25	2.57	38.97	16.03
BENZENE	3/47	6	0.18	17	0.55 J	92 J	DR-SB-188-24-25	4.10	31.14	13.43
CHLOROBENZENE	3/47	6	0.26	9.6	0.4 J	7.1	DR-SB-46I-39-40	1.46	2.73	1.80
ETHYLBENZENE	3/47	6	0.2	16	0.66 J	540	DR-SB-188-24-25	12.65	180.62	78.61
O-XYLENE	3/47	6	0.27	12	1.8 J	82 J	DR-SB-188-24-25	3.45	29.83	11.89
SEC-BUTYLBENZENE	3/47	6	0.14	6.7	0.27 J	48 J	DR-SB-188-24-25	2.29	23.42	7.56
METHYLENE CHLORIDE	2/42	5	0.53	100	16 J	200	DR-SB-187-18-20	15.13	108.00	33.90
1,2-DICHLOROBENZENE	2/47	4	0.28	13	0.71 J	1.7 J	DR-SB-190-28-30	1.74	1.21	2.15
1,3-DICHLOROBENZENE	2/47	4	0.27	7.2	0.5 J	5.7 J	DR-SB-48D-24-26	1.09	3.10	1.35
1,4-DICHLOROBENZENE	2/47	4	0.51	12	3.7 J	8.4 J	DR-SB-48D-24-26	1.88	6.05	2.15
ISOPROPYLBENZENE	2/47	4	0.12	9.2	0.26 J	510	DR-SB-188-24-25	12.00	255.13	74.24
N-PROPYLBENZENE	2/47	4	0.31	20	29 J	160 J	DR-SB-188-24-25	6.36	94.50	23.46
1,1,1-TRICHLOROETHANE	1/47	2	0.43	32	4.2 J	4.2 J	DR-SB-49D-54-56	4.16	4.20	5.39
1,1-DICHLOROETHANE	1/47	2	0.28	26	1.6 J	1.6 J	DR-SB-49D-54-56	3.28	1.60	4.37
TRICHLOROFLUOROMETHANE	1/47	2	0.26	24	0.56 J	0.56 J	DR-SB-50D-34-36	3.08	0.56	4.14

Table 4-4

Statistical Summary of Analytes Detected in Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Maximum Result	Sample of Max Detect	Average Of All Results	Average Of Positive Results	Standard Deviation
Volatile Organics-TICs (ug/kg)										
1,3,5-TRIMETHYLBENZENE	1/1	100	--	--	4.7 NJ	4.7 NJ	DR-SB-191-22-24	4.7	4.7	--
CYCLOHEXANE	1/1	100	--	--	2 NJ	2 NJ	DR-SB-191-22-24	2	2	--
METHYL ACETATE	2/2	100	--	--	1.6 NJ	2.2 NJ	DR-SB-46S-19-20	1.9	1.9	0.42
TERTIARY-BUTYL ALCOHOL	1/1	100	--	--	16 J	16 J	DR-SB-48D-28-31	16	16	--
1-PROPENE, 2-METHYL-	1/1	100	--	--	7.1 NJ	7.1 NJ	DR-SB-50D-18-20	7.1	7.1	--
2-PROPENYL-3-VINYLOXIRANE	1/1	100	--	--	5.9 NJ	5.9 NJ	DR-SB-189-08-10	5.9	5.9	--
BENZENE, 1,3,5-TRIMETHYL-	1/1	100	--	--	1400 NJ	1400 NJ	DR-SB-188-24-25	1400	1400	--
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	1/1	100	--	--	4.1 NJ	4.1 NJ	DR-SB-189-08-10	4.1	4.1	--
BENZENE, 1-ETHYL-2-METHYL-	1/1	100	--	--	1200 NJ	1200 NJ	DR-SB-188-24-25	1200	1200	--
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	1/1	100	--	--	7.4 NJ	7.4 NJ	DR-SB-191-22-24	7.4	7.4	--
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	1/1	100	--	--	11 NJ	11 NJ	DR-SB-189-08-10	11	11	--
CYCLOHEXANE, PROPYL-	1/1	100	--	--	790 NJ	790 NJ	DR-SB-188-24-25	790	790	--
CYCLOTETRASILOXANE, OCTAMETHYL-	1/1	100	--	--	740 NJ	740 NJ	DR-SB-188-24-25	740	740	--
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	1/1	100	--	--	15 NJ	15 NJ	DR-SB-189-08-10	15	15	--
METHYLCYCLOHEXANE	2/2	100	--	--	4.7 NJ	5.7 NJ	DR-SB-191-22-24	5.2	5.2	0.71
NAPHTHALENE, 1,6,7-TRIMETHYL-	1/1	100	--	--	470 NJ	470 NJ	DR-SB-48D-24-26	470	470	--
NAPHTHALENE, DECAHYDRO-, TRANS-	1/1	100	--	--	870 NJ	870 NJ	DR-SB-188-24-25	870	870	--
.ALPHA.-PINENE	1/1	100	--	--	19 NJ	19 NJ	DR-SB-191-22-24	19	19	--
Semivolatile Organics (ug/kg)										
BIS(2-ETHYLHEXYL)PHTHALATE	17/47	36	21	360	26 J	310 J	DR-SB-191-22-24	34.48	59.65	50.53
FLUORANTHENE	17/47	36	0.62	0.71	4 J	13000	DR-SB-191-22-24	388.40	1073.24	1938
PYRENE	16/47	34	0.5	0.57	4.3 J	10000	DR-SB-191-22-24	312.58	917.69	1498
BAP EQUIVALENT-HALFND	13/47	28	0.72	0.83	1.38	9630	DR-SB-191-22-24	262.73	948.88	1412
BAP EQUIVALENT-POS	13/47	28	0.72	0.83	0.56	9630	DR-SB-191-22-24	262.52	948.11	1412
BENZO(B)FLUORANTHENE	13/47	28	0.66	0.76	5.6 J	9400	DR-SB-191-22-24	261.27	943.66	1384
BENZO(A)ANTHRACENE	12/47	26	0.71	0.82	13	6900	DR-SB-191-22-24	199.64	780.83	1021
BENZO(A)PYRENE	12/47	26	0.72	0.83	14	6400	DR-SB-191-22-24	178.35	697.42	940
CHRYSENE	12/47	26	1.2	1.4	14	7600	DR-SB-191-22-24	217.22	848.83	1123
PHENANTHRENE	12/47	26	0.82	0.95	8.5 J	6900	DR-SB-191-22-24	223.02	872.21	1053.09
ANTHRACENE	11/47	23	0.88	1.2	5.6 J	1700	DR-SB-191-22-24	54.07	229.47	255.64
BENZO(G,H,I)PERYLENE	11/47	23	0.39	0.52	11	3800	DR-SB-191-22-24	104.84	447.27	557.30
INDENO(1,2,3-CD)PYRENE	11/47	23	0.39	0.52	9 J	3600	DR-SB-191-22-24	97.85	417.40	527.72
BENZO(K)FLUORANTHENE	10/47	21	0.77	1	12	3200	DR-SB-191-22-24	92.81	434.70	474.16
NAPHTHALENE	10/47	21	0.92	1.1	5.7 J	680	DR-SB-191-22-24	25.73	119.09	112.92
2-METHYLNAPHTHALENE	8/47	17	0.56	0.74	5.3 J	410	DR-SB-191-22-24	15.14	87.49	67.06
DIBENZOFURAN	8/47	17	0.74	1.1	3.6 J	620	DR-SB-191-22-24	20.16	116.49	95.12
FLUORENE	7/47	15	0.56	0.78	8.3 J	990	DR-SB-191-22-24	33.70	224.46	154.86

Table 4-4

Statistical Summary of Analytes Detected in Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Maximum Result	Sample of Max Detect	Average Of All Results	Average Of Positive Results	Standard Deviation
Semivolatile Organics (ug/kg) (continued)										
PHENOL	7/47	15	7.7	140	10 J	21 J	DR-SB-194-26-28	8.13	14.43	11.31
ACENAPHTHENE	7/47	15	0.8	1.1	8.1 J	930	DR-SB-191-22-24	33.20	220.30	150.96
ACENAPHTHYLENE	4/47	9	0.37	6.6	4.4 J	81	DR-SB-191-22-24	2.69	28.53	12.17
DIBENZO(A,H)ANTHRACENE	4/47	9	0.7	12	8.9	1200	DR-SB-191-22-24	27.72	319.98	174.88
1,1-BIPHENYL	2/47	4	3.7	66	7.5 J	120 J	DR-SB-191-22-24	5.43	63.75	17.67
CARBAZOLE	2/47	4	29	510	83	990	DR-SB-191-22-24	43.71	536.50	145.53
Inorganics (mg/kg)										
ARSENIC	39/39	100			0.37 J	21	DR-SB-46S-19-20	3.49	3.49	4.19
BARIUM	39/39	100			0.45 J	260	DR-SB-188-24-25	20.25	20.25	50.04
CHROMIUM	39/39	100			1.4	180	DR-SB-188-24-25	21.82	21.82	34.18
VANADIUM	39/39	100			1.7	130	DR-SB-46S-19-20	20.77	20.77	25.65
LEAD	37/39	95	0.2	0.21	0.43 J	470 J	DR-SB-191-22-24	26.40	27.82	94.63
COPPER	35/39	90	0.65	0.92	0.88 J	1100	DR-SB-191-22-24	43.63	48.57	178.85
COBALT	31/39	79	0.14	0.2	0.19 J	27 J	DR-SB-190-18-20	3.04	3.80	5.43
NICKEL	25/39	64	0.24	0.34	0.29 J	38 J	DR-SB-191-22-24	5.72	8.83	10.57
NICKEL	25/39	64	0.24	0.34	0.29 J	38	DR-SB-188-24-25	5.72	8.83	10.57
ZINC	20/39	51	0.99	10	1.2 J	880 J	DR-SB-191-22-24	51.55	99.11	163.40
CADMIUM	17/39	44	0.031	0.045	0.04 J	52	DR-SB-188-24-25	2.27	5.18	9.32
BERYLLIUM	14/39	36	0.038	0.053	0.065 J	1.5 L	DR-SB-193-08-10	0.23	0.61	0.41
MERCURY	10/39	26	0.015	0.022	0.023 J	0.73	DR-SB-191-22-24	0.05	0.15	0.12
MOLYBDENUM	7/39	18	0.27	1.7	0.25 J	5.5	DR-SB-191-22-24	0.60	2.29	1.20
SILVER	5/39	13	0.087	0.15	0.12 J	4.5	DR-SB-191-22-24	0.23	1.45	0.79
ANTIMONY	2/39	5	0.34	1	9.7 L	11 L	DR-SB-191-22-24	0.76	10.35	2.27
SELENIUM	3/39	8	0.39	0.7	0.47 J	0.79 J	DR-SB-190-18-20	0.28	0.60	0.11
PCBs (ug/kg)										
TOTAL AROCLOR HALFND	47/47	100			64	996.5	DR-SB-191-22-24	107.34	107.34	143.94
TOTAL AROCLOR	8/47	17	0	0	22	710	DR-SB-191-22-24	26.30	154.50	108.56
AROCLOR-1254	6/47	13	18	110	27 J	710	DR-SB-191-22-24	33.97	187.50	106.26
AROCLOR-1260	2/47	4	19	110	22 J	89	DR-SB-189-08-10	14.37	55.50	14.14
Petroleum Hydrocarbons (mg/kg)										
TPH-GRO	18/47	38	0.051	0.073	0.053 J	230	DR-SB-194-13-15	6.01	15.66	33.82
TPH-DRO	9/47	19	11	15	11 J	430	DR-SB-191-22-24	20.70	84.11	64.89

Table 4-4

Statistical Summary of Analytes Detected in Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Maximum Result	Sample of Max Detect	Average Of All Results	Average Of Positive Results	Standard Deviation
Miscellaneous (mg/kg)										
TOTAL KJELDAHL NITROGEN	12/15	80	67	110	63 J	1900	DR-SB-196-02-04	493.57	606.67	660.40
PHOSPHATE	10/13	77	0.33	0.38	0.49 J	140	DR-SB-188-10-12	32.83	42.63	43.11
CARBON	1/2	50	600	600	830 J	830 J	DR-SB-192-16-18	565.00	830.00	374.77
TOTAL ORGANIC CARBON	4/13	31	600	600	5300	15000	DR-SB-196-02-04	3385	10325	5244
NITRATE-N	3/15	20	0.24	0.42	0.58 J	1.8 J	DR-SB-196-02-04	0.36	1.23	0.51
HEXAVALENT CHROMIUM	1/6	17	0.32	0.33	0.57 J	0.57 J	DR-SB-47S/I-30-32	0.23	0.57	0.17
TOTAL INORGANIC CARBON	1/15	7	1000	1000	5900	5900	DR-SB-189-08-10	860	5900	1394
Miscellaneous										
CATION EXCHANGE CAPACITY (meq/100)	15/15	100			2.4	50	DR-SB-196-02-04	23.57	23.57	12.85
PH (s.u.)	15/15	100			3.7	8.13	DR-SB-188-24-25	5.52	5.52	1.36

-- not applicable

J - estimated concentration

L - concentration biased low

NJ - tentatively identified compound

µg/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

DRO - diesel-range organics

GRO - gasloine-range organics

TIC - tentatively identified compound

TPH - total petroleum hydrocarbons

meq/100 - milliequivalents per 100 square centimeters

s.u. - standard units

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-187 DR-SB-187-08-10 8/26/2013	DR-SB-187 DR-SB-187-18-20 8/26/2013	DR-SB-188 DR-SB-188-10-12 9/5/2013	DR-SB-188 DR-SB-188-24-25 9/5/2013	DR-SB-189 DR-SB-189-08-10 9/5/2013	DR-SB-189 DR-SB-189-28-30 9/5/2013	DR-SB-190 DR-SB-190-18-20 8/23/2013
VOLATILES (UG/KG)										
1,1,1-TRICHLOROETHANE	16000000	200000000	NA	--	--	--	--	--	--	--
1,1-DICHLOROETHANE	1600000	20000000	NA	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	390000	5100000	NA	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	NA	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	NA	1.8 J	--	--	110 J	--	--	--
1,2,4-TRICHLOROBENZENE	78000	1000000	NA	--	--	--	--	--	10 B	1.5 B
1,2,4-TRIMETHYLBENZENE	--	--	NA	1.8 J	--	--	550	--	5.9 B	--
1,2-DICHLOROBENZENE	700000	9200000	NA	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	7000	31000	NA	--	--	--	67 J	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	23000	310000	NA	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	27000	120000	NA	--	--	--	--	--	--	--
2-BUTANONE	4700000	61000000	NA	9.7 B	--	7.8 J	--	--	--	3.1 J
4-ISOPROPYLTOLUENE	--	--	NA	0.20 J	--	--	110 J	--	--	--
ACETONE	7000000	92000000	NA	110	--	37 B	310 B	--	--	31 B
BENZENE	12000	52000	NA	0.87 J	--	--	92 J	--	--	--
CARBON DISULFIDE	780000	10000000	NA	--	--	--	110 J	--	--	--
CHLOROBENZENE	160000	2000000	NA	--	--	--	--	--	--	--
CHLOROFORM	78000	1000000	NA	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	--	290	--	100 J	1 J	23 J	--
CYCLOHEXANE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	780000	10000000	NA	0.66 J	--	--	540	--	7.8 B	--
ISOPROPYLBENZENE	780000	10000000	NA	0.26 J	--	--	510	--	--	--
M+P-XYLENES	--	--	NA	1.7 J	--	--	3100	--	23 B	--
METHYL ACETATE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	85000	380000	NA	--	200	--	--	--	--	4.7 B
NAPHTHALENE	160000	2000000	NA	1.2 B	--	--	110 J	--	7.6 B	--
N-BUTYLBENZENE	--	--	NA	0.47 J	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	NA	--	--	--	160 J	--	--	--
O-XYLENE	--	--	NA	1.8 J	--	--	82 J	--	--	--
SEC-BUTYLBENZENE	--	--	NA	0.27 J	--	--	48 J	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	NA	--	--	--	--	--	--	--
TETRACHLOROETHENE	1200	5300	NA	--	--	--	44 B	--	30 B	--
TOLUENE	630000	8200000	NA	1.9 J	53 J	--	190 J	--	19 B	--
TOTAL XYLENES	1600000	20000000	NA	3.5 J	--	--	3200	--	23 B	--
TRANS-1,2-DICHLOROETHENE	160000	2000000	NA	--	--	--	15 J	--	--	--
TRICHLOROETHENE	1600	7200	NA	--	3300	--	46 B	1.2 J	550	--
TRICHLOROFLUOROMETHANE	--	--	NA	--	--	--	--	--	--	--
VINYL CHLORIDE	90	4000	NA	0.49 J	--	--	83 J	--	--	--
VOLATILE ORGANIC COMPOUNDS - TICs (UG/KG)										
.ALPHA.-PINENE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
1-PROPENE, 2-METHYL-	--	--	NA	NA	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	--	--	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-187 DR-SB-187-08-10 8/26/2013	DR-SB-187 DR-SB-187-18-20 8/26/2013	DR-SB-188 DR-SB-188-10-12 9/5/2013	DR-SB-188 DR-SB-188-24-25 9/5/2013	DR-SB-189 DR-SB-189-08-10 9/5/2013	DR-SB-189 DR-SB-189-28-30 9/5/2013	DR-SB-190 DR-SB-190-18-20 8/23/2013
SEMIVOLATILES (UG/KG)										
1,1-BIPHENYL	--	--	NA	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	31000	410000	NA	--	--	--	220	6 J	--	8.6 J
ACENAPHTHENE	470000	6100000	NA	--	--	16	480	--	--	19
ACENAPHTHYLENE	470000	6100000	NA	--	--	--	--	--	--	5.7 J
ANTHRACENE	2300000	31000000	NA	--	--	22	470	6.3 J	--	58
BAP EQUIVALENT-HALFND	22	390	2100	--	--	61.9	**1363.2**	36.4	--	262.55
BAP EQUIVALENT-POS	22	390	2100	--	--	61.4	**1357.2**	36.1	--	262.55
BENZO(A)ANTHRACENE	220	3900	NA	--	--	51	1400	27	--	220
BENZO(A)PYRENE	22	390	NA	--	--	47	**1000**	28	--	190
BENZO(B)FLUORANTHENE	220	3900	NA	--	--	65	1600	34	--	170
BENZO(G,H,I)PERYLENE	230000	3100000	NA	--	--	31	530	18	--	90
BENZO(K)FLUORANTHENE	2200	39000	NA	--	--	26	670	12	--	64
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	--	--	40 B	--	21 B	40 B	35 J
CARBAZOLE	32000	140000	NA	--	--	--	--	--	--	--
CHRYSENE	22000	390000	NA	--	--	47	1500	34	--	210
DIBENZO(A,H)ANTHRACENE	22	390	NA	--	--	--	--	--	--	25
DIBENZOFURAN	7800	100000	NA	--	--	8.2 J	220 J	3.6 J	--	--
FLUORANTHENE	310000	4100000	NA	--	--	120	3100	40	--	250
FLUORENE	310000	4100000	NA	--	--	8.3 J	410	--	--	36
INDENO(1,2,3-CD)PYRENE	220	3900	NA	--	--	25	490	18	--	77
NAPHTHALENE	160000	2000000	NA	--	--	7 J	390	7.4	--	13
PHENANTHRENE	2300000	31000000	NA	--	--	49	2300	19	--	200
PHENOL	2300000	31000000	NA	--	--	--	--	--	--	--
PYRENE	230000	3100000	na	--	--	100	2600	55	--	360
SEMIVOLATILES (MG/KG)										
BAP EQUIVALENT-HALFND	0.022	0.39	2.1	--	--	0.062	**1.36**	0.036	--	0.263
BAP EQUIVALENT-POS	0.022	0.39	2.1	--	--	0.061	**1.36**	0.036	--	0.263
METALS (MG/KG)										
ANTIMONY	3.1	41	NA	--	--	--	9.7 L	0.71 B	--	--
ARSENIC	0.43	1.9	16	**3**	0.89 J	**6**	**11**	**5.1**	0.55 J	**10**
BARIUM	1600	20000	NA	17 J	10 J	34	260	17 J	4.5 J	25 J
BERYLLIUM	16	200	NA	0.15 J	0.15 J	0.52 J	0.74 J	1.4 L	--	1.3
CADMIUM	3.9	51	NA	--	--	0.89	52	0.16 J	--	0.37 J
CHROMIUM	23	310	NA	9.2	11	44	180	33	2.4	50 J
COBALT	--	--	NA	2.4	0.54 J	8.1	12	8.3	--	27 J
COPPER	310	4100	NA	5.3	12	18	250	120	--	17
LEAD	400	1000	NA	5.8	4.5	16	380	21	1.6	16 J
MERCURY	2.3	31	NA	--	--	0.11 J	0.18 J	0.063 J	--	0.028 J
MOLYBDENUM	--	--	NA	--	--	0.79 B	5.1 J	0.63 B	0.31 B	1.3 B
NICKEL	160	2000	NA	2.6 J	0.70 J	14	38	20	--	31 J
SELENIUM	39	510	NA	--	--	--	--	--	--	0.79 J
SILVER	39	510	NA	--	--	--	2.3	--	--	--
VANADIUM	7.8	100	NA	19	5.9	32	44	34	4	51 J
ZINC	2300	31000	NA	11	2.2 B	63	560	60	5 B	85 J

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-187 DR-SB-187-08-10 8/26/2013	DR-SB-187 DR-SB-187-18-20 8/26/2013	DR-SB-188 DR-SB-188-10-12 9/5/2013	DR-SB-188 DR-SB-188-24-25 9/5/2013	DR-SB-189 DR-SB-189-08-10 9/5/2013	DR-SB-189 DR-SB-189-28-30 9/5/2013	DR-SB-190 DR-SB-190-18-20 8/23/2013
PESTICIDES/PCBS (UG/KG)										
AROCLOR-1254	320	1400	NA	--	--	27 J	62	--	--	--
AROCLOR-1260	320	1400	NA	--	22 J	--	--	89	--	--
TOTAL AROCLOR	320	1400	NA	--	22	27	62	89	--	--
PETROLEUM HYDROCARBONS (MG/KG)										
TPH-GRO	230	620	NA	--	0.26	0.07 J	14	0.056 J	--	--
TPH-DRO	230	620	NA	--	--	13 J	94	130	--	--
MISCELLANEOUS PARAMETERS										
CATION EXCHANGE CAPACITY (MEQ/100)	--	--	NA	NA	NA	28	41	20	37	NA
CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM (MG/KG)	23	310	16	--	--	NA	NA	NA	NA	NA
NITRATE-N (MG/KG)	--	--	NA	NA	NA	--	--	--	--	NA
PHOSPHATE (MG/KG)	--	--	NA	NA	NA	140	97	21 J	--	NA
TOTAL INORGANIC CARBON (MG/KG)	--	--	NA	NA	NA	--	--	5900	--	NA
TOTAL KJELDAHL NITROGEN (MG/KG)	--	--	NA	NA	NA	1500	1800	480	160	NA
TOTAL ORGANIC CARBON (MG/KG)	--	--	NA	NA	NA	9000	12000	5300	--	NA
PH (S.U.)	--	--	NA	NA	NA	6.61	8.13	7.8	5.13	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-190 DR-SB-190-28-30 8/23/2013	DR-SB-190 DR-SB-190-8-10 8/23/2013	DR-SB-191 DR-SB-191-22-24 8/23/2013	DR-SB-192 DR-SB-192-16-18 9/4/2013	DR-SB-192 DR-SB-192-22-24 9/4/2013	DR-SB-193 DR-SB-193-08-10 9/4/2013	DR-SB-193 DR-SB-193-26-28 9/4/2013
VOLATILES (UG/KG)										
1,1,1-TRICHLOROETHANE	16000000	200000000	NA	--	--	--	--	--	--	--
1,1-DICHLOROETHANE	1600000	20000000	NA	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	390000	5100000	NA	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	NA	28 J	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	NA	--	--	5.1 J	--	--	--	--
1,2,4-TRICHLOROBENZENE	78000	1000000	NA	220	0.93 B	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	--	--	NA	--	--	4.4 J	--	--	--	--
1,2-DICHLOROBENZENE	700000	9200000	NA	1.7 J	0.71 J	--	--	--	--	--
1,2-DICHLOROETHANE	7000	31000	NA	1 J	--	2 J	0.85 J	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	NA	NA	NA	4.7 NJ	NA	NA	NA	NA
1,3-DICHLOROBENZENE	23000	310000	NA	--	0.50 J	--	--	--	--	--
1,4-DICHLOROBENZENE	27000	120000	NA	--	3.7 J	--	--	--	--	--
2-BUTANONE	4700000	61000000	NA	--	--	--	--	--	--	--
4-ISOPROPYLTOLUENE	--	--	NA	--	--	2.1 J	--	--	--	--
ACETONE	7000000	92000000	NA	24 B	16 B	22 B	--	9.9 B	--	--
BENZENE	12000	52000	NA	--	--	--	--	--	--	--
CARBON DISULFIDE	780000	10000000	NA	--	1.9 J	2.3 J	--	0.34 J	--	--
CHLOROBENZENE	160000	2000000	NA	--	0.69 J	--	--	--	--	--
CHLOROFORM	78000	1000000	NA	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	14	34	5.5 J	23	21	--	1000
CYCLOHEXANE	--	--	NA	NA	NA	2 NJ	NA	NA	NA	NA
ETHYLBENZENE	780000	10000000	NA	--	--	1.2 J	--	--	--	--
ISOPROPYLBENZENE	780000	10000000	NA	--	--	--	--	--	--	--
M+P-XYLENES	--	--	NA	--	--	4.3 J	--	--	--	--
METHYL ACETATE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	85000	380000	NA	16 J	4 B	3.4 B	--	2.6 B	--	--
NAPHTHALENE	160000	2000000	NA	1.3 B	0.95 B	10 B	--	--	--	--
N-BUTYLBENZENE	--	--	NA	--	--	0.95 J	--	--	--	--
N-PROPYLBENZENE	--	--	NA	--	--	--	--	--	--	--
O-XYLENE	--	--	NA	--	--	5.7 J	--	--	--	--
SEC-BUTYLBENZENE	--	--	NA	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	NA	--	--	--	--	--	--	--
TETRACHLOROETHENE	1200	5300	NA	3.7 J	--	1.5 J	0.59 J	0.49 J	--	--
TOLUENE	630000	8200000	NA	2 B	1.6 B	7.8 B	--	--	--	--
TOTAL XYLENES	1600000	20000000	NA	--	--	10 J	--	--	--	--
TRANS-1,2-DICHLOROETHENE	160000	2000000	NA	--	--	--	--	--	--	--
TRICHLOROETHENE	1600	7200	NA	220	--	14	75	4.7	630	1000
TRICHLOROFLUOROMETHANE	--	--	NA	--	--	--	--	--	--	--
VINYL CHLORIDE	90	4000	NA	--	8.8	4.2 J	1.6 J	0.50 J	--	30 J
VOLATILE ORGANIC COMPOUNDS - TICs (UG/KG)										
.ALPHA.-PINENE	--	--	NA	NA	NA	19 NJ	NA	NA	NA	NA
1-PROPENE, 2-METHYL-	--	--	NA	NA	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	--	--	NA	NA	NA	NA	NA	5.2 R	NA	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-190 DR-SB-190-28-30 8/23/2013	DR-SB-190 DR-SB-190-8-10 8/23/2013	DR-SB-191 DR-SB-191-22-24 8/23/2013	DR-SB-192 DR-SB-192-16-18 9/4/2013	DR-SB-192 DR-SB-192-22-24 9/4/2013	DR-SB-193 DR-SB-193-08-10 9/4/2013	DR-SB-193 DR-SB-193-26-28 9/4/2013
SEMIVOLATILES (UG/KG)										
1,1-BIPHENYL	--	--	NA	7.5 J	--	120 J	--	--	--	--
2-METHYLNAPHTHALENE	31000	410000	NA	26	--	410	--	--	10 J	--
ACENAPHTHENE	470000	6100000	NA	35	--	930	--	--	54	--
ACENAPHTHYLENE	470000	6100000	NA	23	--	81	--	--	--	--
ANTHRACENE	2300000	31000000	NA	94	--	1700	--	--	140	--
BAP EQUIVALENT-HALFND	22	390	2100	**423.72**	--	**9629.6**	--	--	372.68	--
BAP EQUIVALENT-POS	22	390	2100	**423.72**	--	**9629.6**	--	--	372.13	--
BENZO(A)ANTHRACENE	220	3900	NA	300	--	**6900**	--	--	340	--
BENZO(A)PYRENE	22	390	NA	290	--	**6400**	--	--	280	--
BENZO(B)FLUORANTHENE	220	3900	NA	380	--	**9400**	--	--	420	--
BENZO(G,H,I)PERYLENE	230000	3100000	NA	220	--	3800	--	--	150	--
BENZO(K)FLUORANTHENE	2200	39000	NA	140	--	3200	--	--	180	--
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	36 J	36 J	310 J	30 B	37 B	76 J	32 J
CARBAZOLE	32000	140000	NA	--	--	990	--	--	83	--
CHRYSENE	22000	390000	NA	320	--	7600	--	--	330	--
DIBENZO(A,H)ANTHRACENE	22	390	NA	46	--	**1200**	--	--	--	--
DIBENZOFURAN	7800	100000	NA	33 J	--	620	--	--	36 J	--
FLUORANTHENE	310000	4100000	NA	740	--	13000	--	--	730	5.5 J
FLUORENE	310000	4100000	NA	61	--	990	--	--	56	--
INDENO(1,2,3-CD)PYRENE	220	3900	NA	180	--	3600	--	--	140 J	--
NAPHTHALENE	160000	2000000	NA	42	--	680	--	--	31	--
PHENANTHRENE	2300000	31000000	NA	300	--	6900	--	--	560	--
PHENOL	2300000	31000000	NA	--	12 J	--	--	--	19 J	11 J
PYRENE	230000	3100000	na	720	--	10000	--	--	610	4.9 J
SEMIVOLATILES (MG/KG)										
BAP EQUIVALENT-HALFND	0.022	0.39	2.1	**0.424**	--	9.63	--	--	0.373	--
BAP EQUIVALENT-POS	0.022	0.39	2.1	**0.424**	--	9.63	--	--	0.372	--
METALS (MG/KG)										
ANTIMONY	3.1	41	NA	--	--	11 L	--	--	--	1 B
ARSENIC	0.43	1.9	16	0.70 J	0.65 J	**5.1**	1.6	1.2 J	**4.6**	0.82 J
BARIUM	1600	20000	NA	4.1 J	1.6 J	190 J	34	3.1 J	25 J	1.9 J
BERYLLIUM	16	200	NA	0.15 J	--	0.63	--	--	1.5 L	--
CADMIUM	3.9	51	NA	0.36 J	2	28	--	--	0.43 J	--
CHROMIUM	23	310	NA	5.5 J	85 J	100 J	9.3	4.8	36	2.9
COBALT	--	--	NA	2 J	0.74 J	7.2 J	0.40 J	0.22 J	14	--
COPPER	310	4100	NA	5.4	18	1100	4.5	2.7	18	--
LEAD	400	1000	NA	9.2 J	1.1 J	470 J	5.1	1.8	14	0.75 J
MERCURY	2.3	31	NA	--	--	0.73	--	--	0.055 J	--
MOLYBDENUM	--	--	NA	0.45 B	--	5.5	0.37 J	--	1.2 J	--
NICKEL	160	2000	NA	2.5 J	0.83 J	38 J	0.66 J	0.51 J	24	--
SELENIUM	39	510	NA	--	--	0.47 J	--	--	--	--
SILVER	39	510	NA	--	--	4.5	--	--	--	--
VANADIUM	7.8	100	NA	5.1 J	4.3 J	41 J	15	4.4	33	5.5
ZINC	2300	31000	NA	17 J	6.1 J	880 J	3.4 B	16	78	2.4 B

Table 4-5

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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-190 DR-SB-190-28-30 8/23/2013	DR-SB-190 DR-SB-190-8-10 8/23/2013	DR-SB-191 DR-SB-191-22-24 8/23/2013	DR-SB-192 DR-SB-192-16-18 9/4/2013	DR-SB-192 DR-SB-192-22-24 9/4/2013	DR-SB-193 DR-SB-193-08-10 9/4/2013	DR-SB-193 DR-SB-193-26-28 9/4/2013
PESTICIDES/PCBS (UG/KG)										
AROCLOR-1254	320	1400	NA	--	--	710	--	--	230	--
AROCLOR-1260	320	1400	NA	--	--	--	--	--	--	--
TOTAL AROCLOR	320	1400	NA	--	--	710	--	--	230	--
PETROLEUM HYDROCARBONS (MG/KG)										
TPH-GRO	230	620	NA	0.069 J	--	0.33	--	--	--	0.45
TPH-DRO	230	620	NA	14 J	--	430	--	--	25 J	--
MISCELLANEOUS PARAMETERS										
CATION EXCHANGE CAPACITY (MEQ/100)	--	--	NA	NA	NA	NA	23	18	NA	NA
CARBON (MG/KG)	--	--	NA	NA	NA	NA	830 J	--	NA	NA
HEXAVALENT CHROMIUM (MG/KG)	23	310	16	NA	NA	NA	NA	NA	NA	NA
NITRATE-N (MG/KG)	--	--	NA	NA	NA	NA	--	0.58 J	NA	NA
PHOSPHATE (MG/KG)	--	--	NA	NA	NA	NA	0.49 J	15 J	NA	NA
TOTAL INORGANIC CARBON (MG/KG)	--	--	NA	NA	NA	NA	--	--	NA	NA
TOTAL KJELDAHL NITROGEN (MG/KG)	--	--	NA	NA	NA	NA	270	230	NA	NA
TOTAL ORGANIC CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
PH (S.U.)	--	--	NA	NA	NA	NA	5.11	7.56	NA	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-194 DR-SB-194-13-15 9/3/2013	DR-SB-194 DR-SB-194-26-28 9/3/2013	DR-SB-195 DR-SB-195-04-06 9/3/2013	DR-SB-195 DR-SB-195-14-16 9/3/2013	DR-SB-196 DR-SB-196-02-04 9/3/2013	DR-SB-196 DR-SB-196-26-28 9/3/2013	DR-SB-46D DR-SB-46D-4-5 8/27/2013
VOLATILES (UG/KG)										
1,1,1-TRICHLOROETHANE	16000000	200000000	NA	--	--	--	--	--	--	--
1,1-DICHLOROETHANE	1600000	20000000	NA	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	390000	5100000	NA	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	NA	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	NA	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	78000	1000000	NA	--	--	--	0.38 B	--	--	--
1,2,4-TRIMETHYLBENZENE	--	--	NA	--	32 J	14 J	--	--	--	--
1,2-DICHLOROBENZENE	700000	9200000	NA	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	7000	31000	NA	--	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	23000	310000	NA	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	27000	120000	NA	--	--	--	--	--	--	--
2-BUTANONE	4700000	61000000	NA	--	--	--	--	--	--	9.5 J
4-ISOPROPYLTOLUENE	--	--	NA	--	12 J	--	--	--	--	--
ACETONE	7000000	92000000	NA	--	--	--	--	--	--	130
BENZENE	12000	52000	NA	--	--	--	--	--	--	--
CARBON DISULFIDE	780000	10000000	NA	--	--	--	--	--	--	--
CHLOROBENZENE	160000	2000000	NA	--	--	--	--	--	--	--
CHLOROFORM	78000	1000000	NA	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	7600	3800	880	30	--	11	--
CYCLOHEXANE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	780000	10000000	NA	--	--	--	--	--	--	--
ISOPROPYLBENZENE	780000	10000000	NA	--	--	--	--	--	--	--
M+P-XYLENES	--	--	NA	--	--	--	--	--	--	--
METHYL ACETATE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	85000	380000	NA	--	--	--	--	--	--	--
NAPHTHALENE	160000	2000000	NA	16 J	12 J	63 J	--	--	--	--
N-BUTYLBENZENE	--	--	NA	--	71 J	54 J	--	--	--	--
N-PROPYLBENZENE	--	--	NA	--	29 J	--	--	--	--	--
O-XYLENE	--	--	NA	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	NA	--	22 J	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	NA	--	--	--	--	--	--	--
TETRACHLOROETHENE	1200	5300	NA	--	--	45 J	--	--	--	--
TOLUENE	630000	8200000	NA	--	--	--	--	--	--	--
TOTAL XYLENES	1600000	20000000	NA	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	160000	2000000	NA	33 J	36 J	140 J	1.9 J	--	--	--
TRICHLOROETHENE	1600	7200	NA	170 J	200 J	2300	3.4 J	1.6 J	17	--
TRICHLOROFLUOROMETHANE	--	--	NA	--	--	--	--	--	--	--
VINYL CHLORIDE	90	4000	NA	200 J	220 J	--	0.60 J	--	--	--
VOLATILE ORGANIC COMPOUNDS - TICs (UG/KG)										
.ALPHA.-PINENE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
1-PROPENE, 2-METHYL-	--	--	NA	NA	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	--	--	NA	NA	NA	NA	NA	NA	NA	NA

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Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-194 DR-SB-194-13-15 9/3/2013	DR-SB-194 DR-SB-194-26-28 9/3/2013	DR-SB-195 DR-SB-195-04-06 9/3/2013	DR-SB-195 DR-SB-195-14-16 9/3/2013	DR-SB-196 DR-SB-196-02-04 9/3/2013	DR-SB-196 DR-SB-196-26-28 9/3/2013	DR-SB-46D DR-SB-46D-4-5 8/27/2013
SEMIVOLATILES (UG/KG)										
1,1-BIPHENYL	--	--	NA	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	31000	410000	NA	--	--	--	--	--	--	14
ACENAPHTHENE	470000	6100000	NA	--	--	--	--	--	--	--
ACENAPHTHYLENE	470000	6100000	NA	--	--	--	--	--	--	4.4 J
ANTHRACENE	2300000	31000000	NA	5.6 J	6.1 J	--	--	--	--	8.2
BAP EQUIVALENT-HALFND	22	390	2100	44.543	26.161	--	--	18.135	--	63.02
BAP EQUIVALENT-POS	22	390	2100	44.158	25.716	--	--	17.614	--	63.02
BENZO(A)ANTHRACENE	220	3900	NA	34	23	--	--	13	--	32
BENZO(A)PYRENE	22	390	NA	35	19	--	--	14	--	42
BENZO(B)FLUORANTHENE	220	3900	NA	46	33	--	--	23	--	55
BENZO(G,H,I)PERYLENE	230000	3100000	NA	18	11	--	--	--	--	39
BENZO(K)FLUORANTHENE	2200	39000	NA	22	15	--	--	--	--	18
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	51 J	110	32 J	--	43 J	--	--
CARBAZOLE	32000	140000	NA	--	--	--	--	--	--	--
CHRYSENE	22000	390000	NA	38	26	--	--	14	--	40
DIBENZO(A,H)ANTHRACENE	22	390	NA	--	--	--	--	--	--	8.9
DIBENZOFURAN	7800	100000	NA	--	--	--	--	--	--	4.1 J
FLUORANTHENE	310000	4100000	NA	54	41	4 J	--	17	--	58
FLUORENE	310000	4100000	NA	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	220	3900	NA	9 J	9.4 J	--	--	--	--	32
NAPHTHALENE	160000	2000000	NA	--	--	--	--	5.7 J	--	8.6
PHENANTHRENE	2300000	31000000	NA	20	24	--	--	8.5 J	--	31
PHENOL	2300000	31000000	NA	--	21 J	--	--	--	16 J	--
PYRENE	230000	3100000	na	50	37	--	--	18	--	57
SEMIVOLATILES (MG/KG)										
BAP EQUIVALENT-HALFND	0.022	0.39	2.1	0.0445	0.026	--	--	0.0181	--	0.063
BAP EQUIVALENT-POS	0.022	0.39	2.1	0.0442	0.026	--	--	0.0176	--	0.063
METALS (MG/KG)										
ANTIMONY	3.1	41	NA	--	--	0.46 B	--	0.87 B	0.52 B	--
ARSENIC	0.43	1.9	16	1.4 J	1.9	**4**	1.8	**9.8**	**3.9**	**4**
BARIUM	1600	20000	NA	9.4 J	10 J	19 J	5.3 J	40	2.8 J	27
BERYLLIUM	16	200	NA	--	--	0.97	--	0.31 J	--	0.54
CADMIUM	3.9	51	NA	--	0.04 J	2.3 J	--	0.31 J	--	0.12 J
CHROMIUM	23	310	NA	5.7 J	13 J	23 J	4.8 J	42 K	5.4 K	17
COBALT	--	--	NA	0.59 J	0.78 J	12	--	5.6 J	--	4.5
COPPER	310	4100	NA	3.2	5.5	10	1.1 J	18	2.1 J	13
LEAD	400	1000	NA	6.4 J	5.3 J	12 J	2.2 J	22 J	0.87 J	11
MERCURY	2.3	31	NA	--	--	0.023 J	--	0.044 J	--	0.21 L
MOLYBDENUM	--	--	NA	--	0.77 B	0.89 B	0.38 B	1.7 B	0.66 B	--
NICKEL	160	2000	NA	3 J	2.1 J	16 J	0.29 J	11	--	9.3
SELENIUM	39	510	NA	--	--	--	--	--	--	--
SILVER	39	510	NA	0.12 J	0.17 J	--	--	0.15 J	--	--
VANADIUM	7.8	100	NA	82	13	20	13	69 K	20 K	25
ZINC	2300	31000	NA	19 J	38 J	61 J	1.8 B	48 J	1.2 J	27

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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-194 DR-SB-194-13-15 9/3/2013	DR-SB-194 DR-SB-194-26-28 9/3/2013	DR-SB-195 DR-SB-195-04-06 9/3/2013	DR-SB-195 DR-SB-195-14-16 9/3/2013	DR-SB-196 DR-SB-196-02-04 9/3/2013	DR-SB-196 DR-SB-196-26-28 9/3/2013	DR-SB-46D DR-SB-46D-4-5 8/27/2013
PESTICIDES/PCBS (UG/KG)										
AROCLOR-1254	320	1400	NA	52	44	--	--	--	--	--
AROCLOR-1260	320	1400	NA	--	--	--	--	--	--	--
TOTAL AROCLOR	320	1400	NA	52	44	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)										
TPH-GRO	230	620	NA	230	35	0.19	0.081 J	--	--	--
TPH-DRO	230	620	NA	11 J	14 J	--	--	--	--	26
MISCELLANEOUS PARAMETERS										
CATION EXCHANGE CAPACITY (MEQ/100)	--	--	NA	NA	NA	NA	NA	50	NA	NA
CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM (MG/KG)	23	310	16	NA	NA	NA	NA	NA	NA	NA
NITRATE-N (MG/KG)	--	--	NA	NA	NA	NA	NA	1.8 J	NA	NA
PHOSPHATE (MG/KG)	--	--	NA	NA	NA	NA	NA	16 J	NA	NA
TOTAL INORGANIC CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	--	NA	NA
TOTAL KJELDAHL NITROGEN (MG/KG)	--	--	NA	NA	NA	NA	NA	1900	NA	NA
TOTAL ORGANIC CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	15000	NA	NA
PH (S.U.)	--	--	NA	NA	NA	NA	NA	3.7	NA	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-46D DR-SB-46D-48-49 8/27/2013	DR-SB-46D DR-SB-46D-56-57 8/27/2013	DR-SB-46I DR-SB-46I-39-40 8/28/2013	DR-SB-46S DR-SB-46S-19-20 8/28/2013	DR-SB-47D DR-SB-47D-29-31 8/29/2013	DR-SB-47D DR-SB-47D-49-51 8/29/2013	DR-SB-47S DR-SB-47S/I-24-26 8/29/2013
VOLATILES (UG/KG)										
1,1,1-TRICHLOROETHANE	16000000	200000000	NA	--	--	--	--	--	--	--
1,1-DICHLOROETHANE	1600000	20000000	NA	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	390000	5100000	NA	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	NA	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	NA	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	78000	1000000	NA	--	--	--	--	17 B	--	20 B
1,2,4-TRIMETHYLBENZENE	--	--	NA	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	700000	9200000	NA	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	7000	31000	NA	--	--	2.9 J	--	15 J	--	14 J
1,3,5-TRIMETHYLBENZENE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	23000	310000	NA	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	27000	120000	NA	--	--	--	--	--	--	--
2-BUTANONE	4700000	61000000	NA	3.6 J	2.2 J	--	1.9 J	--	--	--
4-ISOPROPYLTOLUENE	--	--	NA	--	--	--	--	--	--	--
ACETONE	7000000	92000000	NA	48	40	8.2 B	30 B	--	--	--
BENZENE	12000	52000	NA	--	--	--	--	--	--	--
CARBON DISULFIDE	780000	10000000	NA	--	--	--	--	--	--	--
CHLOROBENZENE	160000	2000000	NA	--	--	7.1	--	--	--	--
CHLOROFORM	78000	1000000	NA	--	--	--	--	13 J	1.8 J	--
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	--	--	21	--	58 J	1.7 J	83 J
CYCLOHEXANE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	780000	10000000	NA	--	--	--	--	--	--	--
ISOPROPYLBENZENE	780000	10000000	NA	--	--	--	--	--	--	--
M+P-XYLENES	--	--	NA	--	--	--	--	--	--	--
METHYL ACETATE	--	--	NA	1.6 NJ	NA	NA	2.2 NJ	NA	NA	NA
METHYLENE CHLORIDE	85000	380000	NA	--	--	--	--	--	--	--
NAPHTHALENE	160000	2000000	NA	--	--	--	--	8.4 B	--	--
N-BUTYLBENZENE	--	--	NA	--	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	NA	--	--	--	--	--	--	--
O-XYLENE	--	--	NA	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	NA	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	NA	--	--	--	--	--	--	--
TETRACHLOROETHENE	1200	5300	NA	--	--	--	--	--	--	--
TOLUENE	630000	8200000	NA	--	--	--	--	--	0.58 J	--
TOTAL XYLENES	1600000	20000000	NA	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	160000	2000000	NA	--	--	--	--	--	--	--
TRICHLOROETHENE	1600	7200	NA	3.7 J	--	31	--	840	22	1100
TRICHLOROFLUOROMETHANE	--	--	NA	--	--	--	--	--	--	--
VINYL CHLORIDE	90	4000	NA	--	--	9.9	--	24 J	--	30 J
VOLATILE ORGANIC COMPOUNDS - TICs (UG/KG)										
.ALPHA.-PINENE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
1-PROPENE, 2-METHYL-	--	--	NA	NA	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	--	--	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-46D DR-SB-46D-48-49 8/27/2013	DR-SB-46D DR-SB-46D-56-57 8/27/2013	DR-SB-46I DR-SB-46I-39-40 8/28/2013	DR-SB-46S DR-SB-46S-19-20 8/28/2013	DR-SB-47D DR-SB-47D-29-31 8/29/2013	DR-SB-47D DR-SB-47D-49-51 8/29/2013	DR-SB-47S DR-SB-47S/I-24-26 8/29/2013
SEMIVOLATILES (UG/KG)										
1,1-BIPHENYL	--	--	NA	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	31000	410000	NA	--	--	--	--	--	--	--
ACENAPHTHENE	470000	6100000	NA	--	--	--	--	--	--	--
ACENAPHTHYLENE	470000	6100000	NA	--	--	--	--	--	--	--
ANTHRACENE	2300000	31000000	NA	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	22	390	2100	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	22	390	2100	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE	220	3900	NA	--	--	--	--	--	--	--
BENZO(A)PYRENE	22	390	NA	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	220	3900	NA	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE	230000	3100000	NA	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	2200	39000	NA	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	--	26 J	41 B	32 B	--	--	26 J
CARBAZOLE	32000	140000	NA	--	--	--	--	--	--	--
CHRYSENE	22000	390000	NA	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	22	390	NA	--	--	--	--	--	--	--
DIBENZOFURAN	7800	100000	NA	--	--	--	--	--	--	--
FLUORANTHENE	310000	4100000	NA	--	--	--	--	--	--	--
FLUORENE	310000	4100000	NA	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	220	3900	NA	--	--	--	--	--	--	--
NAPHTHALENE	160000	2000000	NA	--	--	--	--	--	--	--
PHENANTHRENE	2300000	31000000	NA	--	--	--	--	--	--	--
PHENOL	2300000	31000000	NA	--	--	--	--	--	--	12 J
PYRENE	230000	3100000	na	--	--	--	--	--	--	--
SEMIVOLATILES (MG/KG)										
BAP EQUIVALENT-HALFND	0.022	0.39	2.1	--	--	--	--	--	--	--
BAP EQUIVALENT-POS	0.022	0.39	2.1	--	--	--	--	--	--	--
METALS (MG/KG)										
ANTIMONY	3.1	41	NA	--	--	0.55 B	0.58 B	--	--	--
ARSENIC	0.43	1.9	16	**2.3**	0.63 J	**2.1**	**21**	1.2 J	**2.5**	0.69 J
BARIUM	1600	20000	NA	6.8 J	0.70 J	0.45 J	6.4 J	1.2 J	1.6 J	2.2 J
BERYLLIUM	16	200	NA	--	--	--	0.065 J	--	--	--
CADMIUM	3.9	51	NA	--	--	--	--	--	--	0.068 J
CHROMIUM	23	310	NA	6.1	1.4	11	31	2.5	3.6	4.2
COBALT	--	--	NA	2	0.19 J	0.38 J	--	0.19 J	0.58 J	0.37 J
COPPER	310	4100	NA	1.9 J	3.4	7.7	16	1.6 J	--	1.5 J
LEAD	400	1000	NA	1.6	0.53 J	--	4.9	0.43 J	0.83 J	0.82 J
MERCURY	2.3	31	NA	--	--	--	0.068 J	--	--	--
MOLYBDENUM	--	--	NA	--	--	0.34 B	0.88 J	--	--	--
NICKEL	160	2000	NA	1.1 J	--	0.33 J	--	--	--	--
SELENIUM	39	510	NA	--	--	--	0.53 J	--	--	--
SILVER	39	510	NA	--	--	--	--	--	--	--
VANADIUM	7.8	100	NA	9.1	4.1	13	130	7.5	9.9	8
ZINC	2300	31000	NA	2.8 B	1.1 B	2.1 B	2.6 B	1.3 J	1.3 J	1.8 J

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-46D DR-SB-46D-48-49 8/27/2013	DR-SB-46D DR-SB-46D-56-57 8/27/2013	DR-SB-46I DR-SB-46I-39-40 8/28/2013	DR-SB-46S DR-SB-46S-19-20 8/28/2013	DR-SB-47D DR-SB-47D-29-31 8/29/2013	DR-SB-47D DR-SB-47D-49-51 8/29/2013	DR-SB-47S DR-SB-47S/I-24-26 8/29/2013
PESTICIDES/PCBS (UG/KG)										
AROCLOR-1254	320	1400	NA	--	--	--	--	--	--	--
AROCLOR-1260	320	1400	NA	--	--	--	--	--	--	--
TOTAL AROCLOR	320	1400	NA	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)										
TPH-GRO	230	620	NA	--	--	--	--	0.14	--	--
TPH-DRO	230	620	NA	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS										
CATION EXCHANGE CAPACITY (MEQ/100)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM (MG/KG)	23	310	16	NA	NA	NA	NA	--	--	--
NITRATE-N (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
PHOSPHATE (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL INORGANIC CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL KJELDAHL NITROGEN (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
PH (S.U.)	--	--	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-47S DR-SB-47S/I-30-32 8/29/2013	DR-SB-48D DR-SB-48D-19-21 9/4/2013	DR-SB-48D DR-SB-48D-24-26 9/4/2013	DR-SB-48D DR-SB-48D-28-31 9/4/2013	DR-SB-48D DR-SB-48D-34-36 9/4/2013	DR-SB-48D DR-SB-48D-40-42 9/4/2013	DR-SB-49D DR-SB-49D-19-21 9/5/2013
VOLATILES (UG/KG)										
1,1,1-TRICHLOROETHANE	16000000	200000000	NA	--	--	--	--	--	--	--
1,1-DICHLOROETHANE	1600000	20000000	NA	--	--	--	--	--	--	--
1,1-DICHLOROETHENE	390000	5100000	NA	--	--	--	0.69 J	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	NA	--	--	9.4 J	3.8 J	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	NA	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	78000	1000000	NA	--	--	30 J	19	29 J	--	--
1,2,4-TRIMETHYLBENZENE	--	--	NA	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE	700000	9200000	NA	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	7000	31000	NA	--	--	--	3.9 J	--	0.47 J	--
1,3,5-TRIMETHYLBENZENE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	23000	310000	NA	--	--	5.7 J	--	--	--	--
1,4-DICHLOROBENZENE	27000	120000	NA	--	--	8.4 J	--	--	--	--
2-BUTANONE	4700000	61000000	NA	--	--	--	--	--	--	--
4-ISOPROPYLTOLUENE	--	--	NA	--	--	--	--	--	--	--
ACETONE	7000000	92000000	NA	15 J	--	--	200 J	--	58 B	22 K
BENZENE	12000	52000	NA	--	--	--	--	--	--	--
CARBON DISULFIDE	780000	10000000	NA	--	--	--	--	--	--	--
CHLOROBENZENE	160000	2000000	NA	--	--	--	--	--	--	--
CHLOROFORM	78000	1000000	NA	--	--	13 J	1.7 J	--	--	--
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	--	3400	71 J	50	80 J	11	3.9 J
CYCLOHEXANE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	780000	10000000	NA	--	--	--	--	--	--	--
ISOPROPYLBENZENE	780000	10000000	NA	--	--	--	--	--	--	--
M+P-XYLENES	--	--	NA	--	--	5.5 J	--	--	--	--
METHYL ACETATE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	85000	380000	NA	--	--	--	--	--	--	--
NAPHTHALENE	160000	2000000	NA	--	7.4 J	15 J	0.38 B	--	--	--
N-BUTYLBENZENE	--	--	NA	--	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	NA	--	--	--	--	--	--	--
O-XYLENE	--	--	NA	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	NA	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	NA	--	--	--	16 J	--	--	--
TETRACHLOROETHENE	1200	5300	NA	--	--	--	1.5 J	--	--	--
TOLUENE	630000	8200000	NA	--	--	--	--	--	--	--
TOTAL XYLENES	1600000	20000000	NA	--	--	5.5 J	--	--	--	--
TRANS-1,2-DICHLOROETHENE	160000	2000000	NA	--	--	--	--	--	--	--
TRICHLOROETHENE	1600	7200	NA	--	170 J	610	150 J	1200	27	7.3
TRICHLOROFLUOROMETHANE	--	--	NA	--	--	--	--	--	--	--
VINYL CHLORIDE	90	4000	NA	--	340	--	5.9	--	1.8 J	--
VOLATILE ORGANIC COMPOUNDS - TICs (UG/KG)										
.ALPHA.-PINENE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
1-PROPENE, 2-METHYL-	--	--	NA	NA	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	--	--	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-47S DR-SB-47S/I-30-32 8/29/2013	DR-SB-48D DR-SB-48D-19-21 9/4/2013	DR-SB-48D DR-SB-48D-24-26 9/4/2013	DR-SB-48D DR-SB-48D-28-31 9/4/2013	DR-SB-48D DR-SB-48D-34-36 9/4/2013	DR-SB-48D DR-SB-48D-40-42 9/4/2013	DR-SB-49D DR-SB-49D-19-21 9/5/2013
SEMIVOLATILES (UG/KG)										
1,1-BIPHENYL	--	--	NA	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	31000	410000	NA	--	5.3 J	--	--	--	--	--
ACENAPHTHENE	470000	6100000	NA	--	8.1 J	--	--	--	--	--
ACENAPHTHYLENE	470000	6100000	NA	--	--	--	--	--	--	--
ANTHRACENE	2300000	31000000	NA	--	14	--	--	--	--	--
BAP EQUIVALENT-HALFND	22	390	2100	--	32.15	--	--	--	--	--
BAP EQUIVALENT-POS	22	390	2100	--	31.73	--	--	--	--	--
BENZO(A)ANTHRACENE	220	3900	NA	--	30	--	--	--	--	--
BENZO(A)PYRENE	22	390	NA	--	24	--	--	--	--	--
BENZO(B)FLUORANTHENE	220	3900	NA	--	36	--	--	--	--	--
BENZO(G,H,I)PERYLENE	230000	3100000	NA	--	13	--	--	--	--	--
BENZO(K)FLUORANTHENE	2200	39000	NA	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	--	50 B	28 B	--	--	32 B	26 B
CARBAZOLE	32000	140000	NA	--	--	--	--	--	--	--
CHRYSENE	22000	390000	NA	--	27	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	22	390	NA	--	--	--	--	--	--	--
DIBENZOFURAN	7800	100000	NA	--	7 J	--	--	--	--	--
FLUORANTHENE	310000	4100000	NA	--	62	--	--	10	--	7.3 J
FLUORENE	310000	4100000	NA	--	9.9	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	220	3900	NA	--	11	--	--	--	--	--
NAPHTHALENE	160000	2000000	NA	--	6.2 J	--	--	--	--	--
PHENANTHRENE	2300000	31000000	NA	--	55	--	--	--	--	--
PHENOL	2300000	31000000	NA	10 J	--	--	--	--	--	--
PYRENE	230000	3100000	na	--	52	--	--	8.6	--	6.3 J
SEMIVOLATILES (MG/KG)										
BAP EQUIVALENT-HALFND	0.022	0.39	2.1	--	0.032	--	--	--	--	--
BAP EQUIVALENT-POS	0.022	0.39	2.1	--	0.032	--	--	--	--	--
METALS (MG/KG)										
ANTIMONY	3.1	41	NA	--	--	--	--	--	--	NA
ARSENIC	0.43	1.9	16	**6.9**	0.93 J	0.80 J	0.56 J	1.1 J	**11**	NA
BARIUM	1600	20000	NA	1.4 J	2.1 J	4.2 J	0.79 J	3.3 J	1.8 J	NA
BERYLLIUM	16	200	NA	--	--	--	--	--	--	NA
CADMIUM	3.9	51	NA	--	0.40 J	0.30 J	0.069 J	0.28 J	--	NA
CHROMIUM	23	310	NA	5.5	34	5.5	1.8	4.3	20	NA
COBALT	--	--	NA	1.3	2.9	0.62 J	0.19 J	0.72 J	0.26 J	NA
COPPER	310	4100	NA	8.7	3.1	1.1 J	1.8 J	1.8 J	3.3	NA
LEAD	400	1000	NA	0.55 J	1.1	2.1	0.50 J	1.5	2.6	NA
MERCURY	2.3	31	NA	--	--	--	--	--	--	NA
MOLYBDENUM	--	--	NA	0.67 B	--	--	--	--	0.25 J	NA
NICKEL	160	2000	NA	1.2 J	0.99 J	0.29 J	--	0.36 J	--	NA
SELENIUM	39	510	NA	--	--	--	--	--	--	NA
SILVER	39	510	NA	--	--	--	--	--	--	NA
VANADIUM	7.8	100	NA	13	5.4	8.8	4.3	9.5	20	NA
ZINC	2300	31000	NA	7.5	10 B	2 B	4.1 B	2.3 B	3.4 B	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-47S DR-SB-47S/I-30-32 8/29/2013	DR-SB-48D DR-SB-48D-19-21 9/4/2013	DR-SB-48D DR-SB-48D-24-26 9/4/2013	DR-SB-48D DR-SB-48D-28-31 9/4/2013	DR-SB-48D DR-SB-48D-34-36 9/4/2013	DR-SB-48D DR-SB-48D-40-42 9/4/2013	DR-SB-49D DR-SB-49D-19-21 9/5/2013
PESTICIDES/PCBS (UG/KG)										
AROCLOR-1254	320	1400	NA	--	--	--	--	--	--	--
AROCLOR-1260	320	1400	NA	--	--	--	--	--	--	--
TOTAL AROCLOR	320	1400	NA	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)										
TPH-GRO	230	620	NA	--	0.83	--	--	0.079 J	--	--
TPH-DRO	230	620	NA	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS										
CATION EXCHANGE CAPACITY (MEQ/100)	--	--	NA	18	NA	33	NA	NA	14	NA
CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM (MG/KG)	23	310	16	0.57 J	NA	NA	NA	NA	NA	NA
NITRATE-N (MG/KG)	--	--	NA	--	NA	--	NA	NA	--	NA
PHOSPHATE (MG/KG)	--	--	NA	54	NA	--	NA	NA	34 J	NA
TOTAL INORGANIC CARBON (MG/KG)	--	--	NA	--	NA	--	NA	NA	--	NA
TOTAL KJELDAHL NITROGEN (MG/KG)	--	--	NA	110 B	NA	250	NA	NA	130 J	NA
TOTAL ORGANIC CARBON (MG/KG)	--	--	NA	--	NA	--	NA	NA	--	NA
PH (S.U.)	--	--	NA	5.28	NA	5.04	NA	NA	4.56	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-49D DR-SB-49D-24-26 9/5/2013	DR-SB-49D DR-SB-49D-29-31 9/5/2013	DR-SB-49D DR-SB-49D-36-39 9/5/2013	DR-SB-49D DR-SB-49D-44-46 9/5/2013	DR-SB-49D DR-SB-49D-54-56 9/5/2013	DR-SB-50D DR-SB-50D-18-20 9/9/2013	DR-SB-50D DR-SB-50D-29-31 9/9/2013
VOLATILES (UG/KG)										
1,1,1-TRICHLOROETHANE	16000000	200000000	NA	--	--	--	--	4.2 J	--	--
1,1-DICHLOROETHANE	1600000	20000000	NA	--	--	--	--	1.6 J	--	--
1,1-DICHLOROETHENE	390000	5100000	NA	--	--	--	20 J	4.2 J	--	--
1,2,3-TRICHLOROBENZENE	--	--	NA	--	--	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	NA	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	78000	1000000	NA	--	--	--	8.5 B	0.74 J	--	--
1,2,4-TRIMETHYLBENZENE	--	--	NA	--	--	9.3 B	--	--	--	--
1,2-DICHLOROBENZENE	700000	9200000	NA	--	--	--	--	--	--	--
1,2-DICHLOROETHANE	7000	31000	NA	0.70 J	--	--	--	0.81 J	--	--
1,3,5-TRIMETHYLBENZENE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	23000	310000	NA	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	27000	120000	NA	--	--	--	--	--	--	--
2-BUTANONE	4700000	61000000	NA	--	--	--	--	--	24 L	--
4-ISOPROPYLTOLUENE	--	--	NA	--	--	--	--	--	--	--
ACETONE	7000000	92000000	NA	38 K	57 K	--	--	67 K	180 L	76 L
BENZENE	12000	52000	NA	--	--	--	--	--	0.55 J	--
CARBON DISULFIDE	780000	10000000	NA	--	0.73 J	--	--	--	0.67 J	--
CHLOROBENZENE	160000	2000000	NA	0.40 J	--	--	--	--	--	--
CHLOROFORM	78000	1000000	NA	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	16	5.1 J	78 J	140 J	160	1.3 J	7.3 L
CYCLOHEXANE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	780000	10000000	NA	--	--	16 B	6.6 B	--	--	--
ISOPROPYLBENZENE	780000	10000000	NA	--	--	--	--	--	--	--
M+P-XYLENES	--	--	NA	--	--	43 B	19 B	--	--	--
METHYL ACETATE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	85000	380000	NA	--	--	--	--	--	--	--
NAPHTHALENE	160000	2000000	NA	--	--	--	8.4 B	--	--	--
N-BUTYLBENZENE	--	--	NA	--	--	--	--	--	--	--
N-PROPYLBENZENE	--	--	NA	--	--	--	--	--	--	--
O-XYLENE	--	--	NA	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	NA	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	NA	--	--	--	--	--	--	--
TETRACHLOROETHENE	1200	5300	NA	--	--	44 B	25 B	--	--	--
TOLUENE	630000	8200000	NA	--	--	24 B	22 B	0.80 J	0.54 J	--
TOTAL XYLENES	1600000	20000000	NA	--	--	43 B	19 B	--	--	--
TRANS-1,2-DICHLOROETHENE	160000	2000000	NA	--	--	--	--	2.8 J	--	--
TRICHLOROETHENE	1600	7200	NA	35	3.6 J	480	1600	81	0.69 J	30 L
TRICHLOROFLUOROMETHANE	--	--	NA	--	--	--	--	--	--	--
VINYL CHLORIDE	90	4000	NA	3.9 J	2.2 J	--	--	13	--	0.52 J
VOLATILE ORGANIC COMPOUNDS - TICs (UG/KG)										
.ALPHA.-PINENE	--	--	NA	NA	NA	NA	NA	NA	NA	NA
1-PROPENE, 2-METHYL-	--	--	NA	NA	NA	NA	NA	NA	7.1 NJ	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	--	--	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-49D DR-SB-49D-24-26 9/5/2013	DR-SB-49D DR-SB-49D-29-31 9/5/2013	DR-SB-49D DR-SB-49D-36-39 9/5/2013	DR-SB-49D DR-SB-49D-44-46 9/5/2013	DR-SB-49D DR-SB-49D-54-56 9/5/2013	DR-SB-50D DR-SB-50D-18-20 9/9/2013	DR-SB-50D DR-SB-50D-29-31 9/9/2013
SEMIVOLATILES (UG/KG)										
1,1-BIPHENYL	--	--	NA	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	31000	410000	NA	--	--	--	--	--	--	--
ACENAPHTHENE	470000	6100000	NA	--	--	--	--	--	--	--
ACENAPHTHYLENE	470000	6100000	NA	--	--	--	--	--	--	--
ANTHRACENE	2300000	31000000	NA	--	--	--	--	--	--	--
BAP EQUIVALENT-HALFND	22	390	2100	--	--	--	--	--	1.38	--
BAP EQUIVALENT-POS	22	390	2100	--	--	--	--	--	0.56	--
BENZO(A)ANTHRACENE	220	3900	NA	--	--	--	--	--	--	--
BENZO(A)PYRENE	22	390	NA	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE	220	3900	NA	--	--	--	--	--	5.6 J	--
BENZO(G,H,I)PERYLENE	230000	3100000	NA	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE	2200	39000	NA	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	30 B	--	35 B	65 B	26 B	31 J	44 J
CARBAZOLE	32000	140000	NA	--	--	--	--	--	--	--
CHRYSENE	22000	390000	NA	--	--	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	22	390	NA	--	--	--	--	--	--	--
DIBENZOFURAN	7800	100000	NA	--	--	--	--	--	--	--
FLUORANTHENE	310000	4100000	NA	--	--	--	--	--	6.2 J	--
FLUORENE	310000	4100000	NA	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	220	3900	NA	--	--	--	--	--	--	--
NAPHTHALENE	160000	2000000	NA	--	--	--	--	--	--	--
PHENANTHRENE	2300000	31000000	NA	--	--	--	--	--	--	--
PHENOL	2300000	31000000	NA	--	--	--	--	--	--	--
PYRENE	230000	3100000	na	--	--	--	--	--	4.3 J	--
SEMIVOLATILES (MG/KG)										
BAP EQUIVALENT-HALFND	0.022	0.39	2.1	--	--	--	--	--	0.001382	--
BAP EQUIVALENT-POS	0.022	0.39	2.1	--	--	--	--	--	0.000560	--
METALS (MG/KG)										
ANTIMONY	3.1	41	NA	NA	NA	NA	NA	NA	--	--
ARSENIC	0.43	1.9	16	NA	NA	NA	NA	NA	1.6 J	0.41 J
BARIUM	1600	20000	NA	NA	NA	NA	NA	NA	9.7 J	1.5 J
BERYLLIUM	16	200	NA	NA	NA	NA	NA	NA	0.10 J	--
CADMIUM	3.9	51	NA	NA	NA	NA	NA	NA	--	--
CHROMIUM	23	310	NA	NA	NA	NA	NA	NA	21	2.1
COBALT	--	--	NA	NA	NA	NA	NA	NA	1.1	--
COPPER	310	4100	NA	NA	NA	NA	NA	NA	18	--
LEAD	400	1000	NA	NA	NA	NA	NA	NA	3.3	0.55 J
MERCURY	2.3	31	NA	NA	NA	NA	NA	NA	--	--
MOLYBDENUM	--	--	NA	NA	NA	NA	NA	NA	2.7 J	--
NICKEL	160	2000	NA	NA	NA	NA	NA	NA	2.1 J	--
SELENIUM	39	510	NA	NA	NA	NA	NA	NA	--	--
SILVER	39	510	NA	NA	NA	NA	NA	NA	--	--
VANADIUM	7.8	100	NA	NA	NA	NA	NA	NA	9.1	2.7
ZINC	2300	31000	NA	NA	NA	NA	NA	NA	6.7 B	--

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-49D DR-SB-49D-24-26 9/5/2013	DR-SB-49D DR-SB-49D-29-31 9/5/2013	DR-SB-49D DR-SB-49D-36-39 9/5/2013	DR-SB-49D DR-SB-49D-44-46 9/5/2013	DR-SB-49D DR-SB-49D-54-56 9/5/2013	DR-SB-50D DR-SB-50D-18-20 9/9/2013	DR-SB-50D DR-SB-50D-29-31 9/9/2013
PESTICIDES/PCBS (UG/KG)										
AROCLOR-1254	320	1400	NA	--	--	--	--	--	--	--
AROCLOR-1260	320	1400	NA	--	--	--	--	--	--	--
TOTAL AROCLOR	320	1400	NA	--	--	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)										
TPH-GRO	230	620	NA	--	--	--	0.053 J	0.078 J	--	--
TPH-DRO	230	620	NA	--	--	--	--	--	--	--
MISCELLANEOUS PARAMETERS										
CATION EXCHANGE CAPACITY (MEQ/100)	--	--	NA	NA	11	NA	NA	2.4	27	NA
CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM (MG/KG)	23	310	16	NA	NA	NA	NA	NA	NA	NA
NITRATE-N (MG/KG)	--	--	NA	NA	--	NA	NA	--	1.3 J	NA
PHOSPHATE (MG/KG)	--	--	NA	NA	--	NA	NA	--	0.76 J	NA
TOTAL INORGANIC CARBON (MG/KG)	--	--	NA	NA	--	NA	NA	--	--	NA
TOTAL KJELDAHL NITROGEN (MG/KG)	--	--	NA	NA	63 J	NA	NA	67 J	430	NA
TOTAL ORGANIC CARBON (MG/KG)	--	--	NA	NA	--	NA	NA	--	--	NA
PH (S.U.)	--	--	NA	NA	5.52	NA	NA	4.57	4.88	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-50D DR-SB-50D-34-36 9/9/2013	DR-SB-50D DR-SB-50D-42-44 9/9/2013	DR-SB-50D DR-SB-50D-52-54 9/9/2013	DR-SB-51D DR-SB-51D-14-16 9/10/2013	DR-SB-51D DR-SB-51D-34-36 9/10/2013
VOLATILES (UG/KG)								
1,1,1-TRICHLOROETHANE	16000000	200000000	NA	--	--	--	--	--
1,1-DICHLOROETHANE	1600000	20000000	NA	--	--	--	--	--
1,1-DICHLOROETHENE	390000	5100000	NA	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	--	--	NA	--	--	--	--	--
1,2,3-TRIMETHYLBENZENE	--	--	NA	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	78000	1000000	NA	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	--	--	NA	--	--	--	--	--
1,2-DICHLOROBENZENE	700000	9200000	NA	--	--	--	--	--
1,2-DICHLOROETHANE	7000	31000	NA	0.36 J	--	--	--	--
1,3,5-TRIMETHYLBENZENE	--	--	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	23000	310000	NA	--	--	--	--	--
1,4-DICHLOROBENZENE	27000	120000	NA	--	--	--	--	--
2-BUTANONE	4700000	61000000	NA	--	--	--	--	1.9 J
4-ISOPROPYLTOLUENE	--	--	NA	--	--	--	--	--
ACETONE	7000000	92000000	NA	26 L	16 J	53 L	--	40 B
BENZENE	12000	52000	NA	--	--	--	--	--
CARBON DISULFIDE	780000	10000000	NA	--	--	--	--	--
CHLOROBENZENE	160000	2000000	NA	--	--	--	--	--
CHLOROFORM	78000	1000000	NA	--	0.79 J	--	--	2.9 J
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	6.6 L	0.68 J	0.94 J	390	0.84 J
CYCLOHEXANE	--	--	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	780000	10000000	NA	--	--	--	--	--
ISOPROPYLBENZENE	780000	10000000	NA	--	--	--	--	--
M+P-XYLENES	--	--	NA	--	--	--	--	--
METHYL ACETATE	--	--	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	85000	380000	NA	--	--	--	--	--
NAPHTHALENE	160000	2000000	NA	--	--	--	--	--
N-BUTYLBENZENE	--	--	NA	--	--	--	--	--
N-PROPYLBENZENE	--	--	NA	--	--	--	--	--
O-XYLENE	--	--	NA	--	--	--	--	--
SEC-BUTYLBENZENE	--	--	NA	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	--	--	NA	--	--	--	--	--
TETRACHLOROETHENE	1200	5300	NA	1.1 J	--	--	19 B	--
TOLUENE	630000	8200000	NA	--	--	--	--	0.52 B
TOTAL XYLENES	1600000	20000000	NA	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	160000	2000000	NA	--	--	--	--	--
TRICHLOROETHENE	1600	7200	NA	190 L	0.83 J	1.8 J	960	1.2 J
TRICHLOROFLUOROMETHANE	--	--	NA	0.56 J	--	--	--	--
VINYL CHLORIDE	90	4000	NA	--	--	--	--	--
VOLATILE ORGANIC COMPOUNDS - TICs (UG/KG)								
.ALPHA.-PINENE	--	--	NA	NA	NA	NA	NA	NA
1-PROPENE, 2-METHYL-	--	--	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	--	--	NA	NA	NA	NA	NA	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-50D DR-SB-50D-34-36 9/9/2013	DR-SB-50D DR-SB-50D-42-44 9/9/2013	DR-SB-50D DR-SB-50D-52-54 9/9/2013	DR-SB-51D DR-SB-51D-14-16 9/10/2013	DR-SB-51D DR-SB-51D-34-36 9/10/2013
SEMIVOLATILES (UG/KG)								
1,1-BIPHENYL	--	--	NA	--	--	--	--	--
2-METHYLNAPHTHALENE	31000	410000	NA	--	--	--	--	--
ACENAPHTHENE	470000	6100000	NA	--	--	--	--	--
ACENAPHTHYLENE	470000	6100000	NA	--	--	--	--	--
ANTHRACENE	2300000	31000000	NA	--	--	--	--	--
BAP EQUIVALENT-HALFND	22	390	2100	--	--	--	--	--
BAP EQUIVALENT-POS	22	390	2100	--	--	--	--	--
BENZO(A)ANTHRACENE	220	3900	NA	--	--	--	--	--
BENZO(A)PYRENE	22	390	NA	--	--	--	--	--
BENZO(B)FLUORANTHENE	220	3900	NA	--	--	--	--	--
BENZO(G,H,I)PERYLENE	230000	3100000	NA	--	--	--	--	--
BENZO(K)FLUORANTHENE	2200	39000	NA	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	--	50 J	36 J	40 J	--
CARBAZOLE	32000	140000	NA	--	--	--	--	--
CHRYSENE	22000	390000	NA	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	22	390	NA	--	--	--	--	--
DIBENZOFURAN	7800	100000	NA	--	--	--	--	--
FLUORANTHENE	310000	4100000	NA	--	--	--	--	--
FLUORENE	310000	4100000	NA	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	220	3900	NA	--	--	--	--	--
NAPHTHALENE	160000	2000000	NA	--	--	--	--	--
PHENANTHRENE	2300000	31000000	NA	--	--	--	--	--
PHENOL	2300000	31000000	NA	--	--	--	--	--
PYRENE	230000	3100000	na	--	--	--	--	--
SEMIVOLATILES (MG/KG)								
BAP EQUIVALENT-HALFND	0.022	0.39	2.1	--	--	--	--	--
BAP EQUIVALENT-POS	0.022	0.39	2.1	--	--	--	--	--
METALS (MG/KG)								
ANTIMONY	3.1	41	NA	--	--	--	NA	NA
ARSENIC	0.43	1.9	16	0.37 J	0.81 J	**3.1 K**	NA	NA
BARIUM	1600	20000	NA	2 J	0.87 J	1.9 J	NA	NA
BERYLLIUM	16	200	NA	--	--	--	NA	NA
CADMIUM	3.9	51	NA	--	--	--	NA	NA
CHROMIUM	23	310	NA	2.6	2.1	8.3	NA	NA
COBALT	--	--	NA	--	--	0.53 J	NA	NA
COPPER	310	4100	NA	0.88 J	1.6 J	3.9 K	NA	NA
LEAD	400	1000	NA	0.80 J	--	0.78 J	NA	NA
MERCURY	2.3	31	NA	--	--	--	NA	NA
MOLYBDENUM	--	--	NA	--	--	0.33 B	NA	NA
NICKEL	160	2000	NA	--	--	--	NA	NA
SELENIUM	39	510	NA	--	--	--	NA	NA
SILVER	39	510	NA	--	--	--	NA	NA
VANADIUM	7.8	100	NA	5.5	1.7	8.1	NA	NA
ZINC	2300	31000	NA	--	--	--	NA	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
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LOCATION SAMPLE ID SAMPLE DATE	Residential Screening Level[1]	Non-Residential Screening Level[1]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration[2]	DR-SB-50D DR-SB-50D-34-36 9/9/2013	DR-SB-50D DR-SB-50D-42-44 9/9/2013	DR-SB-50D DR-SB-50D-52-54 9/9/2013	DR-SB-51D DR-SB-51D-14-16 9/10/2013	DR-SB-51D DR-SB-51D-34-36 9/10/2013
PESTICIDES/PCBS (UG/KG)								
AROCLOR-1254	320	1400	NA	--	--	--	--	--
AROCLOR-1260	320	1400	NA	--	--	--	--	--
TOTAL AROCLOR	320	1400	NA	--	--	--	--	--
PETROLEUM HYDROCARBONS (MG/KG)								
TPH-GRO	230	620	NA	0.06 J	--	--	0.14	--
TPH-DRO	230	620	NA	--	--	--	--	--
MISCELLANEOUS PARAMETERS								
CATION EXCHANGE CAPACITY (MEQ/100)	--	--	NA	NA	NA	8.2	23	NA
CARBON (MG/KG)	--	--	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM (MG/KG)	23	310	16	NA	NA	NA	NA	NA
NITRATE-N (MG/KG)	--	--	NA	NA	NA	--	--	NA
PHOSPHATE (MG/KG)	--	--	NA	NA	NA	--	48	NA
TOTAL INORGANIC CARBON (MG/KG)	--	--	NA	NA	NA	--	--	NA
TOTAL KJELDAHL NITROGEN (MG/KG)	--	--	NA	NA	NA	67 B	70 B	NA
TOTAL ORGANIC CARBON (MG/KG)	--	--	NA	NA	NA	--	--	NA
PH (S.U.)	--	--	NA	NA	NA	4.8	4.15	NA

Table 4-5

Detected Analytes and Screening Criteria for Soil Boring Soil Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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Notes:

1 Maryland Department of the Environment soil cleanup standards (MDE, 2008) unless noted otherwise.

2 Benzo(a)pyrene equivalent (BaPEq) and arsenic criteria are the Preliminary Remedial GoalS for soil based on a 10^{-5} target cancer risk level under the industrial worker future use scenario per the Dump Road Remedial Investigation, Table 6-36 (Tetra Tech, 2012c).

Cells shaded gray indicate values that exceed the residential screening level.

Cells shaded black indicate values that exceed residential and non-residential/industrial worker screening criteria.

B - analyte detected in laboratory blank

DRO - diesel-range organics

GRO - gasloine-range organics

HI - hazard index (non-carcinogenic)

J - Positive result is considered estimated as a result of technical noncompliance.

K - Positive result is considered biased high as a result of technical noncompliance.

L - Positive result is considered biased low as a result of technical noncompliance.

MDE - Maryland Department of the Environment

µg/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

NA - not analyzed, not applicable

-- = not detected

TPH - total petroleum hydrocarbons

MEQ/100 - milliequivalents per 100 square centimeter

S.U. - standard units

Table 4-6

Statistical Summary of Analytes Detected in in DPT Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Average of All Results	Average of Positive Results	Standard Deviation
Volatile organic compounds (µg/L)												
TRICHLOROETHENE	101/117	86	0.17	430	0.2	J	490000	--	DR-DPT-43-35	6922	8016	45520
CIS-1,2-DICHLOROETHENE	99/117	85	0.17	3400	0.23	J	75000	--	DR-DPT-34-15	2112	2479	7903
VINYL CHLORIDE	83/117	71	0.22	4400	0.29	J	87000	--	DR-DPT-34-15	1081	1490	8085
BENZENE	52/117	44	0.13	2600	0.13	J	120	J	DR-DPT-34-40	26.63	9.235	125.1
CARBON DISULFIDE	47/117	40	0.13	2600	0.13	J	54	J	DR-DPT-35-25	23.52	3.934	122
1,2-DICHLOROETHANE	42/117	36	0.22	4400	0.27	J	200	J	DR-DPT-25-45	42.88	22.54	207.4
TOLUENE	36/117	31	0.13	31000	0.15	J	37000	--	DR-DPT-34-15	652.4	1646	3813
TRANS-1,2-DICHLOROETHENE	36/117	31	0.19	3800	0.21	J	200	J	DR-DPT-40-30	37.46	20.69	179.6
ACETONE	33/117	28	1.1	22000	1.2	J	7000	J	DR-DPT-34-15	262.5	329.2	1218
CHLOROFORM	26/117	22	0.16	3200	0.21	J	1700	J	DR-DPT-34-40	53.59	123.7	233.7
2-BUTANONE	19/117	16	0.57	11000	0.62	J	98	J	DR-DPT-34-45	96.37	8.115	516.8
TERTIARY-BUTYL ALCOHOL	19/117	16	3.9	61	4.1	J	230	J	DR-DPT-35-45	1330	379.8	7324
CHLOROBENZENE	15/117	13	0.15	3000	0.3	J	5300	--	DR-DPT-35-25	79.1	423	508.8
TOTAL XYLENES	12/117	10	0.14	2800	0.33	J	670	J	DR-DPT-34-15, DR-DPT-43B-15	37.91	163.7	158.8
O-XYLENE	9/117	8	0.14	2800	0.14	J	250	J	DR-DPT-43B-15	26.92	56.03	133.3
1,1-DICHLOROETHENE	8/117	7	0.19	3800	0.29	J	190	J	DR-DPT-26-25-D	33.74	29.9	178.9
M+P-XYLENES	8/117	7	0.24	4800	0.33	J	670	J	DR-DPT-34-15	49.41	182.6	235.1
METHYLENE CHLORIDE	7/117	6	0.33	4800	3.7	J	49000	J	DR-DPT-43-35	481.4	7026	4531
1,1-DICHLOROETHANE	6/117	5	0.15	3000	0.55	J	2	--	DR-DPT-23-25	25.64	1.375	140.9
1,2,4-TRIMETHYLBENZENE	6/117	5	0.12	2400	0.13	J	65	J	DR-DPT-43-30	20.99	14.13	112.7
CARBON TETRACHLORIDE	6/117	5	0.13	2600	0.27	J	12	--	DR-DPT-32-40	22.44	5.113	122.1
CHLOROETHANE	5/117	4	0.29	5800	0.3	J	21	J	DR-DPT-35-45	49.66	4.62	272.3
ETHYLBENZENE	5/117	4	0.17	3400	0.19	J	360	J	DR-DPT-43B-15	31.8	89.09	161.6
VINYL ACETATE	5/117	4	--	--	--	--	--	--	--	64.95	66.38	356.9
1,2,4-TRICHLOROBENZENE	3/117	3	0.15	3000	13	J	410	--	DR-DPT-43-30	29.39	158.7	145.3
1,2-DICHLOROBENZENE	4/117	3	0.13	2600	0.37	J	2.6	J	DR-DPT-35-35	22.25	1.643	122.1
2-HEXANONE	2/117	2	0.41	8200	0.53	J	0.66	J	DR-DPT-29-35	69.7	0.595	384.7
BROMODICHLOROMETHANE	2/117	2	0.15	3000	0.25	J	0.5	J	DR-DPT-38-40	25.58	0.375	140.9
NAPHTHALENE	2/117	2	0.24	4800	0.26	J	7.1	--	DR-DPT-43B-10	40.94	3.68	225.3
TETRACHLOROETHENE	2/117	2	0.29	5800	0.3	J	120	J	DR-DPT-43-30	50.25	60.15	272.4
1,1,1-TRICHLOROETHANE	1/117	1	0.22	4400	160	J	160	J	DR-DPT-40-35	38.64	160	206.9
1,2,3-TRIMETHYLBENZENE	1/117	1	0.0059	120	150	J	150	J	DR-DPT-43-30	2.293	150	14.88

Table 4-6

Statistical Summary of Analytes Detected in in DPT Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Average of All Results	Average of Positive Results	Standard Deviation
Volatile organic compounds (µg/L) (continued)												
1,3-DICHLOROBENZENE	1/117	1	0.14	2800	0.51	J	0.51	J	DR-DPT-43B-10	23.94	0.51	131.5
1,4-DICHLOROBENZENE	1/117	1	0.13	2600	2.4	--	2.4	--	DR-DPT-43B-10	22.23	2.4	122.1
4-METHYL-2-PENTANONE	1/117	1	0.32	6400	0.54	J	0.54	J	DR-DPT-43B-10	54.66	0.54	300.5
DIISOPROPYL ETHER	1/117	1	1.5	30000	2.7	J	2.7	J	DR-DPT-35-20	255.8	2.7	1409
ISOPROPYLBENZENE	1/117	1	0.13	2600	0.2	J	0.2	J	DR-DPT-35-20	22.21	0.2	122.1
N-PROPYLBENZENE	1/117	1	0.14	2800	0.15	J	0.15	J	DR-DPT-35-20	23.94	0.15	131.5
TERT-BUTYLBENZENE	1/117	1	0.13	2600	0.4	J	0.4	J	DR-DPT-38-15	22.22	0.4	122.1
Volatile organic compounds TICs (µg/L)												
1,1,2-TRICHLOROETHANE	1/1	100	--	--	0.57	J	0.57	J	DR-DPT-38-40	0.57	0.57	--
1,4-DIOXANE	8/8	100	--	--	22	J	5800	--	DR-DPT-35-25	853.3	853.3	2002
1-BUTENE	7/7	100	--	--	1.9	NJ	40	NJ	DR-DPT-27-45	13.29	13.29	12.71
1-BUTENE, 2-METHYL-	2/2	100	--	--	1.4	NJ	10	NJ	DR-DPT-24-55	5.7	5.7	6.081
1-HEXANOL, 2-ETHYL-	1/1	100	--	--	2.4	NJ	2.4	NJ	DR-DPT-35-20	2.4	2.4	--
1-HEXENE	1/1	100	--	--	1.1	NJ	1.1	NJ	DR-DPT-31-45	1.1	1.1	--
1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-	1/1	100	--	--	2.8	J	2.8	J	DR-DPT-38-15	2.8	2.8	--
1-OCTENE, 2-METHYL-	1/1	100	--	--	1.1	NJ	1.1	NJ	DR-DPT-42-20	1.1	1.1	--
1-PENTENE	1/1	100	--	--	3.4	NJ	3.4	NJ	DR-DPT-31-45	3.4	3.4	--
1-PENTENE, 2-METHYL-	2/2	100	--	--	2.9	NJ	6.4	NJ	DR-DPT-29-35	4.65	4.65	2.475
1-PROPENE, 2-METHYL-	4/4	100	--	--	5	J	11	NJ	DR-DPT-27-49, DR-DPT-39-38	8.1	8.1	3.353
2(3H)-FURANONE, DIHYDRO-3,5-DIMETHYL-	1/1	100	--	--	36	NJ	36	NJ	DR-DPT-27-45	36	36	--
2-BUTENE, 2-METHYL-	1/1	100	--	--	1.1	NJ	1.1	NJ	DR-DPT-29-25	1.1	1.1	--
2-HEPTENE, 2,6-DIMETHYL-	1/1	100	--	--	2.6	NJ	2.6	NJ	DR-DPT-38-30	2.6	2.6	--
2-METHYLNAPHTHALENE	1/1	100	--	--	1.7	J	1.7	J	DR-DPT-43B-10	1.7	1.7	--
2-PROPEN-1-OL, 2-METHYL-	1/1	100	--	--	1.1	NJ	1.1	NJ	DR-DPT-23-25	1.1	1.1	--
3-HEXANONE, 2,4-DIMETHYL-	2/2	100	--	--	2.5	NJ	12	NJ	DR-DPT-23-50	7.25	7.25	6.718
BENZENE, (2-METHYLPROPYL)-	1/1	100	--	--	2.1	NJ	2.1	NJ	DR-DPT-38-15	2.1	2.1	--
BENZENE, 1-METHYL-4-(1-METHYLETHYL)-	1/1	100	--	--	3.1	NJ	3.1	NJ	DR-DPT-38-15	3.1	3.1	--
BUTANOIC ACID, TRIMETHYLSILYL ESTER	1/1	100	--	--	2	NJ	2	NJ	DR-DPT-31-40	2	2	--
CYCLOHEXANE	9/9	100	--	--	0.12	J	12	J	DR-DPT-38-15	2.621	2.621	3.663
CYCLOPROPANE, 1,2-DIMETHYL-, CIS-	1/1	100	--	--	8.1	NJ	8.1	NJ	DR-DPT-29-35	8.1	8.1	--
CYCLOPROPANE, 1,2-DIMETHYL-, TRANS-	2/2	100	--	--	1.2	NJ	14	NJ	DR-DPT-29-35	7.6	7.6	9.051

Table 4-6

Statistical Summary of Analytes Detected in in DPT Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Average of All Results	Average of Positive Results	Standard Deviation
Volatile organic compounds TICs (µg/L) (continued)												
CYCLOPROPANE, 1-ETHYL-1-METHYL-	1/1	100	--	--	1.3	NJ	1.3	NJ	DR-DPT-31-45	1.3	1.3	--
CYCLOPROPANE, 1-ETHYL-2-METHYL-, CIS-	1/1	100	--	--	3.9	NJ	3.9	NJ	DR-DPT-29-35	3.9	3.9	--
CYCLOPROPANE, ETHYL-	1/1	100	--	--	1.2	NJ	1.2	NJ	DR-DPT-31-35	1.2	1.2	--
DICHLOROFLUOROMETHANE	1/1	100	--	--	0.85	J	0.85	J	DR-DPT-43B-10	0.85	0.85	--
DIMETHYL SULFIDE	1/1	100	--	--	55	NJ	55	NJ	DR-DPT-35-30	55	55	--
EICOSANE	1/1	100	--	--	1.6	NJ	1.6	NJ	DR-DPT-42-10	1.6	1.6	--
ETHYLENE OXIDE	1/1	100	--	--	8	NJ	8	NJ	DR-DPT-32-45	8	8	--
FORMAMIDE, N-METHYLTHIO	1/1	100	--	--	1.5	Z1	1.5	Z1	DR-DPT-24-15	1.5	1.5	--
HEPTANAL	1/1	100	--	--	1.4	NJ	1.4	NJ	DR-DPT-23-25	1.4	1.4	--
HEXANAL, 5,5-DIMETHYL-	1/1	100	--	--	5.4	NJ	5.4	NJ	DR-DPT-23-25	5.4	5.4	--
HEXANE	2/2	100	--	--	0.28	J	0.61	J	DR-DPT-31-45	0.445	0.445	0.2333
METHANETHIOL	2/2	100	--	--	1.1	NJ	28	NJ	DR-DPT-35-35	14.55	14.55	19.02
METHYLCYCLOHEXANE	6/6	100	--	--	0.26	J	5.7	J	DR-DPT-41-40	2.273	2.273	2.488
NAPHTHALENE, 1-METHYL-	1/1	100	--	--	1.5	Z1	1.5	Z1	DR-DPT-24-15	1.5	1.5	--
N-BUTANOL	5/5	100	--	--	14	J,	27	J	DR-DPT-38-40	18.2	18.2	5.495
N-TERT-BUTOXYCARBONYLIMIDAZOLE	2/2	100	--	--	1.4	NJ	7.3	NJ	DR-DPT-24-60	4.35	4.35	4.172
PENTANE, 2,2,4-TRIMETHYL-	1/1	100	--	--	17	NJ	17	NJ	DR-DPT-38-15	17	17	--
PENTANE, 2,3,3-TRIMETHYL-	1/1	100	--	--	19	NJ	19	NJ	DR-DPT-38-15	19	19	--
PENTANE, 2,3,4-TRIMETHYL-	1/1	100	--	--	12	NJ	12	NJ	DR-DPT-38-15	12	12	--
PROPENE	1/1	100	--	--	24	J	24	J	DR-DPT-39-38	24	24	--
SILANOL, TRIMETHYL-	1/18	100	--	--	--	--	--	--	--	4.128	6.3	3.175
TETRAHYDROFURAN	9/9	100	--	--	0.74	J	3	J	DR-DPT-35-20	1.711	1.711	0.8829
UNKNOWN	6/6	100	--	--	2.7	NJ	1400	NJ	DR-DPT-43B-20, DR-DPT-43B-15-D	446.5	446.5	682.2
UNKNOWN [RT=13.32]	1/1	100	--	--	1.2	NJ	1.2	NJ	DR-DPT-35-20	1.2	1.2	--
UNKNOWN [RT=2.27]	1/1	100	--	--	1600	NJ	1600	NJ	DR-DPT-43B-15	1600	1600	--
UNKNOWN [RT=2.30]	1/1	100	--	--	2.7	NJ	2.7	NJ	DR-DPT-31-45	2.7	2.7	--
UNKNOWN [RT=2.80]	1/1	100	--	--	1100	NJ	1100	NJ	DR-DPT-43B-15	1100	1100	--
UNKNOWN [RT=3.12]	1/1	100	--	--	1400	NJ	1400	NJ	DR-DPT-43B-15	1400	1400	--
UNKNOWN [RT=3.15]	1/1	100	--	--	1000	NJ	1000	NJ	DR-DPT-43B-15-D	1000	1000	--
UNKNOWN [RT=9.62]	1/1	100	--	--	1.3	NJ	1.3	NJ	DR-DPT-35-20	1.3	1.3	--
1,1,2-TRICHLOROETHANE	3/3	100	--	--	2	J	27	J	DR-DPT-33-30	14.33	14.33	12.5
1,4-DIOXANE	3/3	100	--	--	34	J	220	J	DR-DPT-37-45	138	138	94.93

Table 4-6

Statistical Summary of Analytes Detected in in DPT Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Average of All Results	Average of Positive Results	Standard Deviation
Volatile organic compounds TICs (µg/L) (continued)												
1-BUTANOL	4/4	100	--	--	13	J	53	J	DR-DPT-29-40	37.75	37.75	17.8
1-PENTENE	5/5	100	--	--	1.5	NJ	26	NJ	DR-DPT-28-35	11	11	9.401
2-METHYL-1-BUTENE	3/3	100	--	--	4.5	NJ	17	NJ	DR-DPT-27-49	9.567	9.567	6.577
2-METHYLBUTANE	6/6	100	--	--	1.1	NJ	42	NJ	DR-DPT-27-45	8.9	8.9	16.24
2-PENTENE (CIS)	1/1	100	--	--	7.8	NJ	7.8	NJ	DR-DPT-29-40	7.8	7.8	--
ACETALDEHYDE	1/1	100	--	--	4.3	NJ	4.3	NJ	DR-DPT-23-50	4.3	4.3	--
CYCLOHEXANE	4/4	100	--	--	0.14	J	0.86	J	DR-DPT-37-25	0.3375	0.3375	0.3493
HEXANE	7/7	100	--	--	0.35	J	7.5	J	DR-DPT-27-45	1.951	1.951	2.555
ISOBUTANOL	2/2	100	--	--	8.9	J	27	J	DR-DPT-29-35	17.95	17.95	12.8
METHYL ACETATE	1/1	100	--	--	2.2	J	2.2	J	DR-DPT-24-55	2.2	2.2	--
METHYLCYCLOHEXANE	1/1	100	--	--	49	J	49	J	DR-DPT-43-30	49	49	--
PENTANE	2/2	100	--	--	33	NJ	49	NJ	DR-DPT-27-45	41	41	11.31
PROPYLENE	1/1	100	--	--	150	NJ	150	NJ	DR-DPT-28-35	150	150	--
TETRAHYDROFURAN	3/3	100	--	--	1.7	J	140	J	DR-DPT-43-30	48.2	48.2	79.5
UNKNOWN	1/1	100	--	--	11	NJ	11	NJ	DR-DPT-37-45	11	11	--

DPT - direct-push technology

-- not applicable

J - estimated concentration

L - concentration biased low

NJ - tentatively identified compound

TIC - tentatively identified compound

µg/L - micrograms per liter

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[(1)] (µg/L)	DR-DPT-23 DR-DPT-23-20	DR-DPT-23 DR-DPT-23-25	DR-DPT-23 DR-DPT-23-30	DR-DPT-23 DR-DPT-23-35	DR-DPT-23 DR-DPT-23-40	DR-DPT-23 DR-DPT-23-45	DR-DPT-23 DR-DPT-23-50	DR-DPT-24 DR-DPT-24-15	DR-DPT-24 DR-DPT-24-25
1,2-DICHLOROETHANE	5	--	--	0.45 J	0.31 J	18	0.72 J	2.5 J	--	25 J
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	13 J	48 J	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	0.94 J	1.4 J	--	--	--	--	17 J	1.3 J	--
2-HEXANONE	NA	--	--	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	2 NJ	NA	1.1 NJ	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	4.3 NJ	NA	NA
ACETONE	550	11 B	19 B	4.4 B	4.2 B	--	2.7 B	68 B	5 B	--
BENZENE	5	--	0.14 J	--	0.16 J	2.6 J	0.15 J	1.2 J	0.80 J	--
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	100	0.18 J	0.33 J	0.17 J	0.34 J	--	0.27 J	--	0.42 J	--
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	--	--	--	35	0.49 J	1.2 J	0.30 J	--
CHLOROETHANE	4	--	--	0.30 J	0.37 J	--	--	--	--	--
CHLOROFORM	80	--	--	--	--	3.4 J	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	0.23 J	0.32 J	0.74 J	0.55 J	130	9.7	5.7 J	--	340
CYCLOHEXANE	NA	NA	NA	NA	0.14 J	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--	--
HEXANE	NA	NA	NA	NA	0.62 J	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	8.9 J	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--	--	--	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	--	--	--	--	--	11 B	--	55 J

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-23 DR-DPT-23-20	DR-DPT-23 DR-DPT-23-25	DR-DPT-23 DR-DPT-23-30	DR-DPT-23 DR-DPT-23-35	DR-DPT-23 DR-DPT-23-40	DR-DPT-23 DR-DPT-23-45	DR-DPT-23 DR-DPT-23-50	DR-DPT-24 DR-DPT-24-15	DR-DPT-24 DR-DPT-24-25
Volatile organic compounds (µg/L) (continued)			--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	--	--	--	--	--	--
O-XYLENE	NA	--	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	10 J	8.9 J	9.6 J	--	--	40 J	--	--
TERTIARY-BUTYL ALCOHOL	NA	8 J	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	--	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	NA	--	--	--	--	--	1.1 J	0.26 J	--
TOLUENE	1000	--	--	--	--	--	--	--	--	--
TOTAL XYLENES	10000	--	--	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	100	--	0.22 J	3.4	2.4	210	38	3.2 J	--	3100
TRICHLOROETHENE	5	--	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	NA	--	0.29 J	0.69 J	80	2.2	--	4.5	150

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[(1)] (µg/L)	DR-DPT-24 DR-DPT-24-30	DR-DPT-24 DR-DPT-24-35	DR-DPT-24 DR-DPT-24-40	DR-DPT-24 DR-DPT-24-45	DR-DPT-24 DR-DPT-24-50	DR-DPT-24 DR-DPT-24-55	DR-DPT-24 DR-DPT-24-60	DR-DPT-24 DR-DPT-24-60A	DR-DPT-25 DR-DPT-25-30
1,2-DICHLOROETHANE	5	--	100	4.1 J	17 J	10 J	35 J	4.1 J	NA	58 J
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	NA	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	NA	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	160 Z1	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	37 J	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	9 Z1	NA	NA	NA
2-BUTANONE	700	--	--	--	--	--	--	6.6 J	NA	--
2-HEXANONE	NA	--	--	--	--	--	--	--	NA	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	7.2 NJ	4.5 NJ	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	NA	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	--	--	--	--	--	40 B	31 B	NA	--
BENZENE	5	--	16 J	--	--	--	3.2 J	0.60 J	NA	--
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	NA	--
CARBON DISULFIDE	100	--	--	--	--	--	--	0.54 J	NA	--
CARBON TETRACHLORIDE	5	--	--	2.3 J	--	7.2 J	--	--	NA	--
CHLOROBENZENE	100	--	58 J	--	--	--	8.1 J	--	NA	--
CHLOROETHANE	4	--	--	--	--	--	--	--	NA	--
CHLOROFORM	80	--	20 J	18	48 J	90	13 J	0.92 J	NA	--
CIS-1,2-DICHLOROETHENE	70	580 J	500	29	66	93	130 J	5.4 J	NA	5000
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	NA	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	NA	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	NA	--
M+P-XYLENES	NA	--	--	--	--	--	--	--	NA	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	2.2 J	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	610 B	44 B	--	31 B	17 J	25 J	4.2 J	NA	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-24 DR-DPT-24-30	DR-DPT-24 DR-DPT-24-35	DR-DPT-24 DR-DPT-24-40	DR-DPT-24 DR-DPT-24-45	DR-DPT-24 DR-DPT-24-50	DR-DPT-24 DR-DPT-24-55	DR-DPT-24 DR-DPT-24-60	DR-DPT-24 DR-DPT-24-60A	DR-DPT-25 DR-DPT-25-30
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	NA	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	NA	--
N-PROPYLBENZENE	NA	--	--	--	--	--	--	--	NA	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	NA	--
TERT-BUTYLBENZENE	NA	--	--	--	--	--	28 J	26 J	NA	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	NA	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	--	--	--	--	--	2.8 J	0.98 J	NA	--
TOLUENE	1000	--	--	--	--	--	--	--	NA	--
TOTAL XYLENES	10000	--	--	--	--	--	--	--	NA	--
TRANS-1,2-DICHLOROETHENE	100	17000	1800	420	1100	1300	260 J	5 J	NA	3000
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	--	420	--	--	--	29 J	--	NA	580

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[(1)] (µg/L)	DR-DPT-25 DR-DPT-25-35	DR-DPT-25 DR-DPT-25-40	DR-DPT-25 DR-DPT-25-45	DR-DPT-25 DR-DPT-25-50	DR-DPT-26 DR-DPT-26-20	DR-DPT-26 DR-DPT-26-25	DR-DPT-26 DR-DPT-26-25-D	DR-DPT-26 DR-DPT-26-30	DR-DPT-26 DR-DPT-26-35
1,2-DICHLOROETHANE	5	120 J	--	200 J	--	--	--	--	180 J	15 J
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	--	--	--	--	--	--	--	--	--
2-HEXANONE	NA	--	--	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	--	--	--	--	--	1800 J	--	2000 J	160 J
BENZENE	5	--	--	--	--	86 J	94 B	--	150 B	8.6 B
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	100	--	--	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	--	110 J	--	--	--	--	--	--
CHLOROETHANE	4	--	--	--	--	--	--	--	--	--
CHLOROFORM	80	--	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	2700	7100	5900	6700	--	24000	24000	4500	500
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--	--	--	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	--	--	--	--	1400 B	--	1400 B	160 B

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-25 DR-DPT-25-35	DR-DPT-25 DR-DPT-25-40	DR-DPT-25 DR-DPT-25-45	DR-DPT-25 DR-DPT-25-50	DR-DPT-26 DR-DPT-26-20	DR-DPT-26 DR-DPT-26-25	DR-DPT-26 DR-DPT-26-25-D	DR-DPT-26 DR-DPT-26-30	DR-DPT-26 DR-DPT-26-35
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	--	--	--	--	--	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	--	--	--	280 B	--	120 J	230 J	--	--
TOLUENE	1000	--	--	--	--	--	--	--	--	--
TOTAL XYLENES	10000	--	--	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	100	14000	25000	21000	16000	--	850	790 J	26000	1600
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	810	2500	2200	1600	5800	7600	7800	550 J	94

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[(1)] (µg/L)	DR-DPT-26 DR-DPT-26-40	DR-DPT-26 DR-DPT-26-45	DR-DPT-26 DR-DPT-26-48	DR-DPT-27 DR-DPT-27-20	DR-DPT-27 DR-DPT-27-25	DR-DPT-27 DR-DPT-27-30	DR-DPT-27 DR-DPT-27-35	DR-DPT-27 DR-DPT-27-40	DR-DPT-27 DR-DPT-27-45
1,2-DICHLOROETHANE	5	7.8 J	2.1 J	3.1 J	--	--	--	--	--	--
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	--	--	--	--	--	--	--	--	--
2-HEXANONE	NA	--	--	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	42 NJ
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	55 J	13 J	9.4 B	--	--	--	--	--	--
BENZENE	5	4.1 B	1.3 B	0.97 J	--	--	--	--	--	--
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	100	--	0.67 J	1.6 J	--	--	--	--	--	--
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	--	--	--	--	--	--	--	--
CHLOROETHANE	4	--	--	--	--	--	--	--	--	--
CHLOROFORM	80	--	0.69 J	0.98 J	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	410	110	110	410	1700	300	200	160	220
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 J
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--	--	--	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	55 B	5.8 B	--	--	--	--	--	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-26 DR-DPT-26-40	DR-DPT-26 DR-DPT-26-45	DR-DPT-26 DR-DPT-26-48	DR-DPT-27 DR-DPT-27-20	DR-DPT-27 DR-DPT-27-25	DR-DPT-27 DR-DPT-27-30	DR-DPT-27 DR-DPT-27-35	DR-DPT-27 DR-DPT-27-40	DR-DPT-27 DR-DPT-27-45
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	--	--	--	--	--	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	49 NJ
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	38 J	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	--	--	2.8 J	--	--	--	--	--	--
TOLUENE	1000	--	--	--	--	--	--	--	--	--
TOTAL XYLENES	10000	--	1.4 J	1.2 J	--	--	--	--	5.2 J	7.4 J
TRANS-1,2-DICHLOROETHENE	100	540	130	140	650	7000	950	710	450	390
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	59	29	26	81	91 J	56	35	17	15 J

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-27 DR-DPT-27-49	DR-DPT-28 DR-DPT-28-15	DR-DPT-28 DR-DPT-28-30	DR-DPT-28 DR-DPT-28-35	DR-DPT-28 DR-DPT-28-40	DR-DPT-29 DR-DPT-29-10	DR-DPT-29 DR-DPT-29-15	DR-DPT-29 DR-DPT-29-20	DR-DPT-29 DR-DPT-29-25
1,2-DICHLOROETHANE	5	2.3 J	--	20 J	3.5 J	--	--	--	--	--
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	13 NJ	NA	NA	26 NJ	NA	NA	NA	NA	NA
2-BUTANONE	700	--	--	--	--	--	1.2 J	--	--	--
2-HEXANONE	NA	--	--	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	17 NJ	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 NJ
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	19 J	3.9 B	--	20 B	--	7.6 B	2.7 B	2.9 B	3.3 B
BENZENE	5	1.6 J	--	12 J	2.3 J	--	0.16 J	--	--	0.13 J
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	100	--	--	--	--	--	--	--	0.60 J	0.26 J
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	--	--	--	--	--	--	--	--
CHLOROETHANE	4	--	--	--	--	--	--	--	--	--
CHLOROFORM	80	--	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	130	2.2	3000 J	300	85	--	0.23 J	2.1	--
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20 J
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.73 J
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--	--	--	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	--	91 B	39 B	27 B	--	--	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-27 DR-DPT-27-49	DR-DPT-28 DR-DPT-28-15	DR-DPT-28 DR-DPT-28-30	DR-DPT-28 DR-DPT-28-35	DR-DPT-28 DR-DPT-28-40	DR-DPT-29 DR-DPT-29-10	DR-DPT-29 DR-DPT-29-15	DR-DPT-29 DR-DPT-29-20	DR-DPT-29 DR-DPT-29-25
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	--	--	--	--	--	--
O-XYLENE	NA	NA	NA	NA	33 NJ	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	150 NJ	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	--	0.23 J	--	--	--	--	--	--	0.16 J
TOLUENE	1000	--	--	--	--	--	--	--	--	--
TOTAL XYLENES	10000	--	--	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	100	120	0.57 J	3100	480	460	0.29 J	--	--	--
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	--	--	280	16	5 J	--	--	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[(1)] (µg/L)	DR-DPT-29 DR-DPT-29-30	DR-DPT-29 DR-DPT-29-35	DR-DPT-29 DR-DPT-29-40	DR-DPT-30 DR-DPT-30-20	DR-DPT-30 DR-DPT-30-30	DR-DPT-30 DR-DPT-30-35	DR-DPT-30 DR-DPT-30-40	DR-DPT-30 DR-DPT-30-40-D	DR-DPT-31 DR-DPT-31-25
1,2-DICHLOROETHANE	5	--	--	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	53 J	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	5.5 NJ	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	0.74 J	4 J	6.9 J	--	--	--	--	--	--
2-HEXANONE	NA	--	0.66 J	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	1.9 NJ	4 NJ	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	7.8 NJ	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	3 B	15 B	26 B	41	53 J	89 J	11 J	8.5 J	--
BENZENE	5	0.16 J	0.69 J	1.2 J	3.4	14 J	15 B	7.4 J	5.7 J	--
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	100	0.25 J	0.44 J	--	0.44 J	--	--	--	--	--
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	--	--	--	--	--	--	--	--
CHLOROETHANE	4	--	--	--	--	--	--	--	--	--
CHLOROFORM	80	--	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	--	--	--	100	920	530	130	100	2000
CYCLOHEXANE	NA	0.15 J	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	0.24 J	--	--	--	--	--	--	--
HEXANE	NA	0.56 J	2.5 NJ	1.4 J	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	27 J	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	0.52 J	--	--	--	--	--	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	--	3.7 J	2.5 B	--	54 B	--	--	35 B

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-29 DR-DPT-29-30	DR-DPT-29 DR-DPT-29-35	DR-DPT-29 DR-DPT-29-40	DR-DPT-30 DR-DPT-30-20	DR-DPT-30 DR-DPT-30-30	DR-DPT-30 DR-DPT-30-35	DR-DPT-30 DR-DPT-30-40	DR-DPT-30 DR-DPT-30-40-D	DR-DPT-31 DR-DPT-31-25
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	0.21 J	--	--	--	--	1.8 J	1 J	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	8.9 J	--	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	1.7 J	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	0.19 J	1.3 J	1.6 J	--	6.9 J	--	1.9 J	--	16 B
TOLUENE	1000	--	0.73 J	--	--	--	--	1.8 J	1 J	--
TOTAL XYLENES	10000	--	--	--	1.2 J	9.2 J	6 J	1.8 J	--	17 J
TRANS-1,2-DICHLOROETHENE	100	--	--	--	20	270	1000	230	160	61 J
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	--	--	--	2.6 J	51	42	11	7.2	580

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-31 DR-DPT-31-30	DR-DPT-31 DR-DPT-31-35	DR-DPT-31 DR-DPT-31-40	DR-DPT-31 DR-DPT-31-45	DR-DPT-32 DR-DPT-32-30	DR-DPT-32 DR-DPT-32-35	DR-DPT-32 DR-DPT-32-40	DR-DPT-32 DR-DPT-32-45	DR-DPT-32 DR-DPT-32-50
1,2-DICHLOROETHANE	5	--	0.27 J	0.74 J	--	--	--	--	--	--
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	--	--	--	--	--	--	--	--	--
2-HEXANONE	NA	--	--	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	20 J	18	6.3 J	36	4.9 B	6.8 B	--	12 B	5.5 B
BENZENE	5	0.62 J	0.67 J	0.97 J	0.27 J	0.87 J	0.48 J	0.43 J	--	0.63 J
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	100	1.5 J	0.86 J	0.51 J	0.50 J	0.66 J	1.2	--	--	--
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	12	2.3 J	6.6
CHLOROBENZENE	100	--	--	--	--	--	--	--	--	--
CHLOROETHANE	4	--	--	--	--	0.70 J	0.73 J	--	--	--
CHLOROFORM	80	1.1 J	0.43 J	--	1.5	--	--	13	16	12
CIS-1,2-DICHLOROETHENE	70	61	13	15	23	33	15	--	0.92 J	--
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--	--	--	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	--	--	--	--	--	--	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-31 DR-DPT-31-30	DR-DPT-31 DR-DPT-31-35	DR-DPT-31 DR-DPT-31-40	DR-DPT-31 DR-DPT-31-45	DR-DPT-32 DR-DPT-32-30	DR-DPT-32 DR-DPT-32-35	DR-DPT-32 DR-DPT-32-40	DR-DPT-32 DR-DPT-32-45	DR-DPT-32 DR-DPT-32-50
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	0.72 J	--	--	--	--	--	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	--	--	8 J	--	--	--	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	1.2 B	0.33 B	0.26 B	0.36 B	--	0.15 B	0.54 B	1 B	2 J
TOLUENE	1000	--	--	0.72 J	--	--	--	--	--	--
TOTAL XYLENES	10000	0.64 J	0.21 J	0.27 J	--	0.41 J	--	--	--	--
TRANS-1,2-DICHLOROETHENE	100	3.6	3.1	6	11	3.7	2.8	120	120	130
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	41	6.5	14	2.8	19	8.6	--	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-33 DR-DPT-33-15	DR-DPT-33 DR-DPT-33-25	DR-DPT-33 DR-DPT-33-30	DR-DPT-33 DR-DPT-33-40	DR-DPT-33 DR-DPT-33-45	DR-DPT-34 DR-DPT-34-15	DR-DPT-34 DR-DPT-34-35	DR-DPT-34 DR-DPT-34-40	DR-DPT-34 DR-DPT-34-45
1,2-DICHLOROETHANE	5	--	--	--	--	--	--	--	--	10 J
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	--	--	--	--	--	--	--	--	98 J
2-HEXANONE	NA	--	--	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	1.7 J	--	--	--	--	7000 J	--	--	54 J
BENZENE	5	0.25 B	--	--	--	9.4 J	660 B	80 J	120 J	9.9 J
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	100	--	--	--	--	--	--	--	--	24 J
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	--	--	--	--	--	--	--	--
CHLOROETHANE	4	--	--	--	--	--	--	--	--	--
CHLOROFORM	80	--	--	--	--	--	--	1000 J	1700 J	270 J
CIS-1,2-DICHLOROETHENE	70	--	100	760	4200 J	900 J	75000	2100 J	3600 J	820 J
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--	670 J	--	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	--	--	--	--	4800 B	--	--	80 J

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-33 DR-DPT-33-15	DR-DPT-33 DR-DPT-33-25	DR-DPT-33 DR-DPT-33-30	DR-DPT-33 DR-DPT-33-40	DR-DPT-33 DR-DPT-33-45	DR-DPT-34 DR-DPT-34-15	DR-DPT-34 DR-DPT-34-35	DR-DPT-34 DR-DPT-34-40	DR-DPT-34 DR-DPT-34-45
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	--	--	--	--	120 J	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	--	--	--	--	--	37000	310 J	3100 J	110 J
TOLUENE	1000	--	--	--	--	--	670 J	--	120 J	--
TOTAL XYLENES	10000	--	--	--	71 J	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	100	--	480	2400	9900 J	1600 J	--	7800 J	16000 J	1000 J
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	--	7.8 J	27 J	460 J	110 J	87000	520 J	400 J	210 J

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-35 DR-DPT-35-20	DR-DPT-35 DR-DPT-35-25	DR-DPT-35 DR-DPT-35-30	DR-DPT-35 DR-DPT-35-35	DR-DPT-35 DR-DPT-35-40	DR-DPT-35 DR-DPT-35-45	DR-DPT-36 DR-DPT-36-10	DR-DPT-36 DR-DPT-36-10-D	DR-DPT-36 DR-DPT-36-30
1,2-DICHLOROETHANE	5	--	--	--	8.7 J	15 J	46 J	--	--	--
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	1.1 J	--	--	--	--	--	2.1 J	1.4 J	--
2-HEXANONE	NA	--	--	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	6.8 J	--	--	--	--	--	23 B	17 B	7.7 B
BENZENE	5	2.3 J	42 J	9.1 J	5.4 J	6.4 J	13 J	--	--	0.22 J
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	100	1.3 J	54 J	12 J	5.5 J	4 J	16 J	0.13 J	0.13 J	--
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	5300	470 J	93 J	220 J	34 J	--	--	--
CHLOROETHANE	4	--	--	--	--	--	21 J	--	--	--
CHLOROFORM	80	--	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	1.2 J	210	550 J	160 J	170 J	860 J	--	--	41
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	2.7 J	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	0.20 J	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	0.40 J	--	--	--	--	--	--	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	--	--	--	--	--	--	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-35 DR-DPT-35-20	DR-DPT-35 DR-DPT-35-25	DR-DPT-35 DR-DPT-35-30	DR-DPT-35 DR-DPT-35-35	DR-DPT-35 DR-DPT-35-40	DR-DPT-35 DR-DPT-35-45	DR-DPT-36 DR-DPT-36-10	DR-DPT-36 DR-DPT-36-10-D	DR-DPT-36 DR-DPT-36-30
Volatile organic compounds (µg/L) (continued)		0.26 J	--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	0.15 J	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	--	--	--	--	--	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	--	--	--	230 J	--	8.8 J	--
TERTIARY-BUTYL ALCOHOL	NA	0.30 J	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	0.35 J	--	--	--	1.3 J	--	--	--	0.46 B
TOLUENE	1000	0.40 J	--	--	--	--	--	--	--	--
TOTAL XYLENES	10000	2.1 J	--	--	5 J	3.9 J	12 J	--	--	1.4 J
TRANS-1,2-DICHLOROETHENE	100	1.1 J	230	110 J	23 J	32 J	110 J	0.20 J	--	5.6
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	0.63 J	210	160 J	77 J	170 J	720 J	--	--	25

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-36 DR-DPT-36-35	DR-DPT-36 DR-DPT-36-40	DR-DPT-36 DR-DPT-36-45	DR-DPT-36 DR-DPT-36-45-D	DR-DPT-36 DR-DPT-36-50	DR-DPT-37 DR-DPT-37-25	DR-DPT-37 DR-DPT-37-30	DR-DPT-37 DR-DPT-37-35	DR-DPT-37 DR-DPT-37-40
1,2-DICHLOROETHANE	5	0.70 J	0.39 J	0.69 J	0.64 J	--	--	--	--	1.4 J
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	34 J	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	1.5 NJ	NA	NA
2-BUTANONE	700	--	--	--	--	--	--	--	--	1.6 J
2-HEXANONE	NA	--	--	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	3.7 B	5.1 B	5.7 B	4.3 B	34 B	--	5.1 J	1.9 J	3.1 J
BENZENE	5	--	--	--	--	--	--	--	--	0.79 J
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE	100	0.13 J	0.22 J	0.27 J	0.24 J	--	1.1 J	1.7 J	1.4	2.5
CARBON TETRACHLORIDE	5	--	--	0.27 J	0.29 J	--	--	--	--	--
CHLOROBENZENE	100	--	--	--	--	--	--	--	--	--
CHLOROETHANE	4	--	--	--	--	--	--	--	--	--
CHLOROFORM	80	--	--	0.27 J	0.31 J	--	--	--	--	0.48 J
CIS-1,2-DICHLOROETHENE	70	0.44 J	0.97 J	1.4	1.4	210	160	8.5	21	88
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	0.86 J	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	0.35 J	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--	--	0.33 J	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	--	--	--	2.3 B	--	--	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-36 DR-DPT-36-35	DR-DPT-36 DR-DPT-36-40	DR-DPT-36 DR-DPT-36-45	DR-DPT-36 DR-DPT-36-45-D	DR-DPT-36 DR-DPT-36-50	DR-DPT-37 DR-DPT-37-25	DR-DPT-37 DR-DPT-37-30	DR-DPT-37 DR-DPT-37-35	DR-DPT-37 DR-DPT-37-40
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	--	--	--	--	--	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	8.6 J	7.9 J	--	--	4.1 J	--	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	2.9 J	NA	NA	NA	NA
TETRAHYDROFURAN	NA	--	--	--	--	3.5 B	--	--	--	0.34 J
TOLUENE	1000	--	--	--	--	--	--	0.33 J	--	--
TOTAL XYLENES	10000	--	--	--	--	--	--	0.41 J	1	0.60 J
TRANS-1,2-DICHLOROETHENE	100	4.6	19	5.6	5.6	9.3	5.9 J	2.1	9.7	21
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	0.92 J	1.4	1	1.1	16	60	1.4	3.6	52

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-37 DR-DPT-37-45	DR-DPT-38 DR-DPT-38-15	DR-DPT-38 DR-DPT-38-30	DR-DPT-38 DR-DPT-38-35	DR-DPT-38 DR-DPT-38-40	DR-DPT-39 DR-DPT-39-15	DR-DPT-39 DR-DPT-39-20	DR-DPT-39 DR-DPT-39-30	DR-DPT-39 DR-DPT-39-35
1,2-DICHLOROETHANE	5	2.4 J	0.99 J	2.1	4.8 J	3.6	--	--	--	--
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	220 J	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	--	2.3 J	--	--	--	--	--	0.62 J	0.99 J
2-HEXANONE	NA	--	--	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	--	8.7 B	20 B	21 B	51	1.2 J	3 J	8.9 J	5.2 J
BENZENE	5	2.5 J	6.3	0.98 J	3.3 J	1.3 J	--	--	--	--
BROMODICHLOROMETHANE	80	--	--	--	--	0.50 J	--	--	--	--
CARBON DISULFIDE	100	3.7 J	1.8	1.6	3.4 J	2.3	0.13 J	1.3	0.30 J	0.28 J
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	--	0.78 J	1.4 J	--	--	--	--	--
CHLOROETHANE	4	--	--	--	--	--	--	--	--	--
CHLOROFORM	80	--	0.21 J	0.46 J	1.9 J	2.9	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	260	0.92 J	16	42	26	--	--	--	--
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--	--	--	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	--	--	--	--	--	--	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-37 DR-DPT-37-45	DR-DPT-38 DR-DPT-38-15	DR-DPT-38 DR-DPT-38-30	DR-DPT-38 DR-DPT-38-35	DR-DPT-38 DR-DPT-38-40	DR-DPT-39 DR-DPT-39-15	DR-DPT-39 DR-DPT-39-20	DR-DPT-39 DR-DPT-39-30	DR-DPT-39 DR-DPT-39-35
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	0.76 J	--	--	--	--	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	0.40 J	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	12 J	42 J	22 B	--	--	--	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	--	0.41 J	0.98 J	4.6 J	2.4	--	--	0.15 J	--
TOLUENE	1000	--	--	--	0.76 J	--	--	--	--	--
TOTAL XYLENES	10000	--	5.8	0.78 J	3.6 J	2.2	--	--	--	--
TRANS-1,2-DICHLOROETHENE	100	73	--	6.5	32	21	--	--	16	0.36 J
TRICHLOROETHENE	5	11 NJ	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	130	8.1	17	95	63	--	--	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-39 DR-DPT-39-38	DR-DPT-40 DR-DPT-40-20	DR-DPT-40 DR-DPT-40-25	DR-DPT-40 DR-DPT-40-30	DR-DPT-40 DR-DPT-40-35	DR-DPT-40 DR-DPT-40-40	DR-DPT-41 DR-DPT-41-25	DR-DPT-41 DR-DPT-41-35
1,2-DICHLOROETHANE	5	--	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	6.1 J	--	--	--	--	--	--	--
2-HEXANONE	NA	0.53 J	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	22	--	--	--	--	67 B	--	--
BENZENE	5	0.54 J	--	--	--	--	--	--	--
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--	--
CARBON DISULFIDE	100	--	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	--	--	--	--	--	--	--
CHLOROETHANE	4	--	--	--	--	--	--	--	--
CHLOROFORM	80	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	--	9100	3700	9000	5500	1100	17000	1900
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--	--	--	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	--	--	--	--	--	1600 B	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-39 DR-DPT-39-38	DR-DPT-40 DR-DPT-40-20	DR-DPT-40 DR-DPT-40-25	DR-DPT-40 DR-DPT-40-30	DR-DPT-40 DR-DPT-40-35	DR-DPT-40 DR-DPT-40-40	DR-DPT-41 DR-DPT-41-25	DR-DPT-41 DR-DPT-41-35
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	--	--	--	--	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	0.46 J	--	--	--	--	--	1700	--
TOLUENE	1000	--	--	--	--	--	--	--	--
TOTAL XYLENES	10000	--	170 J	89 J	200 J	77 J	--	--	--
TRANS-1,2-DICHLOROETHENE	100	2.1	460	210	2800	5800	120	23000	28000 K
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	--	350	51 J	130 J	71 J	43 J	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[(1)] (µg/L)	DR-DPT-41 DR-DPT-41-40	DR-DPT-41 DR-DPT-41-45	DR-DPT-42 DR-DPT-42-10	DR-DPT-42 DR-DPT-42-15	DR-DPT-42 DR-DPT-42-20	DR-DPT-42 DR-DPT-42-25	DR-DPT-42 DR-DPT-42-30	DR-DPT-42 DR-DPT-42-35	DR-DPT-43 DR-DPT-43-25
1,2-DICHLOROETHANE	5	8.8 J	7.6 J	--	--	--	--	1.8 J	1.9 J	--
1,3-DICHLOROBENZENE	2	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	--	--	--	--	0.95 J	--	--	--	--
2-HEXANONE	NA	--	--	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	--	--	--	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	--	--	5 J	4.4 J	14 J	6.9 J	8.9 J	10 J	--
BENZENE	5	--	--	--	--	0.15 J	--	1.9 J	2.1 J	--
BROMODICHLOROMETHANE	80	--	--	--	--	0.25 J	--	--	--	--
CARBON DISULFIDE	100	--	--	--	1.7	0.41 J	--	--	--	32 J
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	--	--	--	--	--	--	--	--
CHLOROETHANE	4	--	--	--	--	--	--	--	--	--
CHLOROFORM	80	--	--	--	0.44 J	1.6	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	320	340	0.26 J	0.69 J	--	83	200	170	1400
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--	--	--	--	40 J
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--	--	--	--	79 J
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	12 B	--	--	--	8.2 B	14 B	14 B	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID	MDE Groundwater Standards[(1)] (µg/L)	DR-DPT-41 DR-DPT-41-40	DR-DPT-41 DR-DPT-41-45	DR-DPT-42 DR-DPT-42-10	DR-DPT-42 DR-DPT-42-15	DR-DPT-42 DR-DPT-42-20	DR-DPT-42 DR-DPT-42-25	DR-DPT-42 DR-DPT-42-30	DR-DPT-42 DR-DPT-42-35	DR-DPT-43 DR-DPT-43-25
Volatile organic compounds (µg/L) (continued)		--	--	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	--	--	--	--	--	41 J
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	--	--	7.8 B	--	--	61 B	--
TERTIARY-BUTYL ALCOHOL	NA	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	66	62	--	0.49 J	--	--	--	--	1200
TOLUENE	1000	--	--	--	--	--	--	--	--	120 J
TOTAL XYLENES	10000	19 J	20 J	--	--	--	4.4 J	2 J	1.6 J	--
TRANS-1,2-DICHLOROETHENE	100	1100	870	0.28 J	0.90 J	--	160	89	86	3600
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	16 J	11 J	--	0.91 J	--	--	120	95	1100

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-43 DR-DPT-43-30	DR-DPT-43 DR-DPT-43-35	DR-DPT-43 DR-DPT-43-40	DR-DPT-43B DR-DPT-43B-10	DR-DPT-43B DR-DPT-43B-15	DR-DPT-43B DR-DPT-43B-15-D	DR-DPT-43B DR-DPT-43B-20
1,2-DICHLOROETHANE	5	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE	2	--	--	--	0.51 J	--	--	--
1,4-DICHLOROBENZENE	75	--	--	--	2.4	--	--	--
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	700	--	--	--	0.69 J	--	--	--
2-HEXANONE	NA	--	--	--	--	--	--	--
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	630	--	--	--	0.54 J	--	--	--
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	550	--	--	--	--	--	--	--
BENZENE	5	--	--	--	3.7	--	--	--
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--
CARBON DISULFIDE	100	--	--	--	--	--	--	--
CARBON TETRACHLORIDE	5	--	--	--	--	--	--	--
CHLOROBENZENE	100	--	--	--	13	--	--	--
CHLOROETHANE	4	--	--	--	--	--	--	--
CHLOROFORM	80	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	1200	--	1100 J	7.1	29000	27000	5700
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA	NA
DIISOPROPYL ETHER	NA	--	--	--	--	--	--	--
ETHYLBENZENE	700	110 J	--	--	0.19 J	360 J	230 J	--
HEXANE	NA	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	66	--	--	--	--	--	--	--
M+P-XYLENES	NA	290 J	--	--	0.35 J	420 J	420 J	--
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	49 J	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	--	49000 J	--	--	--	--	--

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID	MDE Groundwater Standards[1] (µg/L)	DR-DPT-43 DR-DPT-43-30	DR-DPT-43 DR-DPT-43-35	DR-DPT-43 DR-DPT-43-40	DR-DPT-43B DR-DPT-43B-10	DR-DPT-43B DR-DPT-43B-15	DR-DPT-43B DR-DPT-43B-15-D	DR-DPT-43B DR-DPT-43B-20
Volatile organic compounds (µg/L) (continued)		--	--	--	7.1	--	--	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--
N-PROPYLBENZENE	NA	110 J	--	--	0.14 J	250 J	210 J	--
O-XYLENE	NA	NA	NA	NA	NA	NA	NA	NA
PENTANE	NA	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	NA	--	--	--	--	--	--	--
TERTIARY-BUTYL ALCOHOL	NA	120 J	--	--	--	--	--	--
TETRACHLOROETHENE	5	140 J	NA	NA	NA	NA	NA	NA
TETRAHYDROFURAN	NA	2100	31000 B	3700	1	10000	9400	1800 B
TOLUENE	1000	400 J	--	--	0.49 J	670 J	630 J	--
TOTAL XYLENES	10000	--	--	--	0.67 J	--	--	--
TRANS-1,2-DICHLOROETHENE	100	9400	490000	30000	--	3700 J	820 J	22000
TRICHLOROETHENE	5	NA	NA	NA	NA	NA	NA	NA
UNKNOWN	NA	210 J	--	--	6.2	5700	5600	1300

Table 4-7

Detected Analytes and Screening Level Criteria for DPT Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Notes:

1 Maryland Department of the Environment groundwater standards (MDE, 2008).

Cells shaded gray indicate values that exceed the screening level.

--- not detected

NJ - tentatively identified compound

J - estimated concentration

NA - not analyzed

ug/L - micrograms per liter

Table 4-8

Statistical Summary of Analytes Detected in Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland
Page 1 of 3

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Average of All Results	Average of Positive Results	Standard Deviation
Volatile organic compounds (µg/L)												
CIS-1,2-DICHLOROETHENE	18/18	100	--	--	2.1	--	5200	--	MSA-MW51S-102113	630.8	630.8	1293
TRICHLOROETHENE	17/18	94	17	17	4.5	--	13000	--	MSA-MW51S-102113	2233	2364	3832
VINYL CHLORIDE	17/18	94	0.22	0.22	0.87	J	2300	--	MSA-MW48S-101813	304.4	322.3	609.7
1,2-DICHLOROETHANE	11/18	61	0.22	73	0.53	J	80	J	MSA-MW47I-101713	14.41	14.73	20.65
CHLOROBENZENE	9/18	50	0.15	50	0.2	J	50	J	MSA-MW47I-101713	9.939	11.25	13.58
1,1-DICHLOROETHENE	8/18	44	0.19	38	0.19	J	190	J	MSA-MW49I-101713	22.08	41.99	53
BENZENE	7/18	39	0.13	43	0.13	J	1.9	J	MSA-MW46I-101613	4.708	0.683	6.512
TRANS-1,2-DICHLOROETHENE	7/18	39	0.19	63	0.33	J	1.8	J	MSA-MW49S-101713	6.931	1.081	9.466
CHLOROFORM	5/18	28	0.2	53	1.1	J	24	--	MSA-MW51D-102113	8.80	6.94	8.83
CARBON DISULFIDE	4/18	22	0.13	43	0.42	J	3.5	J	MSA-MW47D-101713	4.944	1.445	6.617
ACETONE	3/18	17	1.1	370	1.6	J	6.2	J	MSA-MW46S-101613	38.91	3.17	56.4
TOLUENE	3/18	17	0.13	43	0.33	J	25	J	MSA-MW48S-101813	5.608	8.623	8.159
1,1-DICHLOROETHANE	2/18	11	0.15	38	1.2	--	84	J	MSA-MW49I-101713	8.54	42.6	19.71
1,4-DICHLOROBENZENE	2/18	11	0.13	43	0.46	J	26	J	MSA-MW48S-101813	5.61	13.23	8.338
1,1,1-TRICHLOROETHANE	1/18	6	0.22	73	72	J	72	J	MSA-MW49D-101713	10.08	72	18.42
BROMODICHLOROMETHANE	1/18	6	0.15	50	0.88	J	0.88	J	MSA-MW51D-102113	5.246	0.88	7.64
M+P-XYLENES	1/18	6	0.24	80	0.26	J	0.26	J	MSA-MW51D-102113	8.301	0.26	12.22
METHYLENE CHLORIDE	1/18	6	0.33	110	2.2	J	2.2	J	MSA-MW50S-101813	13.25	2.2	17.98
TETRACHLOROETHENE	1/18	6	0.29	97	0.37	J	0.37	J	MSA-MW51D-102113	10.06	0.37	14.81
TOTAL XYLENES	1/18	6	0.14	47	0.26	J	0.26	J	MSA-MW51D-102113	4.882	0.26	7.163
Volatile gases (µg/L)												
ETHANE	3/3	100	--	--	4.8	--	6.7	--	MSA-MW51I-102113	5.67	5.67	0.961
METHANE	3/3	100	--	--	15	--	38	--	MSA-MW51I-102113, MSA-MW51S-102113	30.33	30.33	13.28
Semivolatile organic compounds (µg/L)												
1,4-DIOXANE	17/18	94	0.48	0.48	1.8	--	200	--	MSA-MW47I-101713	43.52	46.07	60.44
NAPHTHALENE	5/18	28	0.06	0.16	0.65	--	1.2	--	MSA-MW49I-101713, MSA-MW51S-102113	0.2726	0.882	0.414
2-METHYLNAPHTHALENE	3/18	17	0.087	0.36	0.14	J	0.32	--	MSA-MW48I-101713	0.086	0.2033	0.073
ACENAPHTHENE	1/18	6	0.043	0.18	0.67	--	0.67	--	MSA-MW48S-101813	0.064	0.67	0.152
ACETOPHENONE	1/18	6	0.33	1.4	0.41	J	0.41	J	MSA-MW46S-101613	0.240	0.41	0.144
ANTHRACENE	1/18	6	0.085	0.35	0.3	J	0.3	J	MSA-MW48S-101813	0.069	0.3	0.066
CARBAZOLE	1/18	6	0.27	1.1	1.1	J	1.1	J	MSA-MW48S-101813	0.227	1.1	0.240
DI-N-BUTYL PHTHALATE	1/18	6	0.64	2.7	0.76	J	0.76	J	MSA-MW50I-101813	0.478	0.76	0.272
FLUORENE	1/18	6	0.039	0.16	0.39	J	0.39	J	MSA-MW48S-101813	0.046	0.39	0.087

Table 4-8

Statistical Summary of Analytes Detected in Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport
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Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Average of All Results	Average of Positive Results	Standard Deviation
Metals (µg/L)												
IRON	3/3	100	--	--	27000	--	72000	--	MSA-MW51S-102113	55670	55670	24910
CALCIUM	3/3	100	--	--	36000	--	80000	--	MSA-MW51S-102113	52000	52000	24330
MAGNESIUM	3/3	100	--	--	15000	--	55000	--	MSA-MW51S-102113	34000	34000	20070
MANGANESE	3/3	100	--	--	1400	--	5000	--	MSA-MW51S-102113	3100	3100	1808
POTASSIUM	3/3	100	--	--	4000	J	9800	--	MSA-MW51S-102113	5933	5933	3349
SILICON DIOXIDE	3/3	100	--	--	12000	--	18000	--	MSA-MW51S-102113	15330	15330	3055
SODIUM	3/3	100	--	--	57000	--	130000	--	MSA-MW51I-102113	102300	102300	39580
COBALT	17/18	94	1.7	1.7	4.4	J	360	--	MSA-MW48I-101713	103	109	102.1
BARIUM	16/18	89	15	17	17	J	680	--	MSA-MW48S-101813	77.78	86.5	152.8
CHROMIUM	15/18	83	2.2	2.2	2.3	J	40	J	MSA-MW49D-101713	9.433	11.1	9.925
NICKEL	12/18	67	3.2	30	3.6	J	140	--	MSA-MW48I-101713	47.78	67.78	45.93
MOLYBDENUM	9/18	50	1.3	13	1.3	J	4	J	MSA-MW48S-101813	1.992	2.033	1.90
ARSENIC	8/18	44	3.2	32	3.7	J	12	J	MSA-MW47S-101613	5.139	5.963	4.85
BERYLLIUM	8/18	44	0.46	0.46	0.6	J	8.7	J	MSA-MW49I-101713	1.379	2.815	2.46
CADMIUM	7/18	39	0.66	0.66	2.2	J	170	--	MSA-MW48I-101713	17.61	44.77	42.1
ZINC	7/18	39	5	420	11	J	370	--	MSA-MW48I-101713	86.1	147.3	105.1
COPPER	5/18	28	4.5	4.5	8.7	J	140	J	MSA-MW49I-101713	19.61	64.74	41.12
LEAD	2/18	11	1.9	19	2.1	J	2.2	J	MSA-MW48I-101713	2.033	2.15	2.744
VANADIUM	1/18	6	0.64	6.4	1.3	J	1.3	J	MSA-MW47D-101713	0.7283	1.3	0.931
Dissolved metals (µg/L)												
COBALT	17/18	94	1.7	1.7	2.5	J	360	--	MSA-MW48I-101713	101.3	107.2	101.6
BARIUM	16/18	89	13	16	17	J	710	--	MSA-MW48S-101813	77.92	86.75	160.1
CHROMIUM	12/18	67	2.2	22	3.7	J,	38	J	MSA-MW49D-101713	7.6	10.03	8.82
NICKEL	12/18	67	3.2	33	4.2	J	140	--	MSA-MW48I-101713	48.86	69.38	46.98
ARSENIC	8/18	44	3.2	32	3.6	J	12	J	MSA-MW47S-101613	5.01	5.66	4.81
BERYLLIUM	8/18	44	0.46	0.46	0.59	J	8.5	J	MSA-MW49I-101713	1.38	2.81	2.55
CADMIUM	6/18	33	0.66	0.66	1.9	J	37	J	MSA-MW49I-101713	6.07	17.55	10.59
ZINC	4/18	22	5	430	130	--	270	--	MSA-MW48I-101713	70.35	177.5	90.73
MOLYBDENUM	3/18	17	1.3	13	2.1	J	4	J	MSA-MW48S-101813	1.70	3.03	1.99
COPPER	2/18	11	4.5	4.5	84	J	150	J	MSA-MW49I-101713	15	117	38.8
LEAD	1/18	6	1.9	19	2.1	J	2.1	J	MSA-MW51S-102113	1.964	2.1	2.76
VANADIUM	1/18	6	0.64	6.4	1.8	J	1.8	J	MSA-MW46S-101613	0.7517	1.8	0.9612

Table 4-8

Statistical Summary of Analytes Detected in Monitoring Well Groundwater Samples-2013
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Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Average of All Results	Average of Positive Results	Standard Deviation
Miscellaneous parameters												
ALKALINITY (mg/L)	3/3	100	--	--	36	--	52	--	MSA-MW51I-102113	45.67	45.67	8.505
AMMONIA-N (mg/L)	3/3	100	--	--	1.1	--	6.7	--	MSA-MW51D-102113	3.333	3.333	2.967
CHLORIDE (mg/L)	3/3	100	--	--	110	--	240	--	MSA-MW51I-102113	163.3	163.3	68.07
SULFATE (mg/L)	3/3	100	--	--	140	--	760	--	MSA-MW51S-102113	446.7	446.7	310.1
TOTAL DISSOLVED SOLIDS (mg/L)	3/3	100	--	--	390	--	1300	--	MSA-MW51S-102113	930	930	478.2
DISSOLVED ORGANIC CARBON (mg/L	3/3	100	--	--	6.4	--	11	--	MSA-MW51D-102113	8.367	8.367	2.371
NITRATE-N (mg/L)	1/3	33	0.023	0.023	0.057	J	0.057	J	MSA-MW51I-102113	0.02667	0.057	0.02627
ORTHOPHOSPHATE-P (mg/L)	1/3	33	0.044	0.044	0.087	J	0.087	J	MSA-MW51S-102113A	0.04367	0.087	0.03753
HEXAVALENT CHROMIUM (µg/L)	4/18	22	0.01	0.04	0.015	J	0.045	J	MSA-MW49I-101614	0.01714	0.02525	0.009424
Petroleum hydrocarbons (µg/L)												
TPH-GRO	16/18	89	70	89	31	J	6200	K	MSA-MW51S-102113	963.3	1079	1615
TPH-DRO	9/18	50	230	260	250	J	1700	--	MSA-MW51D-102113	413.6	707.8	487.8

J - estimated value

K - value biased high

mg/L milligrams per liter

µg/L - micrograms per liter

DRO -diesel range organics

GRO - gasoline range organics

TPH - total petroleum hydrocarbons

Table 4-9

Detected Analytes and Screening Criteria for Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standards[1]	DR-MW-46D MSA-MW46D-101613 10/16/2013	DR-MW-46I MSA-MW46I-101613 10/16/2013	DR-MW-46S MSA-MW46S-101613 10/16/2013	DR-MW-47D MSA-MW47D-101713 10/17/2013	DR-MW-47I MSA-MW47I-101713 10/17/2013	DR-MW-47S MSA-MW47S-101613 10/16/2013	DR-MW-48D MSA-MW48D-101813 10/18/2013
Volatile organic compounds (µg/L)								
1,1,1-TRICHLOROETHANE	200	--	--	--	--	--	--	--
1,1-DICHLOROETHANE	90	--	--	1.2	--	--	--	--
1,1-DICHLOROETHENE	7	--	1.8 J	--	--	--	--	0.91 J
1,2-DICHLOROETHANE	5	--	10	0.53 J	5.1 J	80 J	27 J	1.8 J
1,4-DICHLOROBENZENE	75	--	--	--	--	--	--	0.46 J
ACETONE	550	--	--	6.2 J	--	--	--	--
BENZENE	5	0.22 J	1.9 J	--	--	--	--	0.83 J
BROMODICHLOROMETHANE	80	--	--	--	--	--	--	--
CARBON DISULFIDE	100	1.2	--	0.42 J	3.5 J	--	--	--
CHLOROBENZENE	100	0.52 J	25	0.20 J	2.2 J	50 J	20 J	--
CHLOROFORM	80	4.7	1.8 B	2 B	25 B	37 B	14 B	1.1 J
CIS-1,2-DICHLOROETHENE	70	3.5	81	2.1	32	630	230	75
M+P-XYLENES	NA	--	--	--	--	--	--	--
METHYLENE CHLORIDE	5	--	4 B	--	--	--	79 B	--
NAPHTHALENE	0.7	--	--	--	--	--	--	--
TETRACHLOROETHENE	5	--	--	--	--	--	--	--
TOLUENE	1000	--	--	0.33 J	--	--	--	0.54 J
TOTAL XYLENES	10000	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	100	--	--	--	--	--	--	1.1 J
TRICHLOROETHENE	5	12	150	4.5	450	4300	1500	150
VINYL CHLORIDE	2	--	85	0.87 J	6.6 J	550	250	32
Volatile gases (µg/L)								
ETHANE	NA	NA	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)								
1,4-DIOXANE	3	--	21	5	12	200	73	26
2-METHYLNAPHTHALENE	2	--	--	--	--	--	--	--
ACENAPHTHENE	37	--	--	--	--	--	--	--
ACETOPHENONE	NA	--	--	0.41 J	--	--	--	--
ANTHRACENE	180	--	--	--	--	--	--	--
CARBAZOLE	3	--	--	--	--	--	--	--
DI-N-BUTYL PHTHALATE	370	0.86 B	--	0.79 B	--	--	--	--
FLUORENE	24	--	--	--	--	--	--	--
NAPHTHALENE	0.7	--	--	--	--	0.67 J	--	--
Metals (µg/L)								
ARSENIC	10	--	4.1 J	8.1 J	--	6.9 J	12 J	--
BARIUM	2000	39 J	26 J	73 J	30 J	45 J	49 J	41 J
BERYLLIUM	4	--	--	--	--	1.1 J	--	0.72 J
CADMIUM	5	--	--	--	--	70	5.4	2.2 J
CALCIUM	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	100	--	--	4.5 J	--	7.9 J	5.1 J	5.5 J

Table 4-9

Detected Analytes and Screening Criteria for Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standards[1]	DR-MW-46D MSA-MW46D-101613 10/16/2013	DR-MW-46I MSA-MW46I-101613 10/16/2013	DR-MW-46S MSA-MW46S-101613 10/16/2013	DR-MW-47D MSA-MW47D-101713 10/17/2013	DR-MW-47I MSA-MW47I-101713 10/17/2013	DR-MW-47S MSA-MW47S-101613 10/16/2013	DR-MW-48D MSA-MW48D-101813 10/18/2013
Metals (µg/L), continued								
COBALT	NA	4.4 J	80	74	6.1 J	320	130	150
COPPER	1300	--	--	25 K	4.5 U	30 J	--	--
IRON	300	NA	NA	NA	NA	NA	NA	NA
LEAD	15	--	--	--	--	--	--	--
MAGNESIUM	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	50	NA	NA	NA	NA	NA	NA	NA
MOLYBDENUM	NA	1.4 J	1.3 J	3.3 J	2.1 J	2.2 J	--	--
NICKEL	73	3.6 J	40	78	--	120	47	72
POTASSIUM	NA	NA	NA	NA	NA	NA	NA	NA
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA	NA	NA
SODIUM	NA	NA	NA	NA	NA	NA	NA	NA
VANADIUM	4	--	--	--	1.3 J	--	--	--
ZINC	5000	8.6 B	29 B	97	11 J	220	63	140
Dissolved metals (µg/L)								
ARSENIC	10	3.8 J	--	6.6 J	4.2 J	6.5 J	12 J	--
BARIUM	2000	38 J	26 J	72 J	28 J	40 J	50 J	42 J
BERYLLIUM	4	--	--	--	--	0.77 J	--	0.68 J
CADMIUM	5	--	--	--	--	19	--	1.9 J
CHROMIUM	100	--	--	3.7 J	--	4.9 J	4.4 J	5.3 J
COBALT	NA	3.5 J	81	72	2.5 J	310	130	150
COPPER	1300	--	--	--	--	--	--	--
LEAD	15	--	--	--	--	--	--	--
MOLYBDENUM	NA	--	--	3 J	--	2.1 J	--	--
NICKEL	73	4.3 J	44	78	4.2 J	120	47	73
VANADIUM	4	--	--	1.8 J	--	--	--	--
ZINC	5000	--	24 B	56 B	--	170	52 B	140
Miscellaneous parameters								
ALKALINITY (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
AMMONIA-N (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
CHLORIDE (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
NITRATE-N (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
SULFATE (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM (µg/L)	100	--	--	--	0.015 J	0.021 J	--	--
Petroleum hydrocarbons (µg/L)								
Gasoline-range organics	47	36 J	160	31 J	210	1800	670	140 K
Diesel-range organics	47	1200	--	1300	--	--	370 J	--

Table 4-9

Detected Analytes and Screening Criteria for Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standards[1]	DR-MW-48I MSA-MW48I-101713 10/17/2013	DR-MW-48S MSA-MW48S-101813 10/18/2013	DR-MW-49D MSA-MW49D-101614 10/17/2013	DR-MW-49D MSA-MW49D-101713 10/17/2013	DR-MW-49I MSA-MW49I-101614 10/17/2013	DR-MW-49I MSA-MW49I-101713 10/17/2013	DR-MW-49S MSA-MW49S-101713 10/17/2013
Volatile organic compounds (µg/L)								
1,1,1-TRICHLOROETHANE	200	--	--	NA	72 J	NA	--	--
1,1-DICHLOROETHANE	90	--	--	NA	--	NA	84 J	--
1,1-DICHLOROETHENE	7	--	--	NA	140 J	NA	190 J	2.6 J
1,2-DICHLOROETHANE	5	32 J	--	NA	--	NA	--	2.9 J
1,4-DICHLOROBENZENE	75	--	26 J	NA	--	NA	--	--
ACETONE	550	--	--	NA	--	NA	--	--
BENZENE	5	--	--	NA	--	NA	--	1.2 J
BROMODICHLOROMETHANE	80	--	--	NA	--	NA	--	--
CARBON DISULFIDE	100	--	--	NA	--	NA	--	--
CHLOROBENZENE	100	--	--	NA	--	NA	--	1.9 J
CHLOROFORM	80	--	--	NA	--	NA	--	--
CIS-1,2-DICHLOROETHENE	70	480	440	NA	2100	NA	1800	88
M+P-XYLENES	NA	--	--	NA	--	NA	--	--
METHYLENE CHLORIDE	5	--	--	NA	--	NA	--	--
NAPHTHALENE	0.7	--	--	NA	--	NA	--	--
TETRACHLOROETHENE	5	--	--	NA	--	NA	--	--
TOLUENE	1000	--	25 J	NA	--	NA	--	--
TOTAL XYLENES	10000	--	--	NA	--	NA	--	--
TRANS-1,2-DICHLOROETHENE	100	--	--	NA	--	NA	--	1.8 J
TRICHLOROETHENE	5	3900	--	NA	9300	NA	6900	160
VINYL CHLORIDE	2	61 J	2300	NA	580	NA	1400	35
Volatile gases (µg/L)								
ETHANE	NA	NA	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)								
1,4-DIOXANE	3	190	31	NA	34	NA	81	54
2-METHYLNAPHTHALENE	2	0.32	--	NA	--	NA	0.15 J	--
ACENAPHTHENE	37	--	0.67	NA	--	NA	--	--
ACETOPHENONE	NA	--	--	NA	--	NA	--	--
ANTHRACENE	180	--	0.30 J	NA	--	NA	--	--
CARBAZOLE	3	--	1.1 J	NA	--	NA	--	--
DI-N-BUTYL PHTHALATE	370	--	--	NA	--	NA	--	--
FLUORENE	24	--	0.39 J	NA	--	NA	--	--
NAPHTHALENE	0.7	0.69	--	NA	0.65	NA	1.2	--
Metals (µg/L)								
ARSENIC	10	4.1 J	4.1 J	NA	--	NA	--	3.7 J
BARIUM	2000	26 J	680	NA	17 B	NA	15 B	17 J
BERYLLIUM	4	1.4 J	--	NA	7.3 J	NA	8.7 J	1.7 J
CADMIUM	5	170	--	NA	19 J	NA	38 J	8.8
CALCIUM	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	100	17 K	7.7 J	NA	40 J	NA	24 J	6.9 J

Table 4-9

Detected Analytes and Screening Criteria for Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standards[1]	DR-MW-48I MSA-MW48I-101713 10/17/2013	DR-MW-48S MSA-MW48S-101813 10/18/2013	DR-MW-49D MSA-MW49D-101614 10/17/2013	DR-MW-49D MSA-MW49D-101713 10/17/2013	DR-MW-49I MSA-MW49I-101614 10/17/2013	DR-MW-49I MSA-MW49I-101713 10/17/2013	DR-MW-49S MSA-MW49S-101713 10/17/2013
Metals (µg/L), continued								
COBALT	NA	360	--	NA	120	NA	150	180
COPPER	1300	8.7 J	--	NA	120 J	NA	140 J	--
IRON	300	NA	NA	NA	NA	NA	NA	NA
LEAD	15	2.2 J	--	NA	--	NA	--	--
MAGNESIUM	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	50	NA	NA	NA	NA	NA	NA	NA
MOLYBDENUM	NA	--	4 J	NA	--	NA	--	--
NICKEL	73	140	--	NA	110	NA	97	68
POTASSIUM	NA	NA	NA	NA	NA	NA	NA	NA
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA	NA	NA
SODIUM	NA	NA	NA	NA	NA	NA	NA	NA
VANADIUM	4	--	1.2 B	NA	--	NA	--	--
ZINC	5000	370	--	NA	400 B	NA	420 B	130
Dissolved metals (µg/L)								
ARSENIC	10	3.6 J	3.9 J	NA	--	NA	--	4.7 J
BARIUM	2000	24 J	710	NA	13 B	NA	16 B	17 J
BERYLLIUM	4	1.2 J	--	NA	8.1 J	NA	8.5 J	1.7 J
CADMIUM	5	21	--	NA	18 J	NA	37 J	8.4
CHROMIUM	100	14 K	7.8 J	NA	38 J	NA	--	7.2 J
COBALT	NA	360	--	NA	120	NA	150	180
COPPER	1300	--	--	NA	84 J	NA	150 J	--
LEAD	15	--	--	NA	--	NA	--	--
MOLYBDENUM	NA	--	4 J	NA	--	NA	--	--
NICKEL	73	140	--	NA	120	NA	100	70
VANADIUM	4	--	--	NA	--	NA	--	--
ZINC	5000	270	5.5 B	NA	410 B	NA	430 B	130
Miscellaneous parameters								
ALKALINITY (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
AMMONIA-N (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
CHLORIDE (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
NITRATE-N (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
SULFATE (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM (µg/L)	100	0.035 B	--	--	NA	0.045 J	NA	0.02 J
Petroleum hydrocarbons (µg/L)								
Gasoline-range organics	47	1500	400 K	NA	2600	NA	3100	150
Diesel-range organics	47	270 J	750	NA	250 J	NA	260 J	--

Table 4-9

Detected Analytes and Screening Criteria for Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standards[1]	DR-MW-50D MSA-MW50D-102113 10/21/2013	DR-MW-50I MSA-MW50I-101813 10/18/2013	DR-MW-50S MSA-MW50S-101813 10/18/2013	DR-MW-51D MSA-MW51D-102113 10/21/2013	DR-MW-51D MSA-MW51D-102113A 10/21/2013	DR-MW-51I MSA-MW51I-102113 10/21/2013	DR-MW-51I MSA-MW51I-102113A 10/21/2013
Volatile organic compounds (µg/L)								
1,1,1-TRICHLOROETHANE	200	--	--	--	--	NA	--	NA
1,1-DICHLOROETHANE	90	--	--	--	--	NA	--	NA
1,1-DICHLOROETHENE	7	0.21 J	--	--	0.19 J	NA	0.24 J	NA
1,2-DICHLOROETHANE	5	1.2	0.57 J	0.92 J	--	NA	--	NA
1,4-DICHLOROBENZENE	75	--	--	--	--	NA	--	NA
ACETONE	550	1.6 J	--	--	1.7 J	NA	--	NA
BENZENE	5	0.27 J	0.23 J	--	0.13 J	NA	--	NA
BROMODICHLOROMETHANE	80	--	--	--	0.88 J	NA	--	NA
CARBON DISULFIDE	100	0.82 B	--	0.66 J	1.1 B	NA	1.2 B	NA
CHLOROBENZENE	100	0.90 J	0.50 J	--	--	NA	--	NA
CHLOROFORM	80	2.4 B	1.7	3.2 J	24	NA	--	NA
CIS-1,2-DICHLOROETHENE	70	46	21	46	10	NA	70	NA
M+P-XYLENES	NA	--	--	--	0.26 J	NA	--	NA
METHYLENE CHLORIDE	5	--	--	2.2 J	--	NA	--	NA
NAPHTHALENE	0.7	--	--	--	--	NA	--	NA
TETRACHLOROETHENE	5	--	--	--	0.37 J	NA	--	NA
TOLUENE	1000	0.62 B	--	--	0.72 B	NA	0.32 B	NA
TOTAL XYLENES	10000	--	--	--	0.26 J	NA	--	NA
TRANS-1,2-DICHLOROETHENE	100	1.2	0.71 J	1.5 J	0.33 J	NA	0.93 J	NA
TRICHLOROETHENE	5	64	32	170	40	NA	58	NA
VINYL CHLORIDE	2	9.7	4.5	11	0.92 J	NA	3.3	NA
Volatile gases (µg/L)								
ETHANE	NA	NA	NA	NA	5.5	NA	6.7	NA
METHANE	NA	NA	NA	NA	15	NA	38	NA
Semivolatile organic compounds (µg/L)								
1,4-DIOXANE	3	2.7	2.7	3.5	2.5	NA	1.8	NA
2-METHYLNAPHTHALENE	2	--	--	--	--	NA	--	NA
ACENAPHTHENE	37	--	--	--	--	NA	--	NA
ACETOPHENONE	NA	--	--	--	--	NA	--	NA
ANTHRACENE	180	--	--	--	--	NA	--	NA
CARBAZOLE	3	--	--	--	--	NA	--	NA
DI-N-BUTYL PHTHALATE	370	--	0.76 J	--	--	NA	--	NA
FLUORENE	24	--	--	--	--	NA	--	NA
NAPHTHALENE	0.7	--	--	--	--	NA	--	NA
Metals (µg/L)								
ARSENIC	10	--	--	--	--	NA	4.7 J	NA
BARIUM	2000	79 J	120 J	49 J	60 J	NA	25 J	NA
BERYLLIUM	4	--	--	--	--	NA	0.60 J	NA
CADMIUM	5	--	--	--	--	NA	--	NA
CALCIUM	NA	NA	NA	NA	36000	NA	40000	NA
CHROMIUM	100	4.8 J	5.5 J	4.3 J	2.3 J	NA	17	NA

Table 4-9

Detected Analytes and Screening Criteria for Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standards[1]	DR-MW-50D MSA-MW50D-102113 10/21/2013	DR-MW-50I MSA-MW50I-101813 10/18/2013	DR-MW-50S MSA-MW50S-101813 10/18/2013	DR-MW-51D MSA-MW51D-102113 10/21/2013	DR-MW-51D MSA-MW51D-102113A 10/21/2013	DR-MW-51I MSA-MW51I-102113 10/21/2013	DR-MW-51I MSA-MW51I-102113A 10/21/2013
Metals (µg/L), continued								
COBALT	NA	58	19	67	28	NA	71	NA
COPPER	1300	--	--	--	--	NA	--	NA
IRON	300	NA	NA	NA	27000	NA	68000	NA
LEAD	15	--	--	--	2.1 J	NA	--	NA
MAGNESIUM	NA	NA	NA	NA	15000	NA	32000	NA
MANGANESE	50	NA	NA	NA	1400	NA	2900	NA
MOLYBDENUM	NA	--	1.4 J	1.3 J	1.3 J	NA	--	NA
NICKEL	73	30 B	3.7 J	34 J	6.2 B	NA	28 B	NA
POTASSIUM	NA	NA	NA	NA	4000 J	NA	4000 J	NA
SILICON DIOXIDE	NA	NA	NA	NA	12000	NA	16000	NA
SODIUM	NA	NA	NA	NA	57000	NA	130000	NA
VANADIUM	4	--	--	--	--	NA	--	NA
ZINC	5000	32 B	20 B	39 B	19 B	NA	43 B	NA
Dissolved metals (µg/L)								
ARSENIC	10	--	--	--	--	NA	--	NA
BARIUM	2000	79 J	120 J	48 J	45 J	NA	25 J	NA
BERYLLIUM	4	--	--	--	--	NA	0.59 J	NA
CADMIUM	5	--	--	--	--	NA	--	NA
CHROMIUM	100	4.3 J	--	3.7 J	--	NA	14	NA
COBALT	NA	59	12	64	28	NA	66	NA
COPPER	1300	--	--	--	--	NA	--	NA
LEAD	15	--	--	--	--	NA	--	NA
MOLYBDENUM	NA	--	--	--	--	NA	--	NA
NICKEL	73	33 B	--	32 J	5.7 B	NA	25 B	NA
VANADIUM	4	1.7 B	--	--	--	NA	--	NA
ZINC	5000	32 B	--	24 B	6 B	NA	35 B	NA
Miscellaneous parameters								
ALKALINITY (mg/L)	NA	NA	NA	NA	36	NA	52	NA
AMMONIA-N (mg/L)	NA	NA	NA	NA	6.7	NA	1.1	NA
CHLORIDE (mg/L)	NA	NA	NA	NA	110	NA	240	NA
DISSOLVED ORGANIC CARBON (mg/L)	NA	NA	NA	NA	11	NA	7.7	NA
NITRATE-N (mg/L)	NA	NA	NA	NA	--	NA	0.057 J	NA
ORTHOPHOSPHATE-P (mg/L)	NA	NA	NA	NA	NA	--	NA	--
SULFATE (mg/L)	NA	NA	NA	NA	140	NA	440	NA
TOTAL DISSOLVED SOLIDS (mg/L)	NA	NA	NA	NA	390	NA	1100	NA
HEXAVALENT CHROMIUM (µg/L)	100	--	--	--	--	NA	--	NA
Petroleum hydrocarbons (µg/L)								
Gasoline-range organics	47	89 B	68 K	130 K	70 B	NA	64 J	NA
Diesel-range organics	47	--	--	--	1700	NA	--	NA

Table 4-9

Detected Analytes and Screening Criteria for Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standards[1]	DR-MW-51S MSA-MW51S-102113 10/21/2013	DR-MW-51S MSA-MW51S-102113A 10/21/2013
Volatile organic compounds (µg/L)			
1,1,1-TRICHLOROETHANE	200	--	NA
1,1-DICHLOROETHANE	90	--	NA
1,1-DICHLOROETHENE	7	--	NA
1,2-DICHLOROETHANE	5	--	NA
1,4-DICHLOROBENZENE	75	--	NA
ACETONE	550	--	NA
BENZENE	5	--	NA
BROMODICHLOROMETHANE	80	--	NA
CARBON DISULFIDE	100	30 B	NA
CHLOROBENZENE	100	--	NA
CHLOROFORM	80	--	NA
CIS-1,2-DICHLOROETHENE	70	5200	NA
M+P-XYLENES	NA	--	NA
METHYLENE CHLORIDE	5	--	NA
NAPHTHALENE	0.7	--	NA
TETRACHLOROETHENE	5	--	NA
TOLUENE	1000	--	NA
TOTAL XYLENES	10000	--	NA
TRANS-1,2-DICHLOROETHENE	100	--	NA
TRICHLOROETHENE	5	13000	NA
VINYL CHLORIDE	2	150 J	NA
Volatile gases (µg/L)			
ETHANE	NA	4.8	NA
METHANE	NA	38	NA
Semivolatile organic compounds (µg/L)			
1,4-DIOXANE	3	43	NA
2-METHYLNAPHTHALENE	2	0.14 J	NA
ACENAPHTHENE	37	--	NA
ACETOPHENONE	NA	--	NA
ANTHRACENE	180	--	NA
CARBAZOLE	3	--	NA
DI-N-BUTYL PHTHALATE	370	--	NA
FLUORENE	24	--	NA
NAPHTHALENE	0.7	1.2	NA
Metals (µg/L)			
ARSENIC	10	--	NA
BARIUM	2000	25 J	NA
BERYLLIUM	4	1 J	NA
CADMIUM	5	--	NA
CALCIUM	NA	80000	NA
CHROMIUM	100	14	NA

Table 4-9

Detected Analytes and Screening Criteria for Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MDE Groundwater Standards[(1)]	DR-MW-51S MSA-MW51S-102113 10/21/2013	DR-MW-51S MSA-MW51S-102113A 10/21/2013
Metals (µg/L), continued			
COBALT	NA	35	NA
COPPER	1300	--	NA
IRON	300	72000	NA
LEAD	15	--	NA
MAGNESIUM	NA	55000	NA
MANGANESE	50	5000	NA
MOLYBDENUM	NA	--	NA
NICKEL	73	23 B	NA
POTASSIUM	NA	9800	NA
SILICON DIOXIDE	NA	18000	NA
SODIUM	NA	120000	NA
VANADIUM	4	--	NA
ZINC	5000	22 B	NA
Dissolved metals (µg/L)			
ARSENIC	10	--	NA
BARIUM	2000	24 J	NA
BERYLLIUM	4	0.96 J	NA
CADMIUM	5	--	NA
CHROMIUM	100	13	NA
COBALT	NA	34	NA
COPPER	1300	--	NA
LEAD	15	2.1 J	NA
MOLYBDENUM	NA	--	NA
NICKEL	73	24 B	NA
VANADIUM	4	--	NA
ZINC	5000	23 B	NA
Miscellaneous parameters			
ALKALINITY (mg/L)	NA	49	NA
AMMONIA-N (mg/L)	NA	2.2	NA
CHLORIDE (mg/L)	NA	140	NA
DISSOLVED ORGANIC CARBON (mg/L)	NA	6.4	NA
NITRATE-N (mg/L)	NA	--	NA
ORTHOPHOSPHATE-P (mg/L)	NA	NA	0.087 J
SULFATE (mg/L)	NA	760	NA
TOTAL DISSOLVED SOLIDS (mg/L)	NA	1300	NA
HEXAVALENT CHROMIUM (µg/L)	100	--	NA
Petroleum hydrocarbons (µg/L)			
Gasoline-range organics	47	6200 K	NA
Diesel-range organics	47	270 J	NA

Table 4-9
Detected Analytes and Screening Criteria for Monitoring Well Groundwater Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Notes

1 Maryland Department of the Environment groundwater standards (MDE, 2008).

Cells shaded gray indicate values that exceed the screening level.

--- not detected

µg/L - micrograms per liter

B - analyte detected in blank sample

J - estimated concentration

K - concentration biased high

mg/L milligrams per liter

NA - not analyzed

Table 4-10

Statistical Summary of Analytes Detected in Surface Water Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle Rvier, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Location of Maximum Detect	Average of All Results	Average of Positive Results	Standard Deviation
Volatile organic compounds (µg/L)													
ACETONE	4/5	80	1.1	1.1	1.5	J	6.9	J	EWT-SW3-1	EWT-SW3	3.63	4.4	2.59
Metals (µg/L)													
BARIUM	4/4	100	--	--	41	J	89	J	EWT-SW1	EWT-SW1	64.5	64.5	27.15
CADMIUM	4/4	100	--	--	0.68	J	12	--	EWT-SW1	EWT-SW1	6.13	6.13	6.22
MOLYBDENUM	4/4	100	--	--	1.8	J	3.2	J	EWT-SW1	EWT-SW1	2.5	2.5	0.70
ARSENIC	3/4	75	3.2	3.2	3.2	J	3.8	J	EP1-SW16	EP1-SW16	3	3.467	0.97
COBALT	2/4	50	1.7	1.7	25	--	27	--	EWT-SW1	EWT-SW1	13.43	26	14.54
COPPER	2/4	50	4.5	4.5	4.5	J	5.2	J	EWT-SW2	EWT-SW2	3.55	4.85	1.528
NICKEL	2/4	50	3.2	3.2	37	J	38	J	EWT-SW1	EWT-SW1	19.55	37.5	20.73
ZINC	2/4	50	6.3	11	380	--	390	--	EWT-SW1	EWT-SW1	194.7	385	219.8
CHROMIUM	1/4	25	4.4	11	12	--	12	--	EWT-SW2	EWT-SW2	5.588	12	4.518
Dissolved metals (µg/L)													
BARIUM	4/4	100	--	--	39	J,	74	J	EWT-SW2	EWT-SW2	56.25	56.25	19.92
MOLYBDENUM	4/4	100	--	--	1.8	J	2.8	J	EWT-SW2	EWT-SW2	2.3	2.3	0.52
NICKEL	3/4	75	3.2	3.2	3.5	J	38	J	EWT-SW2	EWT-SW2	19.52	25.5	19.65
CADMIUM	2/4	50	0.66	0.66	9.6	--	10	--	EWT-SW2	EWT-SW2	5.065	9.8	5.47
COBALT	2/4	50	1.7	1.7	24	--	24	--	EWT-SW1, EWT-SW2	EWT-SW1, EWT-SW2	12.43	24	13.37
ZINC	2/4	50	5	5	350	--	350	--	EWT-SW1, EWT-SW2	EWT-SW1, EWT-SW2	176.3	350	200.6
ARSENIC	1/4	25	3.2	3.2	4.5	J	4.5	J	EP1-SW15	EP1-SW15	2.325	4.5	1.45
Miscellaneous parameters (µg/L)													
HEXAVALENT CHROMIUM	2/4	50	0.02	1	0.014	J	1	J	EWT-SW1	EWT-SW1	0.381	0.507	0.473
Petroleum hydrocarbons (µg/L)													
Gasoline-range organics	4/4	100	--	--	27	J	36	J	EWT-SW2	EWT-SW2	30.5	30.5	4.36
Diesel-range organics	3/4	75	240	240	300	J	400	J	EP1-SW16	EP1-SW16	300	360	127.5

All concentrations are in micrograms per liter (µg/L).
J - estimated concentration
Associated Samples:
EP1-SW15
EP1-SW16
EWT-SW1
EWT-SW2
EWT-SW3-1

Table 4-11

Detected Analytes and Screening Criteria for Pond and Wetland Surface Water Samples-2013
Dump Road Area
Lockheed Martin, Marin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Ecological Screening Value (ESV)[1]	Adjusted USEPA Regional Screenlng Level for Tap Water [2]	Maryland Maximum Contaminant Level (MCL) or Other[3]	EP1-SW15 EP1-SW15 10/15/2013	EP1-SW16 EP1-SW16 10/15/2013	EWT-SW1 EWT-SW1 10/15/2013	EWT-SW2 EWT-SW2 10/15/2013	EWT-SW3-1 EWT-SW3-1 10/18/2013
Volatile organic compounds (µg/L)								
ACETONE	1500	12,000 N	550	--	1.5 J	4.3 J	4.9 J	6.9 J
Metals (µg/L)								
ARSENIC	5	0.45 C	10	3.4 J	3.8 J	3.2 J	--	NA
BARIUM	4	2,900 N	2,000	41 J	41 J	89 J	87 J	NA
CADMIUM	0.12	6.9 N	5	0.84 J	0.68 J	12	11	NA
CHROMIUM	57.5[4]	16,000 N[5]	100	5.3 B	4.4 B	11 B	12	NA
COBALT	1[6]	4.7 N	NA	--	--	27	25	NA
COPPER	3.1	620 N	650	--	--	4.5 J	5.2 J	NA
MOLYBDENUM	23	78 N	NA	1.8 J	2 J	3.2 J	3 J	NA
NICKEL	8.2	300 N	730	--	--	38 J	37 J	NA
ZINC	81	4,700 N	5,000	6.3 B	11 B	390	380	NA
Dissolved metals (µg/L)								
ARSENIC	NA [7]	0.45 C	10	4.5 J	--	--	--	NA
BARIUM	4	2,900 N	2,000	39 J	39 J	73 J	74 J	NA
CADMIUM	0.12	6.9 N	5	--	--	9.6	10	NA
CHROMIUM	57.5[4]	16,000 N[5]	100	2.2 B	2.2 B	3.7 B	3.2 B	NA
COBALT	1[6]	4.7 N	NA	--	--	24	24	NA
COPPER	3.1	620 N	650	--	--	--	--	NA
MOLYBDENUM	NA[7]	78 N	NA	1.8 J	1.9 J	2.7 J	2.8 J	NA
NICKEL	8.2	300 N	73	3.5 J	--	35 J	38 J	NA
ZINC	81	4,700 N	5,000	--	--	350	350	NA
Miscellaneous parameters (µg/L)								
HEXAVALENT CHROMIUM	11	0.31 C	100	0.014 J	--	1 J	--	NA
Petroleum hydrocarbons (µg/L)								
Gasoline-range organics	NA	3.9 C	47	27 J	27 J	32 J	36 J	NA
Diesel-range organics	NA	0.092 C	47	380 J	400 J	300 J	--	NA

Notes:

1 - USEPA Region 3 Biological Technical Assistance Group (BTAG) screening levels for freshwater and marine surface water (USEPA, July 2006). Lowest of freshwater and marine values were selected as screening value.

2 - Screening criteria for surface water are based on USEPA Regional Screening Levels (RSLs) for tap water (November, 2013). To account for the anticipated reduced exposure to surface water, the screening criteria presented in the table for surface water are 10 times those typically used for tap water (which are also based on RSLs). Therefore, the screening criteria for carcinogens in surface water are set at 10 times the RSL for tap water. The screening criteria for non-carcinogens in surface water are set equal to the RSL for tap water because they are adjusted for a hazard quotient of 0.1.

3 - Code of Maryland Regulations 26.04.01.06 (MCL-inorganics), 26.04.01.07 (MCL-organics), and 26.04.01.06-2 (control of lead and copper). MDE Groundwater Cleanup Standards (MDE, 2008) are used for acetone, hexavalent chromium, nickel, zinc, and total petroleum hydrocarbons.

4 - The value is for total chromium.

5 - The value is for trivalent chromium.

6 - NOAA Quick Reference Tables (Buchman, 2008)

7 - The BTAG screening benchmark is based on total metal concentration for this analyte. Therefore, the dissolved metals result for this metal is not screened against the BTAG screening benchmark.

Gray shading indicates a result that exceeds a screening criterion.

B - analyte detected in laboratory blank

C - carcinogenic

J - Positive result is considered estimated.

MDE - Maryland Department of the Environment

mg/L - milligrams per liter

N - Non-carcinogenic

NA - Not applicable or not analyzed

NOAA - National Oceanic and Atmospheric Administration

Table 4-12

Statistical Summary of Analytes Detected in Sediment Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Average Of All Results	Average Of Positive Results	Standard Deviation
Volatile organic compounds (µg/kg)												
1,2,3-TRIMETHYLBENZENE	8/14	57	0.22	0.41	9	J	11000	J	EP1-SD16-1-2	1419	2484	3293
1,2,4-TRIMETHYLBENZENE	8/14	57	0.85	1.6	6.9	J	23000	J	EP1-SD16-1-2	3148	5508	7123
4-ISOPROPYLTOLUENE	8/14	57	0.27	0.51	2.9	J	1300	J	EP1-SD16-1-2	208.6	364.9	429
CHLOROBENZENE	8/14	57	0.43	0.8	530	J	7200	J	EP1-SD16-1-2	1545	2704	2301
ISOPROPYLBENZENE	8/14	57	0.21	0.39	98	J	2100	J	EP1-SD16-1-2	414.2	724.8	671.9
M+P-XYLENES	8/14	57	1.6	2.9	28	J	170000	J	EP1-SD16-1-2	22220	38890	54720
N-BUTYLBENZENE	8/14	57	0.3	0.56	43	J	1500	J	EP1-SD16-1-2	298	521.4	487.8
N-PROPYLBENZENE	8/14	57	0.52	0.97	180	J	2900	J	EP1-SD16-1-2	582.3	1019	901.5
SEC-BUTYLBENZENE	8/14	57	0.24	0.44	51	J	790	J	EP1-SD16-1-2	174.6	305.5	266.4
TOTAL XYLENES	8/14	57	0.46	0.85	37	J	240000	J	EP1-SD16-1-2	31060	54350	76750
2-BUTANONE	7/14	50	2.6	4700	7	J	360	J	EP1-SD17-0-1	369.9	142.7	697.8
ETHYLBENZENE	7/14	50	0.34	35	8.3	J	57000	J	EP1-SD16-1-2	7965	15930	19740
O-XYLENE	7/14	50	0.46	56	8.7	J	73000	J	EP1-SD16-1-2	8911	17820	22410
TOLUENE	7/14	50	0.35	110	59	J	650000	J	EP1-SD17-1-2	78460	156900	201900
TRANS-1,2-DICHLOROETHENE	7/14	50	0.77	1000	0.8	J	120	J	EP1-SD15-1-2	85.34	48.13	149.4
1,2-DICHLOROBENZENE	6/14	43	0.47	940	34	J	240	J	EP1-SD15-1-2	100.2	104.3	145.1
ACETONE	6/14	43	12	19000	23	J	580	J	EP1-SD15-0-1	1379	239.5	2797
NAPHTHALENE	5/14	36	0.25	160	21	J	12000	J	EP1-SD16-1-2	1488	4142	3576
TRICHLOROETHENE	5/14	36	0.55	1100	68	J	5400	J	EP1-SD17-1-2	622.3	1624	1515
CARBON DISULFIDE	4/14	29	0.58	1300	29	J	95	J	EP1-SD17-0-1, EP1-SD18-1-2	102.4	67.5	192.5
CIS-1,2-DICHLOROETHENE	3/14	21	0.47	750	23	J	37000	J	EP1-SD17-1-2	2685	12380	9877
TERT-BUTYLBENZENE	3/14	21	0.38	710	14	J	85	J	EP1-SD15-1-2	54.59	38	106
1,4-DICHLOROBENZENE	2/14	14	0.86	880	7.5	J	9.5	J	EP1-SD18-0-1	61.06	8.5	131.8
BENZENE	2/14	14	0.3	1300	7.1	J	1100	J	EP1-SD17-1-2	137.4	553.6	325.2
VINYL CHLORIDE	2/14	14	0.51	2000	120	J	24000	J	EP1-SD17-1-2	1808	12060	6393
TETRACHLOROETHENE	1/14	7	0.68	1300	1700	J	1700	J	EP1-SD17-1-2	180.1	1700	469.5

Table 4-12

Statistical Summary of Analytes Detected in Sediment Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Average Of All Results	Average Of Positive Results	Standard Deviation
Semivolatile organic compounds (µg/kg)												
BAP EQUIVALENT-HALFND	14/14	100	--	--	23.31	--	5364	--	EP1-SD16-1-2	781.3	781.3	1367
BAP EQUIVALENT-POS	14/14	100	--	--	22.81	--	5304	--	EP1-SD16-1-2	769.8	769.8	1353
BENZO(B)FLUORANTHENE	14/14	100	--	--	33	--	5200	J	EP1-SD16-1-2	941.6	941.6	1351
FLUORANTHENE	14/14	100	--	--	37	--	8900	J	EP1-SD16-1-2	1666	1666	2542
PHENANTHRENE	14/14	100	--	--	17	--	21000	J	EP1-SD16-1-2	2829	2829	5772
PYRENE	14/14	100	--	--	31	--	7800	J	EP1-SD16-1-2	1412	1412	2131
BENZO(A)PYRENE	13/14	93	41	41	16	--	4100	J	EP1-SD16-1-2	561.3	602.9	1049
BENZO(G,H,I)PERYLENE	13/14	93	22	22	15	--	2500	J	EP1-SD16-1-2	400.5	430.5	639.3
BENZO(K)FLUORANTHENE	13/14	93	44	44	9.1	J	2000	J	EP1-SD16-1-2	323.8	347	525.8
INDENO(1,2,3-CD)PYRENE	13/14	93	22	22	13	--	2100	J	EP1-SD16-1-2	343.6	369.2	538.4
BENZO(A)ANTHRACENE	12/14	86	29	40	21	--	4500	J	EP1-SD16-1-2	631.8	734.3	1206
CHRYSENE	12/14	86	50	70	21	--	4200	J	EP1-SD16-1-2	690	800	1173
NAPHTHALENE	12/14	86	1.2	1.9	12	J	66000	J	EP1-SD16-1-2	7022	8193	18510
FLUORENE	9/14	64	0.8	24	9.6	J	4600	J	EP1-SD16-1-2	575.9	894.3	1268
2-METHYLNAPHTHALENE	8/14	57	0.75	2.9	13	--	83000	J	EP1-SD16-1-2	9417	16480	23650
BIS(2-ETHYLHEXYL)PHTHALATE	8/14	57	29	44	220	J	38000	J	EP1-SD16-1-2	4901	8563	10360
ANTHRACENE	7/14	50	1.2	140	19	--	74	J	EP1-SD15-0-1	29.94	37.29	22.29
ACENAPHTHYLENE	5/14	36	0.53	65	7.2	J	20	--	EWT-SD2-1-2	10.07	13.44	8.596
DIBENZO(A,H)ANTHRACENE	5/14	36	0.99	120	18	--	76	J	EP1-SD15-0-1	24.39	41	22.79
DIBENZOFURAN	5/14	36	0.99	42	7.9	J	5100	J	EP1-SD16-1-2	635.5	1766	1618
BENZALDEHYDE	4/14	29	18	2200	26	J	77	J	EWT-SD2-0-1	196.4	59.75	288.8
ACENAPHTHENE	2/14	14	1.1	49	2400	J	5300	J	EP1-SD16-1-2	555.7	3850	1507
1,1-BIPHENYL	1/14	7	5.3	650	5000	J	5000	J	EP1-SD17-1-2	406.5	5000	1325
BIS(2-CHLOROETHOXY)METHANE	1/14	7	33	4100	810	J	810	J	EP1-SD17-1-2	369.2	810	563.4
DI-N-BUTYL PHTHALATE	1/14	7	54	20000	13000	J	13000	J	EP1-SD17-1-2	1819	13000	4149
Polychlorinated biphenyls (µg/kg)												
TOTAL AROCLOR	7/14	50	--	--	170	--	1500	--	EP1-SD18-1-2	325.7	651.4	463.6
AROCLOR-1260	5/14	36	25	150	170	--	890	J	EP1-SD17-1-2	215.7	544	313.3
AROCLOR-1254	2/14	14	25	160	340	J	1500	J	EP1-SD18-1-2	160.2	920	394.6

Table 4-12

Statistical Summary of Analytes Detected in Sediment Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Maximum Non-Detect	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Sample with Maximum Detect	Average Of All Results	Average Of Positive Results	Standard Deviation
Metals (mg/kg)												
ARSENIC	14/14	100	--	--	4.8	J	35	J	EP1-SD15-1-2	15.28	15.28	9.481
BARIUM	14/14	100	--	--	27	J	480	J	EP1-SD17-1-2	143.9	143.9	141.5
CADMIUM	14/14	100	--	--	0.17	J	3400	J	EP1-SD15-1-2	711.5	711.5	1055
CHROMIUM	14/14	100	--	--	48	--	78000	J	EP1-SD16-1-2	15730	15730	22470
COPPER	14/14	100	--	--	15	--	10000	J	EP1-SD16-1-2	1029	1029	2613
LEAD	14/14	100	--	--	21	J	1700	J	EP1-SD16-1-2	371.4	371.4	503.3
MERCURY	14/14	100	--	--	0.17	J	6.9	J	EP1-SD16-1-2	0.9707	0.9707	1.812
MOLYBDENUM	14/14	100	--	--	1.2	J	180	J	EP1-SD16-1-2	23.62	23.62	47.46
NICKEL	14/14	100	--	--	8.2	--	1000	J	EP1-SD16-1-2	138.8	138.8	259.2
VANADIUM	14/14	100	--	--	31	J	150	J	EP1-SD16-1-2	56.57	56.57	30.4
ZINC	14/14	100	--	--	36	--	4200	J	EP1-SD15-1-2	866.7	866.7	1140
COBALT	13/14	93	12	12	1.7	J	17	J	EP1-SD15-1-2	8.307	8.485	4.208
SILVER	13/14	93	1.8	1.8	0.17	J	34	J	EP1-SD16-1-2	3.564	3.769	8.807
BERYLLIUM	12/14	86	1.2	3.3	0.41	J	2.1	--	EWT-SD2-1-2	1.021	1.003	0.4561
ANTIMONY	5/14	36	0.54	30	0.93	J	6	J	EP1-SD17-1-2	2.952	2.726	4.008
SELENIUM	3/14	21	0.62	35	0.9	J	1.1	J	EWT-SD2-0-1, EWT-SD3-0-1	2.665	1.033	4.597
THALLIUM	3/14	21	0.76	42	4	J	7.2	J	EP1-SD17-1-2	3.927	5.1	5.574
Petroleum hydrocarbons (mg/kg)												
Gasoline-range organics	13/14	93	14	14	20	J	39000	J	EP1-SD16-1-2	8246	8879	12390
Diesel-range organics	8/14	57	0.067	0.11	4.9	J	2800	J	EP1-SD16-1-2	379.4	663.9	906.8

-- not applicable
J - estimated concentration
µg/kg - micrograms per kilogram
mg/kg - milligrams per kilogram

Table 4-13
Detected Analytes and Screening Criteria for Sediment Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Freshwater Sediment Ecological Screening Value (ESV)[1]	Saltwater Sediment Ecological Screening Value (ESV)[2]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration (Adjusted)[3]	EP1-SD15 EP1-SD15-0-1 10/15/2013	EP1-SD15 EP1-SD15-1-2 10/15/2013	EP1-SD16 EP1-SD16-0-1 10/15/2013	EP1-SD16 EP1-SD16-1-2 10/15/2013	EP1-SD17 EP1-SD17-0-1 10/15/2013	EP1-SD17 EP1-SD17-1-2 10/15/2013	EP1-SD18 EP1-SD18-0-1 10/15/2013
Volatile organic compounds (µg/kg)										
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	9 J	1300 J	72 J	11000 J	460 J	6800 J	59 J
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	6.9 J	3500 J	120 J	23000 J	970 J	16000 J	120 J
1,2-DICHLOROBENZENE	16.5	989	NA	35 J	240 J	170 J	--	92 J	--	34 J
1,4-DICHLOROBENZENE	599	460	NA	7.5 J	--	--	--	--	--	9.5 J
2-BUTANONE	25,710	NA	NA	140 J	350 J	--	--	360 J	--	100 J
4-ISOPROPYLTOLUENE	NA	NA	NA	2.9 J	280 J	34 J	1300 J	140 J	1100 J	12 J
ACETONE	60,030	167,230	NA	580 J	--	--	--	--	--	540 J
BENZENE	57	137	NA	--	--	--	--	--	1100 J	7.1 J
CARBON DISULFIDE	0.851	NA	NA	29 J	--	--	--	95 J	--	51 J
CHLOROBENZENE	8.42	162	NA	530 J	2700 J	1400 J	7200 J	1300 J	6000 J	1100 J
CIS-1,2-DICHLOROETHENE	1050	NA	NA	--	--	--	--	--	37000 J	23 J
ETHYLBENZENE	1100	305	NA	8.3 J	540 J	--	57000 J	1600 J	52000 J	59 J
ISOPROPYLBENZENE	86	NA	NA	98 J	750 J	500 J	2100 J	270 J	1700 J	150 J
M+P-XYLENES	25.2	34.6	NA	28 J	4400 J	210 J	170000 J	4400 J	130000 J	470 J
NAPHTHALENE	176	34.6	NA	--	1100 J	76 B	12000 J	390 J	7200 J	21 J
N-BUTYLBENZENE	NA	NA	NA	43 J	690 J	220 J	1500 J	310 J	1200 J	68 J
N-PROPYLBENZENE	NA	NA	NA	180 J	1300 J	640 J	2900 J	410 J	2100 J	300 J
O-XYLENE	25.2	34.6	NA	8.7 J	1100 J	--	73000 J	1700 J	48000 J	180 J
SEC-BUTYLBENZENE	880	NA	NA	51 J	420 J	180 J	790 J	160 J	690 J	59 J
TERT-BUTYLBENZENE	1210	NA	NA	14 J	85 J	--	--	--	--	15 J
TETRACHLOROETHENE	468	190	NA	--	--	--	--	--	1700 J	--
TOLUENE	2880	1090	NA	59 J	480 J	--	440000 J	5700 J	650000 J	200 J
TOTAL XYLENES	25.2	34.6	NA	37 J	5500 J	210 J	240000 J	6100 J	180000 J	650 J
TRANS-1,2-DICHLOROETHENE	1050	NA	NA	--	120 J	--	--	110 J	--	7.7 J
TRICHLOROETHENE	96.9	8950	NA	--	--	68 J	--	73 J	5400 J	180 J
VINYL CHLORIDE	31	2780	NA	--	--	--	--	120 J	24000 J	--
Semivolatile organic compounds (µg/kg)										
1,1-BIPHENYL	1220	NA	NA	--	--	--	--	--	5000 J	--
2-METHYLNAPHTHALENE	20.2	20.2	NA	--	3800 J	1300 J	83000 J	3000 J	40000 J	19 J
ACENAPHTHENE	6.7	6.71	NA	--	--	--	5300 J	--	2400 J	--
ACENAPHTHYLENE	5.9	5.87	NA	--	--	--	--	--	--	--
ANTHRACENE	57.2	46.9	NA	74 J	--	--	--	--	--	60 J
BAP EQUIVALENT-POS	NA	NA	21000	623.77	85	411.87	5304.2	975.9	1221.1	303.54
BENZALDEHYDE	NA	NA	NA	75 J	--	--	--	--	--	--
BENZO(A)ANTHRACENE	108	74.8	NA	370 J	--	400 J	4500 J	950 J	1700 J	240 J

Table 4-13
Detected Analytes and Screening Criteria for Sediment Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Freshwater Sediment Ecological Screening Value (ESV)[1]	Saltwater Sediment Ecological Screening Value (ESV)[2]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration (Adjusted)[3]	EP1-SD15 EP1-SD15-0-1 10/15/2013	EP1-SD15 EP1-SD15-1-2 10/15/2013	EP1-SD16 EP1-SD16-0-1 10/15/2013	EP1-SD16 EP1-SD16-1-2 10/15/2013	EP1-SD17 EP1-SD17-0-1 10/15/2013	EP1-SD17 EP1-SD17-1-2 10/15/2013	EP1-SD18 EP1-SD18-0-1 10/15/2013
BENZO(A)PYRENE	150	88.8	NA	420 J	--	290 J	4100 J	700 J	770 J	230 J
BENZO(B)FLUORANTHENE	NA	130	NA	610 J	850 J	580 J	5200 J	1300 J	2100 J	330 J
BENZO(G,H,I)PERYLENE	170	67	NA	300 J	--	230 J	2500 J	560 J	670 J	180 J
BENZO(K)FLUORANTHENE	240	70	NA	230 J	--	240 J	2000 J	370 J	790 J	130 J
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	--	--	--	--	--	810 J	--
BIS(2-ETHYLHEXYL)PHTHALATE	180	182	NA	380 J	2800 J	1900 J	38000 J	5400 J	15000 J	220 J
CHRYSENE	166	108	NA	470 J	--	470 J	4200 J	1200 J	2200 J	240 J
DIBENZO(A,H)ANTHRACENE	33	6.22	NA	76 J	--	--	--	--	--	--
DIBENZOFURAN	415	7300	NA	--	--	--	5100 J	--	3700 J	--
DI-N-BUTYL PHTHALATE	6470	1160	NA	170 B	1200 B	820 B	20000 B	1300 B	13000 J	190 B
FLUORANTHENE	423	113	NA	740 J	1500 J	1000 J	8900 J	2200 J	5600 J	450 J
FLUORENE	77.4	21.2	NA	35 J	560 J	270 J	4600 J	630 J	1900 J	34 J
INDENO(1,2,3-CD)PYRENE	17	68	NA	270 J	--	210 J	2100 J	460 J	610 J	150 J
NAPHTHALENE	176	34.6	NA	51 J	2000 J	800 J	66000 J	1000 J	28000 J	22 J
PHENANTHRENE	204	86.7	NA	240 J	2500 J	1200 J	21000 J	2700 J	9200 J	190 J
PYRENE	195	153	NA	620 J	1300 J	880 J	7800 J	2000 J	4000 J	380 J
Polychlorinated biphenyls (µg/kg)										
AROCLOR-1254	59.8	63.3	74000[4]	--	--	--	--	340 J	--	--
AROCLOR-1260	59.8	40	74000[4]	--	550 J	260 J	850 J	--	890 J	--
TOTAL AROCLOR	59.8	40	74000[4]	--	550	260	850	340	890	--
Metals (mg/kg)										
ANTIMONY	2	0.63	NA	4.6 J	--	--	--	--	6 J	--
ARSENIC	9.8	7.24	160	18 J	35 J	13 J	28 J	23 J	17 J	15 J
BARIUM	NA	130	NA	85 J	200 J	100 J	440 J	120 J	480 J	74 J
BERYLLIUM	NA	NA	NA	1.2 J	--	0.84 J	--	1.2 J	0.82 J	0.99 J
CADMIUM	0.99	0.68	NA	220 J	3400 J	820 J	530 J	1800 J	250 J	630 J
CHROMIUM	43.4	52.3	NA	2500 J	36000 J	20000 J	78000 J	21000 J	36000 J	4300 J
COBALT	50	10	NA	11 J	17 J	7 J	--	13 J	1.7 J	8.5 J
COPPER	31.6	18.7	NA	160 J	1200 J	410 J	10000 J	730 J	350 J	230 J
LEAD	35.8	30.2	NA	190 J	870 J	200 J	1700 J	300 J	1100 J	120 J
MERCURY	0.18	0.13	NA	0.23 J	0.77 J	0.26 J	6.9 J	0.30 J	2.5 J	0.19 J
MOLYBDENUM	NA	NA	NA	6.5 J	25 J	7.2 J	180 J	12 J	59 J	4 J
NICKEL	22.7	15.9	NA	61 J	290 J	63 J	1000 J	130 J	95 J	60 J
SELENIUM	2	1	NA	--	--	--	--	--	--	--
SILVER	1	0.73	NA	0.72 J	3.6 J	--	34 J	1.4 J	2.4 J	0.90 J
THALLIUM	NA	NA	NA	--	--	--	--	4 J	7.2 J	--

Table 4-13
Detected Analytes and Screening Criteria for Sediment Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Freshwater Sediment Ecological Screening Value (ESV)[1]	Saltwater Sediment Ecological Screening Value (ESV)[2]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration (Adjusted)[3]	EP1-SD15 EP1-SD15-0-1 10/15/2013	EP1-SD15 EP1-SD15-1-2 10/15/2013	EP1-SD16 EP1-SD16-0-1 10/15/2013	EP1-SD16 EP1-SD16-1-2 10/15/2013	EP1-SD17 EP1-SD17-0-1 10/15/2013	EP1-SD17 EP1-SD17-1-2 10/15/2013	EP1-SD18 EP1-SD18-0-1 10/15/2013
VANADIUM	NA	57	NA	59 J	60 J	39 J	150 J	54 J	69 J	41 J
ZINC	121	124	NA	680 J	4200 J	670 J	950 J	1500 J	310 J	770 J
Petroleum hydrocarbons (mg/kg)										
Gasoline-range organics	NA	NA	230 [4]	4.9 J	83 J	58 J	2800 J	110 J	2200 J	9.3 J
Diesel-range organics	NA	NA	230 [4]	1100 J	17000 J	5600 J	39000 J	11000 J	29000 J	500 J

Table 4-13
Detected Analytes and Screening Criteria for Sediment Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Freshwater Sediment Ecological Screening Value (ESV)[1]	Saltwater Sediment Ecological Screening Value (ESV)[2]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration (Adjusted)[3]	EP1-SD18 EP1-SD18-1-2 10/15/2013	EWT-SD1 EWT-SD1-0-1 10/15/2013	EWT-SD1 EWT-SD1-1-2 10/15/2013	EWT-SD2 EWT-SD2-0-1 10/15/2013	EWT-SD2 EWT-SD2-1-2 10/15/2013	EWT-SD3 EWT-SD3-0-1 10/15/2013	EWT-SD3 EWT-SD3-1-2 10/15/2013
Volatile organic compounds (µg/kg)										
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	170 J	--	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	350 J	--	--	--	--	--	--
1,2-DICHLOROBENZENE	16.5	989	NA	55 J	--	--	--	--	--	--
1,4-DICHLOROBENZENE	599	460	NA	--	--	--	--	--	--	--
2-BUTANONE	25,710	NA	NA	--	15 J	--	27 J	--	--	7 J
4-ISOPROPYLTOLUENE	NA	NA	NA	50 J	--	--	--	--	--	--
ACETONE	60,030	167,230	NA	--	91 J	--	120 J	23 J	--	83 J
BENZENE	57	137	NA	--	--	--	--	--	--	--
CARBON DISULFIDE	0.851	NA	NA	95 J	--	--	--	--	--	--
CHLOROBENZENE	8.42	162	NA	1400 J	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	1050	NA	NA	120 J	--	--	--	--	--	--
ETHYLBENZENE	1100	305	NA	280 J	--	--	--	--	--	--
ISOPROPYLBENZENE	86	NA	NA	230 J	--	--	--	--	--	--
M+P-XYLENES	25.2	34.6	NA	1600 J	--	--	--	--	--	--
NAPHTHALENE	176	34.6	NA	160 B	--	--	--	--	--	--
N-BUTYLBENZENE	NA	NA	NA	140 J	--	--	--	--	--	--
N-PROPYLBENZENE	NA	NA	NA	320 J	--	--	--	--	--	--
O-XYLENE	25.2	34.6	NA	730 J	--	--	--	--	--	--
SEC-BUTYLBENZENE	880	NA	NA	94 J	--	--	--	--	--	--
TERT-BUTYLBENZENE	1210	NA	NA	--	--	--	--	--	--	--
TETRACHLOROETHENE	468	190	NA	--	--	--	--	--	--	--
TOLUENE	2880	1090	NA	1900 J	--	--	--	--	--	--
TOTAL XYLENES	25.2	34.6	NA	2300 J	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE	1050	NA	NA	96 J	--	--	0.98 J	--	1.4 J	0.80 J
TRICHLOROETHENE	96.9	8950	NA	2400 J	--	--	--	--	--	--
VINYL CHLORIDE	31	2780	NA	--	--	--	--	--	--	--
Semivolatile organic compounds (µg/kg)										
1,1-BIPHENYL	1220	NA	NA	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE	20.2	20.2	NA	700 J	--	--	--	13	--	--
ACENAPHTHENE	6.7	6.71	NA	--	--	--	--	--	--	--
ACENAPHTHYLENE	5.9	5.87	NA	--	14	7.2 J	14 J	20	12 J	--
ANTHRACENE	57.2	46.9	NA	--	30	19	24	32	22	--
BAP EQUIVALENT-POS	NA	NA	21000	801.8	257.97	138.759	207.91	277.23	145.25	22.812
BENZALDEHYDE	NA	NA	NA	--	61 J	26 J	77 J	--	--	--
BENZO(A)ANTHRACENE	108	74.8	NA	--	150	90	120	170	100	21

Table 4-13
Detected Analytes and Screening Criteria for Sediment Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Freshwater Sediment Ecological Screening Value (ESV)[1]	Saltwater Sediment Ecological Screening Value (ESV)[2]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration (Adjusted)[3]	EP1-SD18 EP1-SD18-1-2 10/15/2013	EWT-SD1 EWT-SD1-0-1 10/15/2013	EWT-SD1 EWT-SD1-1-2 10/15/2013	EWT-SD2 EWT-SD2-0-1 10/15/2013	EWT-SD2 EWT-SD2-1-2 10/15/2013	EWT-SD3 EWT-SD3-0-1 10/15/2013	EWT-SD3 EWT-SD3-1-2 10/15/2013
BENZO(A)PYRENE	150	88.8	NA	640 J	170	92	130	170	110	16
BENZO(B)FLUORANTHENE	NA	130	NA	1100 J	250	130	220	300	180	33
BENZO(G,H,I)PERYLENE	170	67	NA	540 J	140	77	120	180	84	15
BENZO(K)FLUORANTHENE	240	70	NA	380 J	79	46	75	100	62	9.1 J
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	180	182	NA	4800 J	--	--	--	--	--	--
CHRYSENE	166	108	NA	--	180	99	160	230	130	21
DIBENZO(A,H)ANTHRACENE	33	6.22	NA	--	35	18	32	44	--	--
DIBENZOFURAN	415	7300	NA	--	--	8.4 J	7.9 J	13 J	--	--
DI-N-BUTYL PHTHALATE	6470	1160	NA	--	85 B	54 B	110 B	110 B	140 B	69 B
FLUORANTHENE	423	113	NA	1800 J	270	150	210	260	210	37
FLUORENE	77.4	21.2	NA	--	10 J	--	--	--	9.6 J	--
INDENO(1,2,3-CD)PYRENE	17	68	NA	480 J	120	62	110	150	65	13
NAPHTHALENE	176	34.6	NA	380 J	15	12 J	14 J	16	--	--
PHENANTHRENE	204	86.7	NA	2100 J	110	66	82	100	100	17
PYRENE	195	153	NA	1700 J	260	150	200	250	190	31
Polychlorinated biphenyls (µg/kg)										
AROCLOR-1254	59.8	63.3	74000[(4)]	1500 J	--	--	--	--	--	--
AROCLOR-1260	59.8	40	74000[(4)]	--	--	--	--	170	--	--
TOTAL AROCLOR	59.8	40	74000[(4)]	1500	--	--	--	170	--	--
Metals (mg/kg)										
ANTIMONY	2	0.63	NA	--	1.1 J	--	0.93 J	1 J	--	--
ARSENIC	9.8	7.24	160	24 J	6 J	4.8 J	5.5 J	12 J	7.5 J	5.1 J
BARIUM	NA	130	NA	150 J	85	40	100	72	41 J	27 J
BERYLLIUM	NA	NA	NA	1 J	0.74 J	1.1	0.44 J	2.1	1.2	0.41 J
CADMIUM	0.99	0.68	NA	2300 J	3.3	2.6	3	0.92 J	1.3	0.17 J
CHROMIUM	43.4	52.3	NA	22000 J	62	59	48	86	75	66
COBALT	50	10	NA	13 J	9.2	8.2	4.8	8.9	5	3
COPPER	31.6	18.7	NA	1100 J	49	25	39	60	39	15
LEAD	35.8	30.2	NA	410 J	57 J	44 J	53 J	91 J	43 J	21 J
MERCURY	0.18	0.13	NA	0.23 J	0.45	0.27	0.29	0.83	0.17 J	0.2
MOLYBDENUM	NA	NA	NA	15 J	4.3 J	1.4 J	6.2 J	5.8 J	3.1 J	1.2 J
NICKEL	22.7	15.9	NA	140 J	22	19	13	26	16	8.2
SELENIUM	2	1	NA	--	0.90 J	--	1.1 J	--	1.1 J	--
SILVER	1	0.73	NA	2 J	0.71 J	0.17 J	0.76 J	1.3 J	0.61 J	0.43 J
THALLIUM	NA	NA	NA	4.1 J	--	--	--	--	--	--

Table 4-13
Detected Analytes and Screening Criteria for Sediment Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	Freshwater Sediment Ecological Screening Value (ESV)[1]	Saltwater Sediment Ecological Screening Value (ESV)[2]	Dump Road RI 10^{-5} or HI=1 Industrial Worker Risk Concentration (Adjusted)[3]	EP1-SD18 EP1-SD18-1-2 10/15/2013	EWT-SD1 EWT-SD1-0-1 10/15/2013	EWT-SD1 EWT-SD1-1-2 10/15/2013	EWT-SD2 EWT-SD2-0-1 10/15/2013	EWT-SD2 EWT-SD2-1-2 10/15/2013	EWT-SD3 EWT-SD3-0-1 10/15/2013	EWT-SD3 EWT-SD3-1-2 10/15/2013
VANADIUM	NA	57	NA	51 J	43 J	32 J	42 J	81 J	40 J	31 J
ZINC	121	124	NA	2200 J	210	82	140	300	86	36
Petroleum hydrocarbons (mg/kg)										
Gasoline-range organics	NA	NA	230 [(4)]	46 J	--	--	--	--	--	--
Diesel-range organics	NA	NA	230 [(4)]	12000 J	47 J	20 J	52 J	71 J	43 J	--

Table 4-13

Detected Analytes and Screening Criteria for Sediment Samples-2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

1 Sediment screening values are from the following sources:
Region 3 BTAG (FW) - USEPA Region 3 BTAG Freshwater Sediment Screening Benchmark (August 2006)
(http://www.epa.gov/reg3hscd/risk/eco/btag/sbv/fwsed/R3_BTAG_FW_Sediment_Benchmarks_07-06.pdf).

Region 3 BTAG (SW) - USEPA Region 3 BTAG Marine Sediment Screening Benchmark (August 2006)
(http://www.epa.gov/reg3hwmd/risk/eco/btag/sbv/marsed/R3_BTAG_Marine_Sediment_Benchmarks_7-06.pdf).

Ecotox - USEPA. ECO Update, Ecotox Thresholds. Office of Solid Waste and Emergency Response. Intermittent Bulletin, Volume 3, Number 2. EPA540/F-95/038. (January, 1996).

NOAA - Buchman, M. F., 2008. NOAA Screening Quick Reference Tables, NOAA HAZMAT Report 99-1, Seattle, WA, Coastal Protection and

2 Benzo(a)pyrene equivalent (BaPEq) and arsenic criteria are the Preliminary Remedial Goal for soil based on a 10-5 target cancer risk level under the industrial worker future use scenario per the Dump Road Remedial Investigation, Table 6-36 (Tetra Tech, 2012c).
The Preliminary Remediation Goals are adjusted by a factor of 10 for expected reduced exposure to sediments.

3 The Dump Road Area Preliminary Remediation Goal developed for Aroclor-1248 is used as a surrogate screening concentration for this analyte. The

4 Maryland Department of the Environment soil cleanup standards (MDE, 2008).

Cells shaded gray indicate values that exceed a screening level.

HI - hazard index (non-carcinogenic)

J - Positive result is considered estimated as a result of technical noncompliance.

µg/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

NA - not available, not applicable

-- = not detected

NOAA - National Aeronautic and Atmospheric Administration

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\Groundwater contours Upper Surficial aquifer October 2013.mxd)
12/19/2013 -- DC



FIGURE 4-1

GROUNDWATER ELEVATION CONTOURS-UPPER SURFICIAL AQUIFER WELLS, OCTOBER 2013

LEGEND

- SURFICIAL AQUIFER GROUNDWATER MONITORING WELL OR PIEZOMETER
- DEEP CONFINED AQUIFER WELL
- ABANDONED WELL
- GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL = 1 FOOT (DASHED WHERE INFERRED)
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND
- *1.79* GROUNDWATER ELEVATION FEET, NAVD, 1988

NAVD - NORTH AMERICAN VERTICAL DATUM
NM - NOT MEASURED

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 100 200 Feet

N

DATE MODIFIED: 12/20/13

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\Groundwater contours Intermediate Surficial aquifer October 2013.mxd)
12/19/2013 -- DC



FIGURE 4-2

GROUNDWATER ELEVATION CONTOURS-INTERMEDIATE SURFICIAL AQUIFER WELLS, OCTOBER 2013

LEGEND

- SURFICIAL AQUIFER GROUNDWATER MONITORING WELL OR PIEZOMETER
- DEEP CONFINED AQUIFER WELL
- ABANDONED WELL
- GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL = 0.5 FOOT (DASHED WHERE INFERRED)
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND
- 1.24 GROUNDWATER ELEVATION FEET, NAVD, 1988

NAVD = North American Vertical Datum
NM= Not measured

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 100 200 Feet

N

DATE MODIFIED: 12/23/2013

CREATED BY: DC

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\Groundwater contours Lower Surficial aquifer October 2013.mxd)
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FIGURE 4-3

GROUNDWATER ELEVATION CONTOURS-LOWER SURFICIAL AQUIFER WELLS, OCTOBER 2013

LEGEND

- SURFICIAL AQUIFER GROUNDWATER MONITORING WELL OR PIEZOMETER
- DEEP CONFINED AQUIFER WELL
- ABANDONED WELL
- GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL = 0.5 FOOT (DASHED WHERE INFERRED)
- *1.61* GROUNDWATER ELEVATION FEET, NAVD, 1988
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

NAVD - NORTH AMERICAN VERTICAL DATUM
NM - NOT MEASURED

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 100 200 Feet

N

DATE MODIFIED: 12/23/13

CREATED BY: DC

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\Groundwater contours Deep Confined aquifer October 2013.mxd)
12/16/13 4:24:21 PM



FIGURE 4-4

GROUNDWATER ELEVATION CONTOURS-DEEP CONFINED AQUIFER WELLS, OCTOBER 2013

LEGEND

- SURFICIAL AQUIFER GROUNDWATER MONITORING WELL OR PIEZOMETER
- DEEP CONFINED AQUIFER WELL
- ABANDONED WELL
- GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL = 1 FOOT (DASHED WHERE INFERRED)
- *4.01* GROUNDWATER ELEVATION FEET, NAVD, 1988
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

DATE MODIFIED: 12/10/13

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA TP Exceedances 2013.mxd)
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FIGURE 4-5

ANALYTES EXCEEDING INDUSTRIAL USE SOIL STANDARDS AT TEST PIT LOCATIONS - 2013
DUMP ROAD AREA

LEGEND

- TEST PIT - 2013
- TEST PIT - PRE-2013
- SOIL BORING SAMPLE LOCATION (1996)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- FORMER POND
- FORMER POND/PIT
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)
- TAXIWAY TANGO AREA- NORTH
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

Concentrations of metals, BaPEq, PAHs, PCBs, and TPH-DRO are in units of mg/kg (milligrams per kilogram)
Concentrations of VOCs are in units of ug/kg (micrograms per kilogram)
BaPEq = benzo(a) pyrene equivalent
BTEX - benzene, toulene, ethylbenzene, and xylene
DRO = diesel range organics
J = estimated value
PAH = polycyclic aromatic hydrocarbons
PCB = polychlorinated biphenyl
TCE = trichloroethene
TPH = total petroleum hydrocarbons
MDE = Maryland Department of the Environment
VOC = volatile organic compound

MDE or Site Specific Screening Levels mg/kg:

	Industrial
Aroclor-1242	10
BaPEq	2.90
Benzo(a)anthracene	3.9
Benzo(a)pyrene	0.39
Benzo(b)flouranthene	3.9
Dibenzo(a,h)anthracene	0.39
Indeno(1,2,3-CD)pyrene	3.9
Chromium	310
TPH-DRO	620
Vanadium	55

Sample ID
Analyte Concentration

MDE or Site Specific Screening Levels ug/kg:

	Industrial
TCE	7200

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 Feet

N

DATE MODIFIED: 02/14/14

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA SB Exceedances 2013.mxd)
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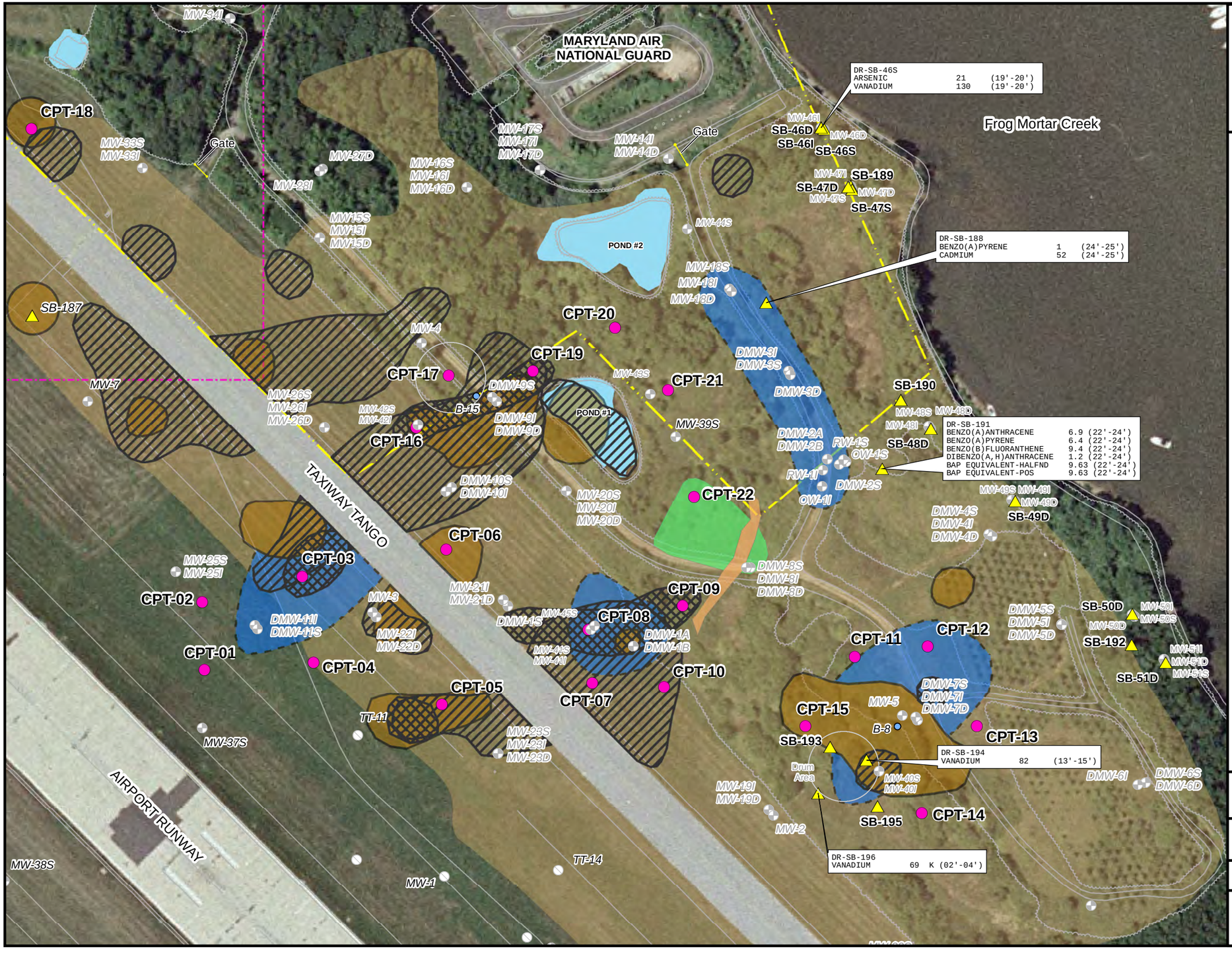

FIGURE 4-6

ANALYTES EXCEEDING INDUSTRIAL USE SOIL STANDARDS AT SOIL BORING LOCATIONS - 2013
DUMP ROAD AREA

LEGEND

- SOIL BORING - 2013
- SOIL BORING SAMPLE LOCATION (1996)
- CPT LOCATION: AUG-SEPT 2012
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- FORMER POND
- FORMER POND/PIT
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)
- TAXIWAY TANGO AREA- NORTH
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

Sample ID
Analyte Concentration Depth(ft)

Concentrations of metals, BaPEq and PAHs are in units of mg/kg (milligrams per kilogram)
BaPEq = benzo(a) pyrene equivalent
BTEX - benzene, toulene, ethylbenzene, and xylene
J = estimated value
K = result is biased high
TCE = trichloroethene
MDE = Maryland Department of the Environment
PAHs = polycyclic aromatic hydrocarbons
' = feet

MDE or Site Specific Screening Levels mg/kg:

	Industrial
Aroclor-1242	10
Arsenic	12
BaPEq	2.90
Benzo(a)anthracene	3.9
Benzo(a)pyrene	0.39
Benzo(b)flouranthene	3.9
Cadmium	51
Dibenzo(a,h)anthracene	0.39
Vanadium	55

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 Feet

N

DATE MODIFIED: 02/13/14

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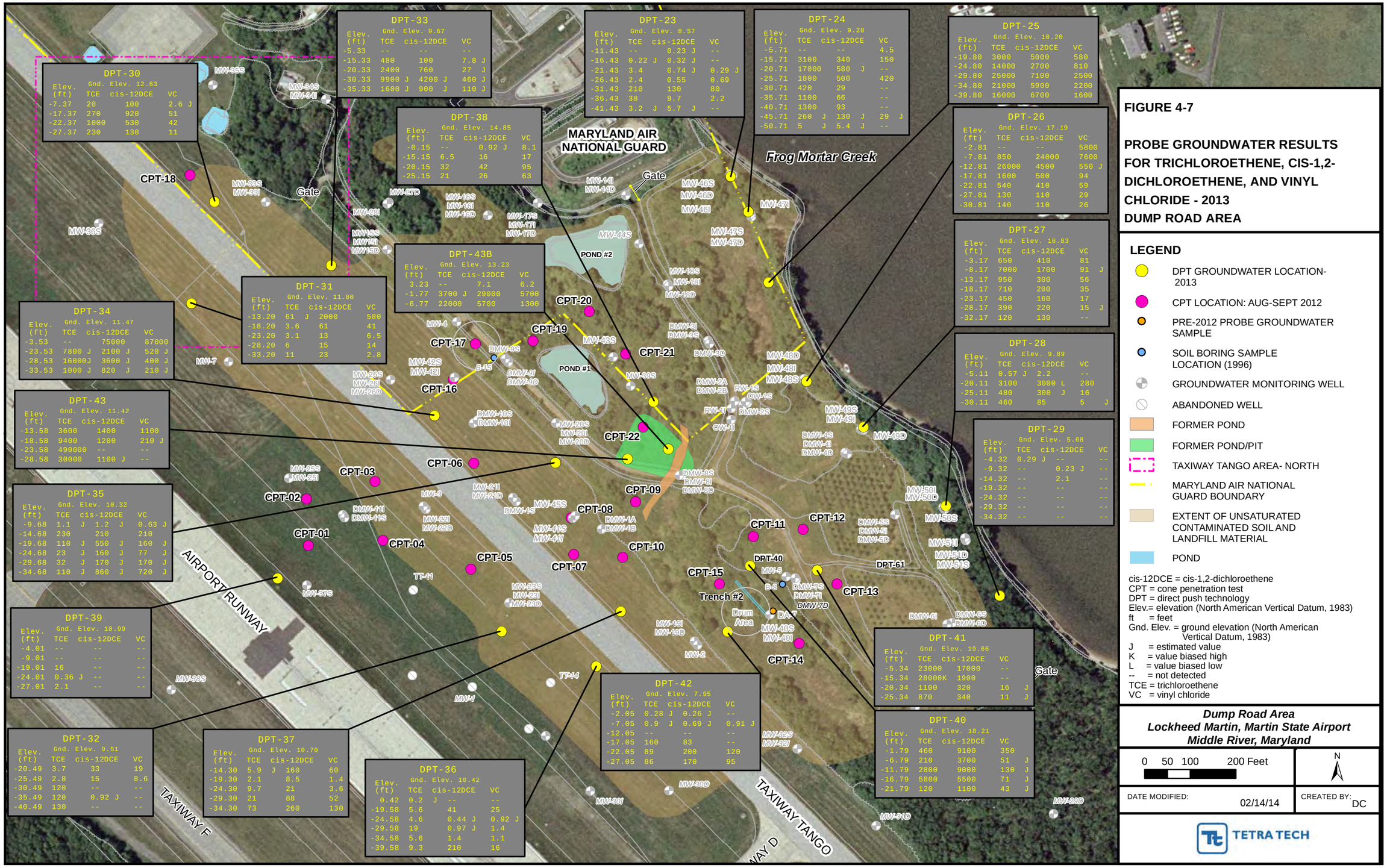

FIGURE 4-7

PROBE GROUNDWATER RESULTS FOR TRICHLOROETHENE, CIS-1,2-DICHLOROETHENE, AND VINYL CHLORIDE - 2013
DUMP ROAD AREA

LEGEND

- DPT GROUNDWATER LOCATION- 2013
- CPT LOCATION: AUG-SEPT 2012
- PRE-2012 PROBE GROUNDWATER SAMPLE
- SOIL BORING SAMPLE LOCATION (1996)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- FORMER POND
- FORMER POND/PIT
- TAXIWAY TANGO AREA- NORTH
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

cis-12DCE = cis-1,2-dichloroethene
CPT = cone penetration test
DPT = direct push technology
Elev.= elevation (North American Vertical Datum, 1983)
ft = feet
Gnd. Elev. = ground elevation (North American Vertical Datum, 1983)
J = estimated value
K = value biased high
L = value biased low
-- = not detected
TCE = trichloroethene
VC = vinyl chloride

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

DATE MODIFIED: 02/14/14

CREATED BY: DC

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA DPT 2013 exceedances for BTEX.mxd)
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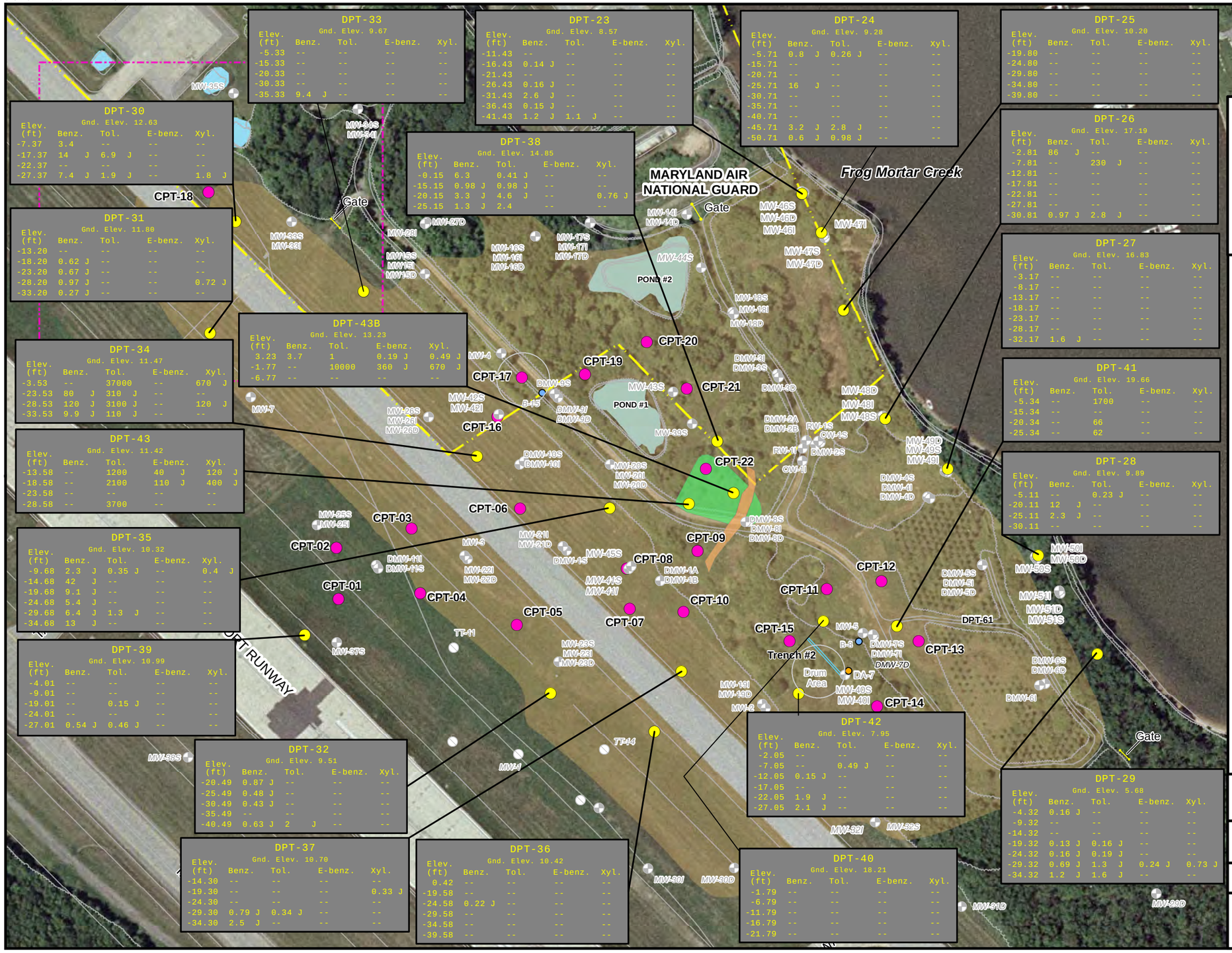

FIGURE 4-8

PROBE GROUNDWATER RESULTS FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENE 2013 DUMP ROAD AREA

LEGEND

- DPT GROUNDWATER LOCATION- 2013
- CPT LOCATION: AUG-SEPT 2012
- PRE-2012 PROBE GROUNDWATER SAMPLE
- SOIL BORING SAMPLE LOCATION (1996)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- FORMER POND
- FORMER POND/PIT
- TAXIWAY TANGO AREA- NORTH
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

BTEX = benzene, toluene, ethylbenzene, xylenes
Benz. = benzene
CPT = cone penetration test
DPT = direct push technology
Elev.= elevation (North American Vertical Datum, 1983)
E-benz. = ethylbenzene
ft = feet
Gnd. Elev. = ground elevation (North American Vertical Datum, 1983)
J = estimated value
-- = not detected
Tol. = toluene
Xyl. = xylenes

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

DATE MODIFIED: 02/14/14

CREATED BY: DC

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA GW Exceedances at new MW Locations Oct2013.mxd)
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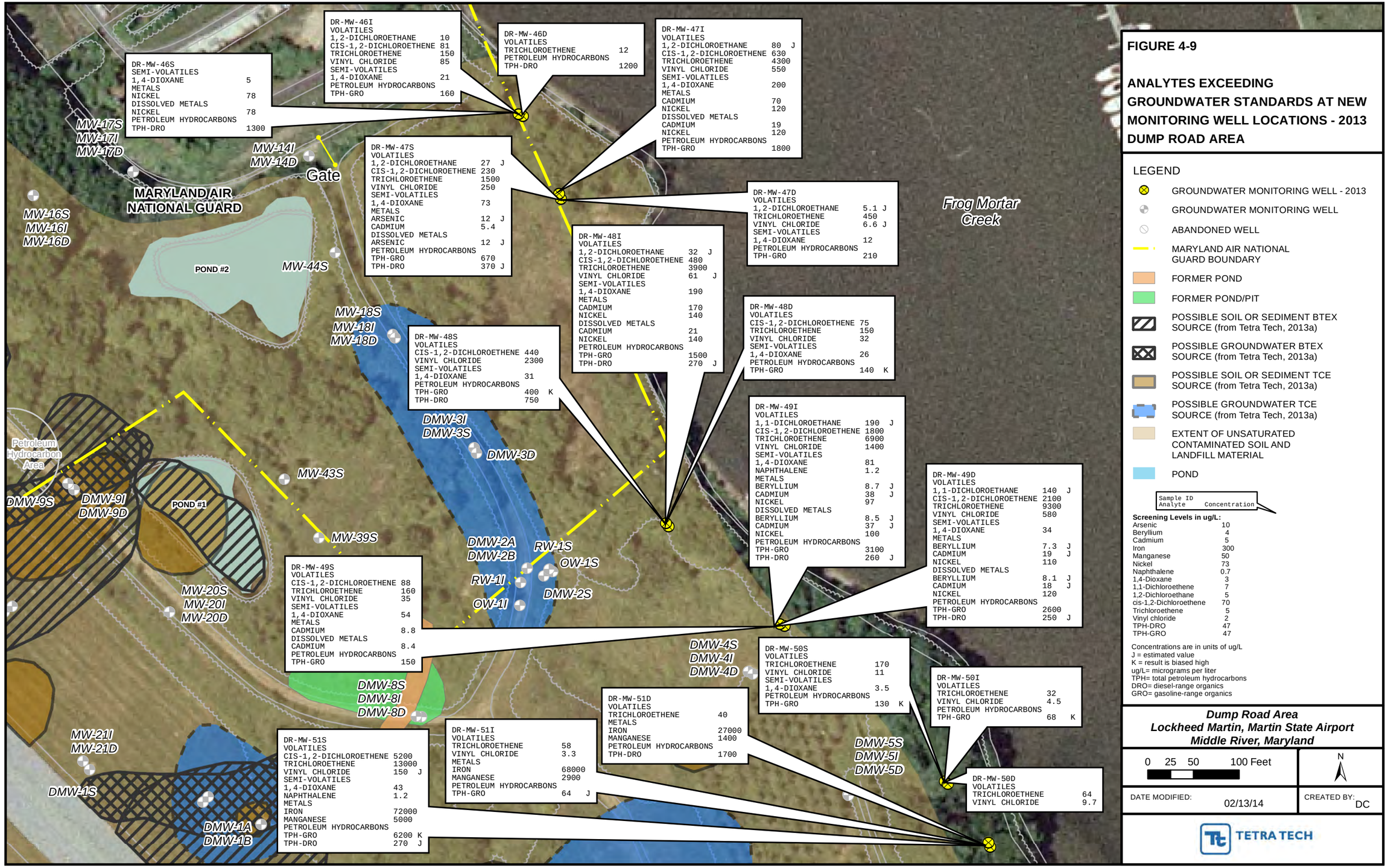

FIGURE 4-9

ANALYTES EXCEEDING GROUNDWATER STANDARDS AT NEW MONITORING WELL LOCATIONS - 2013 DUMP ROAD AREA

LEGEND

- GROUNDWATER MONITORING WELL - 2013
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- FORMER POND
- FORMER POND/PIT
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

Sample ID
Analyte Concentration

Screening Levels in ug/L:

Arsenic	10
Beryllium	4
Cadmium	5
Iron	300
Manganese	50
Nickel	73
Naphthalene	0.7
1,4-Dioxane	3
1,1-Dichloroethene	7
1,2-Dichloroethane	5
cis-1,2-Dichloroethene	70
Trichloroethene	5
Vinyl chloride	2
TPH-DRO	47
TPH-GRO	47

Concentrations are in units of ug/L
J = estimated value
K = result is biased high
ug/L= micrograms per liter
TPH= total petroleum hydrocarbons
DRO= diesel-range organics
GRO= gasoline-range organics

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 25 50 100 Feet

N

DATE MODIFIED: 02/13/14

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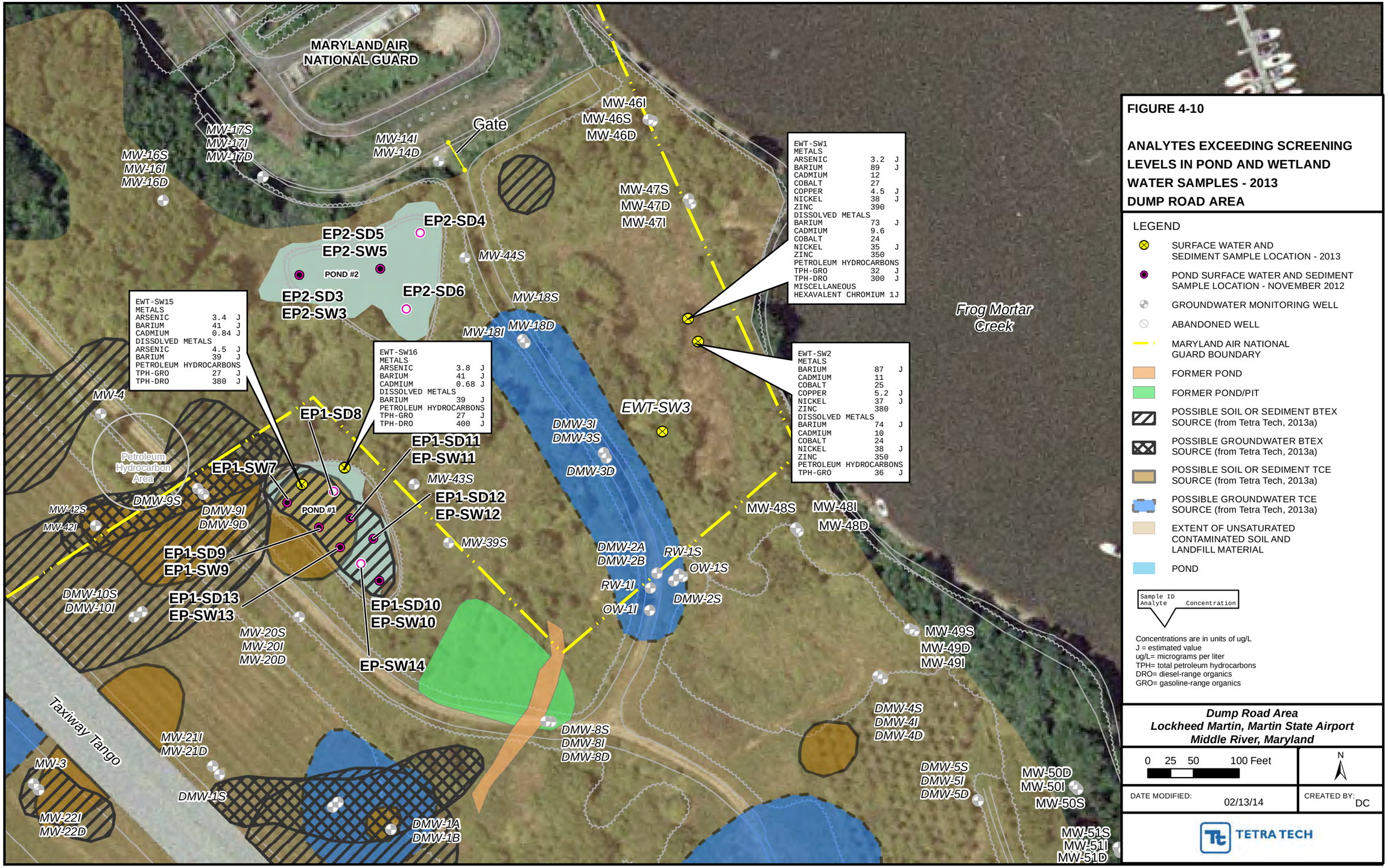

FIGURE 4-10

ANALYTES EXCEEDING SCREENING LEVELS IN POND AND WETLAND WATER SAMPLES - 2013
DUMP ROAD AREA

LEGEND

- SURFACE WATER AND SEDIMENT SAMPLE LOCATION - 2013
- POND SURFACE WATER AND SEDIMENT SAMPLE LOCATION - NOVEMBER 2012
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- FORMER POND
- FORMER POND/PIT
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

Sample ID
Analyte Concentration

Concentrations are in units of ug/L
J = estimated value
ug/L= micrograms per liter
TPH= total petroleum hydrocarbons
DRO= diesel-range organics
GRO= gasoline-range organics

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 25 50 100 Feet

N

DATE MODIFIED: 02/13/14

CREATED BY: DC

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Pond1 Wetlands Sediment Exceedances Oct2013.mxd)
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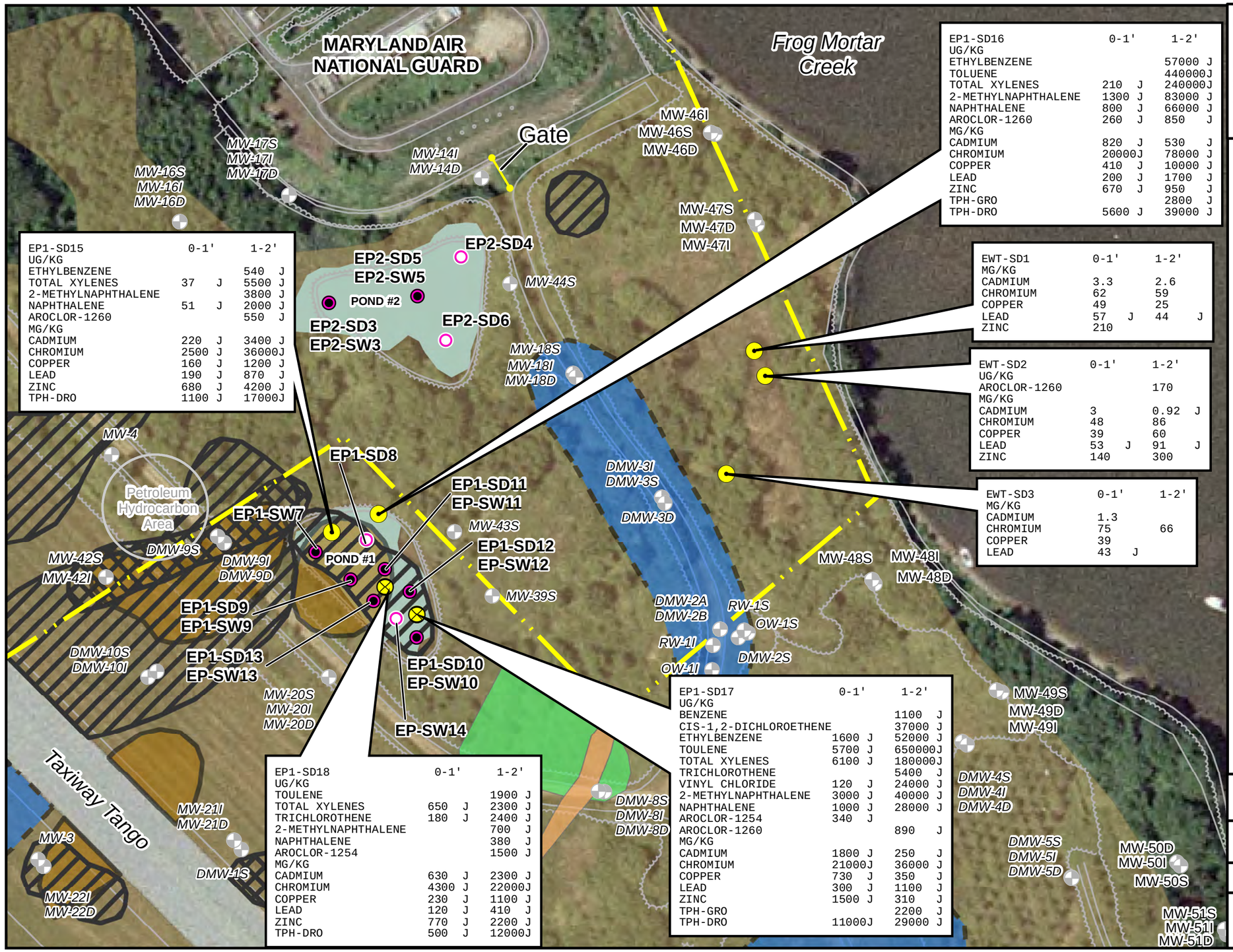

EP1-SD15	0-1'	1-2'
UG/KG		
ETHYLBENZENE		540 J
TOTAL XYLENES	37 J	5500 J
2-METHYLNAPHTHALENE		3800 J
NAPHTHALENE	51 J	2000 J
AROCLOR-1260		550 J
MG/KG		
CADMIUM	220 J	3400 J
CHROMIUM	2500 J	36000J
COPPER	160 J	1200 J
LEAD	190 J	870 J
ZINC	680 J	4200 J
TPH-DRO	1100 J	17000J

EP1-SD16	0-1'	1-2'
UG/KG		
ETHYLBENZENE		57000 J
TOLUENE		440000J
TOTAL XYLENES	210 J	240000J
2-METHYLNAPHTHALENE	1300 J	83000 J
NAPHTHALENE	800 J	66000 J
AROCLOR-1260	260 J	850 J
MG/KG		
CADMIUM	820 J	530 J
CHROMIUM	20000J	78000 J
COPPER	410 J	10000 J
LEAD	200 J	1700 J
ZINC	670 J	950 J
TPH-GRO		2800 J
TPH-DRO	5600 J	39000 J

EWT-SD1	0-1'	1-2'
MG/KG		
CADMIUM	3.3	2.6
CHROMIUM	62	59
COPPER	49	25
LEAD	57 J	44 J
ZINC	210	

EWT-SD2	0-1'	1-2'
UG/KG		
AROCLOR-1260		170
MG/KG		
CADMIUM	3	0.92 J
CHROMIUM	48	86
COPPER	39	60
LEAD	53 J	91 J
ZINC	140	300

EWT-SD3	0-1'	1-2'
MG/KG		
CADMIUM	1.3	
CHROMIUM	75	66
COPPER	39	
LEAD	43 J	

EP1-SD17	0-1'	1-2'
UG/KG		
BENZENE		1100 J
CIS-1,2-DICHLOROETHENE		37000 J
ETHYLBENZENE	1600 J	52000 J
TOULENE	5700 J	650000J
TOTAL XYLENES	6100 J	180000J
TRICHLOROTHENE		5400 J
VINYL CHLORIDE	120 J	24000 J
2-METHYLNAPHTHALENE	3000 J	40000 J
NAPHTHALENE	1000 J	28000 J
AROCLOR-1254	340 J	
AROCLOR-1260		890 J
MG/KG		
CADMIUM	1800 J	250 J
CHROMIUM	21000J	36000 J
COPPER	730 J	350 J
LEAD	300 J	1100 J
ZINC	1500 J	310 J
TPH-GRO		2200 J
TPH-DRO	11000J	29000 J

EP1-SD18	0-1'	1-2'
UG/KG		
TOULENE		1900 J
TOTAL XYLENES	650 J	2300 J
TRICHLOROTHENE	180 J	2400 J
2-METHYLNAPHTHALENE		700 J
NAPHTHALENE		380 J
AROCLOR-1254		1500 J
MG/KG		
CADMIUM	630 J	2300 J
CHROMIUM	4300 J	22000J
COPPER	230 J	1100 J
LEAD	120 J	410 J
ZINC	770 J	2200 J
TPH-DRO	500 J	12000J

FIGURE 4-11

MAJOR ANALYTES EXCEEDING SCREENING LEVELS IN POND 1 AND WETLAND SEDIMENT SAMPLES - 2013 DUMP ROAD AREA

LEGEND

- SEDIMENT SAMPLE LOCATION - 2013
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION - 2013
- POND SEDIMENT SAMPLE LOCATION-NOVEMBER 2012
- POND SURFACE WATER AND SEDIMENT SAMPLE LOCATION - NOVEMBER 2012
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- FORMER POND
- FORMER POND/PIT
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

All concentrations are in micrograms per kilogram (ug/kg) except metals, TPH-GRO, and TPH-DRO which are in milligrams per kilogram (mg/kg)
TPH= total petroleum hydrocarbons
DRO= diesel range organics
GRO= gasoline range organics
PCBs= polychlorinated biphenyls
TCE= trichloroethene
VOC= volatile organic compound
0-1= sample depth in feet below top of sediment surface
' = feet
J= estimated value

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 25 50 100 Feet

N

DATE MODIFIED: 02/13/14

CREATED BY: DC

TETRA TECH

Section 5
Source Areas Evaluation Methodology

The Dump Road Area (DRA) is an unlined dump, so areas of fill and/or buried debris would be expected to be possible contaminant source areas. Results of geophysical surveys, test pits, and soil- and groundwater-sample chemical analyses to date have been used in conjunction with hydrogeologic data to assess and define possible source areas of volatile organic compounds (VOCs) in the unsaturated- and saturated- (soil)-zones at the DRA. Chemical results used in the evaluation also include VOC data for soil samples collected beneath and around Taxiway Tango in 2013 as part of a separate investigation (Tetra Tech, Inc. [Tetra Tech], 2014). The source area evaluation further identifies, assesses, and describes VOC source areas at the DRA, identifies data gaps, and evaluates actions required to further characterize the source areas. Chemical results for the chlorinated VOC (cVOC) trichloroethene (TCE) and the aromatic hydrocarbons benzene, toluene, ethylbenzene, and xylenes (BTEX) are plotted in plan view and on geologic cross-sections in this report and compared to TCE-saturation concentrations to evaluate the possible presence of TCE dense-non-aqueous-phase liquids (DNAPLs) and areas of elevated BTEX.

5.1 EVALUATION OF GEOPHYSICAL SURVEY AND TEST PIT RESULTS

The results of a 2007 geophysical survey of the DRA (Tetra Tech, 2012c) and contour maps of the depth and thickness of buried fill and debris areas were used to identify possible contaminant source areas. These maps are based on the results of test pits excavated throughout the site in 2000, 2007–2009, 2012, and 2013. Test pits provide a method of exposing and identifying fill and debris and directly measuring its depth and thickness.

5.2 EVALUATION OF SOIL SAMPLING CHEMICAL RESULTS

Surface soil (soil at depths of zero to two feet below ground surface [bgs]) samples are typically used to evaluate risk to human health posed by direct contact with soil; surface soil samples may also indicate sources from surface spills or leaks. TCE and BTEX results for soil samples were divided into three soil categories:

- samples collected from zero to two feet bgs (surface soil or pond sediment)
- samples collected between two- and 15-feet bgs (shallow subsurface soil)
- samples collected at depths greater than 15 feet bgs (deep subsurface soil)

Surface soil at the DRA also represents the upper portion of the vadose (or unsaturated) zone. Subsurface soil is defined as the shallow portion of the unsaturated zone down to the average depth of the water table. Deep subsurface soil typically represents soil in the saturated zone of the surficial aquifer.

Soil data are plotted and contoured in plan view in Section 6 of this report for each of these three categories. Groundwater results are also plotted against soil results in plan view and on geologic cross-sections in Section 6. The contour maps and cross-sections generated from the available data provide the basis for determining the locations and depths of elevated VOC concentrations in groundwater at the DRA.

5.3 EVALUATION OF GROUNDWATER SAMPLING CHEMICAL RESULTS

Groundwater at the DRA site has been assessed in three depth zones to better characterize VOC concentrations in three dimensions. The three zones (described in Section 2) are defined as:

- *upper surficial-aquifer zone ("S" wells)*—this zone extends from the groundwater surface (approximately five to 15 feet below grade) to approximately 30 feet below grade
- *intermediate surficial-aquifer zone ("I" monitoring wells)*—this zone occurs at depths approximately 30–60 feet below grade
- *lower surficial-aquifer zone ("D", or deep, monitoring wells)*—this zone occurs at depths approximately 60–90 feet below grade

Groundwater data from the 2012 and 2013 sampling rounds (Tetra Tech, 2013d,e) and from new wells MW-46S/I/D through MW-51S/I/D were used for these analyses. The maximum TCE or

BTEX concentrations from 2012 or 2013 are plotted on the cross-sections. Several wells (DMW-2B, MW-2, MW-17D, MW-18D, MW-22I, MW-23I, MW-26I, and MW-26D) were not sampled in 2012–2013, so chemical data from 2008 were used for these wells. Chemical results from the 2012 and 2013 direct-push technology (DPT)-probe samples (i.e., CPT-01 through CPT-22, and DPT-23 through DPT-43B), from temporary well samples collected in 2002 (e.g., TT-1, PA-1, and DA-1 groundwater samples), and the 2007 DPT groundwater samples (e.g., MIP-28) are also used in the cross-section plots.

Note that DPT-probe samples (e.g., CPT-01, DPT-23, and MIP-28) or temporary wells can yield higher concentrations of cVOCs than samples collected from long-term monitoring wells, because DPT and temporary-well groundwater samples reflect smaller, discrete sampling intervals. The smaller sampling interval can isolate the more highly contaminated portions of the aquifer from less contaminated portions during groundwater sampling, so using DPT and temporary well results to develop detailed vertical profiles of contaminants in the subsurface is more effective at assessing the possible presence of DNAPL. DPT sampling is particularly effective when groundwater samples are collected at multiple depths from the top of the water table to the base of the target aquifer. DPT sampling programs can thus rapidly delineate contaminant concentrations in three dimensions and guide the installation of groundwater monitoring wells.

5.4 DNAPL ASSESSMENT

TCE, the primary parent-VOC of concern at the DRA, is an industrial degreaser previously used in machining operations. Its release at MSA has produced large groundwater plumes of dissolved TCE and its degradation, or "daughter," VOCs *cis*-1,2-dichloroethene (*cis*-1,2-DCE), vinyl chloride (VC), ethane, and ethene. TCE has low solubility in water and is more dense than water. Its physical characteristics enable it to be in the subsurface as DNAPL, or what is known as "product form."

TCE DNAPL degrades slowly in most subsurface environments, so it persists as a long-term source of dissolved-phase VOC contamination. The location of DNAPL determines the spatial distribution and concentrations of VOCs in the plume. The delineation of DNAPL in the subsurface is an important component of a conceptual site model, and is critical to selecting the proper remedial approach (Kueper and Davies, 2009).

When product is released to the subsurface, DNAPL may become distributed in disconnected blobs and ganglia of organic liquid within the soil, referred to as "residual DNAPL." If sufficiently large volumes of product are released, the ganglia may become connected and form pools of DNAPL. Residual DNAPL can be found above and below the water table in the soil column in which it was released. Residual DNAPL is trapped (i.e., immobilized) within the soil by capillary forces, but its presence can result in dissolved-phase plumes of contamination in groundwater that persist for decades to hundreds of years.

DNAPL pools represent a connected distribution of DNAPL and can flow vertically and horizontally as "product" in the subsurface. DNAPL pool-spreading can increase the size of the DNAPL source area, which then contributes to the dissolved-phase plume over time. DNAPL spreading can be parallel to groundwater flow or in other directions. For example, DNAPL in pools may migrate along low-permeability barriers that dip away from groundwater flow, or within rock or saprolite (crumbling) fractures that radiate in several directions (Kueper and Davies, 2009).

The United States Environmental Protection Agency (USEPA) provides a multi-step process for evaluating DNAPL in the subsurface at hazardous waste sites (Kueper and Davies, 2009). Determining whether DNAPL is in the subsurface involves many uncertainties, so USEPA recommends using converging lines of evidence to assess whether it is present. These lines of evidence were used in this evaluation for the DRA site. The following sections describe the recommended DNAPL source-zone investigation methods (Kueper and Davies, 2009) that are used to evaluate DRA investigation results.

5.4.1 Soil Methods

DNAPL typically migrates through the subsurface very selectively and meanderingly. It may be present as residual DNAPL distributed in noncontiguous portions of the soil column, or a significant portion of the contaminant mass may have diffused into lower permeability zones. DNAPL migration can occur within thin lenses and laminations of soil at the scale of inches or less (Kueper and Davies, 2009). Some DNAPLs are colorless and not readily visible in soil. DNAPL in the subsurface is extremely difficult to locate because of the complex nature of subsurface geology, the complex distribution of preferential contaminant pathways in soil, the location and history of DNAPL releases, and solvent density that creates downward migration.

DNAPL in soil can also vaporize into air-filled pore spaces, lowering contaminant concentrations in soil, but creating vapor-phase plumes. DNAPL persistence in soil may be short relative to its persistence in groundwater; therefore, the absence of DNAPL in the unsaturated zone may not be sufficient evidence to conclude that DNAPL has not migrated below the water table. Furthermore, flushing the upper portion of the water table via recharge and downward hydraulic gradients in many aquifer systems may reduce groundwater concentrations near the top of the water table and mask higher contaminant concentrations in deeper portions of the aquifer.

5.4.1.1 Visual Observations

DNAPL may be directly observed in soil or groundwater samples, or in drill cuttings or soil samples collected during drilling. DNAPL in groundwater may be observed in samples collected at the bottom of a well using a bailer, or measured using an electronic water-level and product-interface probe. Soil-boring logs, well drilling logs, and test-pit logs to date indicate elevated field-screening levels using a portable photoionization detector (PID). The logs also provide limited indications of DNAPL from visual observations made during fieldwork.

During the 1996 expanded investigation (Maryland Environmental Service, 1996) conducted for the Maryland Aviation Administration (MAA), soil at 12–14 feet bgs from Drum Area (DA) boring B-8 was reported to have a strong odor and had a high total VOC reading (greater than 2,500 parts per million) using a portable PID in the field. The boring log also reports that pure product was observed at this depth. Soil samples were collected from this interval (12–14 feet, as noted in the log) and submitted to both the field laboratory and an off-site analytical laboratory for chemical analyses.

The field laboratory analyses detected TCE at 6.2 milligrams per kilogram (mg/kg) and total petroleum hydrocarbons (TPH)-diesel-range organics (DRO) at 19,000 mg/kg. However, the off-site laboratory analyses reported a much lower TCE concentration: 130 micrograms per kilogram (µg/kg) or 0.130 mg/kg. Therefore, product observed at this shallow depth (i.e., near the top of the groundwater table) was likely petroleum-related product, or light non-aqueous-phase liquid (LNAPL).

Monitoring well MW-5 was installed in January 1996 directly downgradient and 12 feet east of boring B-8 to further investigate soil results. In January 1996, TCE, *cis*-1,2-DCE, and toluene

were detected in groundwater samples from MW-5 at concentrations of 63,000, 38,000, and 6,900 micrograms per liter (µg/L), respectively. MW-5 is screened from 19–39 feet below grade. The TCE concentration of 63,000 µg/L indicated the likely presence of TCE DNAPL at or near well MW-5. In 2013, test pit DR-TP-DR-A79 was excavated near B-8 to further investigate the possible presence of VOCs and product in this area. As described in Section 4, debris was encountered in this area to a depth of 4–11 feet below grade. Debris consisted of copper wire, cinderblocks, bricks, concrete, blue-green-stained sediment, drum fragments, and metal shards. A soil sample was collected at four feet and a composite sample was also collected.

During the same investigation, free product was observed at depths of four to seven feet in boring B-15, advanced in the dirt access road near the Petroleum Hydrocarbon Area (PHA). A VOC reading of 9,300 parts per million (ppm) was recorded for soil at the groundwater table (six feet bgs). The observed product is presumably petroleum-related LNAPL. A sample from four to seven feet (which is the depth indicated in the log, although 7–10 feet is shown in the report's table) was collected for chemical analyses (Maryland Environmental Service, 1996). TCE (140 µg/kg) and the petroleum VOC xylenes (13,000 µg/kg, or 13 mg/kg) were detected.

Well MW-4 was installed in January 1996 near borings B-1 and B-15 to assess the strong petroleum odor observed at B-1. TCE was not detected in this well, and only low concentrations of other VOCs were detected. MW-4 is screened from 4–30 feet below grade. In 2013, test pit DR-TP-DR-A78 was excavated near boring B-15 to further investigate the possible presence of product. A sheen and petroleum odors were observed at 4–6 feet, and elevated PID readings ranging from 105–222 ppm were measured in soil at depths of 8–10 feet and 12–16 feet below grade.

Test pit N4 was excavated north of Pond 1 in 2008; a greenish-black liquid reportedly oozed from the ground after the test pit was backfilled. The liquid had a very strong odor similar to nail polish remover (i.e., a solvent odor). The PID recorded a total VOC reading of more than 700 parts per million volume (ppmv). Test pit DR-TP-DR-A77 was excavated in 2013 near N4 to further investigate the possible presence of the greenish-black liquid. Small debris was encountered from 3–15 feet, and an unknown white material and gray clay were observed at a depth of 2.5 feet below grade, but a greenish-black liquid was not observed at this test pit.

Grab groundwater samples from temporary wells placed in the Taxiway Tango Median Anomaly Area (TT-1 through TT-10), the DA (DA-1 through DA-14), the PHA (PA-1 through PA-16), and six "previously disturbed areas" (PDA-1 through PDA-6), were inspected for free product in response to MDE's request in an August 15, 2001 letter to Lockheed Martin Corporation (Lockheed Martin); free product was not found in these samples (Tetra Tech, 2002). However, oil/water-interface probes (instruments that can be used to screen for free product) had not been used at the site, and Tetra Tech geologists had not observed DNAPL during site investigations. Therefore, visual observations were not used in this study as a line of evidence to confirm the presence of DNAPLs.

5.4.1.2 Chemical Concentrations in Soil above DNAPL-Saturation Threshold

TCE concentrations detected in soil samples can be compared to a DNAPL-saturation threshold concentration. An exceedance of this threshold indicates DNAPL in the unsaturated zone. The threshold DNAPL-saturation in soil is typically assumed to be between five and 10% of the soil's pore-space. The chemical concentration in soil corresponding to threshold DNAPL saturation (C_D) can be estimated using the following equation (Kueper and Davies, 2009):

$$C_D = \frac{S_r \emptyset \rho_N 10^6}{\rho_b} + C^T$$

where:

C_D = threshold DNAPL soil-saturation concentration (mg/kg)

S_r = threshold DNAPL saturation (set between 0.05 and 0.10), the minimum fraction of soil pore-space occupied by the DNAPL-saturated product

Ø = effective porosity (unitless): the porosity of the soil that can be occupied by a liquid

ρ_N = DNAPL density, in grams per cubic centimeter (g/cm^3)

ρ_b = dry-soil bulk density (g/cm^3)

C^T = partitioning threshold concentration: the contaminant amount (mg/kg) in a soil sample in aqueous, vapor, and sorbed phases

For a TCE DNAPL, the threshold saturation concentration (C_D) equals 9,188 mg/kg (or 9,188,000 µg/kg), using the following assumptions:

S_r = 0.05

$Ø$ = 0.25
ρ_N = 1.47
ρ_b = 2.0 grams per cubic centimeter (g/cm^3)

Using these assumptions ignores C^T, but that value is negligible compared to the DNAPL-saturation term. A TCE concentration in soil greater than 9,188 mg/kg is considered conclusive evidence of DNAPL (Kueper and Davies, 2009). TCE concentrations detected in soil and pond sediment at the DRA have not exceeded this concentration.

5.4.1.3 Chemical Concentrations in Soil above the Partitioning Threshold

Soil sampling results can also be compared to the partitioning threshold concentration (C^T). This soil concentration is based on the partitioning relationship of the cVOC between soil, air, and water at equilibrium, and is typically estimated using site-specific soil parameters, if available. A cVOC concentration above this concentration indicates the possible presence of DNAPL in the unsaturated or saturated zones only, not conclusive evidence as does the saturation-threshold concentration discussed in Section 5.4.1.2. The partitioning threshold can be estimated using the following equation (Kueper and Davies, 2009):

$$C^T = \frac{C_i}{\rho_b}(K_d\rho_b + \theta_w + H'\theta_a)$$

where:

C^T = soil concentration (mg/kg) threshold for a chemical
C_i = effective solubility of chemical, in milligrams per liter (mg/L)
ρ_b = dry-soil bulk density (g/cm^3)
K_d = soil/water partition coefficient, in milliliters per gram (mL/g) [$K_d = K_{oc}f_{oc}$]
θ_w = water-filled porosity (unitless) from moisture content
H' = unitless Henry's Constant
θ_a = air-filled porosity (unitless)
K_{oc} = organic-carbon/water partition coefficient (mL/g)
f_{oc} = fraction of organic carbon (unitless)

Assuming a TCE DNAPL with C_i = 1,100 mg/L, K_{oc} = 126 mL/g, and H' = 0.31 in a soil sample having θ_w = 0.15, θ_a = 0.10, ρ_b = 2.0 g/cc, and f_{oc} = 0.003, the value of C^T is 515 mg/kg (or

515,000 µg/kg). This C^T value (515 mg/kg) is used in this study to evaluate soil samples for TCE DNAPL. Soil samples in the saturated zone have a θ_a of zero and a θ_w of 0.25. Therefore, C^T in the saturated zone is 553 mg/kg (or 553,000 µg/kg). The C^T calculation requires knowledge of site-specific soil parameters and quantitative chemical analyses of the soil. Measured concentrations that only marginally exceed this concentration may be false positives, primarily because of uncertainty associated with estimating the soil/water partition coefficient (Kueper and Davies, 2009).

5.4.1.4 Site Use/Site History

USEPA studies indicate that DNAPL is associated with specific types of industries, processes, and practices. Some industries and processes that typically use solvents include electronic manufacturing, dry cleaning, metal product manufacturing, engine manufacturing, metal machining, and tool and die operations. Past practices, such as the disposal of solvents in unlined pits, may also contribute to DNAPL formation.

The DRA is an unlined dump historically used to dispose of debris and industrial wastes. Historical site activities during full-scale site operations included aircraft manufacturing; TCE use as a solvent in these operations has been confirmed. Various petroleum-based fuels, oils, and lubricants were also used at the facility to operate and maintain ground vehicles, aircraft, and machinery. Aerial photographs from the mid-1950s show black stains along the sides of constructed acid and oil pits, and what appears to be a floating black substance on the water surface of one pit (Tetra Tech, 2013a). Therefore, site history and use provide a positive line of evidence (in conjunction with other lines of evidence) that DNAPLs may be at the site.

5.4.1.5 Vapor Concentrations

Groundwater flowing past residual or pooled DNAPL will result in dissolved-phase plumes of VOCs. Above the water table, DNAPLs may produce vapor plumes in the unsaturated soil zone. Vapor plumes can be measured using active or passive soil-gas sampling techniques. Passive soil-gas sampling and membrane-interface probes (MIPs) have been used at the DRA to guide the placement of soil borings, test pits, and monitoring wells. However, MIP results were not used for the DNAPL evaluation in this study because soil or groundwater samples were collected at these locations, and sampling results provide a more direct indication of DNAPL than do MIP readings.

5.4.2 Groundwater Methods

As discussed previously, using soil sampling results to evaluate for DNAPLs entails numerous difficulties and uncertainties. Therefore, groundwater methods typically offer better means of inferring DNAPL source areas. Groundwater samples generally represent water quality conditions over a larger area, as compared to a soil sample. A groundwater sample at a particular point integrates conditions near the sampling location and, to a lesser extent, groundwater conditions hydraulically upgradient of the sampling location along its flow path. Therefore, groundwater data can be used to "trace" detected constituents back along a groundwater flow path.

5.4.2.1 Magnitude of Groundwater Concentrations

Solvent concentrations in groundwater greater than 1% of the solvent's solubility typically indicate that the groundwater may have contacted DNAPL. The solubility of TCE in water can vary based on several factors. However, the effective solubility of TCE at 20°–25° Celsius is generally accepted to be 1,100 milligrams per liter (mg/L), if TCE is assumed to be the only product in the DNAPL. Therefore, the TCE concentration at 1% effective solubility ($C_{i(1\%)}$) is 11 mg/L or 11,000 µg/L. Thus, a groundwater TCE concentration exceeding 11 mg/L indicates that the groundwater may have come into contact with DNAPL.

Section 6 uses plots of TCE in groundwater to identify possible TCE source areas. A combined BTEX concentration is used to evaluate the locations of possible BTEX source areas. The chemical data used for these analyses are in Section 6 and Appendix I.

5.4.2.2 Other Groundwater Methods

Other methods of evaluating DNAPL in groundwater consider the factors listed below. If applicable, the methods mentioned here are noted and briefly discussed in the evaluation of individual source areas in Section 6:

- a persistent plume
- increasing groundwater concentrations with depth
- contamination in apparently anomalous locations
- evaluation of groundwater-concentration trends with time
- the use of partitioning inter-well tracer tests and MIPs

Section 6
Source Areas Characterization

As discussed in Section 2, the Dump Road Area (DRA) investigation area was initially identified in the 1989 preliminary assessment (PA) as possible acid pits and investigated in 1991 after the Maryland Aviation Administration (MAA) encountered four drums adjacent to Taxiway Tango during trenching to install an electrical cable (Maryland Department of the Environment [MDE], 1989). Preliminary investigations from 1992–1996 and follow-on work to date have identified soil- and groundwater-contaminant source areas through geophysical surveys, soil-gas surveys, trenches, test pits, membrane-interface probe (MIP) screening, soil borings, soil sample analyses, and groundwater sampling and analyses. These investigations identified a large area of soil fill and buried debris east of Taxiway Tango, extending to the base of the embankment at Frog Mortar Creek. Investigation of this fill area identified geophysical electromagnetic (EM) anomalies, areas containing buried debris, and soil containing volatile organic compounds (VOCs) and other contaminants such as polycyclic aromatic hydrocarbons (PAHs) and metals associated with past dumping and backfilling. Past dumping and backfilling practices have led to VOC contamination in DRA soil and pond sediment, and to the development of large contaminant plumes in groundwater in the upper, intermediate, and deep portions of the surficial aquifer east of Taxiway Tango extending to Frog Mortar Creek.

6.1 TCE SOURCE AREAS AND DNAPL ASSESSMENTS

Figures 6-1 through 6-3 are contour maps of trichloroethene (TCE) in soil, displayed by three soil-depth categories: surface soil (zero to two feet), shallow subsurface soil (between two to 15 feet below ground surface [bgs]), and deep subsurface soil (greater than 15 feet deep). The contours illustrated in Figure 6-1 include sediment samples collected from Ponds 1 and 2. Figures 6-4 through 6-6 are maps of TCE concentrations in groundwater and groundwater potentiometric surfaces (i.e., groundwater flow potential) for the upper, intermediate, and lower surficial-aquifer zones, respectively. In these figures, horizontal groundwater flow is assumed perpendicular to the blue groundwater-elevation contour lines. Vertical or downward/upward

groundwater flow can also occur, but is considered secondary to horizontal groundwater flow. These figures include chemical results from samples collected from 2000 (e.g., soil samples and one-time probe groundwater samples) through 2013.

At the DRA, groundwater in the surficial aquifer generally flows from southwest (airport runway area) to northeast toward Frog Mortar Creek. Within the DRA, local groundwater flow may deviate from the overall southwest–northeast trend due to variations in geologic materials, permeabilities, and recharge. Figure 6-7 shows the locations of hydrogeologic cross-sections developed for this study. Figure 6-8 is a hydrogeologic cross-section through the Taxiway Tango Median Anomaly Area (TT Median Area), the Petroleum Hydrocarbon Area (PHA), Pond 1, and the area east of Pond 1 to Frog Mortar Creek. Figure 6-9 is a hydrogeologic cross-section through the TT Median Area, Taxiway Tango Area East (TT East), and the southern portion of the area east of Pond 1 at wells DMW-2S/A/B. Figure 6-10 is a hydrogeologic cross-section through the Drum Area (DA) and a thick fill area near well cluster DMW-5S/I/D.

Figures 6-11 and 6-12 are northwest–southwest geologic cross-sections through the PHA, TT East, DA, the area east of Pond 1, and the former Pond 3 area, using the lithologic results from cone-penetration testing (CPT) and probe groundwater TCE concentrations. These two figures show concentrations of TCE and total cVOCs, because some locations have considerable cVOC concentrations but low concentrations of TCE. Figure 6-13 is along the line of new wells MW-46S/I/D to the north to MW-51S/I/D and DPT-29 to the south. Information shown on these figures will help target future possible source-area remedies in areas that can achieve the greatest remedial impact, thus reducing treatment duration and exceedances of surface-water quality criteria. These figures are referenced in the discussion that follows.

The following areas and environmental media are possible TCE source areas (Figures 6-1 through 6-10):

- PHA, Pond 1—surface sediment/subsurface soil, groundwater
- TT Median Area—subsurface soil, groundwater
- TT East, former open burning and pit (features #44 and #15)—subsurface soil, groundwater
- Drum Area (feature #51)—surface and subsurface soil, groundwater

- Taxiway Tango Area North (TT North), former ammunition bunkers (features #20 and #26)—subsurface soil, groundwater
- area east of Pond 1 and former Pond 7 (feature #42)—subsurface soil, groundwater
- former Pond 3 (feature #2)—groundwater, soil is unknown

6.1.1 Petroleum Hydrocarbon Area and Pond 1

Elevated TCE concentrations have been detected in Pond 1 shallow sediments (Figure 6-1) and in intermediate subsurface soil at the PHA. Sediment samples from Pond 1 contain the highest levels of TCE in sediment or soil at the DRA, with concentrations of 55,000 µg/kg in sample EP1-SD9 (2012 sample), 69,000 µg/kg in sample EP1-SD2 (2000 sample), and 270,000 µg/kg in EP1-SD5 (2005 sample). In 2013, concentrations of TCE detected in the central and southern portions of Pond 1 at EP1-SD17-1–2 (5,400 µg/kg) and EP1-SD18-1–2 (2,400 µg/kg) were lower.

The TCE concentration (270,000 µg/kg) in sample EP1-SD5 is approximately 50% of the saturated (i.e., wet sample) dense non-aqueous-phase liquid (DNAPL) saturation threshold concentration (C^T = 553,000 µg/kg) for TCE. Although this sample's TCE concentration does not exceed C^T, it is within the same order of magnitude (i.e., within a power of 10), which indicates that TCE DNAPL may have been in the Pond 1 sediment, either in unsampled areas of the pond or in deeper sediments below the depths at which samples EP1-SD5 and EP1-SD2 were collected. The 2012 TCE concentration (55,000 µg/kg) and presence of the TCE-degradation product *cis*-1,2-dichloroethene (*cis*-1,2-DCE) in sample EP1-SD9 may indicate that TCE has degraded, resulting in lower TCE concentrations in Pond 1 sediment as compared to the concentration detected in 2005 (270,000 µg/kg), or that areas with higher TCE concentrations were not sampled in 2012.

Lithologic logs for CPT-21, MW-43S, and MW-39S indicate thick subsurface clay downgradient of Pond 1 (Figure 6-8). Although groundwater-elevation contours suggest that water from Pond 1 may be infiltrating to the subsurface, organic matter in pond sediments and the thick layer of dense clay underlying the pond likely inhibit any significant movement of VOCs to groundwater. This is confirmed by TCE concentrations in samples from CPT-21 (maximum TCE detection of 1 microgram per liter (µg/L), with most samples registering as non-detect), MW-43S (TCE not detected), and MW-39S (TCE at 5 µg/L) (see Figures 6-4, 6-5, and 6-8).

The PHA is northwest of and adjacent to Pond 1. TCE in surface soil has only been detected in this area at low concentrations, or not at all (Figure 6-1). Therefore, surface soil at the PHA does not appear to represent a TCE source. However, TCE has been detected at elevated concentrations in shallow subsurface soil (Figure 6-2) at depths of four feet (2,000 µg/kg at PHA-SB4-4 and 420 µg/kg at PHA-SB1-4), nine feet (4,000 µg/kg at PHA-SB3-9 and 1,800 µg/kg at MW42-0910), and 12 feet (2,000 µg/kg at PHA-SB2-12). As shown in Figure 6-3, TCE was not detected in deep subsurface soil samples at borings DR-SB-7 (16 and 20 feet), DR-SB-17 (19-feet), DR-SB-10 (24 feet), or MW-42-3435 (34–35 feet).

Figures 6-4, 6-8, and 6-11 show groundwater TCE concentrations of 120 µg/L (well DMW-9S) and 1,900 µg/L (CPT-16) in the upper surficial-aquifer. As shown in Figures 6-5 and 6-6, wells DMW-9I and DMW-9D have TCE concentrations of 1,000 µg/L and 2,600 µg/L, respectively; TCE concentrations at CPT-16, CPT-17, and CPT-19 are all less than 3,000 µg/L. These concentrations do not exceed the groundwater TCE-DNAPL threshold ($C_{i(1\%)}$) of 11,000 µg/L, and do not indicate TCE DNAPL in the surficial aquifer in the PHA area. However, high concentrations of *cis*-1,2-DCE and vinyl chloride (VC) at these locations suggest a possible upgradient (i.e., southwest) source of TCE DNAPL.

As illustrated in Figures 6-3, 6-4, and 6-8, TCE concentrations at CPT-03 (53,000 µg/L at 20 feet), well DMW-11S (16,000 µg/L at approximately 15 feet), and DPT-34 (16,000 µg/L at 40 feet) indicate the possible presence of TCE DNAPL in the upper and intermediate surficial-aquifer. The highest TCE concentrations at these three locations appear to be contained within fine-grained silts and clays of the upper surficial-aquifer (Figure 6-8). Groundwater contours in Figures 6-4 through 6-6 indicate that CPT-16 and DMW-9S/I/D are hydraulically downgradient of DPT-34, and are likely receiving dissolved-phase TCE from the TT Median area, rather than subsurface soil TCE at the PHA. The dissolved-phase TCE appears to be moving within the more permeable sands west and north of Pond 1, and around the low permeability clay found near Pond 1. As shown in Figures 6-6 and 6-8, concentrations of TCE at DMW-9D, MW-20D, MW-26D, MW-18D, DMW-3D, and DMW-2B do not indicate DNAPL in the lower surficial-aquifer at the PHA, Pond 1 area, and area east of Pond 1.

6.1.2 Taxiway Tango Median Anomaly Area

The TT Median Area is an open grass area that runs parallel to and between the airport runway on the west and Taxiway Tango to the east. It also includes areas underneath the taxiway and runway, and areas west of the runway (Figure 6-1). As shown in Figure 6-1, TCE was either not detected (e.g., samples DR-SB-32-02, DR-SB-34-02, TT-EX3-T15D-2) or was detected at low concentrations in surface soil (e.g., DR-SB-3-SS) in this area. Therefore, surface soil at the TT Median Area does not appear to represent a TCE source. However, TCE was detected at elevated concentrations in shallow subsurface soil (Figure 6-2) at depths of 10 feet (7,680 µg/kg at MIP-58-SS-10), six feet (1,300 µg/kg at DR-A-52-06, and 1,200 µg/kg at DR-A23), five feet (6,200 µg/kg at DR-A-62-05, and 1,300 µg/kg at DR-A-53-05), and four feet (1,300 µg/kg at DR-A-54-04, and 550 µg/kg at TT-EX2-T11A-4). As shown in Figure 6-3, TCE concentrations are also moderately high in two deep subsurface soil samples collected from 18 feet (4,240 µg/kg at MIP-58-SS-18) and 20 feet (315 µg/kg at MIP-61-SS-20). Concentrations in these samples indicate only residual (i.e., sorbed) TCE contamination in soil, and do not indicate DNAPL (i.e., TCE free product).

As shown in Figures 6-4, 6-5, and 6-8, groundwater TCE concentrations at well DMW-11S, CPT-03, (in the upper surficial-aquifer in the TT Median Area), and DPT-34 (intermediate surficial-aquifer) are 16,000, 53,000, and 16,000 µg/L, respectively. These TCE concentrations exceed the TCE $C_{i(1\%)}$ (11,000 µg/L) and indicate that TCE DNAPL is likely present. Results for CPT-01, CPT-02, CPT-04, CPT-05, MIP-58 (at a 9–11 foot depth), and MIP-61 (at a 13–15 foot depth) indicate that the possible DNAPL area is limited laterally to the north, south, and west. DNAPL is not indicated in the lower surficial-aquifer zone (Figures 6-6, and 6-8) in this area.

As shown in Figures 6-4 through 6-8, surrounding wells MW-38S, MW-37S, MW-25S/I, MW-26S/I/D, DMW-10S/I, MW-3, MW-22I/D, DMW-1S, and MW-21I/D have TCE concentrations well below the threshold level (11,000 µg/L). These results indicate that DNAPL is likely restricted to the upper clay-rich portion of the surficial aquifer near CPT-03 and well DMW-11S, and the clay-rich soils of the intermediate surficial-aquifer near DPT-34.

More than 20 feet of clay beneath well DMW-11S (Figure 6-8) probably limits TCE detected in groundwater at this location to the immediate vicinity of this well. Permeability tests (i.e., slug tests) on wells DMW-11S and DMW-11I show low hydraulic conductivities, ranging from

0.50 feet per day (ft/day) at DMW-11S to 0.90 ft/day at DMW-11I. Although the wells were screened in silty-clay and sand, test results primarily reflect the response of the sand layers. Therefore, the silty-clay underlying DMW-11S is expected to have a substantially lower permeability than is indicated by these wells.

6.1.3 Taxiway Tango Area East—Open Burning Area and Former Pit—Features #44 and #15

Southeast of DMW-11S, TCE concentrations in groundwater (Figures 6-4, 6-5, 6-9, and 6-11) exceed the DNAPL threshold (11,000 µg/L) at PA-7 (220,000 µg/L at 15 feet), MW-45S (52,000 µg/L at 15–25 feet), CPT-08 (40,000 µg/L at 30 feet), and MIP-30 (13,000 µg/L at 31-33 feet). TCE concentrations at CPT-08 (9,700 µg/L at 35 feet) and MIP-26 (8,000 µg/L at 44-46 feet) are slightly less than the TCE-DNAPL threshold. Samples with high TCE concentrations at CPT-08 (35 feet), MIP-30 (31–33 feet deep), MIP-26 (44–46 feet deep), and DMW-1A (45–55 feet) are from the intermediate surficial-aquifer zone. Results for CPT-07, CPT-09, CPT-10, and DPT-35 and surrounding wells DMW-1B (screened below DMW-1A), MW-23S/I/D, DMW-1S, MW-21I/D, DMW-8S/I/D, MW-2, and MW-19I/D indicate that the TCE DNAPL area is localized near MW-45S/CPT-08, PA-7, and MIP-30. TCE concentrations in the lower surficial-aquifer zone (Figures 6-6 and 6-9) do not indicate the likely presence of DNAPL.

6.1.4 Drum Area and Feature #51

The DA is in the southern portion of the DRA, east of Taxiway Tango (Figure 6-1). A group of deteriorated drums was discovered at this location in 1996 during preliminary environmental investigations at the DRA (Maryland Environmental Service, 1996). Trenches were subsequently excavated and soil samples were collected for chemical analyses. The drums were discovered at the surface, so any possible soil contamination is likely to have occurred through leaking, spilling, or direct disposal to the ground. East of the DA between wells DMW-7S/I/D and DMW-5S/I/D is a large, northwest–southeast trending fill area where up to 11 feet of fill and debris were encountered in test pit excavations. Materials found there include 55-gallon drums, metal scraps, glass, burned materials, plastic, wood, and vehicle parts.

As shown in Figure 6-1, elevated TCE concentrations in DA surface soil samples range from 1,900 to 7,000 µg/kg. The higher concentrations of TCE follow a northwest–southeast linear path running along sampling locations DA-NC-4-1 (6,500 µg/kg), DA-T2-1-2 (7,000 µg/kg),

DA-T2-2-2 (7,000 µg/kg), DA-T2-3-2 (5,100 µg/kg), and DA-T4-3-2 (5,900 µg/kg). These concentrations are nearly two orders of magnitude (i.e., 100 times) less than the soil-TCE C^T concentration (553,000 µg/kg) and therefore do not indicate DNAPL, but instead indicate TCE sorbed to soil. However, these elevated concentrations may be a continuing source of TCE contamination in soil and groundwater in the DA. The extent of the TCE contamination in surface soil here has not yet been fully delineated, particularly in areas northwest, north, east, and southeast of the sampled area.

Shallow subsurface soil samples (between two and 15 feet deep) show sorbed TCE at depth, but at concentrations lower than surface soil samples (Figure 6-2). Higher TCE concentrations in the shallow subsurface soil in the DA range from 1,500 µg/kg (test pit DR-A39) to a maximum of 68,000 µg/kg at well MW-40S/I (4–6 foot depth). Although this area has fewer shallow subsurface-soil sampling locations than surface-soil sampling locations, sampling results indicate that TCE distribution in both soil zones is the same. TCE (865 µg/kg) has been detected in soil 35 feet deep south of wells DMW-7S/I/D at MIP-55 (Figure 6-3). However, TCE concentrations are 220 µg/kg or less in deep subsurface soil north and southwest of wells DMW-7S/I/D. Except for two samples collected from well boring MW-40S/I in 2012 (samples collected at 22–24 feet and at 30–32 feet depths), deep subsurface soil samples (depths greater than 15 feet) have not been collected below the DA trench samples.

Figures 6-4, 6-10, and 6-12 show groundwater TCE concentrations exceeding the TCE $C_{i(1\%)}$ (11,000 µg/L) in the upper surficial-aquifer at CPT-13 (17,000 µg/L), DPT-41 (28,000 µg/L), DA-1 (12,000 µg/L), and at DA-3 through DA-7 (ranging from 33,000 µg/L to 130,000 µg/L). The maximum TCE concentration in these groundwater samples is DA-7 (130,000 µg/L), collected from 26 feet below grade east of the DA trenches and excavation. As shown in Figure 6-5, TCE was also detected in groundwater at concentrations greater than DNAPL threshold concentration at DA-8 (70,000 µg/L) and MIP-28 (68,600 µg/L). DA-1 through DA-14 were collected at depths ranging from 15 feet (DA-2) to 28 feet bgs (DA-5, DA-8, DA-10, DA-11, and DA-14). MIP-28 was collected from 34 to 36 feet below grade. Lower TCE concentrations (below $C_{i(1\%)}$) were detected at DMW-7S (4,700 µg/L) screened 19–29 feet bgs, and at DA-9 (7,300 µg/L), screened at 44–54 feet below grade.

TCE concentrations recorded before 2005 at DMW-7S and before 2004 at MW-5 consistently exceeded 11,000 µg/L. These results support the possible presence of DNAPL in groundwater at the DA. Sampling results indicate that DNAPL in the upper surficial-aquifer may extend from the trench area west of sampling location DA-1 to the area between DA-6 and DA-9, several hundred feet northeast of DA-1.

As shown in Figures 6-4 through 6-6, surrounding wells MW-2, MW-19S/I, DMW-8S/I/D, DMW-5I/D, DMW-6S/I/D, and MW-32S/I exhibit TCE concentrations well below the TCE-DNAPL threshold-concentration (11,000 µg/L). Groundwater results indicate that DNAPL may be extensive in the upper surficial-aquifer, but it is likely restricted to the upper portion of the surficial aquifer in this area. TCE concentrations in the DA are shown in cross-section in Figures 6-10 and 6-12. The cross-sections show residual concentrations of TCE in unsaturated-zone soil at the DA, south of well DMW-7S. However, TCE groundwater concentrations in areas southwest and northeast of well DMW-7S indicate possible DNAPL.

TCE concentrations of 2,300 µg/L (DA-12), 8,780 µg/L (MIP-41, at 24 to 26 feet), and 7,500 µg/L (DMW-5S) do not support the presence of DNAPL (Figure 6-4). Wells DMW-7S and DMW-5S appear hydraulically connected via a three- to six-foot-thick sand layer at the base of both wells (Figure 6-10). This sand layer is underlain by 2.5 to nine feet of clay that is expected to attenuate downward TCE movement into the intermediate and lower surficial-aquifer zones. Substantially lower concentrations of TCE in groundwater at DMW-7I/D, CPT-13, DPT-41, DMW-5I/D, and MIP-41 (39–41 foot depth) appear to confirm this (see Figures 6-5, 6-6, and 6-10).

6.1.5 Taxiway Tango Area North—Former Ammunition Bunkers—Features #20 and #26

Soil samples were collected in the northwestern area of the DRA (e.g., DR-SB-26, DR-SB-27, DR-SB-28, DR-A-49, DR-A-66, DR-SB-187, etc.) during recent investigations (Figures 6-1 through 6-3). These samples were collected because TCE was detected in soil-gas samples collected in 2010 and in newly installed wells (MW-33S and MW-34S/I) in this area. A recent aerial photograph review indicates that two former ammunition bunkers were in TT North in the 1950s. The two former bunkers were in areas shown in Figures 6-1 through 6-3 as features #26 and #20; the exact locations of the former bunkers are uncertain. Soil boring DR-SB-6 was advanced near feature #26, and soil boring DR-SB-5 and test pit DR-A-49 are near feature #20.

Well MW-36S is hydraulically upgradient of feature #20, whereas wells MW-33S/I are probably almost directly downgradient of feature #20. Well MW-33S had a concentration of TCE in groundwater of 110 µg/L in 2012. Wells MW-34S/I and MW-35S are considered cross-gradient of feature #26.

TCE was detected in this area in only one surface soil sample (DR-SB-29-02), at a trace concentration of 12 µg/kg (see Figure 6-1). As shown in Figure 6-2, TCE was detected at a concentration of 11,000 µg/kg in soil at a depth of 10 feet in sample DR-SB-27-10 (see northwestern contours in Figure 6-2), at 1,100 µg/kg at 14 feet deep in sample DR-SB31-14, and 3,300 µg/kg at 18–20 feet deep in sample DR-SB187-18–20. TCE was not detected or was detected at low concentrations in surrounding soil samples collected at this depth (e.g., DR-SB-6-11, DR-SB-29-10, DR-SB-30-08, DR-SB-26, and DR-SB-28-10).

Considering the general configuration of these former features, soil borings DR-SB-27 and DR-SB-31/DR-SB-187 are similarly arranged. The TCE concentrations detected in soil samples at these boring locations (11,000 µg/kg at DR-SB-27, 1,100 µg/kg at DR-SB-31, and 3,300 µg/kg at DR-SB-187) may well represent the actual previous locations impacted by past operations at these former features. Figures 6-4 through 6-6 show low concentrations of TCE in groundwater at CPT-18, DPT-31, and surrounding wells MW-33S/I, MW-35S, and MW-36S. However, higher TCE concentrations were detected in groundwater east of Taxiway Tango at DPT-33 (9,900 µg/L) and DPT-30 (1,000 µg/L). The concentration of 9,900 µg/L in the intermediate aquifer zone at DPT-33 indicates this area or nearby areas as a TCE source and location for possible TCE DNAPL.

6.1.6 Area East of Pond 1 and Former Pond 7 (Feature #42)

Feature #42 was interpreted in the 2012 aerial photograph study as a pond or pit near Frog Mortar Creek (Tetra Tech, 2013a); it is currently a wetland area. This pond was observed in a 1957 aerial photograph; before 1957, feature #42 appears in photographs as the lowest point in the larger fill area of (former) Limehouse Cove, so water in this area may have ponded near the earthen berm. Photographs do not indicate dumping here, but chemical dumping and backfilling with debris have historically occurred in the DRA; therefore, dumping of chemicals in this area cannot be ruled out. Furthermore, because this area was the lowest point near (former)

Limehouse Cove in the 1950s, liquids released to the larger fill area that did not infiltrate locally into the ground may have accumulated there.

Analytical results for surface and shallow-subsurface soil samples and sediment samples collected east of Pond 1 near former Pond 7 and the current wetland do not indicate a soil-based source of TCE east of Pond 1 (Figures 6-1 and 6-2). TCE (2,500 µg/kg) detected in deep subsurface soil (20 feet deep) at MIP-51, approximately 200 feet east of Pond 1, was well below the DNAPL threshold. TCE (3.7 µg/kg) in a sample collected at a 40-foot depth is substantially lower. These two samples were collected in the saturated zone, and likely represent concentrations in groundwater rather than TCE sorbed to soil.

Farther east and hydraulically downgradient of well DMW-9S and Pond 1 (Figure 6-5), several intermediate surficial-aquifer wells have TCE concentrations at or near $C_{i(1\%)}$ (11,000 µg/L), possibly indicating DNAPL in these areas: MW-18I and DMW-2A (both at 11,000 µg/L) and DMW-3I (10,000 µg/L). Groundwater data collected in 2013 (Figures 6-4, 6-5, and 6-13) indicate that elevated TCE concentrations extend farther east to DPT-24 (17,000 µg/L), DPT-25 (25,000 µg/L), and DPT-26 (26,000 µg/L). These results (Figure 6-13) indicate a wider TCE source area in the intermediate surficial-aquifer at DPT-25 and upgradient of DPT-25.

Groundwater elevation contours in Figures 6-4 and 6-5 show that wells MW-18S/I, DMW-3S/I, and DMW-2S/A are hydraulically downgradient of the PHA, well DMW-9S, and Pond 1. TCE results at CPT-21, well MW-43S, and well MW39S, directly downgradient of Pond 1 (Figures 6-4, 6-5, and 6-12), indicate only trace to low VOC concentrations in groundwater. Farther east, at MIP-51, groundwater samples collected at depths of 19–21 feet (upper surficial-aquifer) and 39–41 feet (intermediate surficial-aquifer) had TCE concentrations of 305 µg/L and 1,485 µg/L, respectively. TCE concentrations in these samples do not support the presence of DNAPL in the upper surficial-aquifer between Pond 1 and DMW-3S/I/D and DMW-2A. TCE detected in wells MW-18S/I, DMW-3S/I, and DMW-2S/A appears to be from a source other than Pond 1 or the area east of Pond 1.

6.1.7 Former Pond 3—Feature #2

CPT-22 was advanced in 2012 and DPT-43 and DPT-43B were advanced in 2013 in an area southeast of Pond 1 that had been indicated as a third pit or pond in historical aerial photographs

and topographic maps (Tetra Tech, 2013a). Interviews conducted during the 1989 preliminary assessment indicated that a third pit had been used to dump wastes; however, the third pit was not found during the preliminary assessment site visits (MDE, 1989). TCE (11,000 µg/L) in groundwater at well DMW-2A, hydraulically downgradient of the former Pond 3 area (see Figures 6-5, 6-9, and 6-12), indicates the possible presence of TCE DNAPL. A groundwater sample collected from the intermediate surficial-aquifer at MIP-26 (near former Pond 3) had a TCE groundwater concentration of 8,000 µg/L, a concentration slightly below the TCE-DNAPL threshold (11,000 µg/L), also indicating possible TCE DNAPL in this area.

As shown in Figures 6-1 through 6-3, soil samples have been collected around, but not in, former Pond 3 (feature #2). The lithologic log for CPT-22 (Figure 6-12) indicates mostly clay from 10 to 20 feet below grade. Below 20 feet, sand and silt mixtures are common. Thinner clay layers occur at approximate depths of 22 feet and 30–32 feet bgs. cVOCs were detected in most groundwater samples collected between 20 and 40 feet deep at CPT-22 (40 feet was the deepest sample collected due to probe refusal, and concentrations increased with depth (Figure 6-12). The maximum TCE concentration (140 µg/L) at CPT-22 was detected in the intermediate surficial-aquifer at 40 feet. Lithology could not be logged and groundwater samples could not be collected below 38 feet at CPT-22 due to probe refusal. However, materials logged at the bottom of the boring, near the depth of the maximum TCE concentration (140 µg/L), are silt mixtures, stiff sand to clayey sand, and very stiff fine-grained material (Figure 6-12).

Additional DPT groundwater samples at DPT-43 and DPT-43B were collected in 2013 near former Pond #3. TCE was detected at concentrations of 490,000 µg/L and 22,000 µg/L at DPT-43 (depth of 35 feet) and at DPT-43 (depth of 20 feet), respectively (Figures 6-4, 6-5, and 6-9). Groundwater sampling results from these two locations had TCE concentrations above the groundwater threshold (11,000 µg/L) in both the upper (DPT-43B) and intermediate (DPT-43) portions of the surficial aquifer.

6.2 BTEX SOURCE AREA EVALUATION

Figures 6-14 through 6-16 are contour maps of benzene, toluene, ethylbenzene, and xylenes (BTEX) in soil for the three soil-depth categories of surface soil (zero to two feet bgs), shallow subsurface soil (between two and 15 feet bgs), and deep subsurface soil (greater than 15 feet bgs), respectively. Figure 6-14 also includes BTEX results for the shallow sediment samples

collected from Ponds 1 and 2. Figures 6-17 through 6-19 are contour maps of BTEX groundwater concentrations and groundwater potentiometric surfaces (i.e., groundwater flow potential) for the upper, intermediate, and lower surficial-aquifer zones, respectively. These figures include chemical results from samples collected in 2000 (e.g., soil samples and one-time probe groundwater samples) through 2013. In these figures, horizontal groundwater flow is assumed perpendicular to the blue groundwater-elevation contour lines.

Figure 6-20 is a hydrogeologic cross-section through the TT Median Area, the PHA, Pond 1, and the area east of Pond 1. Figure 6-21 is a hydrogeologic cross-section through the TT Median Area, TT East, and the southern portion of the area east of Pond 1 at wells DMW-2S/A/B. Figure 6-22 is a hydrogeologic cross-section through the DA and a thick fill area near well cluster DMW-5S/I/D. Figure 6-23 is a hydrogeologic cross-section along the line of new wells (MW-46S/I/D to MW-51S/I/D) and DPT-29. These figures are referenced in the following discussion.

Figures 6-13 through 6-22 show the following areas and environmental media as possible BTEX sources:

- *PHA, Pond 1*—surface sediment/subsurface soil, groundwater
- *TT Median Area*—subsurface soil, groundwater
- *TT East—former open burning and pit (features #44 and #15)*—subsurface soil, groundwater
- *Drum Area (feature #51)*—groundwater
- *DMW-4 former debris pile area (feature #50)*—soil; groundwater is unknown

6.2.1 Petroleum Hydrocarbon Area and Pond 1

Highly elevated BTEX concentrations have been detected in Pond 1 shallow sediments (Figure 6-14) and in intermediate subsurface soil (Figure 6-15). Sediment samples from Pond 1 contain the second highest levels of BTEX detected in sediment or soil at the DRA, with BTEX concentrations ranging from 1,942 µg/kg at EP1-SD4 (2005) to 567,000 µg/kg at EP1-SD9 (2012). As shown in Figure 6-13, the highest BTEX concentrations are in sediment samples collected in the center and at the southern end of the pond. High concentrations of BTEX were also found in deeper 1–2 foot samples. Benzene (16–230 µg/kg) was detected in six samples in

2012; however, high levels of benzene isomers, such as 1,2,4-trimethylbenzene (up to 31,000 µg/kg), chlorobenzene (up to 11,000 µg/kg), and 1,2,3-trimethylbenzene (up to 11,000 µg/kg), were also detected.

The PHA is northwest and adjacent to Pond 1. BTEX were either not detected or were detected at low concentrations in PHA surface soil (Figure 6-14). Therefore, surface soil at the PHA does not appear to represent a BTEX source. However, BTEX was detected at elevated concentrations in numerous shallow subsurface soil samples (Figure 6-15) at depths of four feet (200,380 µg/kg at PHA-SB4-4) to 12 feet (100,200 µg/kg at DR-SB-2).

The highest reported concentration of BTEX in soil at the PHA (2,138,900 µg/kg) was detected in a sample collected from test pit DR-A33 (six-feet deep). Soil boring PHA-SB-1 (Figure 6-15) was advanced adjacent to the 1996 soil boring B-15, where free product had been observed at four to seven feet, and a field VOC reading of 9,300 parts per million had been recorded for soil at six feet below grade. BTEX (1,470 µg/kg) were detected adjacent to boring B-15 in sample PHA-SB-1–4 (Figure 6-14), collected at a depth of four feet bgs. Many elevated BTEX concentrations are near the water table, including the sample from DR-A33. As shown in Figure 6-16, BTEX were detected at low concentrations (2.97-20.47 µg/kg) in deep subsurface soil samples at borings DR-SB-7 (16 and 20 feet), boring DR-SB-17 (19 feet), boring DR-SB-10 (24 feet), and boring MIP-25 (40 feet).

The highest BTEX concentrations in groundwater at the PHA are generally in the upper surficial-aquifer samples (e.g., at well MW-42S, the BTEX concentration is 16,699 µg/L [Figure 6-17]). Southwest of DMW-9S, BTEX were detected at concentrations at PA-1 (43,520 µg/L at 12 feet; primarily xylenes at 35,000 µg/L and toluene at 6,800 µg/L), at CPT-16 (6,340 µg/L at 30 feet bgs), at TT-3 (1,300 µg/L at 14.5 feet bgs; toluene only); and at SB-13 (8 µg/L at 28 feet bgs; benzene only). A moderately low BTEX concentration (75.8 µg/L) was detected southeast of DMW-9S and west of Pond 1 at MIP-25 (14–16 feet). BTEX were not detected southeast of the PHA at PA-3 (28 feet) or north of the PHA at well MW-4 (screened from three to 30 feet, with groundwater typically at seven to eight feet). However, BTEX were detected at CPT-03 (32,260 µg/L at 20 feet) and at DPT-34 (37,670 µg/L at 15 feet) on the western and eastern sides of Taxiway Tango (respectively), and appear to be co-mingling with BTEX detected closer to the PHA.

As shown in Figures 6-18 and 6-20, the highest groundwater BTEX concentration (62,300 µg/L) was detected at a depth of 45 feet at CPT-16, and at relatively high concentrations in samples collected from 20–55 feet in the same location (Figure 6-20). As shown in Figures 6-18 and 6-19, the intermediate and deep wells DMW-9I, MW-42I, and DMW-9D, and the intermediate samples at CPT-17 and CPT-19 at the PHA, have BTEX concentrations ranging from 4 µg/L (CPT-17) to 169 µg/L (CPT-19), indicating that high concentrations of BTEX are typically not found at depth near the apparent PHA source area. However, the high BTEX concentrations found at depth in CPT-16 appear to contradict this trend.

In surrounding wells (MW-4, MW-26S/I/D, DMW-10S/I, and DMW-20S/I/D) and CPT samples, BTEX were either not detected or were detected at low concentrations (range of 4.38-66.8 µg/L). Farther east and hydraulically downgradient of well DMW-9S and Pond 1, upper surficial-aquifer groundwater samples PA-12, PA-13, CPT-20, and CPT-21, and wells MW-39S, DMW-3S, and DMW-2S (Figure 6-14) all have lower BTEX concentrations (range is 2-44 µg/L). As shown on Figures 6-18 and 6-19, BTEX were not detected in other downgradient wells (DMW-3I/D, MW-18S/I/D, DMW-2A and DMW-2B).

The PHA and Pond 1 BTEX sediment concentrations in cross-section (Figure 6-20) show high concentrations detected in the unsaturated and saturated zones. As described above, the highest BTEX concentrations in groundwater (62,300 and 43,520 µg/L) were found at CPT-16 and PA-1, southwest of well DMW-9S. High BTEX concentrations were not found in the deeper wells (DMW-9I and DMW-9D) of that well cluster, or at any of the surrounding well locations.

6.2.2 Taxiway Tango Median Anomaly Area

As mentioned previously, the TT Median Area is the open grass area that runs parallel to and between the airport runway on the west and Taxiway Tango to the east. It also includes areas underneath the taxiway and runway, and areas west of the runway. As shown in Figure 6-14, BTEX were not detected or were detected at low concentrations in surface soil in this area. Although sampling coverage is sparse, surface soil at the TT Median Area does not appear to represent a BTEX source.

BTEX was detected at elevated concentrations in shallow subsurface soil at the TT Median Area at depths up to 10 feet at TT-EX11 and TT-EX2 (see Figure 6-14). The highest detected BTEX

concentration (2,348,720 µg/kg) is in sample TT-EX2-T1-5 (Excavation 2), collected from a depth of five feet. Few deeper subsurface soil samples (greater than 15 feet bgs) were collected in the TT Median Area (Figure 6-15), but moderate BTEX concentrations were detected in the few collected: 6,997 µg/kg at MIP-58 (18 feet), and 931 µg/kg at MW41 (24-26 feet). MIP-58 is between TT-EX2 (Excavation 2) and TT-EX3 (Excavation 3).

As shown in Figures 6-17 to 6-20, BTEX in the TT Median Area have substantially affected shallow groundwater in the upper surficial-aquifer at CPT-03 (32,260 µg/L), MIP-58 (5,224 µg/L, at 9–11 feet), TT-1 (762 µg/L), well DMW-11S (550 µg/L), and MIP-61 (317 µg/L, at 13–15 feet). Toluene is the predominant BTEX component detected in MIP-58 and MIP-61, and is the only BTEX component detected at DMW-11S. Low concentrations of BTEX were also detected at MW-23S and DMW-1S, southeast of DMW-11S and MW-26S. BTEX at CPT-03 appear to co-mingle with BTEX downgradient and to the northeast at probe sample TT-3 and near CPT-16/MW-42S/I.

6.2.3 Taxiway Tango Area East—Former Open Burning Area and Pit—Features #44 and #15

Southeast of DMW-11S, soil samples were collected near wells DMW-1A and DMW-1B in an area now designated TT East. Historically, BTEX have been detected in groundwater wells DMW-1A/B, east of Taxiway Tango; however, the BTEX source was unknown. Recent historical research indicates that open burning was done near DMW-1A/1B in 1952, and that in 1955 a pit was northeast of DMW-1A/1B (Tetra Tech, 2013a).

Samples DR-SB-12-5 and DR-SB-12-9 (collected near well DMW-1A/B) indicate BTEX in shallow subsurface soil at depths of five to nine feet. A sample collected from eight feet deep at test pit A27 (excavated near DR-SB-12) had a BTEX concentration of 506,700 µg/kg, corroborating the results of samples DR-SB-12-5 and DR-SB-12-9. Northeast of test pit A27, BTEX were detected at high concentrations in the soil boring for well MW-41S/I. BTEX were also detected in soil samples at concentrations greater than 1,000 µg/kg in test pit soil samples from DR-A-60 and DR-A-61 near Taxiway Tango.

Soil sampling results confirm that petroleum hydrocarbons are in the TT East area, and are likely responsible for BTEX in groundwater detected in temporary-well samples PA-7 and TT-5 (which had a chlorobenzene concentration of 50,000 µg/L), and in groundwater samples from CPT-08,

MIP-30, MIP-26, MW-45S, MW-41S/I, DMW-1A, and DMW-1B (Figures 6-17 through 6-19 and 6-21). Although deep subsurface soil samples have not been collected near well DMW1A/1B, soil samples DR-MW-41-2426 and MIP-30-SS-20, collected at depths of 24–26 and 20 feet, respectively, indicate residual levels of BTEX (931 µg/kg and 84.6 µg/kg, respectively) in deep subsurface soil.

6.2.4 Drum Area and Feature #51

BTEX were not detected in most DA soil samples, and detected BTEX concentrations in surface, shallow subsurface, and deep subsurface soil in the DA (Figures 6-14 through 6-17 and 6-22) do not indicate a significant soil-based BTEX source. The maximum BTEX concentration (110 µg/kg) detected in the DA was in a soil sample (DR-SB-14 at 15 feet) adjacent to wells DMW-7S/I/D (Figure 6-15). As shown in Figure 6-17, BTEX were detected at moderate to high concentrations in the upper surficial-aquifer at DA-6 (26,200 µg/L), MIP-28 (4,632 µg/L), DA-7 (1,820 µg/L), DA-5 (1,700 µg/L), DPT-41 (1,700 µg/L), and DA-8 (580 µg/L). These samples were collected in 2001-2002 (DA samples), 2007–2008 (MIP sample), and 2013 (DPT-41). Samples collected from multiple depths at CPT-11 through CPT-15, DPT-40, DPT-42, and at wells DMW-7S and MW-40S (area of DA-7) indicate substantially lower BTEX concentrations in the upper surficial-aquifer, ranging from 63 µg/L (at DMW-7S) to 250 µg/L (at CPT-13 at 25 feet bgs).

Except for the BTEX concentration (27 µg/L) at MW-40I, only trace concentrations were detected in intermediate and lower surficial-aquifers wells (1.2 µg/L at DMW-7I [Figure 6-18], and not detected at DMW7D [Figure 6-19]). BTEX were not detected in the DA trench area (DA-1, DA-2, and DA-3), or south of the DA (MIP-55 and MIP-36). However, the analytical detection limits for DA-1 and DA-3 were elevated; therefore, moderate concentrations of 500-2,500 µg/L (the range of sampling detection limits) for each BTEX component would not have been detected in these two samples.

As shown in Figure 6-22, wells DMW-7S and DMW-5S appear hydraulically connected via a three-to six-feet-thick sand layer at the base of both wells. BTEX were detected hydraulically downgradient of the DA in upper surficial-aquifer samples DA-9 (590 µg/L), DA-12 (2,200 µg/L), and MIP-41 (10.4 µg/L at 24–26 feet). However, BTEX were not detected downgradient in upper surficial-aquifer wells DMW-5S and MW-50S (although trace

concentrations [below 1 µg/L] were detected at DPT-28). The upper surficial-aquifer sand layers at wells DMW-7S, DMW-5S, and MW-50S are underlain by 2.5–9 feet of clay, which are expected to attenuate the downward movement of BTEX to the intermediate and lower surficial-aquifer zones. This is confirmed by low BTEX concentrations at DMW-5I/D and MW-50I/D, and the substantially lower BTEX concentrations (less than 1 µg/L) at DMW-7I/D and MIP-41.

6.2.5 DMW-4 Former Debris Pile Area—Feature #50

Feature #50 is an area of former fill or debris piles visible in a 1956 oblique aerial photograph used in the 2012 historical aerial photograph study (Tetra Tech, 2013a). The piles appear to be adjacent to dump-truck-sized mounds. The piles covered a large area and were possibly later used during grading and construction of Taxiway Tango. This former feature is in the area of present-day monitoring wells DMW-4S/I/D.

Test pits advanced west of this area in 2012 (DR-A-67 through DR-A-75) and previous soil boring samples (DR-SB-22) indicated elevated BTEX and chlorobenzene concentrations in soil in this area (Figures 6-14 through 6-17). Chlorobenzene (830,000 µg/kg) was detected in a soil sample collected at a depth of seven feet in test pit DR-A-74, located east of the DRA unpaved roadway. BTEX were also detected in the seven-foot sample (129,000 µg/kg), and at 10 feet (37,700 µg/kg) at DR-A-74.

BTEX (182,250 µg/kg) were also detected at a depth greater than 15 feet at test pit DR-A-68, located east of DR-A-74 and approximately 100 feet from wells DMW-4S/I/D. BTEX were detected at low concentrations or were not detected in wells DMW-4S/I/D, MW-49S/I/D, and DPT-27, which appear to be hydraulically downgradient of these test pits (Figures 6-17 through 6-19). Historically, BTEX have not been detected in wells DMW-4S/I/D. Probe groundwater sampling has not been conducted upgradient of these wells.

6.2.6 Former Pond 3—Feature #2

In 2012–2013, CPT-22, DPT-43, and DPT-43B were advanced southeast of Pond 1in an area suspected to be a third pit or pond in historical aerial photographs and topographic maps. Interviews conducted as part of the 1989 preliminary assessment (MDE, 1989) indicate that a third pit was used to dump wastes; however, the third pit was not found during the preliminary assessment site visits. As shown in Figures 6-14 through 6-17, soil samples have been collected

around, but not in, the former Pond 3 area (feature #2). The lithologic log for CPT-22 indicates mostly clay from 10 to 20 feet below grade. Below 20 feet, sand and silt mixtures are common. Thinner clay layers occur at approximate depths of 22 feet and 30–32 feet.

BTEX were not detected in CPT-22 groundwater samples collected in the upper and intermediate surficial-aquifer zones from 20–40 feet (40 feet was the deepest sample collected due to probe refusal). BTEX were also not detected in nearby upper surficial-aquifer well DMW-8S and probe locations PA-8 and PA-13 (Figure 6-17). BTEX were detected only at trace to low concentrations in samples PA-6 (3 µg/L), MIP-26 (1.6 and 216 µg/L), MW-39S (3.15 µg/L), and CPT-21 (2 µg/L).

Additional DPT groundwater samples collected in 2013 at DPT-43 and DPT-43B were near former Pond #3 (Figures 6-17, 6-18, and 6-21). BTEX were detected at concentrations of 11,030 µg/L at DPT-43B (depth of 15 feet) and 2,610 and 3,700 µg/L at DPT-43 (depths of 30 and 40 feet, respectively). Groundwater sampling results from these two locations indicate elevated concentrations of BTEX in both the upper and intermediate portions of the surficial aquifer.

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA TCE in Soils_0 TO 2 FT_2013.mxd)
1/10/2014 --DC

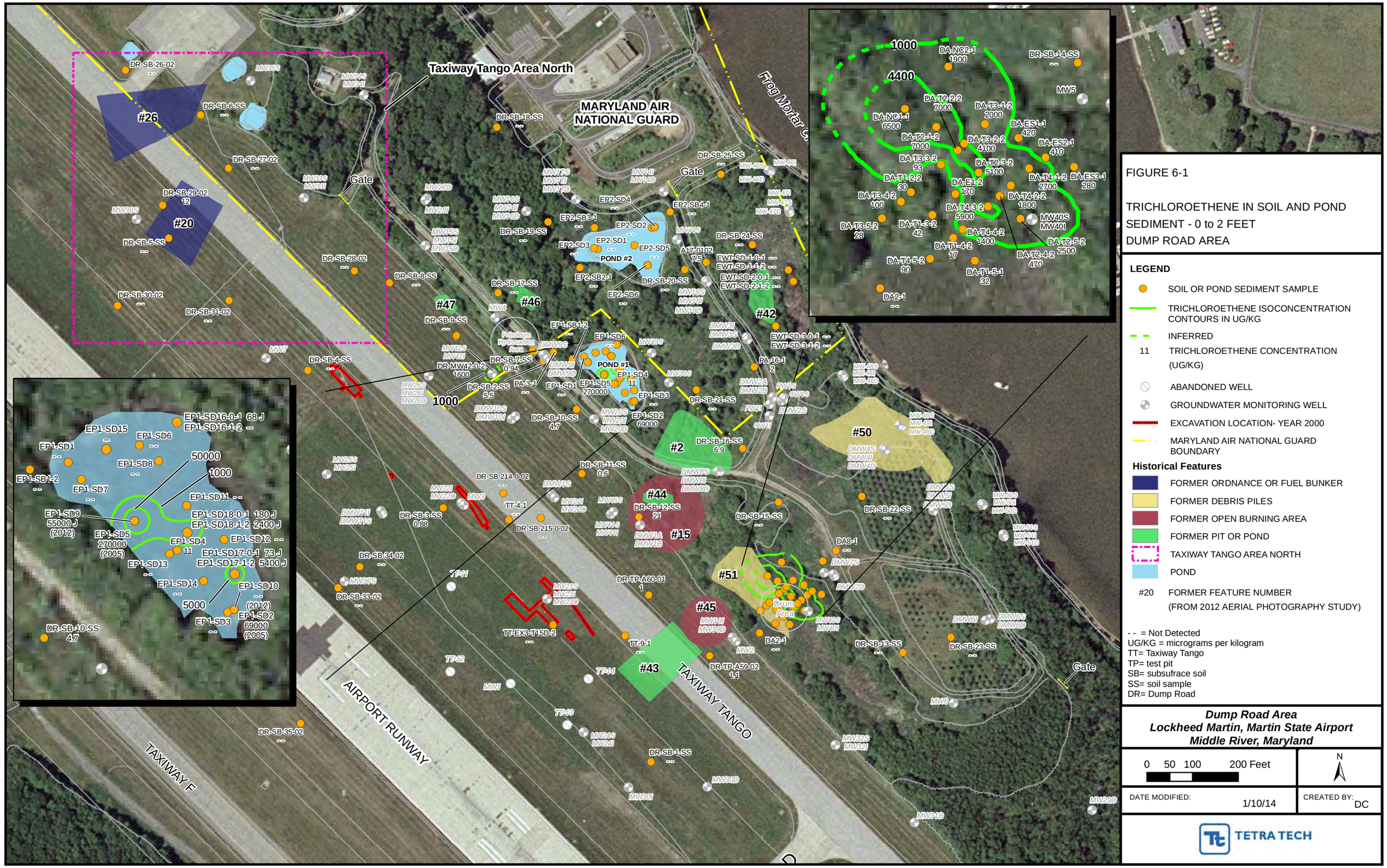

FIGURE 6-1

TRICHLOROETHENE IN SOIL AND POND SEDIMENT - 0 to 2 FEET
DUMP ROAD AREA

LEGEND

- SOIL OR POND SEDIMENT SAMPLE
- TRICHLOROETHENE ISOCONCENTRATION CONTOURS IN UG/KG
- INFERRED
- 11 TRICHLOROETHENE CONCENTRATION (UG/KG)
- ABANDONED WELL
- GROUNDWATER MONITORING WELL
- EXCAVATION LOCATION- YEAR 2000
- MARYLAND AIR NATIONAL GUARD BOUNDARY

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- TAXIWAY TANGO AREA NORTH
- POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

- - = Not Detected
UG/KG = micrograms per kilogram
TT= Taxiway Tango
TP= test pit
SB= subsufrace soil
SS= soil sample
DR= Dump Road

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA TCE in Soils_GT2 FT to 15FT_2013.mxd)
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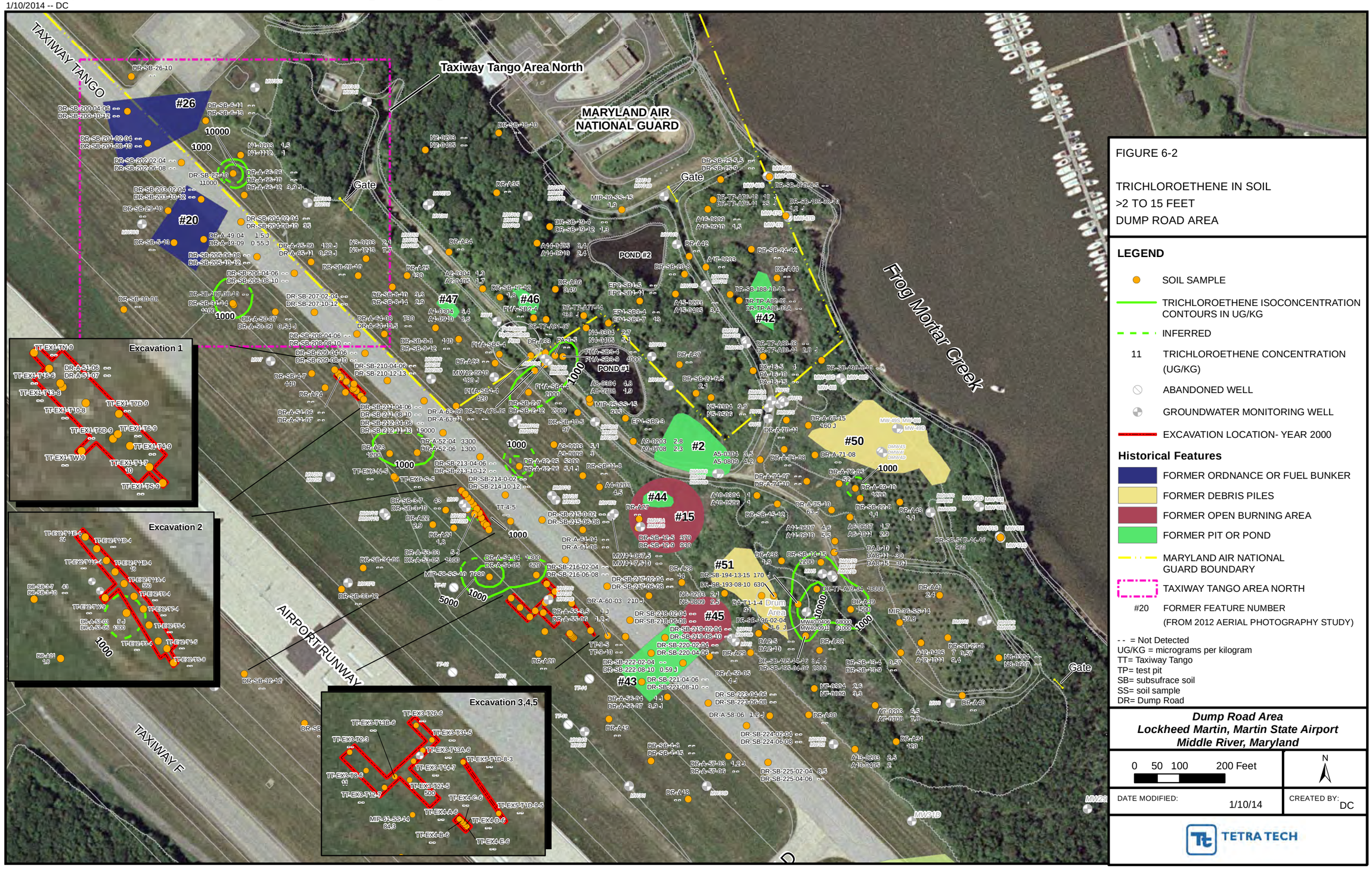

FIGURE 6-2

TRICHLOROETHENE IN SOIL
>2 TO 15 FEET
DUMP ROAD AREA

LEGEND

- SOIL SAMPLE
- TRICHLOROETHENE ISOCONCENTRATION CONTOURS IN UG/KG
- INFERRED
- 11 TRICHLOROETHENE CONCENTRATION (UG/KG)
- ABANDONED WELL
- GROUNDWATER MONITORING WELL
- EXCAVATION LOCATION- YEAR 2000

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- TAXIWAY TANGO AREA NORTH
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

-- = Not Detected
UG/KG = micrograms per kilogram
TT= Taxiway Tango
TP= test pit
SB= subsufrace soil
SS= soil sample
DR= Dump Road

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0 50 100 200 Feet

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FIGURE 6-3

TRICHLOROETHENE IN SOIL
>15 FEET
DUMP ROAD AREA

LEGEND

- SOIL SAMPLE
- TRICHLOROETHENE ISOCONCENTRATION CONTOURS IN UG/KG
- INFERRED
- 11 TRICHLOROETHENE CONCENTRATION (UG/KG)
- ABANDONED WELL
- GROUNDWATER MONITORING WELL
- EXCAVATION LOCATION- YEAR 2000

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- TAXIWAY TANGO AREA NORTH
- POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

-- = Not Detected
UG/KG = micrograms per kilogram
TT= Taxiway Tango
TP= test pit
SB= subsufrace soil
SS= soil sample
DR= Dump Road

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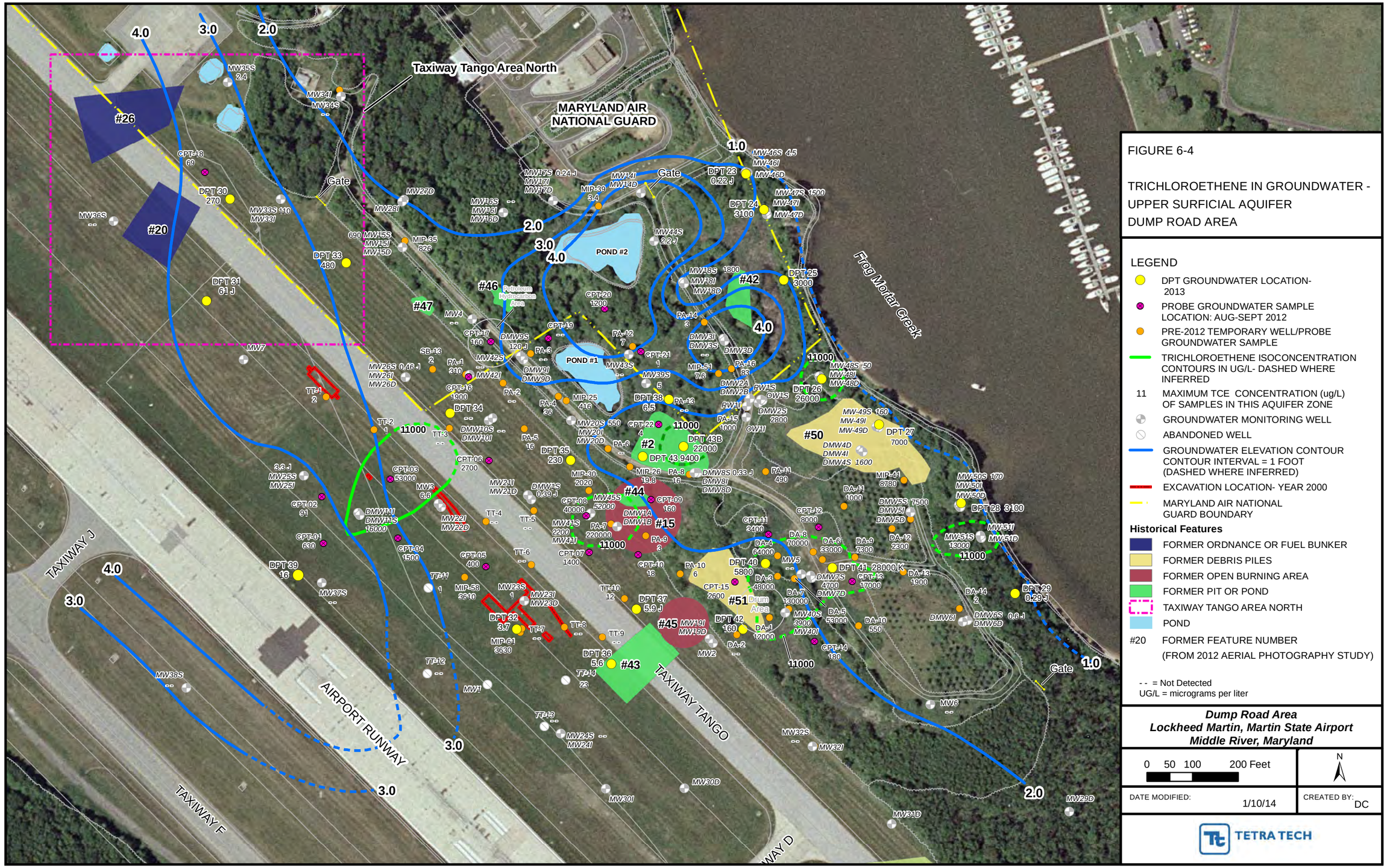

FIGURE 6-4

TRICHLOROETHENE IN GROUNDWATER - UPPER SURFICIAL AQUIFER
DUMP ROAD AREA

LEGEND

- DPT GROUNDWATER LOCATION- 2013
- PROBE GROUNDWATER SAMPLE LOCATION: AUG-SEPT 2012
- PRE-2012 TEMPORARY WELL/PROBE GROUNDWATER SAMPLE
- TRICHLOROETHENE ISOCONCENTRATION CONTOURS IN UG/L- DASHED WHERE INFERRED
- 11 MAXIMUM TCE CONCENTRATION (ug/L) OF SAMPLES IN THIS AQUIFER ZONE
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL = 1 FOOT (DASHED WHERE INFERRED)
- EXCAVATION LOCATION- YEAR 2000
- MARYLAND AIR NATIONAL GUARD BOUNDARY

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- TAXIWAY TANGO AREA NORTH
- POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

-- = Not Detected
UG/L = micrograms per liter

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA TCE GW I_wells 2013.mxd)
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FIGURE 6-5

TRICHLOROETHENE IN GROUNDWATER - INTERMEDIATE SURFICIAL AQUIFER DUMP ROAD AREA

LEGEND

- DPT GROUNDWATER LOCATION- 2013
- PROBE GROUNDWATER SAMPLE LOCATION: AUG-SEPT 2012
- PROBE GROUNDWATER SAMPLE LOCATION: AUG-SEPT 2012
- PRE-2012 TEMPORARY WELL/PROBE GROUNDWATER SAMPLE
- TRICHLOROETHENE ISOCONCENTRATION CONTOUR IN UG/L - DASHED WHERE INFERRED
- 11 MAXIMUM TCE CONCENTRATION (UG/L) OF SAMPLES IN THIS AQUIFER ZONE
- GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL = 0.5 FOOT (DASHED WHERE INFERRED)
- EXCAVATION LOCATION- YEAR 2000
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- TAXIWAY TANGO AREA NORTH
- POND

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

-- = Not Detected
UG/L = micrograms per liter

Dump Road Area
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Middle River, Maryland

0 50 100 200 Feet

N

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA TCE GW D_wells 2013.mxd)
1/8/2014 -- DC



FIGURE 6-6

TRICHLOROETHENE IN GROUNDWATER - LOWER SURFICIAL AQUIFER
DUMP ROAD AREA

LEGEND

- DPT GROUNDWATER LOCATION- 2013
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- 11 MAXIMUM TCE CONCENTRATION (UG/L) OF SAMPLES FOR THIS AQUIFER ZONE
- GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL = 0.5 FOOT (DASHED WHERE INFERRED)
- EXCAVATION LOCATION- YEAR 2000
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- TAXIWAY TANGO AREA NORTH
- POND

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

- - = Not Detected
UG/L = micrograms per liter

Dump Road Area
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0 50 100 200 Feet

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1/7/2014 -- DC

FIGURE 6-7

CROSS - SECTION LOCATIONS
DUMP ROAD AREA

LEGEND

- DPT GROUNDWATER LOCATION- 2013
- SOIL BORING - 2013
- PROBE GROUNDWATER SAMPLE LOCATION: AUG-SEPT 2012
- SOIL OR POND SEDIMENT SAMPLE
- TRICHLOROETHENE ISOCONCENTRATION CONTOURS IN UG/KG
- INFERRED
- 11 TRICHLOROETHENE CONCENTRATION (UG/KG)
- ABANDONED WELL
- GROUNDWATER MONITORING WELL
- A A' CROSS SECTION TRANSECT
- EXCAVATION LOCATION- YEAR 2000
- MARYLAND AIR NATIONAL GUARD BOUNDARY

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- TAXIWAY TANGO AREA NORTH
- POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

- - = Not Detected
UG/KG = micrograms per kilogram
TT= Taxiway Tango
TP= test pit
SB= subsufrace soil
SS= soil sample
DR= Dump Road

Dump Road Area
Lockheed Martin, Martin State Airport
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0 50 100 200 Feet

N

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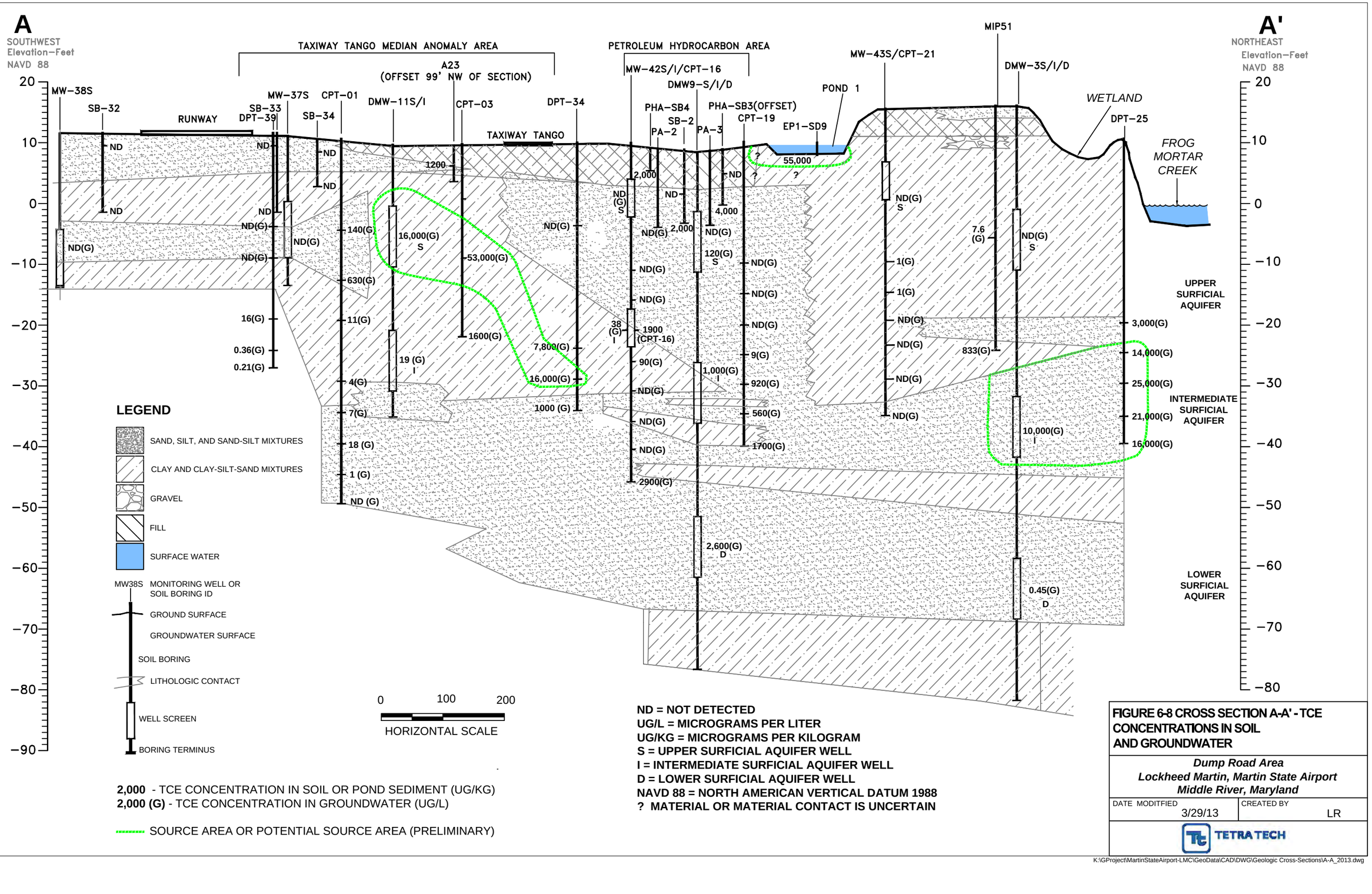

FIGURE 6-8 CROSS SECTION A-A' - TCE CONCENTRATIONS IN SOIL AND GROUNDWATER

Dump Road Area
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Middle River, Maryland

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3/29/13	LR

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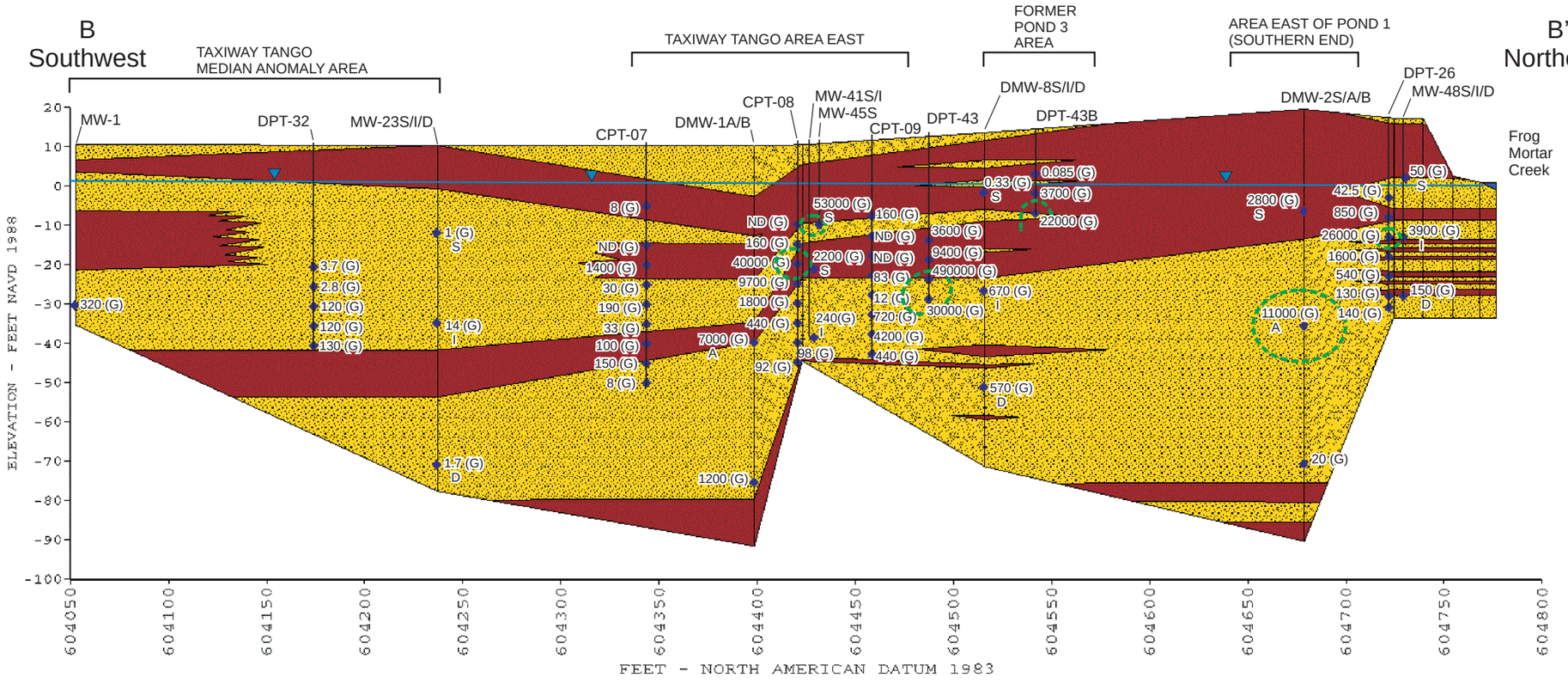

FIGURE 6-9

CROSS SECTION B-B'
TCE CONCENTRATIONS IN GROUNDWATER

LEGEND

- GROUNDWATER SAMPLE
- 20 (G) TCE CONCENTRATION IN GROUNDWATER (UG/L)
- SAND, SILT, AND SAND-SILT MIXTURES
- CLAY AND CLAY-SILT-SAND MIXTURES
- WATER
- GROUNDWATER SURFACE
- TCE SOURCE AREA OR POTENTIAL SOURCE AREA
- (G) = GROUNDWATER SAMPLE
- S = UPPER SURFICIAL AQUIFER WELL
- A or I = INTERMEDIATE SURFICIAL AQUIFER WELL
- B or D = INTERMEDIATE OR LOWER SURFICIAL AQUIFER WELL
- MW OR DMW = MONITORING WELL
- NAVD = NORTH AMERICAN VERTICAL DATUM
- CPT = CONE PENETRATION TEST
- DPT = DIRECT PUSH TECHNOLOGY
- TCE = TRICHLOROETHENE
- ND = NOT DETECTED
- UG/L = MICROGRAMS PER LITER

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

DATE MODIFIED: 1/7/14

CREATED BY: MP

TETRA TECH

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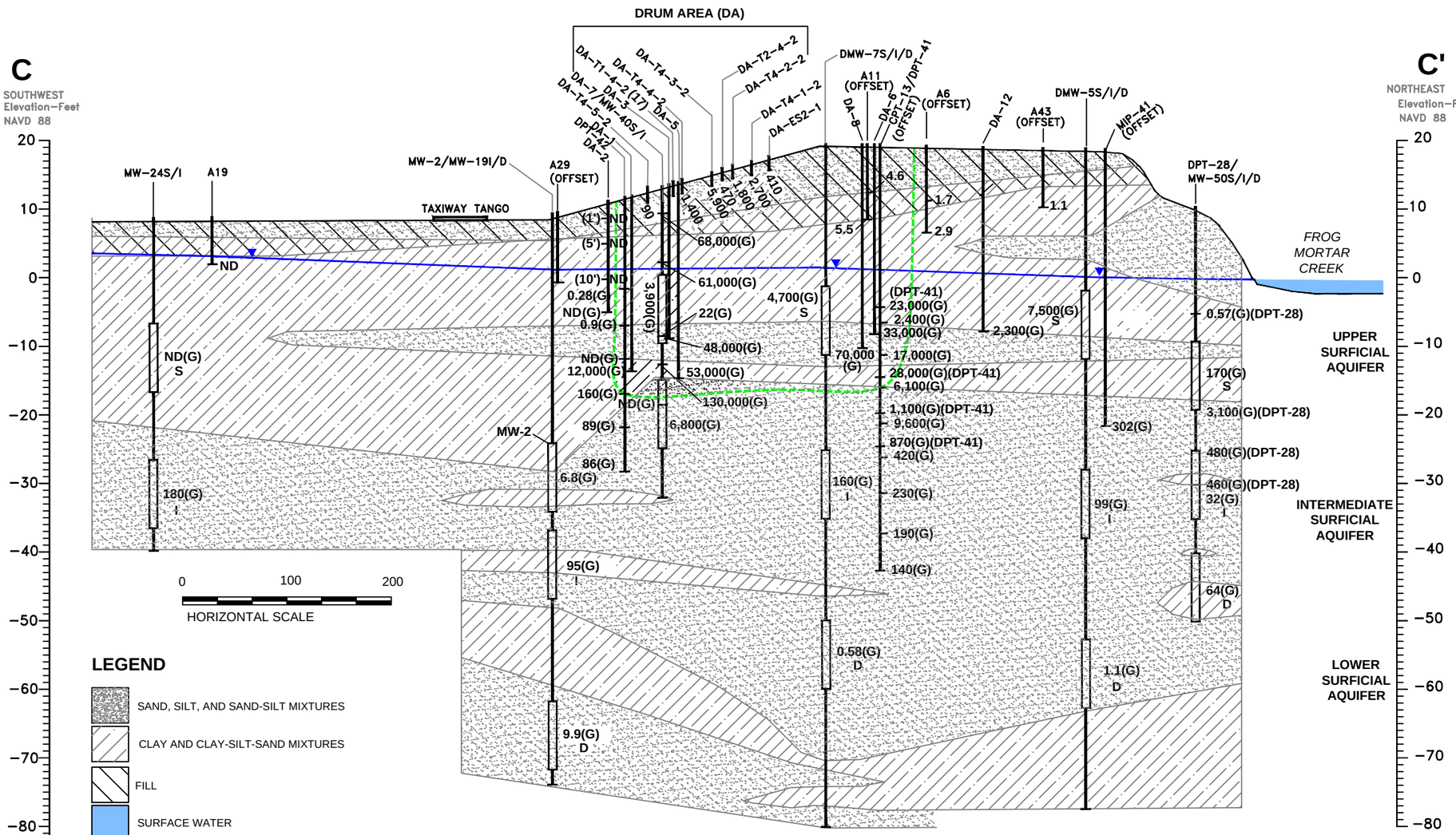

2,000 - TCE CONCENTRATION IN SOIL OR POND SEDIMENT (UG/KG)
2,000 (G) - TCE CONCENTRATION IN GROUNDWATER (UG/L)

---- SOURCE AREA OR POTENTIAL SOURCE AREA (PRELIMINARY)

ND = NOT DETECTED
UG/L = MICROGRAMS PER LITER
UG/KG = MICROGRAMS PER KILOGRAM
A11 = TEST PIT
DA-2 = SOIL BORING
S = UPPER SURFICIAL AQUIFER WELL
I = INTERMEDIATE SURFICIAL AQUIFER WELL
D = LOWER SURFICIAL AQUIFER WELL
NAVD 88 = NORTH AMERICAN VERTICAL DATUM 1988

FIGURE 6-10 CROSS SECTION C-C' - TCE CONCENTRATIONS IN SOIL AND GROUNDWATER

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

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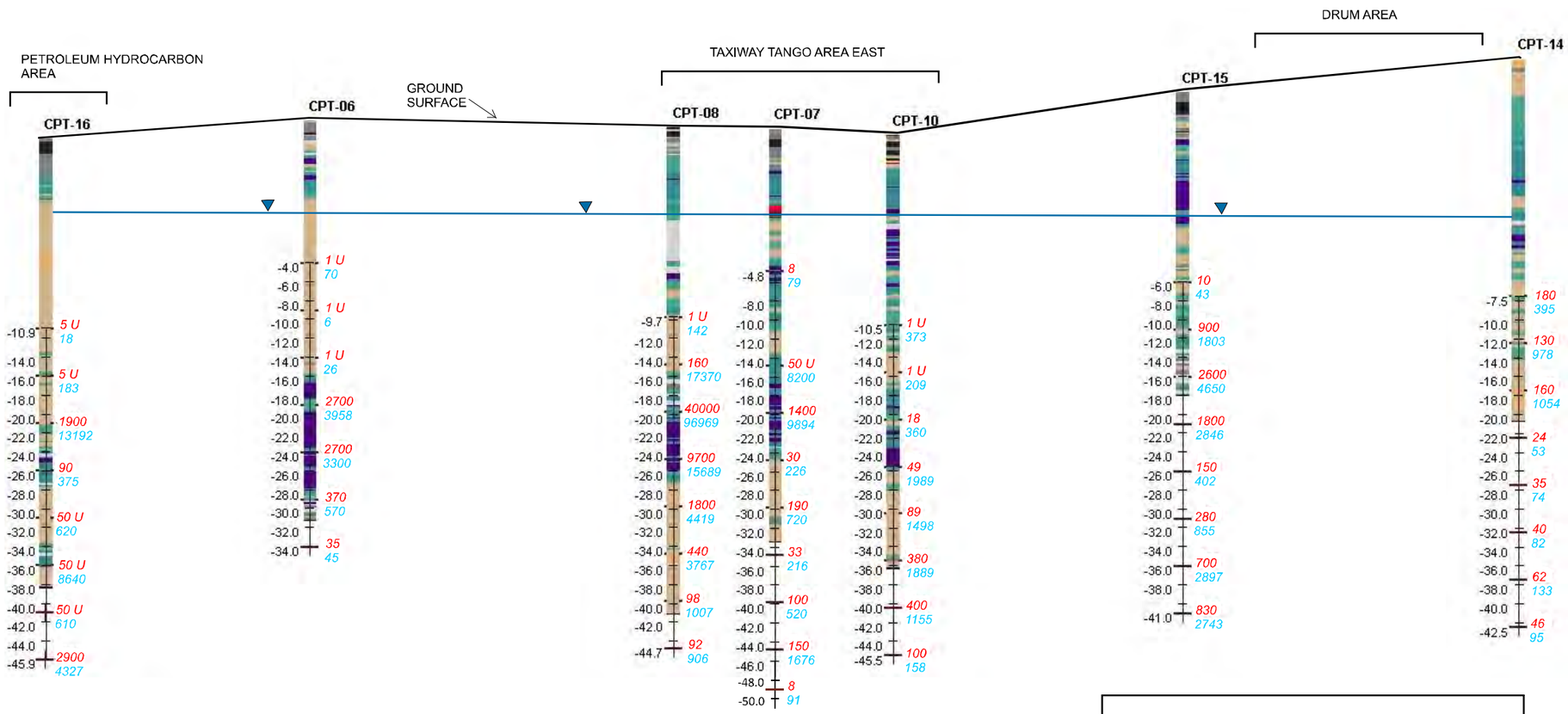
D
Northwest

D'
Southeast



0 80 160 FEET
HORIZONTAL SCALE (APPROXIMATE)

Soil Boring Key

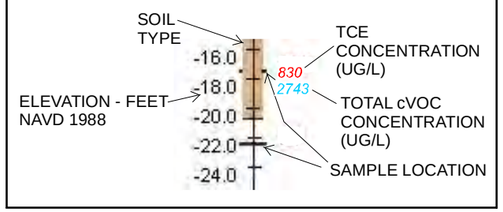


FIGURE 6-11

CROSS SECTION D-D'- TCE AND TOTAL CVOC CONCENTRATIONS IN GROUNDWATER

LEGEND

CPT LOG SOIL TYPE

- UNDEFINED
- SENSITIVE FINE GRAINED
- ORGANIC MATERIAL
- CLAY TO SILTY CLAY
- CLAYEY SILT TO SILTY CLAY
- SILTY SAND TO SANDY SILT
- CLEAN SANDS TO SILTY SANDS
- GRAVELLY SAND TO SAND
- VERY STIFF SAND TO CLAYEY SAND
- VERY STIFF FINE GRAINED

CPT-08 CPT BORING NUMBER

GROUNDWATER SURFACE

U NOT DETECTED AT CONCENTRATION IN UG/L SHOWN LEFT OF THE LETTER

cVOC= CHLORINATED VOLATILE ORGANIC COMPOUND. MAY INCLUDE DETECTED TETRACHLOROETHENE, TRICHLOROETHENE, 1,1-DICHLOROETHENE, CIS-1,2-DICHLOROETHENE, TRANS-1,2-DICHLOROETHENE, VINYL CHLORIDE, 1,1,1-TRICHLOROETHANE, 1,1,2-TRICHLOROETHANE, 1,1-DICHLOROETHANE, 1,2-DICHLOROETHANE, CHLOROETHANE, AND CHLOROFORM.

NAVD = NORTH AMERICAN VERTICAL DATUM
TCE = TRICHLOROETHENE
UG/L = MICROGRAMS PER LITER

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

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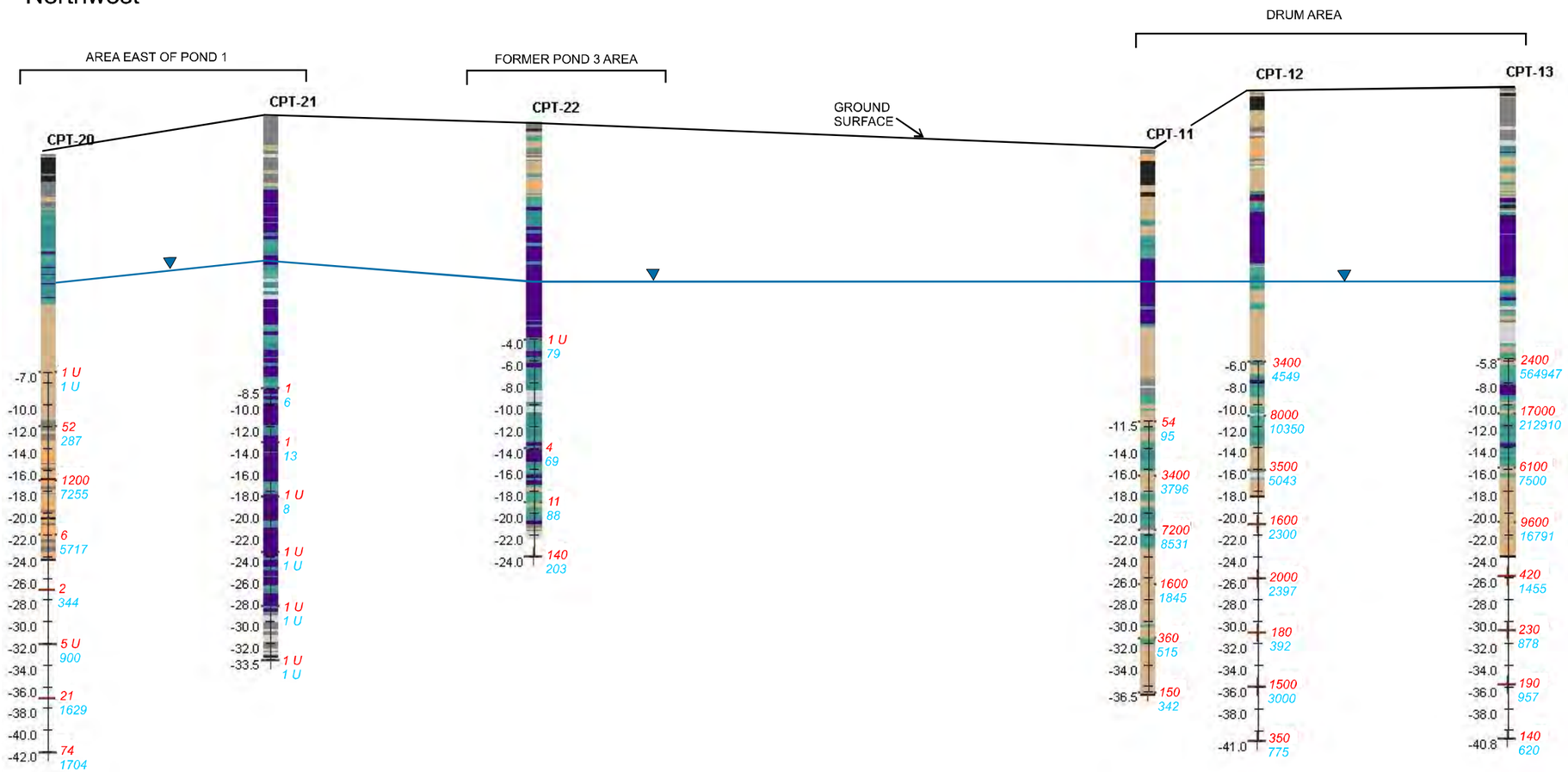
3/28/13	MP

TETRA TECH

K:\GProject\MartinStateAirport-LMC\graphics\DRA Cross Section DD' TCE in Soil and GW_TCE.cdr

E
Northwest

E'
Southeast



Soil Boring Key

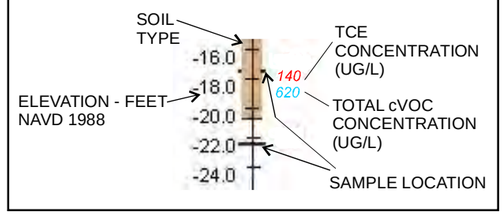


FIGURE 6-12

CROSS SECTION E-E'-TCE AND TOTAL CVOC CONCENTRATIONS IN GROUNDWATER

LEGEND

CPT LOG SOIL TYPE

- UNDEFINED
- SENSITIVE FINE GRAINED
- ORGANIC MATERIAL
- CLAY TO SILTY CLAY
- CLAYEY SILT TO SILTY CLAY
- SILTY SAND TO SANDY SILT
- CLEAN SANDS TO SILTY SANDS
- GRAVELLY SAND TO SAND
- VERY STIFF SAND TO CLAYEY SAND
- VERY STIFF FINE GRAINED

CPT-21 CPT BORING NUMBER

GROUNDWATER SURFACE

U NOT DETECTED AT CONCENTRATION IN UG/L SHOWN LEFT OF THE LETTER

cVOC= CHLORINATED VOLATILE ORGANIC COMPOUND. MAY INCLUDE DETECTED TETRACHLOROETHENE, TRICHLOROETHENE, 1,1-DICHLOROETHENE, CIS-1,2-DICHLOROETHENE, TRANS-1,2-DICHLOROETHENE, VINYL CHLORIDE, 1,1,1-TRICHLOROETHANE, 1,1,2-TRICHLOROETHANE, 1,1-DICHLOROETHANE, 1,2-DICHLOROETHANE, CHLOROETHANE, AND CHLOROFORM.

NAVD = NORTH AMERICAN VERTICAL DATUM

TCE = TRICHLOROETHENE

UG/L = MICROGRAMS PER LITER

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3/28/13	MP

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F
Northwest

F'
Southeast

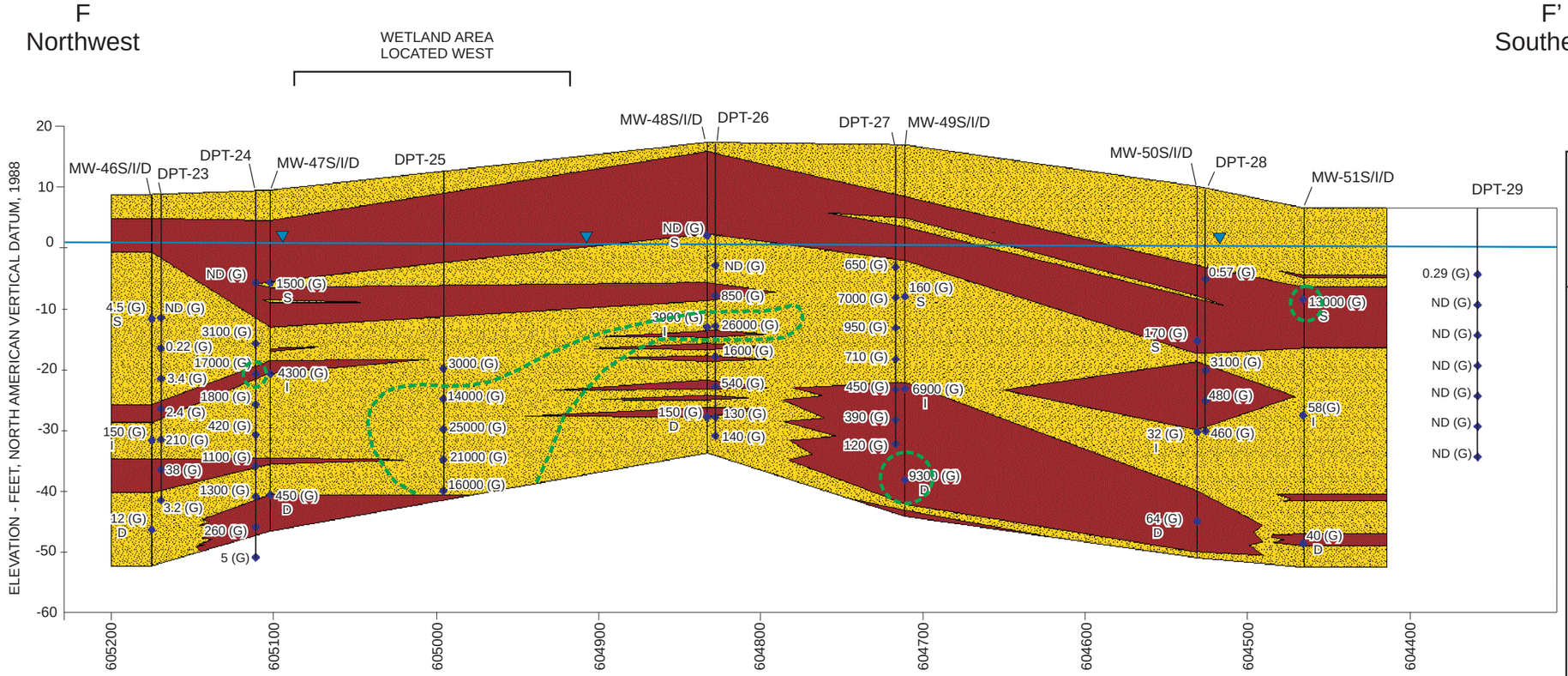

FIGURE 6-13

**CROSS SECTION F-F'
TCE CONCENTRATIONS IN
GROUNDWATER**

LEGEND

- GROUNDWATER SAMPLE
- 0.57 (G) TCE CONCENTRATION IN GROUNDWATER (UG/L)
- SAND, SILT, AND SAND-SILT MIXTURES
- CLAY AND CLAY-SILT-SAND MIXTURES
- WATER
- GROUNDWATER SURFACE
- TCE SOURCE AREA OR POTENTIAL SOURCE AREA
- (G) = GROUNDWATER SAMPLE
- S = UPPER SURFICIAL AQUIFER WELL
- I = INTERMEDIATE SURFICIAL AQUIFER WELL
- D = INTERMEDIATE OR LOWER SURFICIAL AQUIFER WELL
- MW = MONITORING WELL
- TCE = TRICHLOROETHENE
- ND = NOT DETECTED
- UG/L = MICROGRAMS PER LITER
- DPT = DIRECT PUSH TECHNOLOGY

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K:\GProject\MartinStateAirport-LMC\graphics\DRA Cross Section FF' TCE in GW.cdr

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA BTEX in Soils_0 TO 2 FT_2013.mxd)
1/10/2014 -- DC



FIGURE 6-14

BTEX IN SOIL AND POND SEDIMENT
0 to 2 FEET
DUMP ROAD AREA

LEGEND

- SOIL OR POND SEDIMENT SAMPLE
- BTEX ISOCONCENTRATION CONTOURS IN UG/KG
- INFERRED
- 11 BTEX CONCENTRATION (UG/KG)
- ABANDONED WELL
- GROUNDWATER MONITORING WELL
- EXCAVATION LOCATION - YEAR 2000
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

- - = Not Detected
UG/KG = micrograms per kilogram
BTEX = benzene, toluene, ethylbenzene and xylenes
TT= Taxiway Tango
TP= test pit
SB= subsufrace soil
SS= surface soil
DR= Dump Road

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA BTEX in Soils_GT2 TO 15 FT_2013.mxd)
1/10/2014 DC

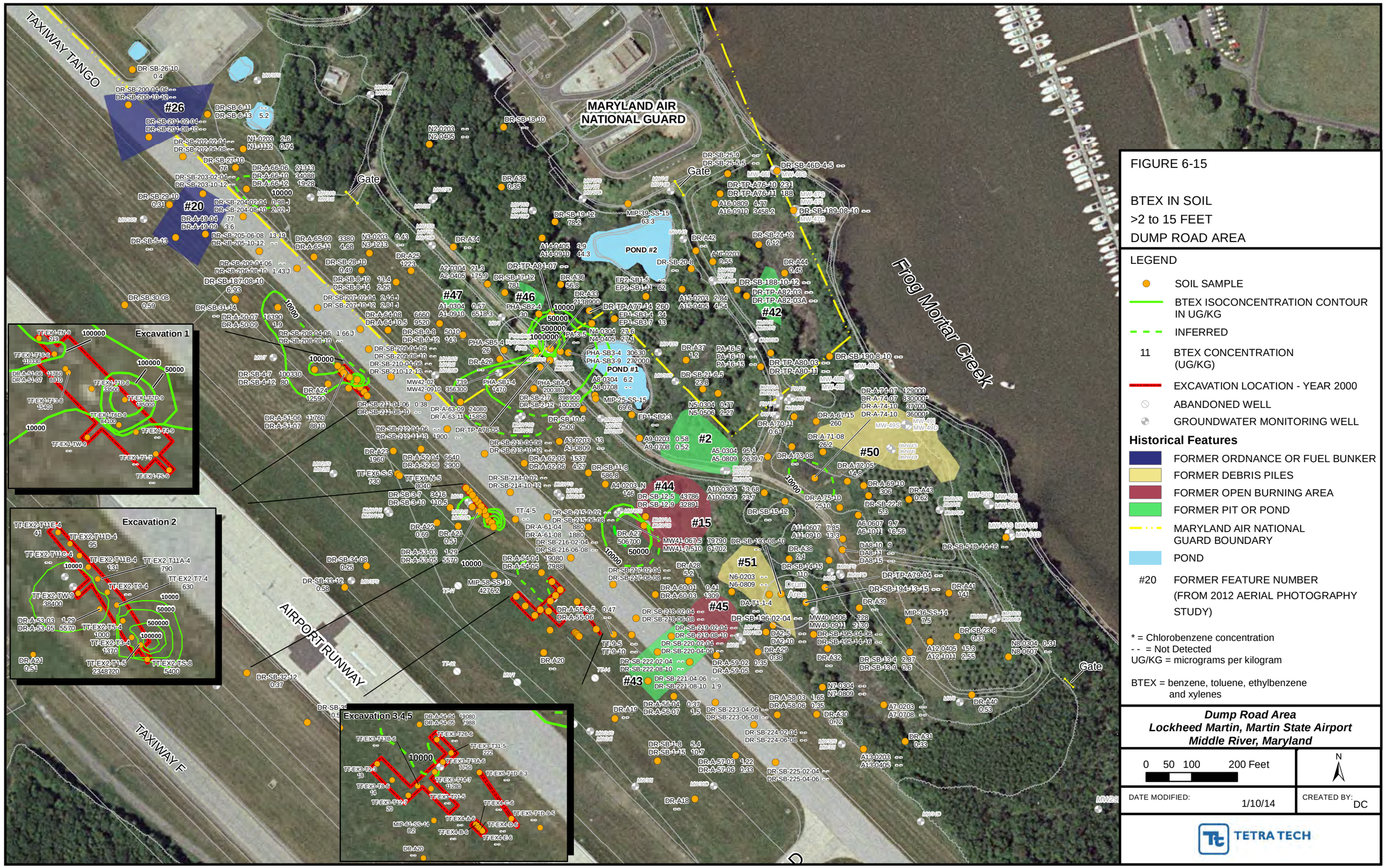

FIGURE 6-15

BTEX IN SOIL
>2 to 15 FEET
DUMP ROAD AREA

LEGEND

- SOIL SAMPLE
- BTEX ISOCONCENTRATION CONTOUR IN UG/KG
- INFERRED
- 11 BTEX CONCENTRATION (UG/KG)
- EXCAVATION LOCATION - YEAR 2000
- ABANDONED WELL
- GROUNDWATER MONITORING WELL

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

* = Chlorobenzene concentration
- - = Not Detected
UG/KG = micrograms per kilogram

BTEX = benzene, toluene, ethylbenzene and xylenes

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

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TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA BTEX in Soils_GT15FT_2013.mxd)
12/17/2013 -- DC



FIGURE 6-16

BTEX IN SOIL
>15 FEET
DUMP ROAD AREA

LEGEND

- SOIL SAMPLE
- BTEX ISOCONCENTRATION CONTOUR IN UG/KG - DASHED WHERE INFERRED
- 11 BTEX CONCENTRATION (UG/KG)
- EXCAVATION LOCATION - YEAR 2000
- ABANDONED WELL
- GROUNDWATER MONITORING WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

-- = Not Detected
UG/KG = micrograms per kilogram

BTEX = benzene, toluene, ethylbenzene and xylenes

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0 50 100 200 Feet

N

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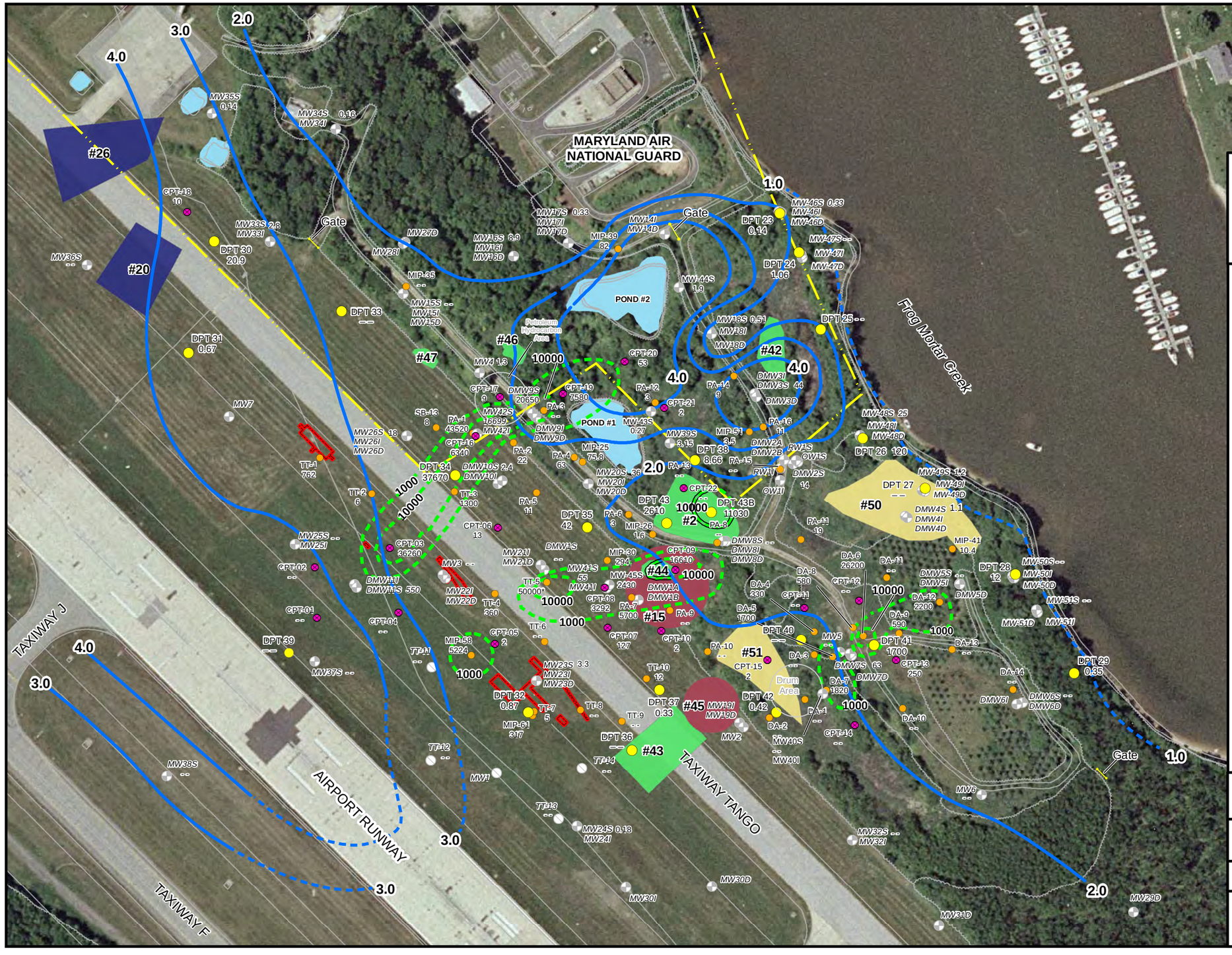

FIGURE 6-17

BTEX IN GROUNDWATER -
UPPER SURFICIAL AQUIFER
DUMP ROAD AREA

LEGEND

- DPT GROUNDWATER LOCATION- 2013
- PROBE GROUNDWATER SAMPLE LOCATION: AUG-SEPT 2012
- PRE- 2012 TEMPORARY WELL/PROBE GROUNDWATER SAMPLE
- BTEX ISOCONCENTRATION CONTOUR IN UG/L
- 11 MAXIMUM BTEX CONCENTRATION (ug/L) OF SAMPLES IN THIS AUQUIFER ZONE
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL = 1 FOOT (DASHED WHERE INFERRED)
- EXCAVATION LOCATION - YEAR 2000
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

* = Chlorobenzene concentration
- - = Not Detected
UG/L = micrograms per liter
BTEX = benzene, toluene, ethylbenzene and xylenes

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA BTEX in GW I_wells 2013.mxd)
1/10/2014 -- DC

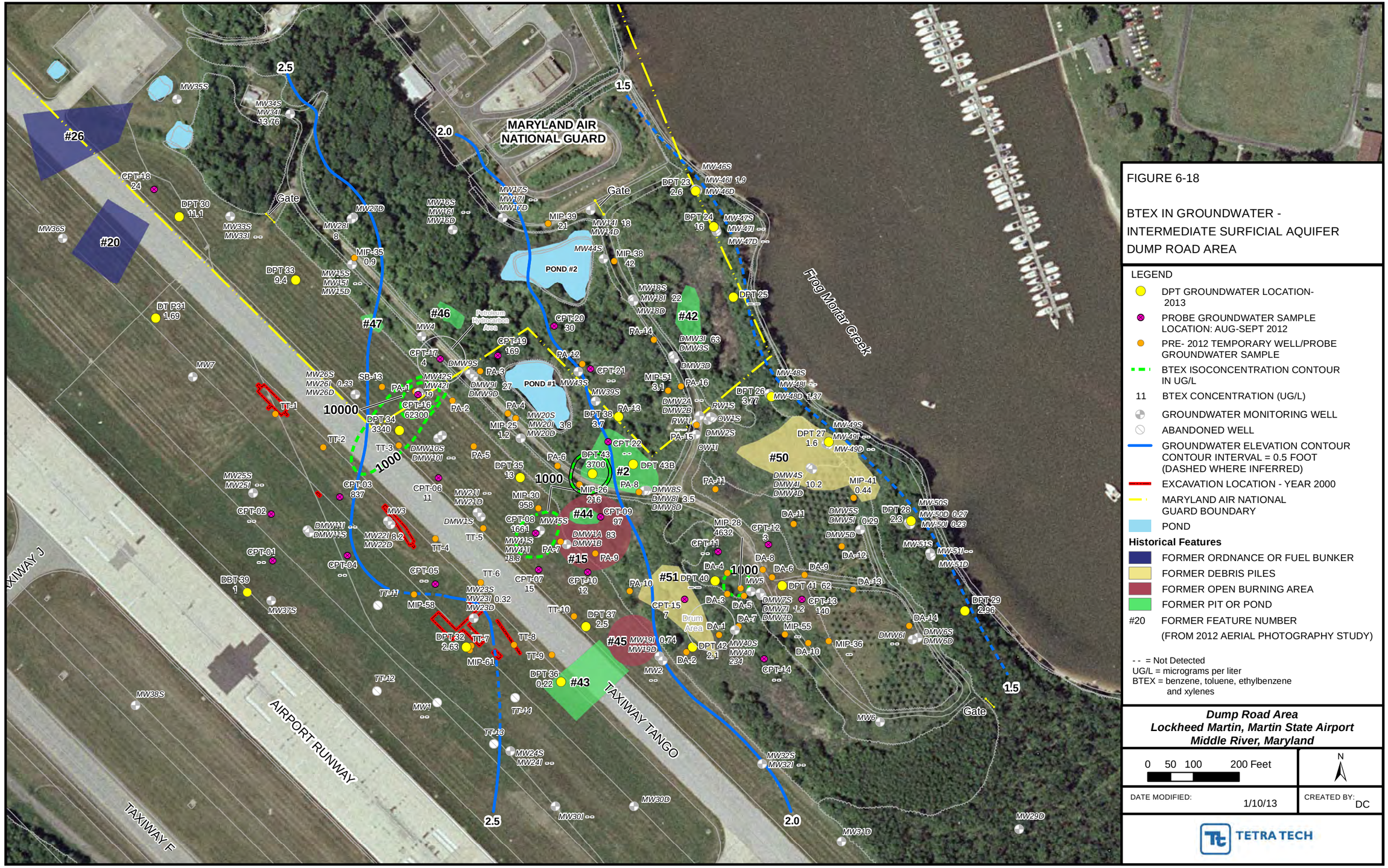

FIGURE 6-18

BTEX IN GROUNDWATER - INTERMEDIATE SURFICIAL AQUIFER DUMP ROAD AREA

LEGEND

- DPT GROUNDWATER LOCATION- 2013
- PROBE GROUNDWATER SAMPLE LOCATION: AUG-SEPT 2012
- PRE- 2012 TEMPORARY WELL/PROBE GROUNDWATER SAMPLE
- BTEX ISOCONCENTRATION CONTOUR IN UG/L
- 11 BTEX CONCENTRATION (UG/L)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL = 0.5 FOOT (DASHED WHERE INFERRED)
- EXCAVATION LOCATION - YEAR 2000
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

-- = Not Detected
UG/L = micrograms per liter
BTEX = benzene, toluene, ethylbenzene and xylenes

Dump Road Area
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Middle River, Maryland

0 50 100 200 Feet

N

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Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA BTEX in GW D_wells 2013.mxd)
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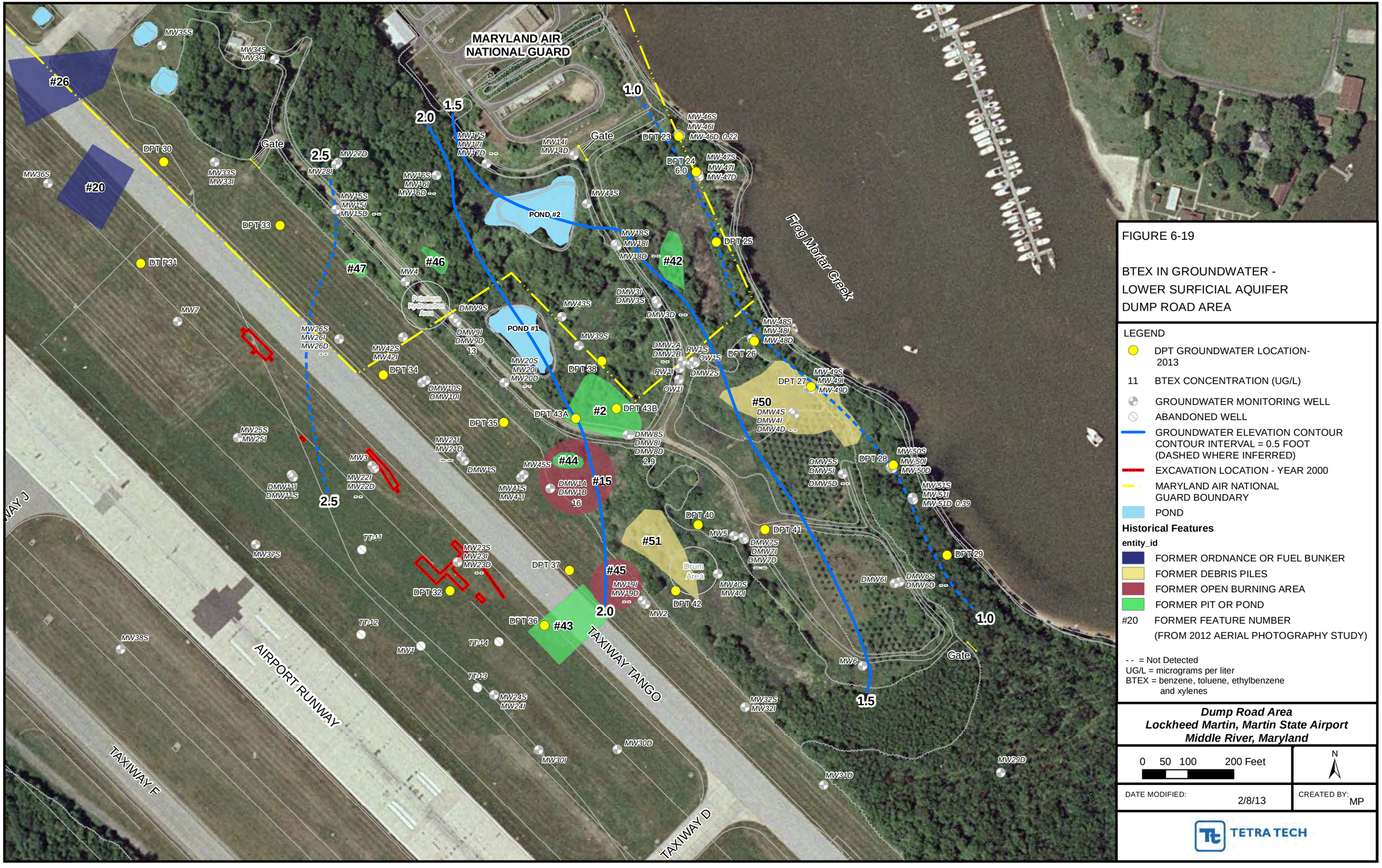

FIGURE 6-19

BTEX IN GROUNDWATER -
LOWER SURFICIAL AQUIFER
DUMP ROAD AREA

LEGEND

- DPT GROUNDWATER LOCATION- 2013
- 11 BTEX CONCENTRATION (UG/L)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- GROUNDWATER ELEVATION CONTOUR CONTOUR INTERVAL = 0.5 FOOT (DASHED WHERE INFERRED)
- EXCAVATION LOCATION - YEAR 2000
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

Historical Features

entity_id

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

-- = Not Detected
UG/L = micrograms per liter
BTEX = benzene, toluene, ethylbenzene and xylenes

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

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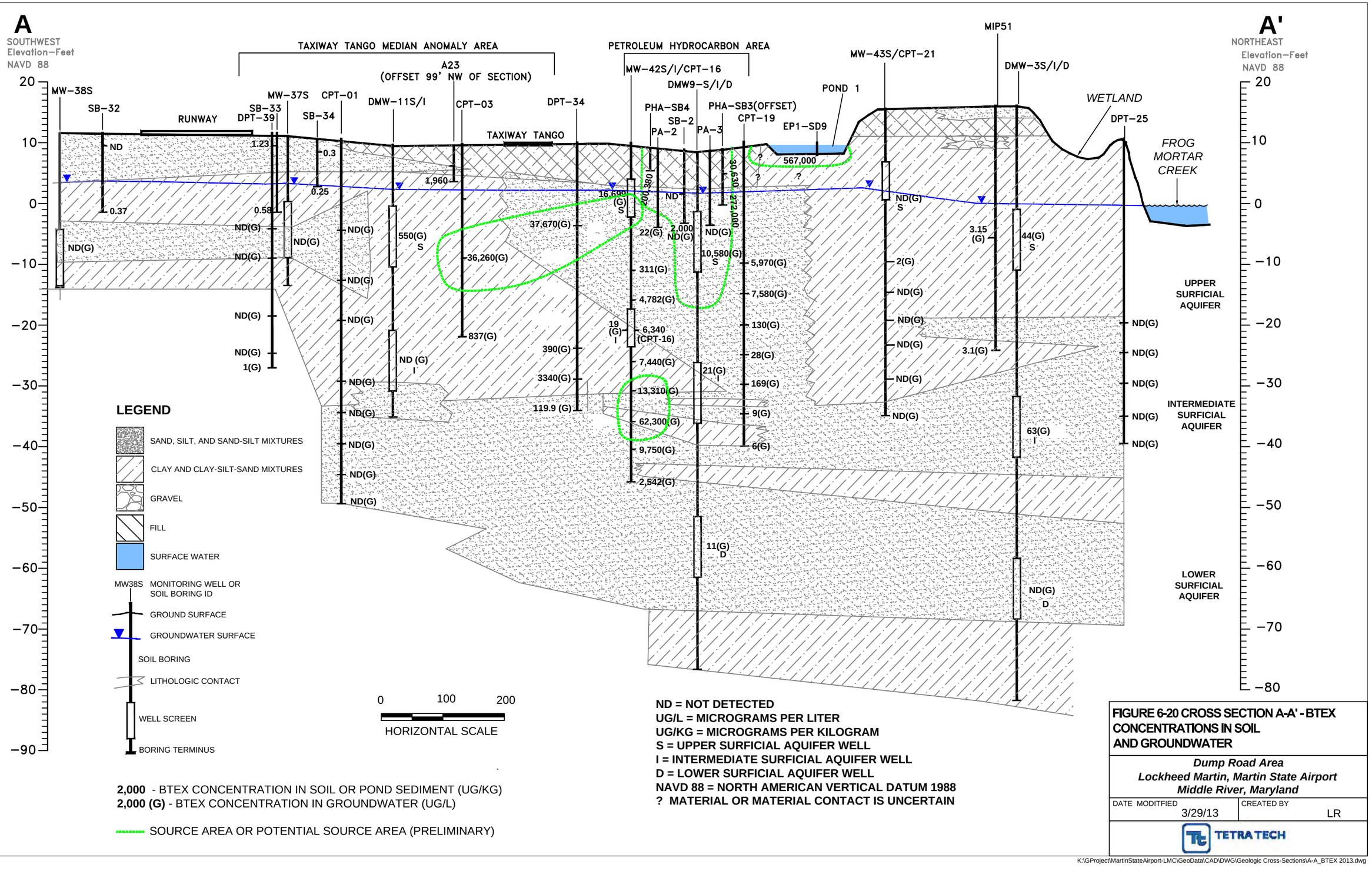

FIGURE 6-20 CROSS SECTION A-A' - BTEX CONCENTRATIONS IN SOIL AND GROUNDWATER

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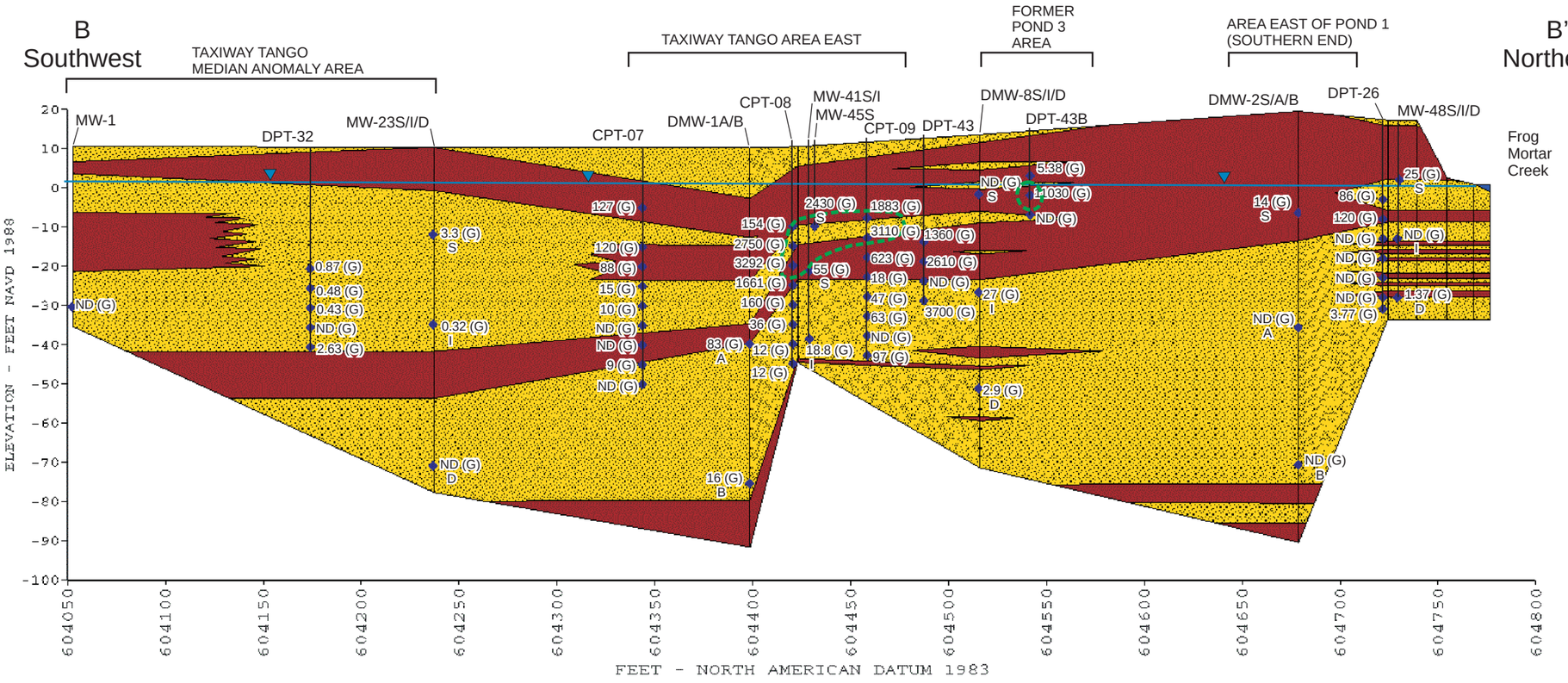

FIGURE 6-21

CROSS SECTION B-B'
BTEX CONCENTRATIONS IN GROUNDWATER

LEGEND

- GROUNDWATER SAMPLE
- 27 (G) BTEX CONCENTRATION IN GROUNDWATER (UG/L)
- SAND, SILT, AND SAND-SILT MIXTURES
- CLAY AND CLAY-SILT-SAND MIXTURES
- WATER
- GROUNDWATER SURFACE
- BTEX SOURCE AREA OR POTENTIAL SOURCE AREA

(G) =	GROUNDWATER SAMPLE
S =	UPPER SURFICIAL AQUIFER WELL
A or I =	INTERMEDIATE SURFICIAL AQUIFER WELL
B or D =	INTERMEDIATE OR LOWER SURFICIAL AQUIFER WELL
MW OR DMW =	MONITORING WELL
NAVD =	NORTH AMERICAN VERTICAL DATUM
CPT =	CONE PENETRATION TEST
TCE =	TRICHLOROETHENE
ND =	NOT DETECTED
UG/L =	MICROGRAMS PER LITER
DPT =	DIRECT PUSH TECHNOLOGY

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K:\GProject\MartinStateAirport-LMC\graphics\DRA Cross Section BB' BTEX in GW.cdr

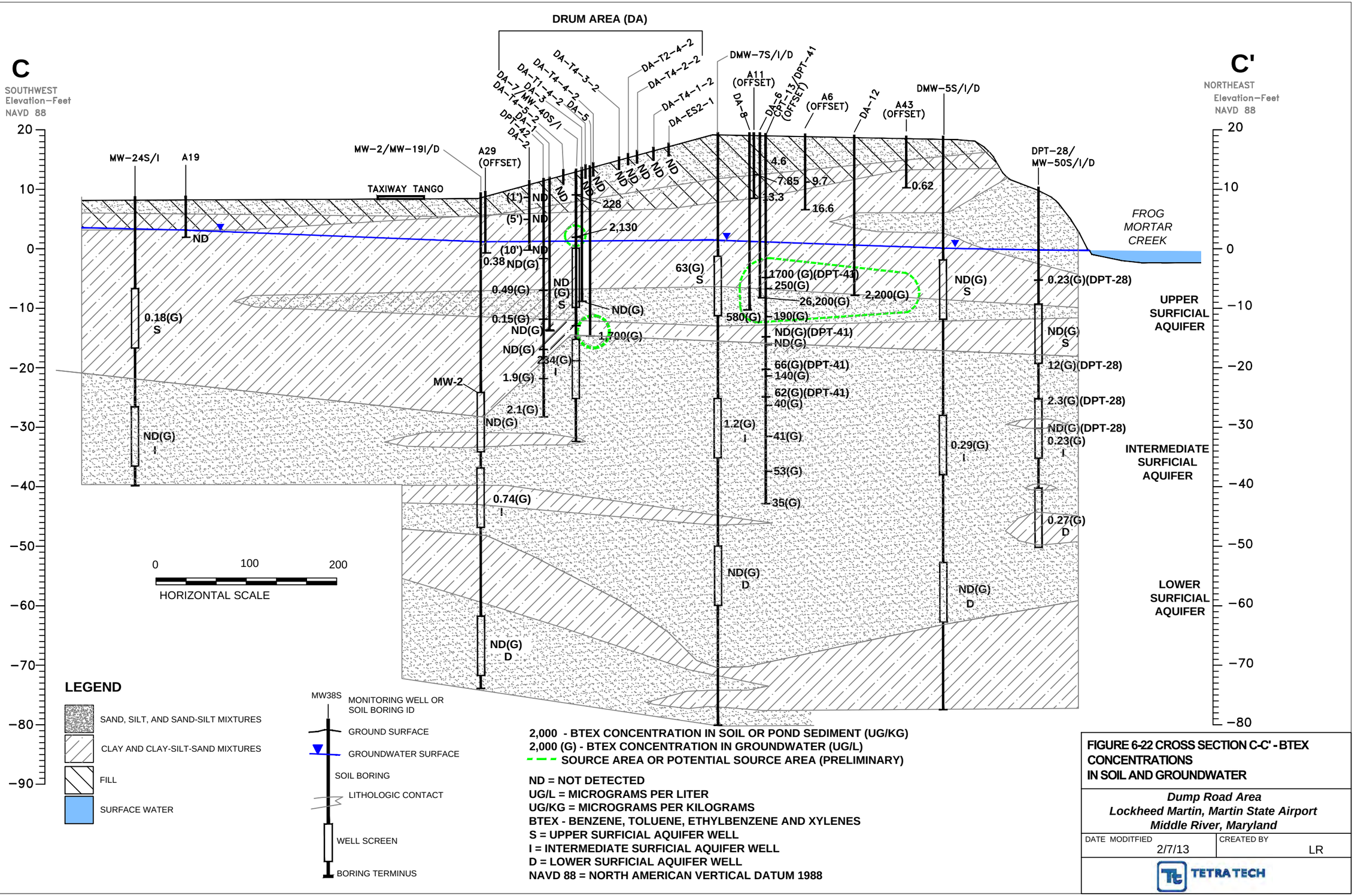

FIGURE 6-22 CROSS SECTION C-C' - BTEX CONCENTRATIONS IN SOIL AND GROUNDWATER

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Middle River, Maryland

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2/7/13	LR

TETRA TECH

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F
Northwest

F'
Southeast

WETLAND AREA
LOCATED WEST

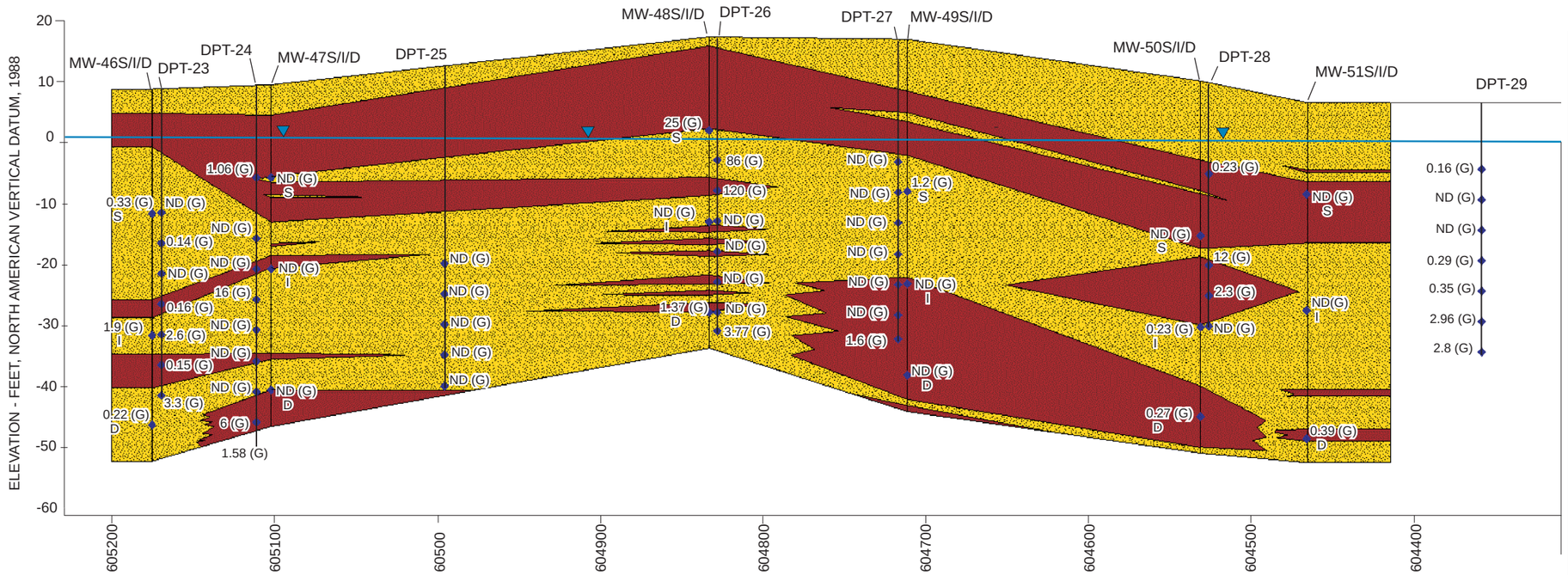

FIGURE 6-23

CROSS SECTION F-F'
BTEX CONCENTRATIONS IN GROUNDWATER

LEGEND

- GROUNDWATER SAMPLE
- 0.16 (G) BTEX CONCENTRATION IN GROUNDWATER (UG/L)
- SAND, SILT, AND SAND-SILT MIXTURES
- CLAY AND CLAY-SILT-SAND MIXTURES
- WATER
- GROUNDWATER SURFACE
- BTEX SOURCE AREA OR POTENTIAL SOURCE AREA

(G) =	GROUNDWATER SAMPLE
S =	UPPER SURFICIAL AQUIFER WELL
I =	INTERMEDIATE SURFICIAL AQUIFER WELL
D =	INTERMEDIATE OR LOWER SURFICIAL AQUIFER WELL
MW =	MONITORING WELL
BTEX =	BENZENE, TOLUENE, ETHYLBENZENE AND XYLENES
ND =	NOT DETECTED
UG/L =	MICROGRAMS PER LITER
DPT =	DIRECT PUSH TECHNOLOGY

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Section 7
Summary

The 2013 Dump Road Area (DRA) field program included the following activities:

- excavating seven test pits in three areas based on comments from Maryland Department of the Environment (MDE)
- advancing 10 soil borings for lithological characterization using a direct-push-technology (DPT) drill rig and collecting discrete soil samples to a depth of approximately 30 feet below grade
- collecting discrete groundwater samples, typically at five-foot intervals, from 22 locations using a direct-push-technology drill rig, to a depth of up to 60 feet below grade
- installing six monitoring well clusters (18 wells) to characterize groundwater conditions along the Frog Mortar Creek shoreline, and collection of 13 soil samples during drilling
- collecting surface water samples from two sampling points in Pond 1 and from three locations in the wetland area near the Frog Mortar Creek shoreline
- collecting sediment cores using a Shelby Tube, piston tube, or comparable sediment sampling device from three locations within the wetland area near the Frog Mortar Creek shoreline and from four locations in Pond 1, to a depth of two-feet below the sediment surface.
- conducting a synoptic round of water level measurements that included existing monitoring wells and the 18 newly installed groundwater monitoring wells
- collecting groundwater samples from the 18 new monitoring wells
- chemically analyzing soil, groundwater, surface water, and sediment samples at an off-site laboratory
- surveying the test pits, soil borings, probe groundwater sampling locations, and newly installed groundwater monitoring wells using a Maryland-licensed surveyor

The probe groundwater-sampling results helped define volatile organic compound (VOC) concentrations in three dimensions at 22 locations around possible groundwater source-areas at the Dump Road Area. Significant findings of the probe groundwater-sampling program are:

- Trichloroethene (TCE) was detected in probe groundwater samples at a maximum concentration of 490,000 micrograms per liter (µg/L) at DPT-43 (elevation of -23.58 feet) near a former pond or pit (former Pond 3) found on historical photographs (Tetra Tech, Inc. [Tetra Tech], 2013a). TCE was also detected in groundwater at 22,000 µg/L at DPT-43B (elevation of 6.77 feet) east of DPT-43 in the area of the same former pond or pit. These concentrations indicate the likely presence of trichloroethene dense non-aqueous phase liquids (DNAPL) at or near these sampling elevations.

- Trichloroethene was detected at elevated concentrations (up to 26,000 µg/L) in probe groundwater samples collected in the upper and intermediate surficial-aquifer zones along the dump embankment and raised berm near Frog Mortar Creek. These concentrations indicate the likely presence of trichloroethene dense non-aqueous-phase liquids at or near these sampling elevations. The highest trichloroethene concentrations in this portion of the site were detected in samples collected east of the wetland area. The wetland is nearly coincident with the lowest drainage area present during filling activities for the former Limehouse Cove.

- DPT-41 results confirm previous results at CPT-13, which indicate elevated concentrations of chlorinated volatile organic compounds east of well DMW-7S in the Drum Area. These concentrations indicate the likely presence of trichloroethene dense non-aqueous-phase liquids at or near these sampling elevations.

- A trichloroethene result (9,900 µg/L) in groundwater for DPT-33 indicates the location of the volatile organic compound source area east and hydraulically upgradient of wells MW-15S/I/D. This concentration indicates the possible presence of trichloroethene dense non-aqueous-phase liquids at or near this sampling location.

- Low concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) were generally detected in samples collected along the embankment and berm along Frog Mortar Creek. Only three concentrations of benzene (DPT-24, DPT-26, and DPT-28) exceed the Maryland Department of the Environment groundwater standard.

- Benzene, toluene, ethylbenzene, and xylenes were generally not detected or were detected at relatively low concentrations in the probe groundwater samples, except near former Pond 3 (DPT-43 and 43B) and west of the Petroleum Hydrocarbon Area (PHA) near Taxiway Tango (DPT-34).

Significant findings of the groundwater level measurement program are as follows:

- Elevated groundwater levels at wells MW-43S, MW-39S, DMW-3S, and MW-44S indicate local groundwater mounding east and northeast of Pond 1 and Pond 2.

- The groundwater elevation configuration of wells MW-39S, MW-43S, and MW-44S indicates that the higher groundwater surface may be partially due to infiltrating water from Pond 1 and Pond 2.

- Groundwater flow at the site is generally southwest to northeast, and east from the airport runway towards Frog Mortar Creek.

Soil samples, monitoring-well groundwater samples, surface water samples, and sediment samples were screened against chemical-specific criteria to gauge the degree of observed contamination relative to regulatory standards/criteria, to assess potential adverse effects on human health or the environment, and to evaluate the need for further sampling or remedial action. Soil and groundwater results were screened against the Maryland Department of the Environment (MDE) cleanup standards for soil and groundwater. Surface water results were screened against the United States Environmental Protection Agency (USEPA) Region 3 Biological Technical Advisory Group (BTAG) freshwater and saltwater screening benchmarks. Sediment results were compared against USEPA regional screening-levels (RSL) for soil, using an order of magnitude adjustment (i.e., by 10 times) to account for less frequent human exposure to sediment than to soil. Sediment results were also compared to the USEPA Region 3 BTAG sediment-screening benchmarks, ecological toxicity levels, and the National Oceanic and Atmospheric Administration (NOAA) screening quick-reference tables.

Significant findings of the soil, groundwater monitoring well, and pond sampling program include:

- Aroclor-1242, a polychlorinated biphenyl (PCB), was detected at 4,100 milligrams per kilogram (mg/kg) in the 2–3 foot sample at test pit DR-A80. This is the highest polychlorinated biphenyl concentration detected to date in a soil sample at the Dump Road Area site and the only soil sample to have exceeded 50 mg/kg polychlorinated biphenyls.

- Trichloroethene was detected at 13,000 micrograms per kilogram (µg/kg) in a soil sample collected at four feet below grade from test pit DR-A79. Test pit DR-A79 is in the eastern portion of the Drum Area near soil boring B-8 (advanced in 1996), which indicated the presence of product at a depth of 12–14 feet below grade: trichloroethene at 6,200 µg/kg and total petroleum hydrocarbons (TPH)-diesel-range organics (DRO) at 19,000 mg/kg.

- Only one soil sample (DR-SB-46S-19–20) from the new monitoring well boreholes had concentrations of constituents exceeding industrial-soil screening levels. Arsenic (21-mg/kg) and vanadium (130 mg/kg) were detected in this soil sample collected from a depth of 19–21 feet below grade from the soil boring for well DR-SB-46S/I.

- Soil borings DR-SB-188, DR-SB-191, DR-SB-194, and DR-SB-196 produced samples with compounds (several polycyclic aromatic hydrocarbons and three metals) exceeding industrial screening levels.

- Elevated trichloroethene concentrations were detected in several groundwater samples collected from the newly installed monitoring wells, including a trichloroethene concentration of 13,000 µg/L for well MW-51S, located at the southern end of the Dump

Road Area. In addition, the other elevated trichloroethene concentrations (3,900-9,300 µg/L) were detected in samples from monitoring wells MW-49D, MW-49I, MW-47I, and MW-48I. The groundwater samples collected through direct-push technology generally produced significantly higher trichloroethene concentrations than those collected from these monitoring wells.

- Sediment samples collected from Pond 1 contained elevated concentrations of benzene, toluene, ethane, and xylene, several chlorinated volatile organic compounds, 2-methylnaphthalene, naphthalene, polychlorinated biphenyls, cadmium, chromium, copper, lead, zinc, total petroleum hydrocarbons-diesel-range organics, total petroleum hydrocarbons-gasoline-range organics, and numerous polycyclic aromatic hydrocarbons. Higher concentrations of chemicals were detected in the one- to two-foot samples, consistent with previously collected Pond 1 sediment samples. Sediment samples EP1-SD15 and EP1-SD16 from the northern portion of Pond 1 contained non-detect or low concentrations of chlorinated volatile organic compounds, but a highly elevated benzene, toluene, ethane, and xylene concentration (737,000 µg/kg) was detected at location EP1-SD16. Samples collected from the southern portion of the pond (EP1-SD17) produced the highest concentrations of benzene, toluene, ethane, and xylene (883,100 µg/kg) and trichloroethene (5,400 µg/kg) in Pond 1, but those from the central portion of the pond were also high (4,480 µg/kg and 2,400 µg/kg, respectively).

- Constituents exceeding screening levels in wetland area sediment samples (EWT-SD-1 through EWT-SD3) are primarily metals, with polycyclic aromatic hydrocarbons also exceeding screening levels. Unlike Pond 1 sediment samples, benzene, toluene, ethane, and xylene, and the chlorinated volatile organic compounds trichloroethene, *cis*-1,2-dichloroethene, and vinyl chloride were not detected in the wetland area sediment samples.

- Metals, total petroleum hydrocarbons-gasoline-range organics, and total petroleum hydrocarbons-diesel-range organics are the only compounds detected in Pond 1 and wetland area surface water samples at concentrations exceeding their respective screening levels. The barium concentrations in Pond 1 water samples were approximately five to eight times higher than those detected in 2012, but are now consistent with levels reported in nearby water bodies. Cadmium and chromium concentrations in the Pond 1 water samples have decreased since 2012.

- Barium and cadmium concentrations in wetland water samples (EWT-SW1 and EWT-SW2) are higher than those in Pond 1 samples. Additionally, concentrations of cobalt, cooper, nickel, and zinc exceed screening levels in two wetland water samples, and hexavalent chromium exceeds the lowest screening level in one wetland water sample (EWT-SW1).

The 2013 sampling results and historical data are used in this study to evaluate the occurrence and distribution of major chlorinated and aromatic volatile organic compounds that have been detected in various environmental media at the Dump Road Area. Evaluating current and historical data identifies, characterizes, and spatially delineates source areas or possible source

areas of these compounds. Early environmental investigations (1991–1996) identified four areas of concern:

- Taxiway Tango Median Anomaly Area
- Drum Area
- Pond 1 and Pond 2
- Petroleum Hydrocarbon Area

Soil- and groundwater-chemical analytical results were also evaluated to identify possible areas of trichloroethene dense-non-aqueous-phase liquids (DNAPLs); these free-product sources can remain in the subsurface for long periods and provide a continuous source for dissolved-phase groundwater plumes.

Trichloroethene concentrations were compared to a calculated saturation-threshold concentration (C_D) and partitioning-threshold concentration (C^T) to evaluate soil and sediment sampling results for the presence of dense non-aqueous-phase liquids. A saturation threshold concentration of 9,188,000 micrograms per kilogram (µg/kg), a partitioning threshold concentration of 515,000 µg/kg for vadose-zone soil samples, and a 535,000 µg/kg threshold concentration for soil in groundwater or saturated pond sediment were computed for this study using typical soil and chemical characteristics available in the scientific literature. Detection of trichloroethene in soil at a concentration greater than 9,188,000 µg/kg was considered conclusive evidence of dense non-aqueous-phase liquids in soil. A trichloroethene concentration above 515,000 µg/kg, or above 535,000 µg/kg, would indicate the possible presence of dense non-aqueous-phase liquids in unsaturated or saturated soil zones, respectively.

A threshold screening concentration (11,000 µg/L) was also used to screen groundwater sampling results for trichloroethene; i.e., if concentrations were above this value, residual dense non-aqueous-phase liquids were likely present. Dense non-aqueous-phase liquids in groundwater can act as a continuing source of volatile organic compounds. The groundwater screening concentration is equivalent to 1% of the effective solubility ($C_{i[1\%]}$) for trichloroethene in water. Groundwater sample concentrations exceeding this value indicate that groundwater may have come in contact with DNAPL (Kueper and Davies, 2009). Historical and current groundwater concentrations at the Dump Road Area site exceed 11,000 µg/L at several locations, indicating dense non-aqueous-phase liquids in the subsurface.

Existing data confirm that all the areas listed above (except for Pond 2) are primary sources for soil, pond sediment, and groundwater contamination. Results of surface water and pond sediment samples from Pond 2 do not indicate that it is a source for volatile organic compounds at the Dump Road Area. The source area study conducted in 2012 for the Dump Road Area (Tetra Tech, 2012b) identified three additional areas of elevated volatile organic compounds in soil and groundwater requiring further investigation:

- Taxiway Tango Area East (TT East)
- Taxiway Tango Area North (TT North)
- the area east of Pond 1

The fieldwork discussed in Sections 3 and 4 of this report was designed to gather additional environmental data at the initial and possible new source areas listed above.

A 2012 historical aerial photograph and document review (Tetra Tech, 2013a) confirmed the location and use of Pond 1 as an acid and oil pit and identified other past features, such as debris piles in the Drum Area and an open burning area and open pit in Taxiway Tango Area East. This study also identified other features considered possible chemical source areas, identified in this investigation as follows:

- *former Pond 3*—a pond south of Pond 1—feature #2 in Figure 7-1
- *former Pond 4/open burning area*—features #43 and #45 in Figure 7-1
- *former Ponds 5 and 6*—features #46 and #47 in Figure 7-1
- *former Pond 7*—feature #42 in Figure 7-1; currently a wetland
- *DMW-4/former debris pile area*—feature #51 in Figure 7-1
- *former ammunition bunkers*—features #20 and #26 in Figure 7-1 (same area as Taxiway Tango Area North)

The former ammunition bunkers (features #20/#26) are in the Taxiway Tango Area North area; feature #51 (the former debris piles) is in the Drum Area; and the former open burning area and pit (features #15 and #44) are in Taxiway Tango Area East. These features were therefore combined with the previously identified Taxiway Tango Area North, Drum Area, and Taxiway Tango Area East. These former features/possible source areas are shown in Figures 7-1 and 7-2

and listed in Table 7-1 with the environmental media affected by trichloroethene and petroleum hydrocarbons (i.e., benzene, toluene, ethylbenzene, and xylenes).

Although light non-aqueous-phase liquids (LNAPL) have been observed at soil borings and test pits (e.g., floating oil sheens, apparent product at or above the water table, etc.), dense non-aqueous-phase liquids have not been directly observed in soil or groundwater samples collected during drilling and sampling at the Dump Road Area. High photoionization-detector (PID) field readings for subsurface soil samples or odors may be associated with high concentrations of volatile organic compounds, or possibly dense non-aqueous-phase liquids, but field screening results or odors alone do not indicate dense non-aqueous-phase liquids.

Concentrations of trichloroethene in soil samples are less than the threshold chemical concentrations used to evaluate whether trichloroethene dense non-aqueous-phase liquids are present (553,000 µg/kg for soil samples in groundwater or saturated pond sediment, and 515,000 µg/kg for vadose zone samples). Results for Pond 1 sediment samples collected in 2000 and 2005 indicate that trichloroethene dense non-aqueous-phase liquids may have been present in Pond 1 sediment at those times. Sampling results for Pond 1 sediment samples collected in 2012 and 2013 show lower trichloroethene concentrations; therefore, dense non-aqueous-phase liquids may no longer be present in the bottom sediment or may be non-uniformly distributed in the sediment.

Alternatively, high concentration areas in Pond 1 may have been missed or not sampled in 2012-2013. High concentrations of total benzene, ethylbenzene, toluene, and xylenes in Pond 1 sediments were detected in 2012–2013, indicating that Pond 1 sediments are a possible groundwater source of volatile aromatic hydrocarbons. However, lithologic logs for CPT-21, MW-43S, and MW-39S indicate thick clay in the subsurface downgradient of Pond 1. Although groundwater elevation contours suggest that water from Pond 1 may be infiltrating to the subsurface, organic matter in the pond sediments and a thick layer of dense clay underlying the pond likely inhibit movement of volatile organic compounds to groundwater. This is confirmed by trace trichloroethene concentrations detected in groundwater samples at CPT-21. Most other samples were non-detect, except for MW-39S, which had a trichloroethene concentration of 5 µg/L. Trichloroethene concentrations exceeding 11,000 µg/L in groundwater indicate possible residual dense non-aqueous-phase liquids in the surficial aquifer in the following areas: Taxiway

Tango Median Anomaly Area (in well DMW-11S and probe samples at CPT-03 and DPT-34), Taxiway Tango Area East (in well MW-45S/CPT-08/PA-7), former Pond 3 (DPT-43 and DPT-43B), around new well MW-50S, the southeastern corner of Taxiway Tango North (DPT-33), and the area east of Pond 1 (in wells MW-18I, DMW-3I, DMW-2A, DPT-24, DPT-25, and DPT-26).

Historical trichloroethene groundwater data in the Drum Area for probe samples DA-1, DA-3, DA-5, DA-6, DA-7, DA-8, MIP-28, and pre-2004 results for wells DMW-7S and MW-5 also indicate possible residual dense non-aqueous-phase liquids in the surficial aquifer. Generally, however, current trichloroethene concentrations (ranging from not detected to 6,800 µg/L) in groundwater samples from area wells (DMW-7S, MW-5, MW-40S/I, DPT-40, and DPT-42), and probe groundwater samples CPT-11 through CPT-15 (10-9600 µg/L) do not indicate that residual dense non-aqueous-phase liquids in groundwater are currently in this part of the Drum Area. TCE concentrations (7,200 µg/L–28,000 µg/L) at DPT-41, CPT-13 (30 feet deep), CPT-12 (30 feet deep), and at CPT-11 (35 feet deep) suggest that additional probe groundwater sampling may be required to further assess possible residual dense non-aqueous-phase liquids in these areas. High concentrations of *cis*-1,2-dichloroethene and vinyl chloride at many Drum Area probe groundwater-sampling locations, particularly those downgradient of DMW-7, indicate that degradation of trichloroethene is occurring at the Drum Area, likely in response to past injections of substrate into the surficial aquifer during a pilot-scale test in 2004.

High concentrations of petroleum hydrocarbons (total benzene, ethylbenzene, toluene, and xylenes) in soil at the Petroleum Hydrocarbon Area (PHA) northwest of DMW-9S/I/D indicate that this area is a significant source of volatile aromatic hydrocarbons. Oily sheens observed at soil boring B-15 and in test pit A33 also indicate the presence of light non-aqueous-phase liquids at the Petroleum Hydrocarbon Area. High concentrations of petroleum hydrocarbons (total benzene, ethylbenzene, toluene, and xylenes [total BTEX]) have also been detected in soil in the Taxiway Tango Median Area, west of well DMW-4, and near the former debris pile. Probe groundwater-sampling in 2012–2013 identified and delineated well-defined petroleum hydrocarbon groundwater plumes in the Taxiway Tango Median Anomaly Area, the Petroleum Hydrocarbon Area, Taxiway Tango Area East, and the Drum Area. Groundwater concentrations were primarily detected in the upper surficial-aquifer zone, and appear to be attenuating to low concentrations before reaching the eastern boundary of the Dump Road Area. However, low

concentrations of toluene have been detected infrequently in surface water samples collected from Frog Mortar Creek.

Several previously unknown historical features were identified in the Dump Road Area as part of the 2012 aerial photograph study (Tetra Tech, 2013a). These features had characteristics or operations that indicate that they may be possible source areas. Several features identified in the photograph review coincide with current known volatile organic compound source areas, such as Pond 1 (acid and oil disposal pit), former Pond 3, and Taxiway Tango Area East (former open burning area and pit).

Table 7-1
Source Areas, Possible Source Areas, and Affected Environmental Media—
Dump Road Area, Lockheed Martin, Martin State Airport, Middle River, Maryland

Area	Affected environmental media: trichloroethene	Affected environmental media: petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes)
Petroleum Hydrocarbon Area, Pond 1	surface sediment/subsurface soil, groundwater	surface sediment/subsurface soil, groundwater
Taxiway Tango Median Area	subsurface soil, groundwater	subsurface soil, groundwater
Taxiway Tango East— former open burning area and pit (features #44 and #15)	subsurface soil, groundwater	subsurface soil, groundwater
Drum Area (feature #51)	surface and subsurface soil, groundwater	groundwater
Taxiway Tango North— former ammunition bunkers (features #20 and #26)	subsurface soil, groundwater	—
Area east of Pond 1	subsurface soil, groundwater	—
Former Pond 3 (feature #2)	soil is unknown, groundwater	soil is unknown
DMW-4 former debris pile area (feature #50)	soil; groundwater	soil; groundwater is unknown
Former Pond 4/open burning area (features #43 and #45)	unknown; surrounding samples indicate trace to low concentrations in soil and groundwater	unknown; surrounding samples indicate trace to low concentrations in soil and groundwater
Former Ponds 5 and 6 (features #46 and #47)	unknown	unknown
Former Pond 7 (feature #42)	unknown	unknown

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA TCE Source Areas 2013.mxd)
1/17/2014 -- DC

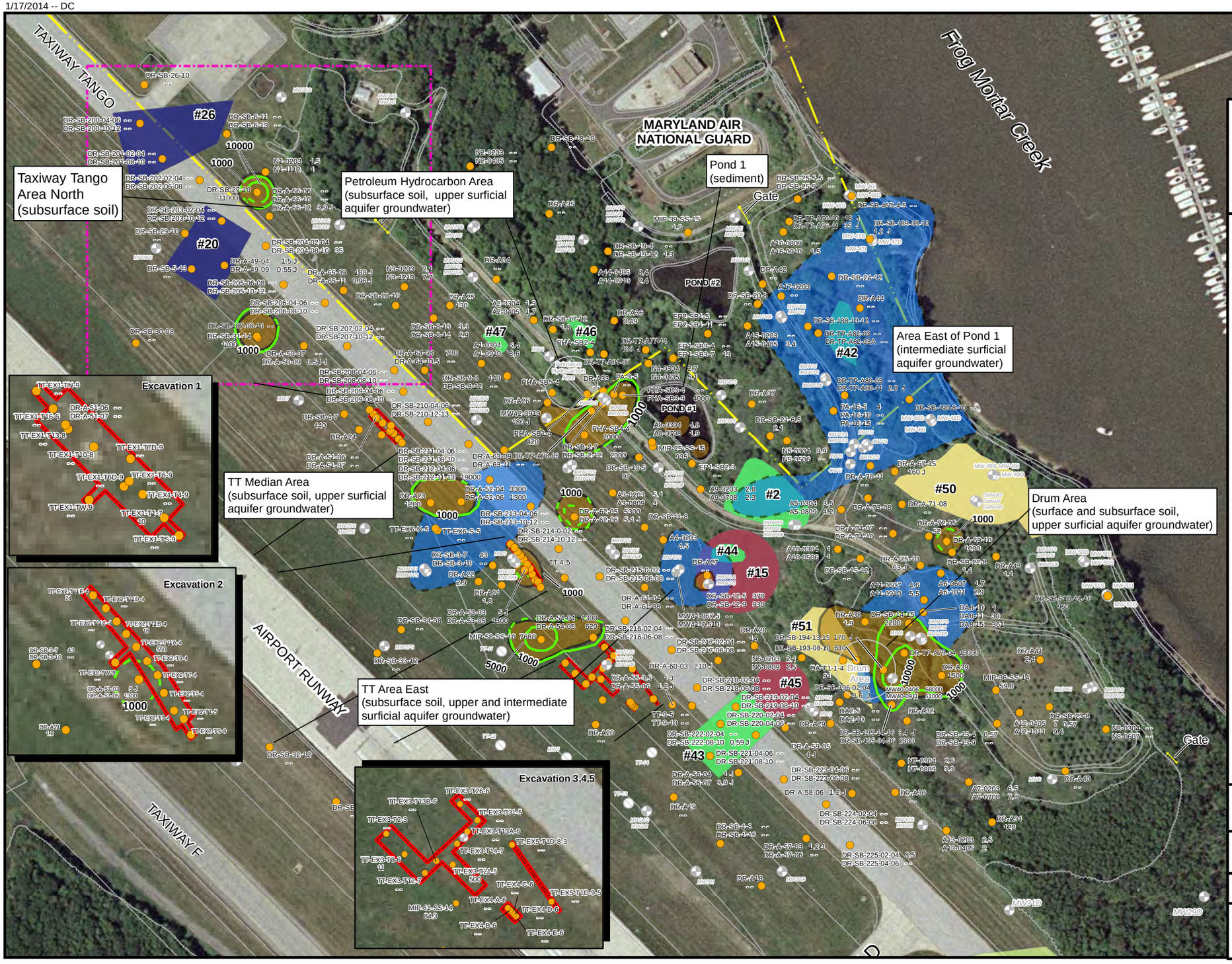

FIGURE 7-1

POSSIBLE TRICHLOROETHENE SOURCE AREAS
DUMP ROAD AREA

LEGEND

- SOIL SAMPLE
- TRICHLOROETHENE ISOCONCENTRATION CONTOURS IN UG/KG
- INFERRED
- 11 TRICHLOROETHENE CONCENTRATION (UG/KG)
- ABANDONED WELL
- GROUNDWATER MONITORING WELL
- EXCAVATION LOCATION- YEAR 2000
- POSSIBLE SOIL OR SEDIMENT TCE SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER TCE SOURCE (from Tetra Tech, 2013a)

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- TAXIWAY TANGO AREA NORTH
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

-- = Not Detected
UG/KG = micrograms per kilogram
TT= Taxiway Tango
TP= test pit
SB= subsurface soil
SS= soil sample
DR= Dump Road

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

DATE MODIFIED: 1/17/14

CREATED BY: DC

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA BTEX Source Areas 2013.mxd)
1/17/2014 DC

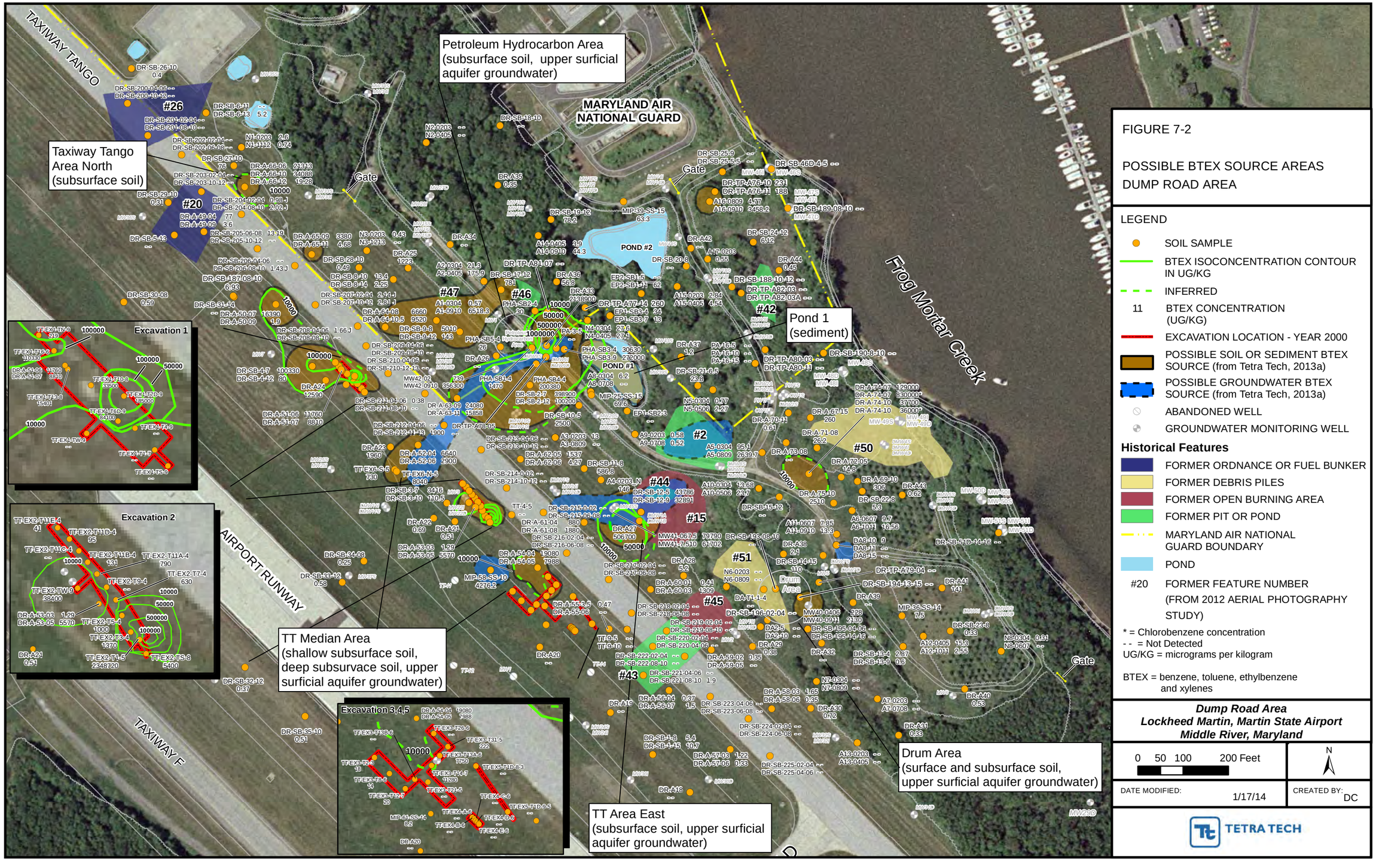

FIGURE 7-2

POSSIBLE BTEX SOURCE AREAS
DUMP ROAD AREA

LEGEND

- SOIL SAMPLE
- BTEX ISOCONCENTRATION CONTOUR IN UG/KG
- INFERRED
- 11 BTEX CONCENTRATION (UG/KG)
- EXCAVATION LOCATION - YEAR 2000
- POSSIBLE SOIL OR SEDIMENT BTEX SOURCE (from Tetra Tech, 2013a)
- POSSIBLE GROUNDWATER BTEX SOURCE (from Tetra Tech, 2013a)
- ABANDONED WELL
- GROUNDWATER MONITORING WELL

Historical Features

- FORMER ORDNANCE OR FUEL BUNKER
- FORMER DEBRIS PILES
- FORMER OPEN BURNING AREA
- FORMER PIT OR POND
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPHY STUDY)

* = Chlorobenzene concentration
-- = Not Detected
UG/KG = micrograms per kilogram

BTEX = benzene, toluene, ethylbenzene and xylenes

Dump Road Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 50 100 200 Feet

N

DATE MODIFIED: 1/17/14

CREATED BY: DC

TETRA TECH

Section 8
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APPENDIX A—DIGGING PERMITS AND UTILITY CLEARANCE DOCUMENTATION

Maryland Aviation Administration

Martin O'Malley
Governor
Anthony G. Brown
Lt. Governor
James T. Smith, Jr.
Secretary

Paul J. Wiedefeld, A.A.E.
Executive Director/CEO

June 27, 2013

Mr. Anthony Apanavage
Tetra Tech
20251 Century Boulevard Suite 200
Germantown, Maryland 20874

SUBJECT: Permit BP-13-027 Martin State Airport Dump Road Source Areas Groundwater Characterization

Dear Mr. Apanavage:

Please find enclosed the approved Permit for the above referenced project. Permit approval is subject to compliance with provisions and stipulations contained in the Permits Information Guide and Tenant Directive 007.01. The issuance or granting of this permit shall not be construed to be an approval of any violation of other Maryland Aviation Administration (MAA) or Code of Maryland (COMAR) regulations. MAA reserves the right to suspend or revoke the permit whenever it is deemed to be issued on the basis of incorrect, inaccurate or incomplete information provided by the applicant.

Please see the attached list of MAA departments and offices that need to be contacted prior to the start of work. Also, please refer to the Permits Information Guide to see if any other permit or authorization is required. The approved Permit, Permit Plan Set and Permit Comments shall be kept at the project location until the completion of the project. Revisions to design shall be submitted to and approved by MAA Division of Document & Permits prior to construction. ***As-Built Drawings are to be received no later than 70 days from Final Inspection acceptance.***

This permit shall become invalid unless the work on the site authorized by this permit is commenced within 180 days after issuance, or if the work is suspended or abandoned for a period of 180 days after the work is commenced. The issuance of this permit shall not relieve the applicant from his/her responsibility to ensure proper design and construction of this project.

Sincerely,

Syed Shariq R.A., Manager

Division of Documents & Permits

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND AVIATION ADMINISTRATION

CONSTRUCTION PERMIT

X	**Building Permit**
	Installation Permit
	Single Trade Permit
	Demolition Permit

Permit Information

Project Name: **Dump Road Groundwater at MTN**	Airport:		BWI
		X	MTN
Project Location: Taxiway Tango and Frog Mortar Creek	Tenant Space No.		
Permit Issued to: **Lockheed Martin / Tetra Tech**	Tel.: 301-233-8230		
	E-mail: tony.apanavage@tetratech.com		
Contact Person: **Tony Apanavage**	Tel.:301-233-8230		
	E-mail:		
Mailing Address: **20251 Century Boulevard Suite 200 Germantown MD 20874**	Emergency Tel. Number: **301-233-8230**		

Contractor/ Installer

Construction Company/Organization: **Boart Longyear**	MD Const. License No: MWD 575
	Expiration 6-1-2015
Address:	Tel: 740-373-2190
	E-mail:
Contact Person: **Larry Hunsberger/Jim McCombs**	Emergency Tel. Number:740-350-6611
	E-mail: jim.mccombs@boartlongyear.com

Additional Permits/Authorizations Required Prior to Start of Work

Airport Zoning Permit	X if applicable	**Hot Work/Welding Permit/ Hydrant Use Permit**	X
Contact MAA Fac. Planning: 410-859-7793		Contact BWI Fire & Rescue: 410-859-7511	
Utility Modification/Digging Authorization	X	**Department of Health Approval**	
Contact MAA Inspections: 410-859-7796		*Contact AA County DOH: 410-222-7238*	
Confined Space Entry Permit		**Liquor License**	
Contact MAA Inspections: 410-859-7796		*Contact AA County Liquor Board: 410-222-1148*	
State Highway Admin. Access Permit		**MAA Tenant Advisory**	X
Contact State Highway Administration		*Contact MAA Operations: 410-859-7974*	

Call MAA Division of Documents & Permits to schedule a Preconstruction Meeting Before Start of Work

Approval	Permit No. **BP-13-027**
Syed Shariq, R.A. Manager, Division of Documents & Permits	Date Issued: 6-27-12

THIS PERMIT IS ISSUED BY MARYLAND AVIATION ADMINISTRATION AS AUTHORIZATION TO PERFORM APPROVED CONSTRUCTION ACTIVITIES AS DESCRIBED AND SHOWN ON APPROVED PERMIT PLANS AND SPECIFICATIONS

Post in a Conspicuous Place at Job Site

Building Permit No. BP-13-027 is ***approved as noted*** and subject to compliance with the applicable codes, MAA Design Standards and the follow comments:

1. Excavation within non-tidal wetlands for the purpose of groundwater investigation qualifies as an exempt activity under COMAR 26.23.01.02 F(7) - Soil Investigation. Construction access should be via existing cleared areas. Restore any temporary disturbance to wetland areas by restoring grades, removing excess fill and seed.

GENERAL COMMENTS

1. Applicable Codes & Regulations as per Tenant Directive 007.1 apply.
2. Display MAA Permit on site at all times
3. Secure all tools and equipment in public/sterile areas and ensure that all doors are locked when no one is present in the construction area. No tools are to be left unattended. Follow proper escort procedures in the SIDA.
4. All loose debris/trash, on or about AOA, shall be deposited in an acceptable, covered trash receptacle. No debris/trash shall be left about roof; spaces open to the AOA, conveyance, or near open trash receptacles at any time.
5. Firestop penetrations through fire rated assemblies and seal all unused/abandoned openings using appropriate UL-listed firestopping systems.
6. Sleeves:
   - Sleeves shall be installed for cable and raceway penetrations of concrete slabs, masonry and fire rated gypsum walls and other floor and wall assemblies.
   - Sleeves will be installed during erection of concrete and masonry walls.
   - Sleeves shall be installed in concrete slabs supported by pan decking to ensure full sealing of the uneven lower surface around the pan.
   - New concrete slabs are acceptable to be poured with the concrete surrounding the new conduit without the use of sleeves.
7. Provide support to structural member for any mechanical, electrical or other building elements not scheduled for removal but attached to items being demolished.
8. Core drilling, concrete floor cutting or other removal methods (on-grade, elevated, and post tensioned) shall be preceded by NDT to show that no embedded conduits or structural reinforcing will be disturbed in the proposed locations. The MAA Design Standard DST 2007-01 Core Drilling of Concrete Floors shall be used as reference.

9. Electrical:
   - Electrical, communication, security or fire safety wiring/systems shall not be interrupted without notification and coordination with authority having jurisdiction and written approval by said authority.
   - MC/FMC ¾ inch minimum size, 6 foot maximum length; except as allowed to fish existing walls per MAA Design Standards. Cont'
   - Raceway size shall be ¾" minimum.
   - All conduit fittings shall be steel.
   - All wire/cable shall be plenum rated.
   - Only brushed stainless steel device covers allowed.
   - Exothermic weld required for electrical grounding to building steel per MAA-DST.
   - Install expansion joints at points required.
10. Mechanical/Plumbing:
    - Roof mounted equipment issues:
      -Gas pipe exposure on the roof shall be minimized.
      -Roof mounted equipment condensate drains shall be routed to the nearest roof drain.
      -Condensate drains shall not rest directly on the roof.
      -Existing roof warranties shall be maintained.
    - High pressure stainless steel couplings shall be used on all sanitary waste and vent piping.
11. Hot Work & Welding:
    - Open flame welding and cutting shall not be allowed without burning permit as issued.
    - During flame welding and flame/mechanical cutting operations install protective weld screens and non-flammable fire protection blankets.

12. The Office of Airport Security (OAS) recommend/requires a Security Plan for this project including requirements as stipulated on ITEM X-1 Security Requirements during Construction. These would include/but not limit to the following: The OAS requires MAA/ Contractor and all Subcontractors must obtain appropriate BWI ID badges for all personnel requiring access to any restricted area work site prior to commencement of work. Secondly, the Contractor/all Subcontractors must obtain appropriate BWI Airfield Registration stickers for all essential work vehicles requiring access to any restricted area work site prior to commencement of work. Thirdly, the Contractor/Subcontractors must ensure that escort authorized BWI ID badge holders will conduct continuous escorting of all non-badge personnel. Maintain all escorted non-badged personnel /vehicles within sight and reasonable speaking distance at all times while within a restricted areas to/ from/ at the work site. Finally, no vehicles/equipment without an authorized/current Air field Stickers is left unattended at anytime.

APPENDIX B—FIELD-SAMPLE SHEETS

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-SB-46D-4-5
Sample Location: MW46D
Sampled By: JS TOMALAVAGE
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:			
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/27/13

Method: MIX IN BAG

Monitor Readings (Range in ppm): 0-1.8

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
0845	4-5	BRN-GRY	SANDY CLAY

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-4ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): J S Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-46D-48-49
Sample Location: MW-46D
Sampled By: JS TOMM/AVIACE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/27/13

Method: MIX IN BAG

Monitor Readings (Range in ppm): 6.4

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
1120	48-49	VARIEGATED WHT-PURPL	CLAY

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-40ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-465-19-20
Sample Location: MW465/E
Sampled By: JS TOMALAVAGE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/28/13
Method: MIX
Monitor Readings (Range in ppm): 0.6-1.0

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
0833	19-20	GRY	SAND

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ml VIAL w/ METHANOL	1	
"	2-4ml VIAL w/ DI WATER	2	
GRO	4OZ GLASS	1	
SVOC + PCB + DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-46I-34-40
Sample Location: MW46S/I
Sampled By: JS TOMA/MVAC
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/28/13
Method: MIX
Monitor Readings (Range in ppm): 10

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
0940	39-40	ORG-BRN	SAND

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ml VIAL w/ METHANOL	1	
"	2-4ml VIAL w/ DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-46D-56-57
Sample Location: MW46D
Sampled By: JS TOMALAVAGE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/27/13
Method: MIX
Monitor Readings (Range in ppm): 3.7

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
1200	56-57	TAN	SAND

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ML VIAL W/METHANOL	1	
"	2-40ML VIAL W/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112EC04882

Sample ID No.: DR-SB-47D-29-31
Sample Location: MW47D
Sampled By: JS TOMA/MVAC
C.O.C. No.:

- [] Surface Soil
- [X] Subsurface Soil
- [] Sediment
- [] Other:
- [] QA Sample Type:

Type of Sample:
- [X] Low Concentration
- [] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/29/13
Method: MIX
Monitor Readings (Range in ppm): 10.4

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
0845	29-31	GRY-ORG BRN	CLAY & SAND

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ml VIAL w/ METHANOL	1	
"	2-4ml VIAL w/ DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-47D-49-51
Sample Location: MW47D
Sampled By: J STOMALAVAGE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/29/13
Method: MIX
Monitor Readings (Range in ppm): 7.2

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
0945	49-51	GRY-BRN	CLAY & SAND

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ML VIAL W/METHANOL	1	
"	2-4ML VIAL W/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

J STomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-475/I-24-26
Sample Location: MW475/E
Sampled By: JS TOMA/MWAC
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/29/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: MIX	1400	24-26	LT GRY	CLAYEY SAND
Monitor Readings (Range in ppm): 2.2				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-40ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):
JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-475/I-30-32
Sample Location: MW/475/I
Sampled By: JS TOMALAVAGE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/29/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	1430	30-32	ORG BRN	SAND
Method: MIR				
Monitor Readings (Range in ppm): 4.1				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL W/METHANOL	1	
"	2-4ml VIAL W/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	
TOC, TINC, CEC, NITRITES, TKN, PHOSPHATES, pH	8OZ GLASS	1	

OBSERVATIONS / NOTES:

ADDITIONAL SOIL FOR SOIL CHARACTERIZATION

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-SBD-19-21
Sample Location: MW48D
Sampled By: JS TOMA/MVACE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/4/13
Method: MIX
Monitor Readings (Range in ppm): 25 - 78.6

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
0845	19-21	GRY	F. SAND

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-40ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC + PCB + DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

JS Toma/MVACE

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-SB-48D-24-26
Sample Location: MW 48D
Sampled By: JS TOMALAVAGE
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:			
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 9/4/13	0910	24-26	GRY	CLAY
Method: MIX				
Monitor Readings (Range in ppm): 20.1-88.2				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-4ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	
TOC, TINC, CEC, NITRATES, TKN, PHOSPHATES, pH	16OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-48D-28-37
Sample Location: MW48D
Sampled By: JS TOMALAVAGE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/4/13
Method: MIX
Monitor Readings (Range in ppm): 1.5-44.3

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
0950	28-37	GRY	SANDY CLAY

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/ METHANOL	1	
"	2-4ml VIAL w/ DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-48D-34-36
Sample Location: MW48D
Sampled By: JS TOMA/MACE
C.O.C. No.: _____

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other: _____
[] QA Sample Type: _____

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/4/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: MIX	1040	34-36	LT. BRN	SAND
Monitor Readings (Range in ppm): 3.5-13.1				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-4ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112EC04882

Sample ID No.: DR-SB-48D-42-W
Sample Location: MW 48D
Sampled By: JS TOMMLAVAGE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/4/13
Method: MIX
Monitor Readings (Range in ppm): 1.3-4.5

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
1133	42-44	LT. BRN	SAND W/CLAY

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL W/METHANOL	1	
"	2-4ml VIAL W/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	
TOC, TIC, CEC, NITRITES, TKN, PHOSPHATES, pH	16OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

JS Tommlavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-49D-19-21
Sample Location: MW 49D
Sampled By: JS TOMM/MVAC
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/5/13
Method: MIX
Monitor Readings (Range in ppm): 0.4-3.7

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
0845	19-21	ORG. BRN	SAND

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-4ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC + PCB + DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

JS Tomlanovich

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112EC04882

Sample ID No.: DR-SB-49D-24-26
Sample Location: MW 49D
Sampled By: JS TOMM/MACE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/5/13
Method: MIX
Monitor Readings (Range in ppm): 2.9-4

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
0920	24-26	TAN	SAND

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-40ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

J S Tomlinson

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-490-29-31
Sample Location: MW 490
Sampled By: JS TOMA/[illegible]
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/5/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: MIX	1000	29-31	LT GRY	SAND
Monitor Readings (Range in ppm): 3.8-6.5				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ML VIAL W/ METHANOL	1	
"	2-4ML VIAL W/ DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	
TOC, TIC, CEC, NITRITES, TKN, PHOSPHATES, pH	16OZ GLASS	1	

OBSERVATIONS / NOTES:

MS/MSD COLLECTED

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
X	

Signature(s):

JS Toma

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-SB-49D-36-39
Sample Location: MW 49D
Sampled By: JS TOMALAVACE
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:			
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 9/5/13	1110	36-39	TAN-BRN	SAND
Method: MIX				
Monitor Readings (Range in ppm): 18.9-53.1				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-4ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-49D-44-46
Sample Location: MW49D
Sampled By: JS TOMM/MWAGE
C.O.C. No.:

- [] Surface Soil
- [X] Subsurface Soil
- [] Sediment
- [] Other:
- [] QA Sample Type:

Type of Sample:
- [X] Low Concentration
- [] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/5/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: MIX	1140	44-46	RED-BRN & GRY	SAND & CLAY
Monitor Readings (Range in ppm): 7.5-8.5				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ml VIAL W/METHANOL	1	
"	2-4ml VIAL W/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS		

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-49D-54-56
Sample Location: MW 49D
Sampled By: JS TOMA/MACE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/5/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: MIX	1205	54-56	BRN	SAND
Monitor Readings (Range in ppm): 7-17				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ML VIAL W/METHANOL	1	
"	2-40ML VIAL W/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	
TOC, TIC, CEC, NITRITES, TKN, PHOSPHATES, pH	16OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Duplicate ID No.:

Signature(s):

JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-SOD-18-20
Sample Location: MWSOD
Sampled By: JSTomm/AVACE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/9/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	0925	18-20	BRN-GRY	SAND & CLAY
Method: MIX				
Monitor Readings (Range in ppm): 2.5-17.9				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-4ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	
TOC, TIC, CEC, NITRITES, TKN, PHOSPHATES, pH	16OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

JS Tomlance

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-SOD-29-31
Sample Location: MWSOD
Sampled By: JS TOMM/RAVIAGE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/9/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: MIX	1030	29-31	LIGHT-TAN	SAND
Monitor Readings (Range in ppm): 1.2-5.6				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-4ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-SOD-34-36
Sample Location: MW-SOD
Sampled By: JS TOMM/INVACE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/9/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: MIX	1110	34-36	TAN-WHT	SAND
Monitor Readings (Range in ppm): 6.4-8				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-40ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

JJ Tomkowicz

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-SB-SOD-52-54
Sample Location: MW50D
Sampled By: JS TOMALAVAGE
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:			
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 9/9/13	1245	52-54	RED-BRN	CLAYEY SAND
Method: MIX				
Monitor Readings (Range in ppm): 3.6-8.9				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-4ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	
TOC, TINC, CEC, NITRATES, TKN, PHOSPHATES, pH	16OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-SOD-42-44
Sample Location: MW50D
Sampled By: JSTOMALAVAGE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/9/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: MIX	1150	42-44	BRN	SAND
Monitor Readings (Range in ppm): 5.1-11.5				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ml VIAL w/METHANOL	1	
"	2-4ml VIAL w/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

FLOWING SANDS SLOWING DRILLING PROGRESS

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

JS Tomalavage

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: DR-SB-SID-14-16
Sample Location: MW-SID
Sampled By: JS TOMMALVACE
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/10/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: MIX	1125	14-16	TAN	CLAYEY SAND
Monitor Readings (Range in ppm): 25, 1-618				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ. AMBER GLASS	1	
VOC	1-40ML VIAL W/METHANOL	1	
"	2-4ML VIAL W/DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	
TOC, TIC, CEC, NITRITES, TKN, PHOSPHATES, pH	16OZ GLASS	1	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

JS Tommalvace

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DUMP ROAD SOURCE AREAS
Project No.: 112IC04882

Sample ID No.: OR-SB-SID-34-36
Sample Location: MW-5D
Sampled By: JS TOMA/MVACC
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/10/13
Method: MIX
Monitor Readings (Range in ppm): 11.2-12.7

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
1230	34-36	BRN	SAND

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
% MOISTURE	2OZ, AMBER GLASS	1	
VOC	1-40ml VIAL w/ METHANOL	1	
"	2-4ml VIAL w/ DI WATER	2	
GRO	4OZ GLASS	1	
SVOC, PCB, DRO	8OZ GLASS	1	
METALS	4OZ GLASS	1	

OBSERVATIONS / NOTES:

FLOWING SANDS SLOWING DRILLING PROGRESS

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

JS Tomalavage

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-SB-188
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:			
Time:			
Method: Geoprobe			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/5/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: Geoprobe				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3-40ml VOAs	✓	
TPH-GRO	1-4oz glass jar	✓	
SVOCs, PCBs, DRO	1-8oz glass jar	✓	
PP metals	1-4oz glass jar	✓	
TOC, TJC, NO3, PO4, CH, ZHN	1-8oz glass jar	✓	
CEC	1-8oz glass jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-SB-189
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method: Geoprobe			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/5/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: Geoprobe				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3-40mL VOAs	✓	
TPH-GRO	1-4oz glass jar	✓	
SVOCs, PCBs, DRO	1-8oz glass jar	✓	
PP metals	1-4oz glass jar	✓	
TOC, TJC, NO3, PO4, CH, THN	1-8oz glass jar	✓	
CEC	1-8oz glass jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Camp Road Source Area
Project No.: 112G04882

Sample ID No.: OR-SB-190
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:

- [ ] Surface Soil
- [x] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Date: 6/27/13	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/25/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	1110	18-20	dk. brown to blk.	Clay to clayey silt, sl. moist to wet, high plast
Method: Geoprobe	1120	28-30	light gray w/red mottles	mottled, clay w/ some silt, sl. moist, mod plast
Monitor Readings (Range in ppm): 3.8 to 24.2				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	Terra Core kit	✓	
SVOCs, PCBs, TPH-GRO	1- 8oz Jar	✓	
TPH-DRO	1- 4oz Jar	✓	
Priority Pollutant Metals	1- 4oz Jar	✓	

OBSERVATIONS / NOTES:

PID: 18-20: 10.2

28-30: 24.2

other PID data see BORING LOG

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Area
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-SB-191
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/23/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	1400	8-10	dk. gray w/red, tan, light gray mottles, stiff, sl. moist to moist	
Method:			clay	to clayey silt, high plast to med plast
Geoprobe	1410	22-24	tan to golden	sand, well sorted, med to fine grained
Monitor Readings			some	poorly sorted gravel at 22.5'
(Range in ppm):				no plast, wet
3.4 - 81.1				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	Terra Core kit	✓	
SVOCs, PCBs, TPH-GRO	1 - 8 oz Jar	✓	
TPH-DRO	1 - 4 oz Jar	✓	
Priority Pollutant Metals	1 - 8 oz Jar	✓	

OBSERVATIONS / NOTES:

PID: 8-10: 5.5
22-24: 81.1

other PID readings See BORING LOG

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-SB-193
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method: Geoprobe			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/4/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: Geoprobe				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3-40mL VOAs	✓	
TPH-GRO	1-4oz glass jar	✓	
SVOCs, PCBs, DRO	1-8oz glass jar	✓	
PP metals	1-4oz glass jar	✓	
TOC, TJC, NO3, PO4, CH, ZNN	1-8oz glass jar	✓	
CEC	1-8oz glass jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-SB-194
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 9/3/13			
Time:			
Method: Geoprobe			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/3/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	1442	13-15	dark red/brown	clayey silt to silty clay, hard, sl. pliable,
Method:			(177 PID)	possible brick chunks, v. sl. moist
Geoprober	1452	26-28	light brown	coarse sand, wet, well sorted, soft
Monitor Readings			(41.7 PID)	
(Range in ppm):				
5.1-177				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3-40mL VOAs	✓	
TPH-GRO	1-4oz glass jar	✓	
SVOCs, PCBs, DRO	1-8oz glass jar	✓	
PP metals	1-4oz glass jar	NO	
TOC, TJC, NO3, PO4, CH, ZHN	1-8oz glass jar	NO	
CEC	1-8oz glass jar	NO	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Ramp Road Source
Project No.: 112IC04682

Sample ID No.: OL-SB-195
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method: Geoprobe			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/3/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: Geoprober	1119	4-6	Dk. brown w/ orange mottles, clayey silt to silty clay	
			Sl. moist, med plast, pliable	
	1140	14-16	brown to light gray, wet to moist, sandy clay to	
Monitor Readings (Range in ppm):			clayey sand, soft.	

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3-40ml VOAs	✓	
TPH-GRO	1-4oz glass jar	✓	
SVOCs, PCBs, DRO	1-8oz glass jar	✓	
RP metals	1-4oz glass jar	ND	
TOC, TSC, NO3, PO4, NH3, TKN	1-8oz glass jar	ND	
CEC	1-8oz glass jar	ND	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Ramp Road Source
Project No.: 112G04682

Sample ID No.: OL-SB-196
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method: Geoprobe			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 9/3/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: Geoprobe	0950	02-04 (PID: 30.4)	dk. brown w/red mottles	sl. moist, silty clay, soft, la-plastic
Monitor Readings (Range in ppm): 3.0-32.1	1040	26-28 (PID: 10.4)	light brown	wet coarse grained sand, well sorted, soft

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3-40ml VOAs	✓	
TPH-GRO	1-4oz glass jar	✓	
SVOCs, PCBs, OPP	1-8oz glass jar	✓	
PP metals	1-4oz glass jar	✓	
TOC, TIC, NO3, POA, chloride	2-8oz glass jar	✓	
CEC	1-8oz glass jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Dump Road Wetland
Project No.:

Sample ID No.: EWT-SD-0-1
Sample Location: SD-1
Sampled By: SBC
C.O.C. No.:

- [ ] Surface Soil
- [ ] Subsurface Soil
- [x] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1525	0-1'	Brown mottled	CLAYEY SILT, Soft, Moist to
Method:			gray	wet w/ organics such as sticks,
Composite				roots, & leaves,
Monitor Readings				
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC	Terra Core kit, & 2 oz Jar	✓	
1,4-Dioxane, DRO, Metals, PCBs	1-8oz Jar	✓	
GRO	1-2oz Jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Dump Road Wetland
Project No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: EWT-SD1-1-2
Sample Location: SD-1
Sampled By: SBL
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:			
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1530	1-2'	Brown Mottled black	Medium to high plasticity CLAY w/ trace sand + organics such as rush + sticks, moderately soft + moist.
Method: Composite				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	Terra Core Kit, 2oz Jar	✓	
1,4-Dioxane, DRO, Metals, PCBs	1-8oz Jar	✓	
GRO	1-2oz Jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dyp Road Wetland
Project No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: EWT-SD2-0-1
Sample Location: SD-2
Sampled By: SBC
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1510	0-1'	Brown mottled	CLAYEY SILT, Soft, Moist
Method:			gray	to wet, w/ organics such as
Composite				roots, stem pieces.
Monitor Readings				
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC,	Terra Core kit + 2 oz jar	✓	
1,4-Dioxane, DRO, Resin, PCBs	1 x 8 oz jar	✓	
GRO	1-2 oz jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Pump Road Wetland
Project No.:

Sample ID No.: EWT-SD2-1-2
Sample Location: SD-2
Sampled By: SPL
C.O.C. No.:

- [ ] Surface Soil
- [ ] Subsurface Soil
- [X] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1515	1-2'	Brown mottled	Medium to high plasticity CLAY w/
Method:			black	trace Sand & organics such
Composite				as roots & rootlets. Moderately Soft
Monitor Readings				& Moist
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	Tora Lock kit, 2oz Jar	✓	
1,4-Dioxane, DRO, Metals, PCBs	1-8oz Jar	✓	
GRO	1-2oz Jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Pond 1
Project No.:

Sample ID No.: EP1-SD15-0-1
Sample Location: SD15
Sampled By: SBC
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1145	0-1'	Dark brown	Very Soft silt, ~~Mod~~ wet, decaying
Method: Composite				organics odor.
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	Terra Core kit + 2oz jar	✓	
1,4-Dioxane, DRO, Metals, PCBs	1-8oz jar	✓	
GRO	1-2oz jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Pond I
Project No.:

Sample ID No.: EPI-SD15-1-2
Sample Location: SD15
Sampled By: JM
C.O.C. No.:

- [ ] Surface Soil
- [ ] Subsurface Soil
- [x] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1150	1-2'	Dark brown w/ light green & orange mottles	Very Soft Silt, wet, decaying organic matter.
Method: Composite				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC	Terra Core Kit + 2 oz Jar	✓	
1,4-Dioxane, DRO, Metals, PCBs	1- 8 oz Jar	✓	
GRO	1-2 oz Jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Dump Road Pond 1
Project No.:

Sample ID No.: EP1-SD16-0-1
Sample Location: SD16
Sampled By: SRL
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1205	0-1'	Dark brown w/	Very soft, silt, wet, decaying
Method:			light green	organics odor
Composite			mottles	
Monitor Readings				
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	terra Core kit, 2 2oz jar	✓	
1,4-Dioxane, DRO, metals, PCBs	1-8oz jar	✓	
GRO	1-2oz jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Dump Road Pond 1
Project No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: EP1-SD16-1-2
Sample Location: SD16
Sampled By: JM
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA

Date: 10/15/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	1210	1-2'	Dark brown	very soft, silt, wet, decaying
Method: Composite			w/ light green	organics odor
			mottles	
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION

Analysis	Container Requirements	Collected	Other
VOCs	terra core kits & 2oz jar	✓	
1,4-Dioxane, DRO, Metals, PCBs	1-8oz jar	✓	
C-RO	1-2oz jar	✓	

OBSERVATIONS / NOTES

MAP

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Drop Royal Pond 1
Project No.:

Sample ID No.: EP1-SD17-0-1
Sample Location: SD17
Sampled By: SBL
C.O.C. No.:

- [ ] Surface Soil
- [ ] Subsurface Soil
- [X] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1335	0-1'	Dark brown	Very soft silt, wet, decaying
Method: Composite			mottled light	organics abun.
			green.	
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	Term Cool Fill & 2oz jar	✓	
1,4-Dioxane, DRO, metals, PCBs	1-8oz jar	✓	
C-BOD	1-2oz jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Park 1
Project No.:

Sample ID No.: EP1-SD17-1-2
Sample Location: SD17
Sampled By: SBC
C.O.C. No.:

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1340	1-2'	Dark brown	Very soft silt, wet, decaying
Method: Composite			mottled light	organics odor
			green	
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	Terra Cycle Kit & 2oz jar	✓	
1,4-Dioxane, ORO, Metals, PCBs	1-8oz jar	✓	
GRO	1-2oz jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Pond 1
Project No.:

Sample ID No.: EP1-SD18-0-1
Sample Location: SD18
Sampled By: SDC
C.O.C. No.:

- [ ] Surface Soil
- [ ] Subsurface Soil
- [x] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1220	0-1'	Dark brown	Very soft silt, wet, decaying
Method:			w/ light grey	organics odor. Scheve core
Composite			mottles	to surface upon advancement of
Monitor Readings				sampler into sediment.
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	Term Cubit + 2oz Jar	✓	
1,4-Dioxane, DRO, Metals, PCBs	1-8oz Jar	✓	
CLP	1-2oz Jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Dump Road Pond 1
Project No.:

[] Surface Soil
[] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: EP1-SD18-1-2
Sample Location: SD18
Sampled By: SBC
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/15/13	1225	1-2'	Dark brown	very soft silt, wet, decaying organics
Method:			w/ light green	odor.
Composite			mottles	
Monitor Readings				
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC,	terra core lts + 2 oz jar	✓	
1,4-Dioxane, DRO, metals, PCBs	1-8 oz jar	✓	
GRO	1-2 oz jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA - OR GW-2013
Project No.: 112G04882

Sample ID No.: MSA-MW465-101613
Sample Location: MSA
Sampled By: JAM/BZL
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

SAMPLING DATA:

Date: 10/16/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 0950	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: bed pump	clear	6.13	1.50	15.83	13.6	2.36	0.8	-39

PURGE DATA:

Date: 10/16/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri pump								
Monitor Reading (ppm): -								
Well Casing Diameter & Material			SEE	low flow	purge	data	sheet	
Type: 2" PVC								
Total Well Depth (TD): 27.75'								
Static Water Level (WL): 9.73								
One Casing Volume(gal/L): -								
Start Purge (hrs): 0902								
End Purge (hrs): 0947								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	7-40 ml glass vials	✓
BRO	HCl	2-40 ml glass vials	✓
Total Metals	HNO_3	1-500 ml plastic	✓
Dissolved Metals	HNO_3	1-500 ml plastic (filtered)	✓
Hex Chrom	-	1-250 ml plastic	✓
DRO	-	2-1 L ambers	✓
SVOCs + 1,4 dioxane	-	2-1 L ambers	✓

OBSERVATIONS / NOTES:

Ferrous Iron Unit: >10 and >1
Hex Chrom Sampled @ 1110

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA - OR
PROJECT NUMBER: 117610482

WELL ID.: MSA-MW465-10-16-13
DATE: 10/16/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0902	9.23	-	-	-		—	—	—	—	
0907	12.75	200 mL/m	[illegible]609	1.65	25.9	2.96	K.11	-15	0.8	
0912	14.04	"	6.17	1.58	27.1	2.86	15.21	-26	0.8	
0917	15.20	" "	6.17	1.49	24.1	2.41	15.34	-37	0.7	
0922	15.81	" "	6.18	1.48	20.5	2.72	15.44	-44	0.7	
0927	16.34	" "	6.18	1.48	19.5	2.76	15.57	-46	0.7	
0932	16.82	" "	6.17	1.49	22.2	2.94	15.61	-46	0.7	
0937	17.22	" "	6.15	1.49	14.4	2.76	15.68	-44	0.7	
0942	17.61	" "	6.14	1.50	13.9	2.43	15.75	-42	0.7	
0947	17.81	" "	6.13	1.50	13.6	2.36	15.83	-39	0.8	
		Sample VOCs, Gasoline, BTEX & 1-4 Dioxane, Hex Chrom, Total + Dissolved Metals								
					Sample taken @ 0950					

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA - DR GW 2013
Project No.: 112504882

Sample ID No.: MSA-MW46I
Sample Location: MSA
Sampled By: JAM/SDL
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

SAMPLING DATA:

Date: 10/16/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1205	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: Peri pump	clear	5.72	0.540	14.26	9.05	0.78	0.3	44

PURGE DATA:

Date: 10/16/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri pump								
Monitor Reading (ppm): -								
Well Casing Diameter & Material								
Type: 2" PVC			See low flow purge data sheet					
Total Well Depth (TD): 47.72								
Static Water Level (WL): 10.11								
One Casing Volume(gal/L): -								
Start Purge (hrs): 1120								
End Purge (hrs): 1225								
Total Purge Time (min): 65								
Total Vol. Purged (gal/L): 24								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 ml glass vials	✓
GRO	HCl	2-40 ml glass vials	✓
Total Metals	HNO3	1-500 ml ~~plastic~~ plastic	✓
Dissolved Metals	HNO3	1-500 ml plastic (filtered)	✓
Hex Chrom	-	1-250 ml plastic	✓
DRO	-	2-1L Ambers	✓
SVOC/1-4 dioxane	-	2 1L ambers	✓

OBSERVATIONS / NOTES:

Ferrous Iron kit: >10 and >1
Hex Chrom Sample @ 1205

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA-Dr GW 2013 **WELL ID.:** MSA-MW 46I-101613
PROJECT NUMBER: 112G04882 **DATE:** 10/16/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP mV	Salinity % or ppt	Comments
1120	10.11	-	-	-	-	-	-	-	-	
1125	10.20	200	5.95	0.871	39.5	6.61	16.27	20	0.4	
1130	10.20	200	5.73	0.887	41.5	3.47	14.60	52	0.4	
1135	10.20	200	5.71	0.778	30.5	1.61	14.46	54	0.4	
1140	10.20	200	5.71	0.723	31.4	1.35	14.42	54	0.3	
1145	10.20	200	5.71	0.650	17.1	1.07	14.35	52	0.3	
1150	10.20	200	5.71	0.600	15.1	0.82	14.33	50	0.3	
1155	10.20	200	5.74	0.583	12.5	1.04	14.31	47	0.3	
1200	10.20	200	5.77	0.546	9.07	0.79	14.28	46	0.3	
1205	10.20	200	5.77	0.540	9.05	0.78	14.26	44	0.3	
			Sample VOCs,		GRO+DRO, Suites		+/-4 Analyte, Hex Chrom,			
					Total + Dissolved		Met. 15			
					Sampled @ 1205					

SIGNATURE(S):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA-DR GW 2013
Project No.: 117604882

Sample ID No.: MSA-MW46D-101613
Sample Location: MSA
Sampled By: JAM/SBL
C.O.C. No.:

[] Domestic Well Data
[↓] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Type of Sample:
[↓] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/16/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1320	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: Peri pump	Clear	6.32	0.151	14.61	15.5	-87	0.1	-87

PURGE DATA:

Date: 10/16/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri pump								
Monitor Reading (ppm): -								
Well Casing Diameter & Material			See flow purge data sheet					
Type: 2" PVC								
Total Well Depth (TD): 62.45								
Static Water Level (WL): 10.48								
One Casing Volume(gal/L): -								
Start Purge (hrs): 1230								
End Purge (hrs): 1340								
Total Purge Time (min): 70								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL vials	✓
BTEX	HCl	2-40 mL vials	✓
Total Metals	HNO_3	1-500 mL plastic	✓
Dissolved Metals	HNO_3	1-500 mL plastic (filtered)	✓
Hex Chrom	-	1-250 mL plastic	✓
NAD	-	2-1L amber	✓
SVOC + 1,4 Dioxane	-	2-1L amber	✓

OBSERVATIONS / NOTES:

Hex chrom @ 1320

Ferrous iron test: >10 and >1

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA-DR GW 2013
PROJECT NUMBER: 112IC04882
WELL ID.: MSA-MW46D-101613
DATE: 10/16/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1230	10.48	–	–	–	–	–	–	–	–	
1235	10.52	200	6.25	0.148	9.05	6.48	14.72	-60	0.1	
1240	10.52	200	6.27	0.146	7.90	5.29	14.65	-68	0.1	
1245	10.52	200	6.28	0.145	8.52	4.45	14.63	-73	0.1	
1250	10.52	200	6.28	0.145	9.62	3.64	14.59	-78	0.1	
1255	10.52	200	6.28	0.144	22.0	3.16	14.64	-81	0.1	
1300	10.52	200	6.28	0.144	16.8	2.78	14.62	-83	0.1	
1305	10.52	200	6.29	0.146	16.3	2.40	14.62	-85	0.1	
1310	10.52	200	6.30	0.149	15.8	1.98	14.63	-86	0.1	
1315	10.52	200	6.32	0.151	15.5	1.92	14.61	-87	0.1	
			Sample	VOCs, Gro + Dro, SVOC + 1-4 dioxane, Hex chrom, total + dissolved metals						

SIGNATURE(S): [signature]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA - BR GW 2013
Project No.:

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MSA-MW475-101613
Sample Location: MSA
Sampled By: JAM/SDL
C.O.C. No.:
Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/16/13	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1445								
Method: Peri pump	clear	6.29	2.05	16.04	3.45	0.54	1.0	-74

PURGE DATA:

Date: 10/16/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri pump								
Monitor Reading (ppm): -								
Well Casing Diameter & Material			See low flow purge data sheet					
Type: 2" PVC								
Total Well Depth (TD): 22.5								
Static Water Level (WL): 10.61								
One Casing Volume(gal/L): -								
Start Purge (hrs): 1355								
End Purge (hrs): 1520								
Total Purge Time (min): 85								
Total Vol. Purged (gal/L): 4.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 ml glass vials	✓
GRO	HCl	2-40 ml glass vials	✓
Total Metals	HNO3	1-500 ml plastic	✓
Dissolved Metals	HNO3	1-500 ml plastic	✓
Hex chrom	-	1-250 ml plastic	✓
DRO	-	2-1L Ambers	✓
PCBs, 1,4 dioxane	-	2-1L ambers	✓

OBSERVATIONS / NOTES:

Hex Chrom @ 1445
Ferrous iron kit: >10, >1

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA-DR GW 2013
PROJECT NUMBER: 112IC04882
WELL ID.: MSA-MW475-101613
DATE: 10/16/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1355	10.61	–	–	–	–	–	–	–	–	
1400	11.95	200	6.51	2.44	10.14	8.02	15.71	-85	1.3	
1405	12.91	200	6.51	2.40	11.26	3.02	15.78	-100	1.2	
1410	12.9	200	6.55	2.23	8.63	1.58	15.91	-104	1.1	
1415	13.0	200	6.57	2.17	9.63	1.10	15.96	-107	1.1	
1420	13.0	200	6.50	2.13	7.04	1.37	16.04	-100	1.1	
1425	13.0	200	6.45	2.11	5.72	0.66	16.13	-95	1.1	
1430	13.0	200	6.44	2.08	4.16	0.81	16.12	-86	1.1	
1435	13.0	200	6.34	2.06	4.15	0.58	16.07	-80	1.0	
1440	13.0	200	6.29	2.05	3.45	0.54	16.04	-74	1.0	
			Sample VOCs, 1-4 dioxane + DRO, GRO, Total + Dissolved metals, Hex Chrom + SVOCs							
			Sample @ 1445							

SIGNATURE(S): [signature]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA-OA GW 2013
Project No.:

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MSA-MW47I-101713
Sample Location: MSA
Sampled By: JHM/SDL
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/17/13	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: 0840								ORP
Method: Peri pump	Clear	5.92	1.79	14.75	10.25	1.18	0.9	60

PURGE DATA:

Date: 10/17/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri Pump								
Monitor Reading (ppm): -								
Well Casing Diameter & Material			See low flow purge data sheet					
Type: 2" PVC								
Total Well Depth (TD): 37.71								
Static Water Level (WL): 10.12								
One Casing Volume(gal/L): -								
Start Purge (hrs): 0750								
End Purge (hrs): 0910								
Total Purge Time (min): 80								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL glass vials	✓
DRO	HCl	2-40 mL glass vials	✓
Total Metals	HNO3	1-500 mL plastic	✓
Dissolved Metals	HNO3	1-500 mL plastic (filtered)	✓
Hex Chrom	-	1-250 mL plastic	✓
PAH	-	2-1L ambers	✓
SVOCs + 1,4 dioxane	-	2-1L ambers	✓

OBSERVATIONS / NOTES:

Hex chrom sampled @ 0905

Ferrous iron kit: >10, >1

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA-OA GW 2013 **WELL ID.:** MSA-MW47I
PROJECT NUMBER: 117604882 **DATE:** 10/17/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0750	10.12	—	—	—	—	—	—	—	—	
0755	10.81	200	5.77	1.76	13.8	3.78	16.44	70	0.9	
0800	10.92	200	5.69	1.78	13.3	1.51	15.67	82	0.9	
0805	10.94	200	5.65	1.79	16.0	0.96	15.17	86	0.9	
0810	10.99	200	5.69	1.79	17.7	1.84	14.99	87	0.9	
0815	10.99	200	5.72	1.80	26.8	1.03	14.85	83	0.9	
0820	10.99	200	5.77	1.81	29.5	1.19	14.80	79	0.9	
0825	10.99	200	5.89	1.81	14.6	1.14	14.78	66	0.9	
0830	10.99	200	5.91	1.81	10.52	1.23	14.72	61	0.9	
0835	10.99	200	5.92	1.79	10.25	1.18	14.75	60	0.9	
			Sample VOCs, bromides, SVOCs + 1-4 dioxane, Total and dissolved metals							
						Hex Chrom				
			Sample zone 1 0840							
			Hex Chrom:							

SIGNATURE(S): _____

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA-DR bw 2013
Project No.:

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MSA-MW470-101713
Sample Location: MSA
Sampled By: JAM/SDL
C.O.C. No.:
Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/17/13	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1005								
Method: Peri pump	clear	6.53	0.223	15.52	10.25	7.60	0.1	-103

PURGE DATA:

Date: 10/17/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri pump								
Monitor Reading (ppm): -								
Well Casing Diameter & Material			See low flow purge data sheet					
Type: 2" PVC								
Total Well Depth (TD): 52.7'								
Static Water Level (WL): 10.74'								
One Casing Volume(gal/L): -								
Start Purge (hrs): 0915								
End Purge (hrs): 1030								
Total Purge Time (min): 75								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL glass vials	✓
GRO	HCl	2-40 mL glass vials	✓
Total Metals	HNO3	1-500 mL plastic	✓
Dissolved metals	HNO3	1-500 mL plastic (filtered)	✓
Hex chrom	-	1-250 mL plastic	✓
DRO	-	2-1L ambers	✓
SVOCs + 1-Hydrazine	-	2-1L ambers	✓

OBSERVATIONS / NOTES:

Hex chrom sampled @ 1030

Ferrous iron kit: >10, >1

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA-OR GW 2013
PROJECT NUMBER: 112G04882
WELL ID.: MSA-MW47D-101713
DATE: 10/17/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0915	10.29	–	–	–	–	–	–	–	–	
0920	10.48	200	6.33	0.524	7.68	7.61	15.59	-35	0.2	
0925	10.48	200	6.44	0.243	6.06	7.59	15.41	-73	0.1	
0930	10.48	200	6.47	0.229	6.45	~~7.59~~ 7.59	15.46	-86	0.1	
0935	10.48	200	6.53	0.225	~~6.75~~ 7.25	7.45	15.50	-96	0.1	
0940	10.48	200	6.51	0.225	8.10	7.44	15.46	-97	0.1	
0945	10.48	200	6.47	0.224	9.67	7.55	15.54	-100	0.1	
0950	10.48	200	6.53	0.225	10.65	7.65	15.55	-102	0.1	
0955	10.48	200	6.51	0.226	10.50	7.63	15.52	-102	0.1	
1000	10.48	200	6.53	0.225	10.25	7.60	15.52	-103	0.1	
			Sample	VOCs, SVOCs, 504 (5+1-4 dioxane), 624+P&T, Total+dissolved						
				Metals, Hex chrom						
			Sample time:	1005						
			Hex Chrom time:	1030						

SIGNATURE(S):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA-DAL GW 2013
Project No.: 112C04882

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MSA-MW48S-101813
Sample Location: MSA
Sampled By: JAM/SGL
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/18/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 0845	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: Peri pump	clear	6.75	1.72	14.52	3.65	7.21	0.9	-106

PURGE DATA:

Date: 10/18/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri pump								
Monitor Reading (ppm): —								
Well Casing Diameter & Material			See low flow purge data sheet					
Type: 2" PVC								
Total Well Depth (TD): 22.45'								
Static Water Level (WL): 18.75'								
One Casing Volume(gal/L): —								
Start Purge (hrs): 0800								
End Purge (hrs): 0920								
Total Purge Time (min): 80								
Total Vol. Purged (gal/L): ~2								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL glass vials	✓
BTEX	HCl	2-40 mL glass vials	✓
Total Metals	HNO3	1-500 mL plastic	✓
Dissolved Metals	HNO3	1-500 mL plastic (filtered)	✓
Hex Chrome	—	1-250 mL plastic	✓
TPHD	—	2-1L ambers	✓
SVOCs: 1-4 dioxane	—	2-1L ambers	✓

OBSERVATIONS / NOTES:

Hex Chrom sampled @ 1240
Ferrous Iron wt: >10, >1

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA-DR GW 2013
PROJECT NUMBER: 112IC04882

WELL ID.: MSA-MW 485-~~101713~~ 101813
DATE: ~~10/17/13~~ 10/18/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
~~1125~~	~~18.25~~									
	~~DRY~~		START							
0800	18.32	—	—	—	—	—	—	—	—	
0805	18.46	100	6.58	1.69	14.0	6.54	14.92	-52	0.9	
0810	18.46	100	6.73	1.69	6.49	5.43	14.43	-96	0.8	
0815	18.46	100	6.76	1.69	4.24	4.82	14.44	-103	0.9	
0820	18.46	100	6.76	1.70	3.89	4.41	14.43	-106	0.9	
0825	18.46	100	6.76	1.72	3.44	4.12	14.51	-106	0.9	
0830	18.46	100	6.76	1.72	3.15	3.85	14.51	-107	0.9	
0835	18.46	100	6.76	1.72	2.93	3.57	14.51	-107	0.9	
0840	18.46	100	6.75	1.72	3.87	3.30	14.53	-106	0.9	
0845	18.46	100	6.75	1.72	3.65	3.21	14.52	-106	0.9	

Sample VOCs, SVOCs+1-4 dioxane, GRO+DRO, Total + Dissolved Metals
Hex Chrom

Hex Chrom Sampled @ 1240

All other Samples @ 0845

SIGNATURE(S): [signature]

PAGE 1 **OF** 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA-DR GW 2013
Project No.: 112IC04882

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MSA-MW48I-101713
Sample Location: MSA
Sampled By: JAM/SBL
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 10/17/13								
Time: 1335								ORP
Method: Peri pump	Clear	5.31	1.04	18.05	71.1	5.33	0.5	117

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/17/13								
Method: Peri pump								
Monitor Reading (ppm): –								
Well Casing Diameter & Material			See low flow purge data sheet					
Type: 2" PVC								
Total Well Depth (TD): 37.63'								
Static Water Level (WL): 18.31'								
One Casing Volume(gal/L): –								
Start Purge (hrs): 1245								
End Purge (hrs): 1430								
Total Purge Time (min): 105								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40mL glass vials	✓
GRO	HCl	2-40 mL glass vials	✓
Total Metals	HNO3	1-500 mL plastic	✓
Dissolved Metals	HNO3	1-500 mL plastic (Filtered)	✓
Hex Chrom	–	1-250 mL plastic	✓
DRO	–	2-1L ambers	✓
SVOCs + 1-4 dioxane	–	2-1L ambers	✓

OBSERVATIONS / NOTES:

Hex chrom @ 1430
Ferrous iron kit: >10, >1

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA DR GW 2013
PROJECT NUMBER: 112JC04882

WELL ID.: MSA-MW48I-101713
DATE: 10/17/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1245	18.4	–	–	–	–	–	–	–	–	
1250	18.4	200	5.47	1.03	1409AV	6.56	18.73	82	0.5	
1255	18.4	200	5.40	1.08	668 AV	5.61	18.31	97	0.5	
1300	18.4	200	5.35	1.08	144	5.42	18.17	104	0.5	
1305	18.4	200	5.36	1.08	149	5.39	18.17	105	0.5	
1310	18.4	200	5.35	1.08	155	5.26	18.15	106	0.5	
1315	18.4	200	5.34	1.07	95.6	5.21	18.07	108	0.5	
1320	18.4	200	5.35	1.06	81.4	5.25	17.94	111	0.5	
1325	18.4	200	5.32	1.05	77.5	5.36	18.04	114	0.5	
1330	18.4	200	5.31	1.04	71.1	5.33	18.05	117	0.5	
			Sample	time: 1335						
		Sample	VOCs,	1-4 dioxane + SVOCs,		DRO+GRO,	Total +	Dissolved	metals,	Hex chrom
			Hex	chrom @	1430					

SIGNATURE(S): [signature]

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA - Qtr GW 2013
Project No.: 112G04882

Sample ID No.: MSA-MW48D-101813
Sample Location: MSA
Sampled By: JAM/SBL
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

SAMPLING DATA:

Date: 10/18/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1015	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: Peri pump	clear	5.51	0.7%	13.85	7.83	5.16	0.4	76

PURGE DATA:

Date: 10/18/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri pump								
Monitor Reading (ppm): -								
Well Casing Diameter & Material Type: 2" PVC			See low flow purge data sheet					
Total Well Depth (TD): 52.12								
Static Water Level (WL): 18.85								
One Casing Volume(gal/L): -								
Start Purge (hrs): 0925								
End Purge (hrs): 1045								
Total Purge Time (min): 80								
Total Vol. Purged (gal/L): ~3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 ml glass vials	✓
BRO	HCl	2-40 ml glass vials	✓
Total Metals	HNO3	1-500 ml Plastic	✓
Dissolved Metals	HNO3	1-500 ml plastic (filtered)	✓
Hex Chrom	-	1-250 ml plastic	✓
PRO	-	2-1L Ambers	✓
Suite 1-4 dioxins	-	2-1L Ambers	✓

OBSERVATIONS / NOTES:

Hex chrom @ 1245
Ferrous iron kit: >10, >1

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA-DR GW 2013 **WELL ID.:** MSA-MW48D-101813
PROJECT NUMBER: 117-1604682 **DATE:** 10/18/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0925	18.55	—	—	—	—	—	—	—	—	
0930	18.60	200	6.51	0.967	20.6	7.47	14.20	-62	0.5	
0935	18.61	200	5.63	0.797	6.27	4.88	13.84	-9	0.4	
0940	18.61	200	5.55	0.801	3.81	5.25	13.76	48	0.4	
0945	18.61	200	5.54	0.801	3.52	6.01	13.77	57	0.4	
0950	18.61	200	5.52	0.800	3.34	5.94	13.80	63	0.4	
0955	18.61	200	5.52	0.798	3.51	5.65	13.83	68	0.4	
1000	18.61	200	5.69	0.798	3.60	5.68	13.87	72	0.4	
1005	18.61	200	5.53	0.798	3.02	5.27	13.80	74	0.4	
1010	18.61	200	5.51	0.797	2.78	5.20	13.82	75	0.4	
1015	18.61	200	5.51	0.796	3.83	5.16	13.85	76	0.4	
				Sample VOCs, SVOCs + 1-4 dioxane, Total + Dissolved Metals						
					1,4-D+6020, Hex Chrom					
				Hex Chrom @	1245					
				All others @	1015					

SIGNATURE(S): _____

PAGE 1 **OF** 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Dump Road MSA
Project No.: 112 ICO4RR2

Sample ID No.: MSA-MW495-101713
Sample Location: MW495
Sampled By: S. Cameron
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 10/17/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1020	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: Peri Pump	Clear	5.06	0.773	18.13	2.12	0.00	0.04	170

PURGE DATA:

Date: 10/17/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri Pump		See		Low	Flow			
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 2" PVC		Purge		Data	Sheet			
Total Well Depth (TD): 32.96								
Static Water Level (WL): 18.36								
One Casing Volume(gal/L):								
Start Purge (hrs): 0935								
End Purge (hrs): 1105								
Total Purge Time (min): 90								
Total Vol. Purged (gal/L): 1.5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL Vials	✓
Total Metals	HNO_3	1-500 mL plastic	✓
Dissolved Metals	HNO_3	1-500 mL plastic	✓
TPH-GRO	HCl	2-40 mL vials	✓
TPH-DRO	—	2-1L Ambers	✓
SVOCs + 1,4-Dioxane	—	2-1L Ambers	✓
Hexavalent Chromium	—	1-250 mL plastic	✓

OBSERVATIONS / NOTES:

Hex Chrom Collected @ 1100

Iron > 10

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA Dump Road 1 **WELL ID.:** MSA-MW495-101713
PROJECT NUMBER: 112I04882 **DATE:** 10/17/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0935	18.36	—	—	—	—	—	—	—	—	
0940	18.38	250	5.04	0.730	5.42	0.00	20.80	179	0.04	
0945	18.41	250	5.03	0.772	1.22	0.00	19.13	166	0.04	
0950	18.41	250	5.05	0.768	1.86	0.00	19.09	163	0.04	
0955	18.41	250	5.04	0.762	2.09	0.00	19.19	158	0.04	
1000	18.41	250	5.04	0.759	2.29	0.00	18.73	159	0.04	
1005	18.41	250	5.06	0.767	2.13	0.00	18.63	162	0.04	
1010	18.41	250	5.07	0.761	2.43	0.00	18.42	165	0.04	
1015	18.41	250	5.05	0.769	2.79	0.00	18.15	170	0.04	
1020	18.41	250	5.06	0.773	2.12	0.00	18.18	170	0.04	
Sampling	VOCs Total Metals, Dissolved metals,			DRO, GRO, SVOCs + 1,4-Dioxane, + Hex Cr						

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA Dump Road
Project No.: 112IC04882

Sample ID No.: MSA-MW49I-101713
Sample Location: MW49I
Sampled By: SBC
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 10/17/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1200	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: Peri Pump	Clear	4.46	1.60	18.52	34.2	0.00	0.0	259

PURGE DATA:

Date: 10/17/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri Pump								
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD): 47.95								
Static Water Level (WL): 18.16								
One Casing Volume(gal/L):								
Start Purge (hrs): 1115								
End Purge (hrs): 1245								
Total Purge Time (min): 90								
Total Vol. Purged (gal/L): 36								

See Low Flow Purge Data Sheet

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL vials	✓
Total Metals	HNO_3	1-500 mL plastic	✓
Dissolved Metals	HNO_3	1-500 mL plastic	✓
TPH-GRO	HCl	2-40 mL vials	✓
TPH-DRO	—	2-1L Ambers	✓
SVOCs, 1,4-Dioxane	—	2-1L Ambers	✓
Hexavalent Chromium	—	1-250 mL plastic	✓

OBSERVATIONS / NOTES:

Iron = 6 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA Dump Road GW
PROJECT NUMBER: 112IC04882
WELL ID.: MSA-MW49I-101713
DATE: 10/17/13

Time (hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1115	18.16	—	—	—	—	—	—	—	—	
1120	18.41	250	4.80	1.55	19.4	0.00	19.65	218	0.08	
1125	18.41	250	4.67	1.56	9.6	0.00	19.04	256	0.08	
1130	18.41	250	4.56	1.57	53.1	0.00	18.84	261	0.08	
1135	18.41	250	4.50	1.58	57.3	0.00	18.62	264	0.08	
1140	18.41	250	4.50	1.58	43.7	0.00	18.55	262	0.08	
1145	18.41	250	4.50	1.59	45.4	0.00	18.42	261	0.08	
1150	18.41	250	4.49	1.60	41.2	0.00	18.45	260	0.08	
1155	18.41	250	4.46	1.60	31.7	0.00	18.49	259	0.08	
1200	18.41	250	4.46	1.60	34.2	0.00	18.52	259	0.08	
Sampling VOCs, Total + Dissolved Metals, TPH GRO + DRO, SVOCs + 1,4-Dioxane, + Hex Chrom										

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA Dump Road GW
Project No.: 112IC04882

Sample ID No.: MSA-MW49D-101713
Sample Location: MW49D
Sampled By: SBC
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 10/17/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1330	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: Peri Pump	Clear	5.34	1.29	21.45	29.6	0.00	0.06	-18

PURGE DATA:

Date: 10/17/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri Pump		See		Low	Flow			
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 2" PVC			Purge Data Sheet					
Total Well Depth (TD): 63.02								
Static Water Level (WL): 18.28								
One Casing Volume(gal/L):								
Start Purge (hrs): 1245								
End Purge (hrs): 1425								
Total Purge Time (min): 100								
Total Vol. Purged (gal/L): 3gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40mL vials	✓
Total Metals	HNO3	1-500 mL plastic	✓
Dissolved metals	HNO3	1-500 mL plastic	✓
TPH-GRO	HCl	2-40mL vials	✓
TPH-DRO	—	2-1L Ambers	✓
SVOCs + 1,4-Dioxane	—	2-1L Ambers	✓
Hexavalent Chromium	—	1-250 mL plastic	✓

OBSERVATIONS / NOTES:

Iron = 5mg/L

Circle If Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA Dump Road GW
PROJECT NUMBER: 112IC04882
WELL ID.: MSA-MW49D-101713
DATE: 10/17/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1245	18.28	—	—	—	—	—	—	—	—	
1250	18.29	250	6.34	0.493	10.17	0.00	21.63	-29	0.02	
1255	18.29	250	6.40	0.542	13.5	0.00	21.17	-66	0.03	
1300	18.29	250	6.16	0.663	15.9	0.00	21.14	-72	0.03	
1305	18.29	250	5.89	0.732	18.4	0.00	21.18	-64	0.04	
1310	18.29	250	5.77	0.854	21.5	0.00	21.21	-52	0.04	
1315	18.29	250	5.73	0.968	14.21	0.00	21.28	-59	0.05	
1320	18.29	250	5.66	1.01	9.65	0.00	21.32	-66	0.05	
1325	18.29	250	5.43	1.16	17.4	0.00	21.38	-26	0.06	
1330	18.29	250	5.34	1.29	29.6	0.00	21.45	-18	0.06	
Sampling for VOCs, Total + Dissolved metals, Succ + 1,4-Dioxane, TPH DRO + GRO, + Hex Chrom										

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Dump Road GW 2013
Project No.: 112IC04882

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MSA-MW50S-101813
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 10/18/13								
Time: 1205								DRP
Method: Peri pump	Clear	6.00	1.20	14.62	7.82	0.87	0.6	-55

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/18/13								
Method: Peri pump								
Monitor Reading (ppm): –								
Well Casing Diameter & Material								
Type: 2" PVC			See low flow purge data sheet					
Total Well Depth (TD): 32.6'								
Static Water Level (WL): 11.36'								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1115								
End Purge (hrs): 1230								
Total Purge Time (min): 75								
Total Vol. Purged (gal/L): 3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	2-40 mL glass vials	✓
GRO	HCl	2-40 mL glass vials	✓
DRO ~~+ Tetra~~	–	2-1L ambers	✓
SVOCs + 1,4 dioxane	–	2-1L ambers.	✓
Hex chrom	–	1-250 mL plastic	✓
Total Metals	HNO3	1-500 mL plastic	✓
Dissolved Metals	HNO3	1-500 mL plastic (filtered)	✓

OBSERVATIONS / NOTES:

Hex chrom sampled @ 1230
Ferrous iron test: >10, >1

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Dump Road GW 2013
PROJECT NUMBER: 112IC04882

WELL ID.: MFA-MW505-101813
DATE: 10/18/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1115	11.36	—	—	—	—	—	—	—	—	—
1120	11.49	200	6.32	0.735	9.50	3.44	15.01	-11	0.4	
1125	11.50	200	6.50	0.779	9.84	1.28	14.72	-72	0.4	
1130	11.50	200	6.54	0.785	10.03	0.97	14.65	-86	0.4	
1135	11.50	200	6.57	0.797	14.1	0.83	14.60	-98	0.4	
1140	11.50	200	6.56	0.836	15.6	0.77	14.56	-104	0.4	
1145	11.50	200	6.14	1.02	12.55	0.66	14.56	-76	0.5	
1150	11.50	200	6.07	1.08	8.95	0.76	14.54	-68	0.5	
1155	11.50	200	6.05	1.17	9.05	0.71	14.60	-59	0.6	
1200	11.50	200	6.00	1.20	7.82	0.87	14.62	-55	0.6	
			Sample VOCs, SVOCs, 1-4 dioxane, Gro+Dro, Total + Dissolved metals							
			Hex chrom, Flex chrom @: 1230							
			All other samples @: 1205							

SIGNATURE(S): [signature]

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Ramp Road MSA GW 2013
Project No.: 117501892

Sample ID No.: MSA-MW501
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/18/13	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1420								
Method: Peri pump	clear	6.74	1.15	14.97	11.35	0.47	0.6	-126

PURGE DATA:

Date: 10/18/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri pump								
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 2" PVC			See low flow purge data sheet					
Total Well Depth (TD): 47.71								
Static Water Level (WL): 14.75								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1335								
End Purge (hrs): 1445								
Total Purge Time (min): 70								
Total Vol. Purged (gal/L): ~3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40mL glass vials	✓
GRO	HCl	2-40mL glass vials	✓
DRO	—	2-1L amber	✓
SVOCs + 1-4 dioxane	—	2-1L amber	✓
Total Metals	HNO3	1-500mL plastic	✓
Dissolved Metals	HNO3	1-500mL plastic (filtered)	✓
Hex chrom	—	1-250mL plastic	✓

OBSERVATIONS / NOTES:

Hex chrom sampled @ 1445
Ferrous iron kit: >10, >1

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Dump Road GW 2013
PROJECT NUMBER: 112IC04882

WELL ID.: MSA-MW50I-101813
DATE: 10/18/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1335	11.75	—	—	—	—	—	—	—	—	
1340	11.76	200	6.79	0.841	8.34	2.00	15.59	-106	0.4	
1345	11.79	200	6.88	0.876	5.41	1.03	15.19	-127	0.4	
1350	11.79	200	6.90	0.887	5.50	0.80	15.06	-133	0.4	
1355	11.79	200	6.92	0.897	6.16	0.73	15.08	-136	0.4	
1400	11.79	200	6.90	0.899	7.45	0.65	15.01	-137	0.4	
1405	11.79	200	6.90	0.920	9.95	0.62	14.98	-138	0.5	
1410	11.79	200	6.97	0.968	12.0	0.92	14.97	-135	0.5	
1415	11.79	200	6.76	1.13	13.0	0.49	14.97	-128	0.6	
1420	11.79	200	6.74	1.15	11.35	0.47	14.97	-126	0.6	
		Sample	VOCs, 1-4	dioxane, DRO+GRO, SVOCs, Total + Dissolved Metals, Hex Chrom						
				Hex chrom @ 1445						
				All other samples @ 1420						

SIGNATURE(S): [signature]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Arrop Road GW 2013
Project No.:

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MSA-MV-SOD-102113
Sample Location: MSA
Sampled By: JAM
C.O.C. No.:
Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 10/21/13								
Time: 1115								DRP
Method: Peri pump	Clear	~~4.4~~ 6.10	1.22	14.24	5.66	4.29	0.6	2

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/21/13								
Method: Peri pump								
Monitor Reading (ppm): -								
Well Casing Diameter & Material								
Type: 2" PVC			See	low	flow	purge	data	Sheet
Total Well Depth (TD): 62.7'								
Static Water Level (WL): 11.90								
One Casing Volume(gal/L): -								
Start Purge (hrs): 1030								
End Purge (hrs): 1155								
Total Purge Time (min): 85								
Total Vol. Purged (gal/L): 23.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL glass vials	✓
GRO	HCl	2-40 mL glass vials	✓
DRO	-	2-1L ambers	✓
SVOCs+1-4 dioxane	-	2-1L ambers	✓
Total metals	HNO_3	1-500 mL plastic	✓
Dissolved metals	HNO_3	1-500 mL plastic (filtered)	✓
Hex chrom	-	1-250 mL plastic	✓

OBSERVATIONS / NOTES:

Hex Chrom sampled @ 1150
Ferrous iron kit: >10, >1

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Dump Road GW 2013
PROJECT NUMBER: 112IC04882
WELL ID.: MSA MW50D-102113
DATE: 10/21/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1030	11.90	–	–	–	–	–	–	–	–	
1035	11.93	300	5.97	1.19	28.4	6.99	14.37	21	0.6	
1040	11.94	300	6.04	1.19	15.2	6.64	14.19	10	0.6	
1045	11.95	300	6.05	1.19	7.09	4.21	14.18	7	0.6	
1050	11.95	300	6.06	1.17	6.50	4.12	14.14	6	0.6	
1055	11.95	300	6.06	1.20	6.26	4.19	14.23	3	0.6	
1100	11.95	300	~~5.7~~ 6.10	1.20	5.31	4.36	14.29	-1	0.6	
1105	11.95	300	6.11	1.21	5.83	4.27	14.26	-1	0.6	
1110	11.95	300	6.11	1.21	4.53	4.33	14.24	0	0.6	
1115	11.95	300	6.10	1.22	4.29	5.66	14.24	2	0.6	

Sample LOCs, SVOCs+1-4 dioxane, DRO+GRO, Total + Dissolved Metals, Hex chrom
Hex chrom sampled @ 1150
All others sampled @ 1115

SIGNATURE(S): [signature]

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA Dump Road
Project No.:

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MSA-MW51S-102113
Sample Location: MW 51S
Sampled By: SRC
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date: 10/21/13								
Time: 1055								
Method: Peri Pump	Clear	5.88	1.74	15.85	3.41	0.00	0.09	-85

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10/21/13								
Method: Peri Pump			See Low Flow					
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" PVC			Purge Data Sheet					
Total Well Depth (TD): 22.88								
Static Water Level (WL): 8.37								
One Casing Volume(gal/L):								
Start Purge (hrs): 1010								
End Purge (hrs): 1145								
Total Purge Time (min): 95								
Total Vol. Purged (gal/L): 3.991								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL vials	✓
Total Metals	HNO_3	1-500 mL plastic	✓
Dissolved Metals	HNO_3	1-500 mL plastic	✓
TPH GRO	HCl	2-40 mL vials	✓
TPH DRO	—	2-1L Ambers	✓
SVOCs & 1,4-Dioxane	—	2-1L Ambers	✓
Alkalinity, Anions, TDS	—	1-500 mL plastic	✓
Ammonia	H_2SO_4	1-500 mL plastic	✓
Dissolved organic carbon	H_2SO_4	2-40 mL vials	✓
Metals, + Dissolved gasses	HNO_3/HCl	1-500 mL plastic / 2-40 mL vials	✓

OBSERVATIONS / NOTES:

Hex chrom collected @ 1145

Iron = 5

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: MSA Dump Road
PROJECT NUMBER: 112IC04402
WELL ID.: MSA-MW515-102113
DATE: 10/21/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity (% or ppt	Comments
1010	8.37	—	—	—	—	—	—	—	—	
1015	8.66	250	5.78	1.70	3.33	0.00	18.16	-53	0.09	
1020	8.65	200	5.95	1.75	3.36	0.00	17.00	-81	0.09	
1025	8.67	200	5.98	1.75	4.16	0.00	16.84	-87	0.09	
1030	8.68	200	6.02	1.76	(2)	0.00	16.68	-92	0.09	
1035	8.68	200	6.05	1.76	5.34	0.00	16.41	-98	0.09	
1040	8.68	200	6.08	1.77	3.96	0.00	16.39	-99	0.09	
1045	8.68	200	6.01	1.75	3.81	0.00	16.22	-93	0.09	
1050	8.68	200	5.94	1.74	3.12	0.00	15.91	-88	0.09	
1055	8.68	200	5.88	1.74	3.41	0.00	15.85	-85	0.09	
Sampling										

SIGNATURE(S):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Dump Road MSA
Project No.: 112Fc4992

Sample ID No.: MSA-MW/SII-102113
Sample Location: MWSII
Sampled By: SBC
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 10/21/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1235	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: Peri Pump	Clear	5.64	1.58	14.92	4.12	0.00	0.08	-61

PURGE DATA:

Date: 10/21/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri Pump			See Low		Flow			
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD): 42.05			Purge Data Sheet					
Static Water Level (WL): 8.38								
One Casing Volume(gal/L):								
Start Purge (hrs): 1050								
End Purge (hrs): 1305								
Total Purge Time (min): 75								
Total Vol. Purged (gal/L): 3≤1								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL vials	✓
Total metals	HNO_3	1-500 mL vial	✓
Dissolved metals	HNO_3	1-500 mL vial	✓
TPH-GRO	HCl	2-40 mL vials	✓
TPH-DRO	—	2-1L Ambers	✓
SVOCs w/1,4-Dioxane	—	2-1L Ambers	✓
Hex Chrom	—	1-250 mL plastic	✓
Nat Attn Parameters			

OBSERVATIONS / NOTES:

Iron ≈ 6 mg/L

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Dump Road MSA
PROJECT NUMBER: 112IC04882
WELL ID.: MSA-MW51I-102113
DATE: 10/21/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1150	8.58	—	—	—	—	—	—	—	—	
1155	8.42	250	6.40	0.984	10.51	0.00	15.64	-70	0.05	
1200	8.42	200	6.37	1.07	5.08	0.00	15.29	-81	0.05	
1205	8.41	200	6.04	1.32	6.12	0.00	15.16	-53	0.07	
1210	8.43	200	5.74	1.50	8.86	0.00	15.09	-34	0.07	
1215	8.44	200	5.71	1.52	8.38	0.00	15.02	-38	0.08	
1220	8.45	200	5.69	1.56	4.11	0.00	15.00	-44	0.08	
1225	8.46	200	5.66	1.58	3.62	0.00	14.95	-56	0.08	
1230	8.46	200	5.65	1.58	3.16	0.00	14.93	-58	0.08	
1235	8.46	200	5.64	1.58	4.12	0.00	14.92	-61	0.08	
Sampling										

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Dump Road/MSA
Project No.: 112FC04112

Sample ID No.: MSA-MW51D-102113
Sample Location: MW51D
Sampled By: SBC
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 10/21/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1355	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Method: Peri Pump	Clear	7.06	0.412	15.50	58.4	0.00	0.02	-169

PURGE DATA:

Date: 10/21/13	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peri Pump			See Low Flow Purge Data Sheet					
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD): 62.92								
Static Water Level (WL): 8.57								
One Casing Volume(gal/L):								
Start Purge (hrs): 1310								
End Purge (hrs): 1435								
Total Purge Time (min): 85								
Total Vol. Purged (gal/L): 3gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL vials	✓
Total Metals	HNO_3	1-500 mL plastic	✓
Dissolved Metals	HNO_3	1-500 mL plastic	✓
TPH GRO	HCl	2-40 mL vials	✓
TPH DRO	—	2-1L Ambers	✓
SVOCs + 1,4-Dioxane	—	2-1L Ambers	✓
Hex Chrom	—	1-250 mL plastic	✓
Nat Atten Parameters			

OBSERVATIONS / NOTES:

Iron = 7 mg/L

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Dump Road MSA
PROJECT NUMBER: 112IC04882
WELL ID.: MSA-MW51D-102113
DATE: 10/21/13

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1310	8.57	—	—	—	—	—	—	—	—	
1315	8.65	250	6.84	0.381	74.3	0.00	15.46	-93	0.02	
1320	8.65	250	7.17	0.352	83.4	0.00	15.40	-124	0.02	
1325	8.65	250	7.31	0.350	78.6	0.00	15.47	-132	0.02	
1330	8.65	250	7.36	0.351	79.6	0.00	15.49	-146	0.02	
1335	8.65	250	7.40	0.352	78.2	0.00	15.52	-158	0.02	
1340	8.67	250	7.38	0.362	69.4	0.00	15.53	-160	0.02	
1345	8.68	250	7.22	0.384	65.8	0.00	15.54	-162	0.02	
1350	8.68	250	7.13	0.396	63.2	0.00	15.53	-165	0.02	
1355	8.69	250	7.06	0.412	58.9	0.00	15.50	-169	0.02	
Sampling										

SIGNATURE(S):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Dump Road Area, Martin State Airport
Project No.: 112IC04882

Sample ID No.: EPI-SW15
Sample Location: Pond 1, AOA
Sampled By: JAM/SBC
C.O.C. No.:

[] Stream
[] Spring
[X] Pond
[] Lake
[] Other:
[] QA Sample Type:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/15/13 Time: 0945	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ~~ORP~~ Iron
Depth: 1 foot Method: Grab	Clear	6.88	0.493	16.4	1.79	4.59	0.2	0.15 ppm

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y
Total Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
GRO	<4° C	1 - 1 L amber bottle	Y
Perchlorate	<4° C	1 - 125 mL plastic bottle	Y
DRO	<4° C	1 - 1 L amber bottle	Y
1,4-dioxane	<4° C	1 - 1 L amber bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field
Perchlorate filtered in the field

MAP:

Coordinates: 39.372583 / -76.40946

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Dump Road Area, Martin State Airport
Project No.: 112IC04882

[] Stream
[] Spring
[X] Pond
[] Lake
[] Other:
[] QA Sample Type:

Sample ID No.: EP1-SW16
Sample Location: Pond 1, NEA
Sampled By: JAM/SBC
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/15/13	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ~~ORP~~ Iron
Time: 1004								
Depth: 1 foot	Clear	7.09	0.493	16.3	1.85	3.88	0.2	0.05 ppm
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y
Total Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
GRO	<4° C	1 - 1 L amber bottle	Y
Perchlorate	<4° C	1 - 125 mL plastic bottle	Y
DRO	<4° C	1 - 1 L amber bottle	Y
1,4-dioxane	<4° C	1 - 1 L amber bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field
Perchlorate filtered in the field

MAP:

Coordinates:
~~39.33~~
39.32578 / -76.40929

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Dump Road Area, Martin State Airport
Project No.: 112IC04882

Sample ID No.: EWT-SW1
Sample Location: Wetland area, DRA
Sampled By: JAM/SBC
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Wetland
[] QA Sample Type:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/15/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1444	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Depth: 1 foot	Clear	6.62	2.09	18.7	9.83	7.22	1.1	122
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y
Total Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
GRO	<4° C	1 - 1 L amber bottle	Y
Perchlorate	<4° C	1 - 125 mL plastic bottle	Y
DRO	<4° C	1 - 1 L amber bottle	Y
1,4-dioxane	<4° C	1 - 1 L amber bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field
Perchlorate filtered in the field

Iron: 0.35 ppm

MAP:

Coordinates:
39.32622 / 076.40789

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Dump Road Area, Martin State Airport
Project No.: 112IC04882

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Wetland
[] QA Sample Type:

Sample ID No.: EWT-SW2
Sample Location: wetland area, ORA
Sampled By: JAM/SBC
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/15/13	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1425								
Depth: 1 foot	Clear	6.7	2.04	16.9	16.7	6.39	1.0	137
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y
Total Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
GRO	<4° C	1 - 1 L amber bottle	Y
Perchlorate	<4° C	1 - 125 mL plastic bottle	Y
DRO	<4° C	1 - 1 L amber bottle	Y
1,4-dioxane	<4° C	1 - 1 L amber bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field
Perchlorate filtered in the field

Iron: 0.9 ppm

MAP:

Coordinates!
39.32622 / 076.40788

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Dump Road Area, Martin State Airport
Project No.: 112IC04882

Sample ID No.: EWT-SW3-1
Sample Location: DRA SW
Sampled By: JAM/SBC
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Wetland
[] QA Sample Type:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/18/13	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: 1500								
Depth: 1 foot	light brown	/	/	–	–	–	–	–
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL glass vials	yes

OBSERVATIONS / NOTES:

Sample was taken approx 1 foot from surface, piezometer was placed into the ground and then resulting water that filled was collected. only enough for VOC analysis.

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Dump Road Area, Martin State Airport
Project No.: 112IC04882

Sample ID No.: EPI-SW15
Sample Location: Pond 1, AOA
Sampled By: JAM/SBC
C.O.C. No.:

[] Stream
[] Spring
[X] Pond
[] Lake
[] Other:
[] QA Sample Type:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/15/13 Time: 0945	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ~~ORP~~ Iron
Depth: 1 foot Method: Grab	Clear	6.88	0.493	16.4	1.79	4.59	0.2	0.15 ppm

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y
Total Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
GRO	<4° C	1 - 1 L amber bottle	Y
Perchlorate	<4° C	1 - 125 mL plastic bottle	Y
DRO	<4° C	1 - 1 L amber bottle	Y
1,4-dioxane	<4° C	1 - 1 L amber bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field
Perchlorate filtered in the field

MAP:

Coordinates: 39.372583 / -76.40946

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Dump Road Area, Martin State Airport
Project No.: 112IC04882

[] Stream
[] Spring
[X] Pond
[] Lake
[] Other:
[] QA Sample Type:

Sample ID No.: EP1-SW16
Sample Location: Pond 1, NEA
Sampled By: JAM/SBC
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/15/13	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ~~ORP~~ Iron
Time: 1004								
Depth: 1 foot	Clear	7.09	0.493	16.3	1.85	3.88	0.2	0.05 ppm
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y
Total Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
GRO	<4° C	1 - 1 L amber bottle	Y
Perchlorate	<4° C	1 - 125 mL plastic bottle	Y
DRO	<4° C	1 - 1 L amber bottle	Y
1,4-dioxane	<4° C	1 - 1 L amber bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field
Perchlorate filtered in the field

MAP:

Coordinates:
~~39.33~~
39.32578 / -76.40929

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Dump Road Area, Martin State Airport
Project No.: 112IC04882

Sample ID No.: EWT-SW1
Sample Location: Wetland area, DRA
Sampled By: JAM/SBC
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Wetland
[] QA Sample Type:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/15/13	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1444	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Depth: 1 foot	Clear	6.62	2.09	18.7	9.83	7.22	1.1	122
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y
Total Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
GRO	<4° C	1 - 1 L amber bottle	Y
Perchlorate	<4° C	1 - 125 mL plastic bottle	Y
DRO	<4° C	1 - 1 L amber bottle	Y
1,4-dioxane	<4° C	1 - 1 L amber bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field
Perchlorate filtered in the field

Iron: 0.35 ppm

MAP:

Coordinates:
39.32622 / 076.40789

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Dump Road Area, Martin State Airport
Project No.: 112IC04882

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Wetland
[] QA Sample Type:

Sample ID No.: EWT-SW2
Sample Location: wetland area, ORA
Sampled By: JAM/SBC
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/15/13	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1425								
Depth: 1 foot	Clear	6.7	2.04	16.9	16.7	6.39	1.0	137
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y
Total Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
GRO	<4° C	1 - 1 L amber bottle	Y
Perchlorate	<4° C	1 - 125 mL plastic bottle	Y
DRO	<4° C	1 - 1 L amber bottle	Y
1,4-dioxane	<4° C	1 - 1 L amber bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field
Perchlorate filtered in the field

Iron: 0.9 ppm

MAP:

Coordinates!
39.32622 / 076.40788

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Dump Road Area, Martin State Airport
Project No.: 112IC04882

Sample ID No.: EWT-SW3-1
Sample Location: DRA SW
Sampled By: JAM/SBC
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Wetland
[] QA Sample Type:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/18/13	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: 1500								
Depth: 1 foot	light brown	/	/	–	–	–	–	–
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL glass vials	yes

OBSERVATIONS / NOTES:

Sample was taken approx 1 foot from surface, piezometer was placed into the ground and then resulting water that filled was collected. only enough for VOC analysis.

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

Sample ID No.: DR-TP-A76-10
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 5/12/13	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1050	10'	gray black	sandy clay plastic Moist
Method: Backhoe/Excavator			
Monitor Reading (ppm): 14.2			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
N/A	N/A

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

Sample ID No.: DR-TP-A76-11
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 8/12/13	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1105	11'	gray brown	silty clay, plastic, slightly moist
Method: Backhoe/Excavator			
Monitor Reading (ppm): 46.3			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

Sample ID No.: DR-TP-A77-14
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 8/13/13	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0945	14'	dark grey to black	clay to gravel
Method: Backhoe/Excavator			
Monitor Reading (ppm): 115			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

[] Surface Soil
[V] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-TP-A77-C
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method: Backhoe/Excavator			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date: 8/13/13	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: backhoe	0955	7	Brown	clay to gravel fill
	"	9	"	" " "
	"	11	dark gray to black	clay to gravel
Monitor Readings	"	13	"	" " "
(Range in ppm): 52.4-113	"	14	"	" " "

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs Incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD N/A

Duplicate ID No.: N/A

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

Sample ID No.: DR-TP-A78-05
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 8/13/13	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1130	5'	Black	silty sand, soft, wet w/ sheen
Method: Backhoe/Excavator			
Monitor Reading (ppm): 222			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
N/A	NA

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

Sample ID No.: DR-TP-A7S-C
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method: Backhoe/Excavator			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	1146	5	black	silty sand, soft, wet sheen
Method: backhoe	"	6	"	" "
	"	7	gray	silty clay w/ sand, soft, plastic, moist
Monitor Readings (Range in ppm): 82-222	"	8	"	" "
	"	9	gray	silty clay, low plasticity, soft, wet, moist

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD N/A

Duplicate ID No.: N/A

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-TP-A79-04
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 8/13/13 Time: 1425 Method: Backhoe/Excavator Monitor Reading (ppm): 24.7	4	Brown	silty sand to gravel fill, soft, v slight moisture

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
N/A	N/A

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

Sample ID No.: DR-TP-A79-C
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method: Backhoe/Excavator			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
8/13/13	1440	6	Brown	silty sand to gravel fill, soft, v. slight moisture
Method: backhoe	11	7	red brown	silty clay to clayey silt, stiff, low plastic, dry to v. slight moisture
	11	9	11	11 11
Monitor Readings (Range in ppm): 15.6 - 23.4	11	10	11	11 11

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD N/A

Duplicate ID No.: N/A

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-TP-A8D-03
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 8/14/13	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0900	3'	Dark brown to Black	Burned material mixed w/ brown silty sand + gravel
Method: Backhoe/Excavator			
Monitor Reading (ppm): 1.3			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD N/A

Duplicate ID No.: N/A

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

Sample ID No.: DR-TP-A80-11
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 8/14/13	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0910	11	gray	silty clay w/some silt & sand plastic moist
Method: Backhoe/Excavator			
Monitor Reading (ppm): 0.05			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
N/A	N/A

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

Sample ID No.: DR-TP-A81-07
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 8/14/13	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: ~~0919~~ 1010	7	gray	Silty Sandy clay to clayey sand soft, moist
Method: Backhoe/Excavator			
Monitor Reading (ppm): 4.9			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD N/A

Duplicate ID No.: N/A

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DR-TP-A8I-C
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method: Backhoe/Excavator			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
8/14/13	1020	1	brown	silty sandy fill, loose, dry to v. slight moisture
Method:	"	2	"	" " "
backhoe	"	4	gray	clay to silty clay, dense, stiff, dry
Monitor Readings	"	6	gray	silty sandy clay to clayey sandy, soft, moist
(Range in ppm):				
4.7 to 5.9				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
N/A	N/A

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

Sample ID No.: DR-TP-A82-03
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[X] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 8/12/13	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1430	3'	Brown	silt to fine fill. low plasticity, slight moisture Asphalt, metal & plastic bags
Method: Backhoe/Excavator			
Monitor Reading (ppm): 2.9			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D).	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD N/A

Duplicate ID No.: N/A

Signature(s):

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Dump Road Source Areas Soil and Groundwater Characterization
Project No.: 112IC04882

Sample ID No.: DR-TP-A82-08
Sample Location: MSA Middle River, MD
Sampled By: W. O'Niell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 8/12/13	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1420	8'	GRAY	clay, Plastic, slightly moist
Method: Backhoe/Excavator			
Monitor Reading (ppm): 2.2			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs 8260C	Terra Core kit	✓	
SVOCs incl. 1,4-Dioxane (8270D), PCBs (8082A), TPH-DRO (8015D),	8 oz glass	✓	
Priority Pollutant Metals (1010C, 7471A)	4 oz glass	✓	
TPH-GRO (8015D)	4 oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
N/A	N/A

Signature(s):

APPENDIX C—TEST PIT LOGS AND PHOTOGRAPHS

Tetra Tech
20251 Century Blvd Ste 200
Germantown Maryland/20874

Log of Test Pit TP-A76

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

Depth (ft)	Debris Percentage	Graphic Log	Material Description	Elev. (ft)	Environmental Data (PPM)
0			Dark brown TOPSOIL with organic debris		PID = 0
					PID = 0
			Brown SILTY CLAY, moderate plasticity, minor (<5%) debris, slightly moist, water leaking in side seam @ 4.5' but bottom of pit is not saturated.		PID = 0
	0-5(%)				PID = 0
					PID = 0
5				5	PID = 1.7
			Brown gray CLAY to SILTY CLAY, medium plasticity, slight moisture, < 5% debris including asphalt, plastic debris, brick and tile encountered.		PID = 0
	0-5(%)				PID = 3.9
					PID = 2.6
	10-10(%)		Gray/Black, SANDY CLAY, plastic, moist, 10% debris including, pipe, metal pieces, asphalt, concrete.		PID = 14.2
10				0	PID = 46.3
			Brown/gray SANDY SILT CLAY plastic, slightly moist		PID = 2.1
			Gray brown SILTY CLAY, plastic, slightly moist. Pit filling with water		
			Gray CLAY with some silt and sand, plastic, slightly moist, no debris after 12 feet.		
15			Bottom of Test Pit at 13 ft	-5	
20				-10	
25				-15	
30				-20	
35				-25	
				-30	

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Germantown Maryland/20874

Log of Test Pit TP-A76

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A76.1
Photograph 01



Figure TP-A76.2
Photograph 02

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Germantown Maryland/20874

Log of Test Pit TP-A76

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A76.3
Photograph 03



Figure TP-A76.4
Photograph 04

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20251 Century Blvd Ste 200
Germantown Maryland/20874

Log of Test Pit TP-A76

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A76.5
Photograph 05



Figure TP-A76.6
Photograph 06

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Germantown Maryland/20874

Log of Test Pit TP-A76

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A76.7
Photograph 07



Figure TP-A76.8
Photograph 08

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Germantown Maryland/20874

Log of Test Pit TP-A76

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A76.9
Photograph 09



Figure TP-A76.10
Photograph 10

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Germantown Maryland/20874

Log of Test Pit TP-A77

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

Depth (ft)	Debris Percentage	Graphic Log	Material Description	Elev. (ft)	Environmental Data (PPM)
0			Dark brown TOPSOIL, very slightly moist, low plasticity, rootlets, silty.		PID = 0
			Brown SILT to COBBLE FILL, low plasticity, very slightly moist, white material at 2.5', some rock.	10	PID = 0 PID = 0
			Brown CLAY to GRAVEL FILL material, slightly moist, low plasticity, some glass and asphalt, wet at 7 feet (perched water).		PID = 0 PID = 4.9 PID = 7.3
5	5-10(%)			5	PID = 59.6 PID = 25.9 PID = 80.1
10	10-20(%)		Dark gray to black CLAY to GRAVEL, low plasticity, slightly moist, 10 - 20% debris including some wood, electrical components, gloves	0	PID = 38.3 PID = 56.4 PID = 27 PID = 59.4
15			Gray SILTY CLAYEY SAND, medium plasticity, slightly moist.	-5	PID = 115 PID = 12 PID = 2.7
			Bottom of Test Pit at 16 ft		
20				-10	
25				-15	
30				-20	
35				-25	

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Log of Test Pit TP-A77

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A77.1
Photograph 01



Figure TP-A77.2
Photograph 02

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Germantown Maryland/20874

Log of Test Pit TP-A77

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A77.3
Photograph 03



Figure TP-A77.4
Photograph 04

Tetra Tech
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Germantown Maryland/20874

Log of Test Pit TP-A77

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A77.5
Photograph 05



Figure TP-A77.6
Photograph 06

Tetra Tech
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Germantown Maryland/20874

Log of Test Pit TP-A78

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

Depth (ft)	Debris Percentage	Material Description	Elev. (ft)	Environmental Data (PPM)
0		Brown TOPSOIL, soft, slightly moist		PID = 1.6
		Brown SILTY CLAY with gravel, medium plasticity, very slight moisture		PID = 2.3
	0-15(%)	Dark brown CLAY to GRAVEL, unknown white material, low plasticity, moist to slightly moist, rubber disk at 3.5'	5	PID = 7.1 PID = 3.7 PID = 222
5		Gray CLAY, medium plasticity, slightly moist		PID = 16.1
		Black SILTY SAND, soft, wet, sheen and petroleum odor.		PID = 105
		Gray SILTY CLAY with sand, soft, plastic, moist		PID = 201
		Light brown SANDY SILT, soft, slightly moist, moderate plasticity	0	PID = 8.2
		Gray SILTY CLAY, plastic, slightly moist		PID = 6.1
10		Gray SILTY CLAY, low plasticity, slightly moist		
		Bottom of Test Pit at 10 ft		
15			-5	
20			-10	
25			-15	
30			-20	
35			-25	
			-30	

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Log of Test Pit TP-A78

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A78.1
Photograph 01



Figure TP-A78.2
Photograph 02

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Log of Test Pit TP-A78

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A78.3
Photograph 03



Figure TP-A78.4
Photograph 04

Tetra Tech
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Germantown Maryland/20874

Log of Test Pit TP-A78

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A78.5
Photograph 05



Figure TP-A78.6
Photograph 06

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Log of Test Pit TP-A78

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A78.7
Photograph 07



Figure TP-A78.8
Photograph 08

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Log of Test Pit TP-A79

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

Depth (ft)	Debris Percentage	Graphic Log	Material Description	Elev. (ft)	Environmental Data (PPM)
			Brown CLAY and SAND TOPSOIL, soft, moist		PID = 4.4
			Brown SILTY SAND to GRAVEL FILL, soft (low to medium plasticity) moist		PID = 6.9
					PID = 16.6
					PID = 24.7
				15	PID = 5.3
5	10-10(%)		Brown SILTY SAND to GRAVEL FILL, soft, (low to medium plasticity), very slight moisture, 40% debris including copper wire, cinder blocks, masonry, brick, metal, wire, and drum parts.		PID = 19.7
	10-40(%)				PID = 18.8
	40-75(%)				PID = 17.5
			Red/brown SILTY CLAY to clayey silt, low plasticity, very slight moisture, lots of brick block and masonry at 8.5', large slabs of concrete at 9', and metal shards (possibly from drums).		PID = 23.4
	75-80(%)			10	PID = 18.6
10	75-80(%)				PID = 16.4
			Gray CLAY to SILTY CLAY, plastic, moist, water at 12'		
			Bottom of Test Pit at 12 ft		
				5	
15					
				0	
20					
				-5	
25					
				-10	
30					
				-15	
35					
				-20	

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Log of Test Pit TP-A79

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A79.1
Photograph 01



Figure TP-A79.2
Photograph 02

Tetra Tech
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Log of Test Pit TP-A79

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A79.3
Photograph 03



Figure TP-A79.4
Photograph 04

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Log of Test Pit TP-A79

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A79.5
Photograph 05



Figure TP-A79.6
Photograph 06

Tetra Tech
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Germantown Maryland/20874

Log of Test Pit TP-A79

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A79.7
Photograph 07



Figure TP-A79.8
Photograph 08

Tetra Tech
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Log of Test Pit TP-A79

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A79.9
Photograph 09

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Log of Test Pit TP-A80

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

Depth (ft)	Debris Percentage	Material Description	Elev. (ft)	Environmental Data (PPM)
0	0-5(%)	Brown TOPSOIL	15	PID = 0.1
		SAND: silty sandy fill, low to moderate plasticity, very slightly moist, and < 5% debris including rock, wood, glass, and brick.		PID = 0.3
	10-20(%)	Dark burned wood visible on part of pile mixed with brown SILTY SANDY FILL with GRAVEL, low plasticity, very slight moisture.		PID = 1.3
5		Large pieces of concrete in brown SILT to GRAVEL FILL, low plasticity, very slight moisture.		PID = 0.5
		Brown SILTY SANDY FILL with gravel, very slight moisture.		PID = 0.5
		Brown SILTY SANDY FILL, loose, dry, not much debris.		PID = 0.4
	0-5(%)	Gray black CLAY lens, moderate plasticity.	10	PID = 0.6
		Brown SILTY SANDY FILL, loose, dry, with very small amount of debris (glass chips and rocks).		PID = 0.5
10		Gray SILTY CLAY with sand, plastic, moist.		PID = 0.5
		Bottom of Test Pit at 11 ft		PID = 0.5
				PID = 0.3
				PID = 0.8
15			5	
20			0	
25			-5	
30			-10	
35			-15	
			-20	

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Log of Test Pit TP-A80

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A80.1
Photograph 01

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Log of Test Pit TP-A81

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

Depth (ft)	Debris Percentage	Graphic Log	Material Description	Elev. (ft)	Environmental Data (PPM)
	0-5(%)		Brown SILTY SANDY FILL, loose, dry, interbedded with gray silty clay, medium plasticity, very slightly moist		PID = 15.8
			Brown SILTY SANDY FILL, loose, low plasticity, dry to slight moisture, < 5% debris including broken rock pieces		PID = 5.9 PID = 4.3 PID = 5.9
5			Gray CLAY to SILTY CLAY, dense, stiff, dry, low plasticity	5	PID = 3.9
			Medium gray CLAY, dense, stiff, dry, low plasticity		PID = 4.7
			Gray SILTY SANDY CLAY to clayey sand, soft, moist medium plasticity to plastic. Water at 7'.		PID = 4.9
			Bottom of Test Pit at 8 ft		
10				0	
15				-5	
20				-10	
25				-15	
30				-20	
35				-25	
				-30	

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Log of Test Pit TP-A81

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A81.1
Photograph 01



Figure TP-A81.2
Photograph 02

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Log of Test Pit TP-A82

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

Depth (ft)	Debris Percentage	Graphic Log	Material Description	Elev. (ft)	Environmental Data (PPM)
			Brown TOPSOIL, soft, slightly moist	10	PID = 0
			Brown SILT to GRAVEL FILL material, low plasticity, slightly moist, asphalt, metal, blastic bags, styrofoam, garbage bags, lumber debris at 3' and increasing to 7'. Debris percentages comprise 5% at 3', 75% at 4.5', 100% at 6', and 100% at 7'.		PID = 0 PID = 2.9 PID = 0 PID = 0 PID = 0 PID = 0
5	0-5(%) 75-80(%) 80-100(%) 100-100(%)			5	PID = 2.2
			Gray CLAY, plastic, slightly moist.		
10			Bottom of Test Pit at 8 ft	0	
15				-5	
20				-10	
25				-15	
30				-20	
35				-25	

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Log of Test Pit TP-A82

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A82.1
Photograph 01



Figure TP-A82.2
Photograph 02

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Germantown Maryland/20874

Log of Test Pit TP-A82

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A82.3
Photograph 03



Figure TP-A82.4
Photograph 04

Tetra Tech
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Germantown Maryland/20874

Log of Test Pit TP-A82

Project Name: Dump Road Area Test Pit Investigation **Project Number:** 112IC04882

PHOTOS



Figure TP-A82.5
Photograph 05

APPENDIX D—CHEMICAL-DATA TABLES AND DATA-VALIDATION REPORTS (ON CD ONLY)

Table D-1

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23
SAMPLE ID	DR-DPT-23-20	DR-DPT-23-25	DR-DPT-23-30	DR-DPT-23-35	DR-DPT-23-40	DR-DPT-23-45	DR-DPT-23-50
SAMPLE DATE	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	1.9 U	0.23 U	0.77 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	1.8 U	0.22 U	0.73 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	1.5 U	0.18 U	0.6 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	2.3 U	0.28 U	0.93 U
1,1-DICHLOROETHANE	1.4	2	1.5	1.4	1.2 U	0.15 U	0.5 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	2.4 J	0.19 U	0.63 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	1.4 U	0.17 U	0.57 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	3.6 U	0.43 U	1.4 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.049 U	0.0059 U	0.02 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	1.2 U	0.15 U	0.5 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	1 U	0.12 U	0.4 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	5.6 U	0.67 U	2.2 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	2 U	0.24 U	0.8 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.45 J	0.31 J	18	0.72 J	2.5 J
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	1.5 U	0.18 U	0.6 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	1.2 U	0.14 U	0.47 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	1.3 U	0.16 U	0.53 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	13 NJ	48 NJ
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 U
2-BUTANONE	0.94 J	1.4 J	0.57 U	0.57 U	4.7 U	0.57 U	17 J
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	8.2 U	0.99 U	3.3 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.92 U	0.11 U	0.37 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	3.4 U	0.41 U	1.4 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	2 NJ	NA	1.1 NJ	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	1.5 U	0.18 U	0.6 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	1 U	0.12 U	0.4 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	2.7 U	0.32 U	1.1 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	4.3 NJ
ACETONE	11 B	19 B	4.4 B	4.2 B	9.2 U	2.7 B	68 B
BENZENE	0.13 U	0.14 J	0.13 U	0.16 J	2.6 J	0.15 J	1.2 J
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	2.4 U	0.29 U	0.97 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	1.2 U	0.15 U	0.5 U

Table D-1

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23
SAMPLE ID	DR-DPT-23-20	DR-DPT-23-25	DR-DPT-23-30	DR-DPT-23-35	DR-DPT-23-40	DR-DPT-23-45	DR-DPT-23-50
SAMPLE DATE	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	5.3 U	0.64 U	2.1 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	3.4 U	0.41 U	1.4 U
CARBON DISULFIDE	0.18 J	0.33 J	0.17 J	0.34 J	1.1 U	0.27 J	0.43 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	35	0.49 J	1.2 J
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	1.5 U	0.18 U	0.6 U
CHLOROETHANE	0.29 U	0.29 U	0.3 J	0.37 J	2.4 U	0.29 U	0.97 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	3.4 J	0.16 U	0.53 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	2.5 U	0.3 U	1 U
CIS-1,2-DICHLOROETHENE	0.23 J	0.32 J	0.74 J	0.55 J	130	9.7	5.7
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	1.2 U	0.14 U	0.47 U
CYCLOHEXANE	NA	NA	NA	0.14 NJ	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	2.3 U	0.28 U	0.93 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	2.6 U	0.31 U	1 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	12 U	1.5 U	5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.92 U	0.11 U	0.37 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	1.4 U	0.17 U	0.57 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	2.5 U	0.3 U	1 U
HEXANE	NA	NA	NA	0.62 NJ	NA	NA	NA
ISOBUTANOL	NA	NA	NA	8.9 NJ	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	2 U	0.24 U	0.8 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	1.4 U	0.17 U	0.57 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	2.7 U	0.33 U	11 B
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	2 U	0.24 U	0.8 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	1 U	0.12 U	0.4 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	1.2 U	0.14 U	0.47 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	1.2 U	0.14 U	0.47 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.92 U	0.11 U	0.37 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.56 U	0.067 U	0.22 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 U
TERTIARY-BUTYL ALCOHOL	8 J	10 J	8.9 J	9.6 J	32 UR	3.9 UR	40 J
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	2.4 U	0.29 U	0.97 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	1.1 J
TOTAL XYLENES	0.28 U	0.28 U	0.28 U	0.28 U	2.3 U	0.28 U	0.93 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	1.6 U	0.19 U	0.63 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	1.6 U	0.19 U	0.63 U

Table D-1

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23
SAMPLE ID	DR-DPT-23-20	DR-DPT-23-25	DR-DPT-23-30	DR-DPT-23-35	DR-DPT-23-40	DR-DPT-23-45	DR-DPT-23-50
SAMPLE DATE	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013
TRICHLOROETHENE	0.17 U	0.22 J	3.4	2.4	210	38	3.2 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	1.7 U	0.21 U	0.7 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	1.6 UR	0.19 UR	0.63 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.29 J	0.69 J	80	2.2	0.73 U
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

Table D-1

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24
SAMPLE ID	DR-DPT-24-15	DR-DPT-24-25	DR-DPT-24-30	DR-DPT-24-35	DR-DPT-24-40	DR-DPT-24-45	DR-DPT-24-50
SAMPLE DATE	7/31/2013	7/31/2013	7/31/2013	7/31/2013	7/31/2013	7/31/2013	7/31/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	23 U	140 U	15 U	2.6 U	12 U	7.7 U
1,1,1-TRICHLOROETHANE	0.22 U	22 U	140 U	15 U	2.4 U	11 U	7.3 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	18 U	110 U	12 U	2 U	9 U	6 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	28 U	180 U	19 U	3.1 U	14 U	9.3 U
1,1-DICHLOROETHANE	1.4	15 U	94 U	10 U	1.7 U	7.5 U	5 U
1,1-DICHLOROETHENE	0.19 U	19 U	120 U	14 J	2.1 U	9.5 U	6.3 U
1,1-DICHLOROPROPENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
1,2,3-TRICHLOROBENZENE	0.17 U	17 U	110 U	11 U	1.9 U	8.5 U	5.7 U
1,2,3-TRICHLOROPROPANE	0.43 U	43 U	270 U	29 U	4.8 U	22 U	14 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.59 U	3.7 U	0.39 U	0.066 U	0.3 U	0.2 U
1,2,4-TRICHLOROBENZENE	0.15 U	15 U	94 U	10 U	1.7 U	7.5 U	5 U
1,2,4-TRIMETHYLBENZENE	0.12 U	12 U	75 U	8 U	1.3 U	6 U	4 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	67 U	420 U	45 U	7.4 U	34 U	22 U
1,2-DIBROMOETHANE	0.24 U	24 U	150 U	16 U	2.7 U	12 U	8 U
1,2-DICHLOROBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
1,2-DICHLOROETHANE	0.22 U	25 J	140 U	100	4.1 J	17 J	10 J
1,2-DICHLOROPROPANE	0.18 U	18 U	110 U	12 U	2 U	9 U	6 U
1,3-DICHLOROBENZENE	0.14 U	14 U	88 U	9.3 U	1.6 U	7 U	4.7 U
1,3-DICHLOROPROPANE	0.16 U	16 U	100 U	11 U	1.8 U	8 U	5.3 U
1,4-DICHLOROBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
2-BUTANONE	1.3 J	57 U	360 U	38 U	6.3 U	29 U	19 U
2-CHLOROETHYL VINYL ETHER	0.99 U	99 U	620 U	66 U	11 U	50 U	33 U
2-CHLOROTOLUENE	0.11 U	11 U	69 U	7.3 U	1.2 U	5.5 U	3.7 U
2-HEXANONE	0.41 U	41 U	260 U	27 U	4.6 U	21 U	14 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	18 U	110 U	12 U	2 U	9 U	6 U
4-ISOPROPYLTOLUENE	0.12 U	12 U	75 U	8 U	1.3 U	6 U	4 U
4-METHYL-2-PENTANONE	0.32 U	32 U	200 U	21 U	3.6 U	16 U	11 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	5	110 U	690 U	73 U	12 U	55 U	37 U
BENZENE	0.8 J	13 U	81 U	16 J	1.4 U	6.5 U	4.3 U
BROMOBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
BROMOCHLOROMETHANE	0.29 U	29 U	180 U	19 U	3.2 U	15 U	9.7 U
BROMODICHLOROMETHANE	0.15 U	15 U	94 U	10 U	1.7 U	7.5 U	5 U

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LOCATION	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24
SAMPLE ID	DR-DPT-24-15	DR-DPT-24-25	DR-DPT-24-30	DR-DPT-24-35	DR-DPT-24-40	DR-DPT-24-45	DR-DPT-24-50
SAMPLE DATE	7/31/2013	7/31/2013	7/31/2013	7/31/2013	7/31/2013	7/31/2013	7/31/2013
BROMOFORM	0.64 U	64 U	400 U	43 U	7.1 U	32 U	21 U
BROMOMETHANE	0.41 U	41 U	260 U	27 U	4.6 U	21 U	14 U
CARBON DISULFIDE	0.42	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
CARBON TETRACHLORIDE	0.13 U	13 U	81 U	8.7 U	2.3 J	6.5 U	7.2 J
CHLOROBENZENE	0.3	15 U	94 U	58 J	1.7 U	7.5 U	5 U
CHLORODIBROMOMETHANE	0.18 U	18 U	110 U	12 U	2 U	9 U	6 U
CHLOROETHANE	0.29 U	29 U	180 U	19 U	3.2 U	15 U	9.7 U
CHLOROFORM	0.16 U	16 U	100 U	20 J	18	48 J	90
CHLOROMETHANE	0.3 U	30 U	190 U	20 U	3.3 U	15 U	10 U
CIS-1,2-DICHLOROETHENE	0.17 U	340	580 J	500	29	66	93
CIS-1,3-DICHLOROPROPENE	0.14 U	14 U	88 U	9.3 U	1.6 U	7 U	4.7 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	28 U	180 U	19 U	3.1 U	14 U	9.3 U
DICHLORODIFLUOROMETHANE	0.31 U	31 U	190 U	21 U	3.4 U	16 U	10 U
DIISOPROPYL ETHER	1.5 U	150 U	940 U	100 U	17 U	75 U	50 U
ETHYL TERT-BUTYL ETHER	0.11 U	11 U	69 U	7.3 U	1.2 U	5.5 U	3.7 U
ETHYLBENZENE	0.17 U	17 U	110 U	11 U	1.9 U	8.5 U	5.7 U
HEXACHLOROBUTADIENE	0.3 U	30 U	190 U	20 U	3.3 U	15 U	10 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
M+P-XYLENES	0.24 U	24 U	150 U	16 U	2.7 U	12 U	8 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	17 U	110 U	11 U	1.9 U	8.5 U	5.7 U
METHYLENE CHLORIDE	0.33 U	55 J	610 B	44 B	3.7 U	31 B	17 J
NAPHTHALENE	0.24 UJ	24 UJ	150 U	16 U	2.7 UJ	12 U	8 UJ
N-BUTYLBENZENE	0.12 U	12 U	75 U	8 U	1.3 U	6 U	4 U
N-PROPYLBENZENE	0.14 U	14 U	88 U	9.3 U	1.6 U	7 U	4.7 U
O-XYLENE	0.14 U	14 U	88 U	9.3 U	1.6 U	7 U	4.7 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
STYRENE	0.11 U	11 U	69 U	7.3 U	1.2 U	5.5 U	3.7 U
TERT-AMYL METHYL ETHER	0.067 U	6.7 U	42 U	4.5 U	0.74 U	3.4 U	2.2 U
TERT-BUTYLBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	390 UR	2400 UR	260 UR	43 UR	200 UR	130 UR
TETRACHLOROETHENE	0.29 U	29 U	180 U	19 U	3.2 U	15 U	9.7 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.26 J	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
TOTAL XYLENES	0.14 U	14 U	88 U	9.3 U	1.6 U	7 U	4.7 U
TRANS-1,2-DICHLOROETHENE	0.19 U	19 U	120 U	13 U	2.1 U	9.5 U	6.3 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	19 U	120 U	13 U	2.1 U	9.5 U	6.3 U

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LOCATION	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-24
SAMPLE ID	DR-DPT-24-15	DR-DPT-24-25	DR-DPT-24-30	DR-DPT-24-35	DR-DPT-24-40	DR-DPT-24-45	DR-DPT-24-50
SAMPLE DATE	7/31/2013	7/31/2013	7/31/2013	7/31/2013	7/31/2013	7/31/2013	7/31/2013
TRICHLOROETHENE	0.17 U	3100	17000	1800	420	1100	1300
TRICHLOROFLUOROMETHANE	0.21 U	21 U	130 U	14 U	2.3 U	11 U	7 U
VINYL ACETATE	0.19 UR	19 UR	120 UR	13 UR	2.1 UR	9.5 UR	6.3 UR
VINYL CHLORIDE	4.5	150	140 U	420	2.4 U	11 U	7.3 U
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
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LOCATION	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-25	DR-DPT-25	DR-DPT-25	DR-DPT-25
SAMPLE ID	DR-DPT-24-55	DR-DPT-24-60	DR-DPT-24-60A	DR-DPT-25-30	DR-DPT-25-35	DR-DPT-25-40	DR-DPT-25-45
SAMPLE DATE	7/31/2013	8/1/2013	8/1/2013	9/6/2013	9/6/2013	9/6/2013	9/6/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	1.4 UJ	0.46 UJ	NA	58 U	120 U	230 U	160 U
1,1,1-TRICHLOROETHANE	1.3 UJ	0.44 UJ	NA	55 U	110 U	220 U	160 U
1,1,2,2-TETRACHLOROETHANE	1.1 UJ	0.36 UJ	NA	45 U	90 U	180 U	130 U
1,1,2-TRICHLOROETHANE	2 J	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	1.6 UJ	0.56 UJ	NA	70 U	140 U	280 U	200 U
1,1-DICHLOROETHANE	0.88 UJ	0.3 UJ	NA	38 U	75 U	150 U	110 U
1,1-DICHLOROETHENE	2.7 J	0.38 UJ	NA	48 U	95 U	190 U	140 U
1,1-DICHLOROPROPENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
1,2,3-TRICHLOROBENZENE	1 UJ	0.34 UJ	NA	43 U	85 U	170 U	120 U
1,2,3-TRICHLOROPROPANE	2.5 UJ	0.86 UJ	NA	110 U	220 U	430 U	310 U
1,2,3-TRIMETHYLBENZENE	0.035 UJ	0.012 UJ	NA	1.5 U	3 U	5.9 U	4.2 U
1,2,4-TRICHLOROBENZENE	0.88 UJ	0.3 UJ	NA	38 U	75 U	150 U	110 U
1,2,4-TRIMETHYLBENZENE	0.71 UJ	0.24 UJ	NA	30 U	60 U	120 U	86 U
1,2-DIBROMO-3-CHLOROPROPANE	3.9 UJ	1.3 UJ	NA	170 U	340 U	670 U	480 U
1,2-DIBROMOETHANE	1.4 UJ	0.48 UJ	NA	60 U	120 U	240 U	170 U
1,2-DICHLOROBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
1,2-DICHLOROETHANE	35 J	4.1 J	NA	58 J	120 J	220 U	200 J
1,2-DICHLOROPROPANE	1.1 UJ	0.36 UJ	NA	45 U	90 U	180 U	130 U
1,3-DICHLOROBENZENE	0.82 UJ	0.28 UJ	NA	35 U	70 U	140 U	100 U
1,3-DICHLOROPROPANE	0.94 UJ	0.32 UJ	NA	40 U	80 U	160 U	110 U
1,4-DICHLOROBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
1,4-DIOXANE	160 Z1	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	37 NJ	NA	NA	NA	NA	NA
1-PENTENE	9 Z1	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
2-BUTANONE	3.4 UJ	6.6 J	NA	140 U	290 U	570 U	410 U
2-CHLOROETHYL VINYL ETHER	5.8 UJ	2 UJ	NA	250 UJ	500 UJ	990 UJ	710 UJ
2-CHLOROTOLUENE	0.65 UJ	0.22 UJ	NA	28 U	55 U	110 U	79 U
2-HEXANONE	2.4 UJ	0.82 UJ	NA	100 U	210 U	410 U	290 U
2-METHYL-1-BUTENE	NA	7.2 NJ	4.5 NJ	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	1.1 UJ	0.36 UJ	NA	45 U	90 U	180 U	130 U
4-ISOPROPYLTOLUENE	0.71 UJ	0.24 UJ	NA	30 U	60 U	120 U	86 U
4-METHYL-2-PENTANONE	1.9 UJ	0.64 UJ	NA	80 U	160 U	320 U	230 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	40 B	31 B	NA	280 U	550 U	1100 U	790 U
BENZENE	3.2 J	0.6 J	NA	33 U	65 U	130 U	93 U
BROMOBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
BROMOCHLOROMETHANE	1.7 UJ	0.58 UJ	NA	73 U	150 U	290 U	210 U
BROMODICHLOROMETHANE	0.88 UJ	0.3 UJ	NA	38 U	75 U	150 U	110 U

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LOCATION	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-25	DR-DPT-25	DR-DPT-25	DR-DPT-25
SAMPLE ID	DR-DPT-24-55	DR-DPT-24-60	DR-DPT-24-60A	DR-DPT-25-30	DR-DPT-25-35	DR-DPT-25-40	DR-DPT-25-45
SAMPLE DATE	7/31/2013	8/1/2013	8/1/2013	9/6/2013	9/6/2013	9/6/2013	9/6/2013
BROMOFORM	3.8 UJ	1.3 UJ	NA	160 U	320 U	640 U	460 U
BROMOMETHANE	2.4 UJ	0.82 UJ	NA	100 U	210 U	410 U	290 U
CARBON DISULFIDE	0.76 UJ	0.54 J	NA	33 U	65 U	130 U	93 U
CARBON TETRACHLORIDE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
CHLOROBENZENE	8.1 J	0.3 UJ	NA	38 U	75 U	150 U	110 J
CHLORODIBROMOMETHANE	1.1 UJ	0.36 UJ	NA	45 U	90 U	180 U	130 U
CHLOROETHANE	1.7 UJ	0.58 UJ	NA	73 UJ	150 UJ	290 UJ	210 UJ
CHLOROFORM	13 J	0.92 J	NA	40 U	80 U	160 U	110 U
CHLOROMETHANE	1.8 UJ	0.6 UJ	NA	75 U	150 U	300 U	210 U
CIS-1,2-DICHLOROETHENE	130 J	5.4 J	NA	5000	2700	7100	5900
CIS-1,3-DICHLOROPROPENE	0.82 UJ	0.28 UJ	NA	35 U	70 U	140 U	100 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	1.6 UJ	0.56 UJ	NA	70 U	140 U	280 U	200 U
DICHLORODIFLUOROMETHANE	1.8 UJ	0.62 UJ	NA	78 U	160 U	310 U	220 U
DIISOPROPYL ETHER	8.8 UJ	3 UJ	NA	380 U	750 U	1500 U	1100 U
ETHYL TERT-BUTYL ETHER	0.65 UJ	0.22 UJ	NA	28 U	55 U	110 U	79 U
ETHYLBENZENE	1 UJ	0.34 UJ	NA	43 U	85 U	170 U	120 U
HEXACHLOROBUTADIENE	1.8 UJ	0.6 UJ	NA	75 U	150 U	300 U	210 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
M+P-XYLENES	1.4 UJ	0.48 UJ	NA	60 U	120 U	240 U	170 U
METHYL ACETATE	2.2 J	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	1 UJ	0.34 UJ	NA	43 U	85 U	170 U	120 U
METHYLENE CHLORIDE	25 J	4.2 J	NA	83 U	170 U	330 U	240 U
NAPHTHALENE	1.4 UJ	0.48 UJ	NA	60 U	120 U	240 U	170 U
N-BUTYLBENZENE	0.71 UJ	0.24 UJ	NA	30 U	60 U	120 U	86 U
N-PROPYLBENZENE	0.82 UJ	0.28 UJ	NA	35 U	70 U	140 U	100 U
O-XYLENE	0.82 UJ	0.28 UJ	NA	35 U	70 U	140 U	100 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
STYRENE	0.65 UJ	0.22 UJ	NA	28 U	55 U	110 U	79 U
TERT-AMYL METHYL ETHER	0.39 UJ	0.13 UJ	NA	17 U	34 U	67 U	48 U
TERT-BUTYLBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
TERTIARY-BUTYL ALCOHOL	28 J	26 J	NA	980 UR	2000 UR	3900 UR	2800 UR
TETRACHLOROETHENE	1.7 UJ	0.58 UJ	NA	73 U	150 U	290 U	210 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	2.8 J	0.98 J	NA	33 U	65 U	130 U	93 U
TOTAL XYLENES	0.82 UJ	0.28 UJ	NA	35 U	70 U	140 U	100 U
TRANS-1,2-DICHLOROETHENE	1.1 UJ	0.38 UJ	NA	48 U	95 U	190 U	140 U
TRANS-1,3-DICHLOROPROPENE	1.1 UJ	0.38 UJ	NA	48 U	95 U	190 U	140 U

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LOCATION	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-25	DR-DPT-25	DR-DPT-25	DR-DPT-25
SAMPLE ID	DR-DPT-24-55	DR-DPT-24-60	DR-DPT-24-60A	DR-DPT-25-30	DR-DPT-25-35	DR-DPT-25-40	DR-DPT-25-45
SAMPLE DATE	7/31/2013	8/1/2013	8/1/2013	9/6/2013	9/6/2013	9/6/2013	9/6/2013
TRICHLOROETHENE	260 J	5 J	NA	3000	14000	25000	21000
TRICHLOROFLUOROMETHANE	1.2 UJ	0.42 UJ	NA	53 U	110 U	210 U	150 U
VINYL ACETATE	1.1 UR	0.38 UR	NA	48 UR	95 UR	190 UR	140 UR
VINYL CHLORIDE	29 J	0.44 UJ	NA	580	810	2500	2200
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	2.9 NJ	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-25	DR-DPT-26	DR-DPT-26	DR-DPT-26	DR-DPT-26	DR-DPT-26	DR-DPT-26
SAMPLE ID	DR-DPT-25-50	DR-DPT-26-20	DR-DPT-26-25	DR-DPT-26-25-D	DR-DPT-26-30	DR-DPT-26-35	DR-DPT-26-40
SAMPLE DATE	9/6/2013	8/15/2013	8/15/2013	8/15/2013	8/15/2013	8/15/2013	8/15/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	190 U	120 U	160 U	190 U	160 U	12 U	3.8 U
1,1,1-TRICHLOROETHANE	180 U	110 U	160 U	180 U	160 U	11 U	3.7 U
1,1,2,2-TETRACHLOROETHANE	150 U	90 U	130 U	150 U	130 U	9 U	3 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	230 U	140 U	200 U	230 U	200 U	14 U	4.7 U
1,1-DICHLOROETHANE	120 U	75 U	110 U	120 U	110 U	7.5 U	2.5 U
1,1-DICHLOROETHENE	160 U	95 U	160 J	190 J	140 U	9.5 U	3.2 J
1,1-DICHLOROPROPENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
1,2,3-TRICHLOROBENZENE	140 U	85 U	120 U	140 U	120 U	8.5 U	2.8 U
1,2,3-TRICHLOROPROPANE	360 U	220 U	310 U	360 U	310 U	22 U	7.2 U
1,2,3-TRIMETHYLBENZENE	4.9 U	3 U	4.2 U	4.9 U	4.2 U	0.3 U	0.098 U
1,2,4-TRICHLOROBENZENE	120 U	75 U	110 U	120 U	110 U	13 J	2.5 U
1,2,4-TRIMETHYLBENZENE	100 U	60 U	86 U	100 U	86 U	6 U	2 U
1,2-DIBROMO-3-CHLOROPROPANE	560 U	340 U	480 U	560 U	480 U	34 U	11 U
1,2-DIBROMOETHANE	200 U	120 U	170 U	200 U	170 U	12 U	4 U
1,2-DICHLOROBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
1,2-DICHLOROETHANE	180 U	110 U	160 U	180 U	180 J	15 J	7.8 J
1,2-DICHLOROPROPANE	150 U	90 U	130 U	150 U	130 U	9 U	3 U
1,3-DICHLOROBENZENE	120 U	70 U	100 U	120 U	100 U	7 U	2.3 U
1,3-DICHLOROPROPANE	130 U	80 U	110 U	130 U	110 U	8 U	2.7 U
1,4-DICHLOROBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
2-BUTANONE	470 U	290 U	410 U	470 U	410 U	29 U	9.5 U
2-CHLOROETHYL VINYL ETHER	820 U	500 U	710 U	820 U	710 U	50 U	17 U
2-CHLOROTOLUENE	92 U	55 U	79 U	92 U	79 U	5.5 U	1.8 U
2-HEXANONE	340 U	210 U	290 U	340 U	290 U	21 U	6.8 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	150 U	90 U	130 U	150 U	130 U	9 U	3 U
4-ISOPROPYLTOLUENE	100 U	60 U	86 U	100 U	86 U	6 U	2 U
4-METHYL-2-PENTANONE	270 U	160 U	230 U	270 U	230 U	16 U	5.3 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	920 U	550 U	1800 J	920 U	2000 J	160 J	55 J
BENZENE	110 U	86 J	94 B	110 U	150 B	8.6 B	4.1 B
BROMOBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
BROMOCHLOROMETHANE	240 U	150 U	210 U	240 U	210 U	15 U	4.8 U
BROMODICHLOROMETHANE	120 U	75 U	110 U	120 U	110 U	7.5 U	2.5 U

Table D-1

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LOCATION	DR-DPT-25	DR-DPT-26	DR-DPT-26	DR-DPT-26	DR-DPT-26	DR-DPT-26	DR-DPT-26
SAMPLE ID	DR-DPT-25-50	DR-DPT-26-20	DR-DPT-26-25	DR-DPT-26-25-D	DR-DPT-26-30	DR-DPT-26-35	DR-DPT-26-40
SAMPLE DATE	9/6/2013	8/15/2013	8/15/2013	8/15/2013	8/15/2013	8/15/2013	8/15/2013
BROMOFORM	530 U	320 U	460 U	530 U	460 U	32 U	11 U
BROMOMETHANE	340 U	210 U	290 U	340 U	290 U	21 U	6.8 U
CARBON DISULFIDE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
CARBON TETRACHLORIDE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
CHLOROBENZENE	120 U	75 U	110 U	120 U	110 U	7.5 U	2.5 U
CHLORODIBROMOMETHANE	150 U	90 U	130 U	150 U	130 U	9 U	3 U
CHLOROETHANE	240 U	150 U	210 U	240 U	210 U	15 U	4.8 U
CHLOROFORM	130 U	80 U	110 U	130 U	110 U	8 U	2.7 U
CHLOROMETHANE	250 U	150 U	210 U	250 U	210 U	15 U	5 U
CIS-1,2-DICHLOROETHENE	6700	85 U	24000	24000	4500	500	410
CIS-1,3-DICHLOROPROPENE	120 U	70 U	100 U	120 U	100 U	7 U	2.3 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	230 U	140 U	200 U	230 U	200 U	14 U	4.7 U
DICHLORODIFLUOROMETHANE	260 U	160 U	220 U	260 U	220 U	16 U	5.2 U
DIISOPROPYL ETHER	1200 U	750 U	1100 U	1200 U	1100 U	75 U	25 U
ETHYL TERT-BUTYL ETHER	92 U	55 U	79 U	92 U	79 U	5.5 U	1.8 U
ETHYLBENZENE	140 U	85 U	120 U	140 U	120 U	8.5 U	2.8 U
HEXACHLOROBUTADIENE	250 U	150 U	210 U	250 U	210 U	15 U	5 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
M+P-XYLENES	200 U	120 U	170 U	200 U	170 U	12 U	4 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	140 U	85 U	120 U	140 U	120 U	8.5 U	2.8 U
METHYLENE CHLORIDE	270 U	170 U	1400 B	270 U	1400 B	160 B	55 B
NAPHTHALENE	200 U	120 U	170 U	200 U	170 U	12 U	4 U
N-BUTYLBENZENE	100 U	60 U	86 U	100 U	86 U	6 U	2 U
N-PROPYLBENZENE	120 U	70 U	100 U	120 U	100 U	7 U	2.3 U
O-XYLENE	120 U	70 U	100 U	120 U	100 U	7 U	2.3 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
STYRENE	92 U	55 U	79 U	92 U	79 U	5.5 U	1.8 U
TERT-AMYL METHYL ETHER	56 U	34 U	48 U	56 U	48 U	3.4 U	1.1 U
TERT-BUTYLBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
TERTIARY-BUTYL ALCOHOL	3200 UR	2000 UR	2800 UR	3200 UR	2800 UR	200 UR	65 UR
TETRACHLOROETHENE	240 U	150 U	210 U	240 U	210 U	15 U	4.8 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	280 B	65 U	120 J	230 J	93 U	6.5 U	2.2 U
TOTAL XYLENES	120 U	70 U	100 U	120 U	100 U	7 U	2.3 U
TRANS-1,2-DICHLOROETHENE	160 U	95 U	140 U	160 U	140 U	9.5 U	3.2 U
TRANS-1,3-DICHLOROPROPENE	160 U	95 U	140 U	160 U	140 U	9.5 U	3.2 U

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LOCATION	DR-DPT-25	DR-DPT-26	DR-DPT-26	DR-DPT-26	DR-DPT-26	DR-DPT-26	DR-DPT-26
SAMPLE ID	DR-DPT-25-50	DR-DPT-26-20	DR-DPT-26-25	DR-DPT-26-25-D	DR-DPT-26-30	DR-DPT-26-35	DR-DPT-26-40
SAMPLE DATE	9/6/2013	8/15/2013	8/15/2013	8/15/2013	8/15/2013	8/15/2013	8/15/2013
TRICHLOROETHENE	16000	85 U	850	790 J	26000	1600	540
TRICHLOROFLUOROMETHANE	170 U	110 U	150 U	170 U	150 U	11 U	3.5 U
VINYL ACETATE	160 UR	95 UR	140 UR	160 UR	140 UR	9.5 UR	3.2 UR
VINYL CHLORIDE	1600	5800	7600	7800	550 J	94	59
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

Table D-1

Chemical Results for DPT Groundwater Samples - 2013
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LOCATION	DR-DPT-26	DR-DPT-26	DR-DPT-27	DR-DPT-27	DR-DPT-27	DR-DPT-27	DR-DPT-27
SAMPLE ID	DR-DPT-26-45	DR-DPT-26-48	DR-DPT-27-20	DR-DPT-27-25	DR-DPT-27-30	DR-DPT-27-35	DR-DPT-27-40
SAMPLE DATE	8/15/2013	8/16/2013	8/5/2013	8/5/2013	8/5/2013	8/6/2013	8/6/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.92 U	1.2 U	7.7 U	77 U	9.2 U	7.7 U	3.8 U
1,1,1-TRICHLOROETHANE	0.88 U	1.1 U	7.3 U	73 U	8.8 U	7.3 U	3.7 U
1,1,2,2-TETRACHLOROETHANE	0.72 U	0.9 U	6 U	60 U	7.2 U	6 U	3 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U	1.4 U	9.3 U	93 U	11 U	9.3 U	4.7 U
1,1-DICHLOROETHANE	0.6 U	0.75 U	5 U	50 U	6 U	5 U	2.5 U
1,1-DICHLOROETHENE	0.76 U	0.95 U	6.3 U	63 U	9.6 J	6.3 U	3.2 U
1,1-DICHLOROPROPENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
1,2,3-TRICHLOROBENZENE	0.68 U	0.85 U	5.7 U	57 U	6.8 U	5.7 U	2.8 U
1,2,3-TRICHLOROPROPANE	1.7 U	2.2 U	14 U	140 U	17 U	14 U	7.2 U
1,2,3-TRIMETHYLBENZENE	0.024 U	0.03 U	0.2 U	2 U	0.24 U	0.2 U	0.098 U
1,2,4-TRICHLOROBENZENE	0.6 U	0.75 U	5 U	50 U	6 U	5 U	2.5 U
1,2,4-TRIMETHYLBENZENE	0.48 U	0.6 U	4 U	40 U	4.8 U	4 U	2 U
1,2-DIBROMO-3-CHLOROPROPANE	2.7 U	3.4 U	22 U	220 U	27 U	22 U	11 U
1,2-DIBROMOETHANE	0.96 U	1.2 U	8 U	80 U	9.6 U	8 U	4 U
1,2-DICHLOROBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
1,2-DICHLOROETHANE	2.1 J	3.1 J	7.3 U	73 U	8.8 U	7.3 U	3.7 U
1,2-DICHLOROPROPANE	0.72 U	0.9 U	6 U	60 U	7.2 U	6 U	3 U
1,3-DICHLOROBENZENE	0.56 U	0.7 U	4.7 U	47 U	5.6 U	4.7 U	2.3 U
1,3-DICHLOROPROPANE	0.64 U	0.8 U	5.3 U	53 U	6.4 U	5.3 U	2.7 U
1,4-DICHLOROBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
2-BUTANONE	2.3 U	2.9 U	19 U	190 U	23 U	19 U	9.5 U
2-CHLOROETHYL VINYL ETHER	4 U	5 U	33 UR	330 U	40 U	33 U	17 U
2-CHLOROTOLUENE	0.44 U	0.55 U	3.7 U	37 U	4.4 U	3.7 U	1.8 U
2-HEXANONE	1.6 U	2.1 U	14 U	140 U	16 U	14 U	6.8 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.72 U	0.9 U	6 U	60 U	7.2 U	6 U	3 U
4-ISOPROPYLTOLUENE	0.48 U	0.6 U	4 U	40 U	4.8 U	4 U	2 U
4-METHYL-2-PENTANONE	1.3 U	1.6 U	11 U	110 U	13 U	11 U	5.3 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	13 J	9.4 B	37 U	370 U	44 U	37 U	18 U
BENZENE	1.3 B	0.97 J	4.3 U	43 U	5.2 U	4.3 U	2.2 U
BROMOBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
BROMOCHLOROMETHANE	1.2 U	1.5 U	9.7 U	97 U	12 U	9.7 U	4.8 U
BROMODICHLOROMETHANE	0.6 U	0.75 U	5 U	50 U	6 U	5 U	2.5 U

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LOCATION	DR-DPT-26	DR-DPT-26	DR-DPT-27	DR-DPT-27	DR-DPT-27	DR-DPT-27	DR-DPT-27
SAMPLE ID	DR-DPT-26-45	DR-DPT-26-48	DR-DPT-27-20	DR-DPT-27-25	DR-DPT-27-30	DR-DPT-27-35	DR-DPT-27-40
SAMPLE DATE	8/15/2013	8/16/2013	8/5/2013	8/5/2013	8/5/2013	8/6/2013	8/6/2013
BROMOFORM	2.6 U	3.2 U	21 U	210 U	26 U	21 U	11 U
BROMOMETHANE	1.6 U	2.1 U	14 U	140 U	16 U	14 U	6.8 U
CARBON DISULFIDE	0.67 J	1.6 J	4.3 U	43 U	5.2 U	4.3 U	2.2 U
CARBON TETRACHLORIDE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
CHLOROBENZENE	0.6 U	0.75 U	5 U	50 U	6 U	5 U	2.5 U
CHLORODIBROMOMETHANE	0.72 U	0.9 UL	6 U	60 U	7.2 U	6 U	3 U
CHLOROETHANE	1.2 U	1.5 U	9.7 U	97 U	12 U	9.7 U	4.8 U
CHLOROFORM	0.69 J	0.98 J	5.3 U	53 U	6.4 U	5.3 U	2.7 U
CHLOROMETHANE	1.2 U	1.5 U	10 U	100 U	12 U	10 U	5 U
CIS-1,2-DICHLOROETHENE	110	110	410	1700	300	200	160
CIS-1,3-DICHLOROPROPENE	0.56 U	0.7 U	4.7 U	47 U	5.6 U	4.7 U	2.3 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	1.1 U	1.4 U	9.3 U	93 U	11 U	9.3 U	4.7 U
DICHLORODIFLUOROMETHANE	1.2 U	1.6 U	10 U	100 U	12 U	10 U	5.2 U
DIISOPROPYL ETHER	6 U	7.5 U	50 U	500 U	60 U	50 U	25 U
ETHYL TERT-BUTYL ETHER	0.44 U	0.55 U	3.7 U	37 U	4.4 U	3.7 U	1.8 U
ETHYLBENZENE	0.68 U	0.85 U	5.7 U	57 U	6.8 U	5.7 U	2.8 U
HEXACHLOROBUTADIENE	1.2 U	1.5 U	10 U	100 U	12 U	10 U	5 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
M+P-XYLENES	0.96 U	1.2 U	8 U	80 U	9.6 U	8 U	4 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.68 U	0.85 U	5.7 U	57 U	6.8 U	5.7 U	2.8 U
METHYLENE CHLORIDE	5.8 B	1.7 U	11 U	110 U	13 U	11 U	5.5 U
NAPHTHALENE	0.96 U	1.2 U	8 U	80 U	9.6 U	8 U	4 UJ
N-BUTYLBENZENE	0.48 U	0.6 U	4 U	40 U	4.8 U	4 U	2 U
N-PROPYLBENZENE	0.56 U	0.7 U	4.7 U	47 U	5.6 U	4.7 U	2.3 U
O-XYLENE	0.56 U	0.7 U	4.7 U	47 U	5.6 U	4.7 U	2.3 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
STYRENE	0.44 U	0.55 U	3.7 U	37 U	4.4 U	3.7 U	1.8 U
TERT-AMYL METHYL ETHER	0.27 U	0.34 U	2.2 U	22 U	2.7 U	2.2 U	1.1 U
TERT-BUTYLBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
TERTIARY-BUTYL ALCOHOL	16 UR	38 J	130 UR	1300 UR	160 UR	130 UR	65 UR
TETRACHLOROETHENE	1.2 U	1.5 U	9.7 U	97 U	12 U	9.7 U	4.8 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.52 U	2.8 J	4.3 U	43 U	5.2 U	4.3 U	2.2 U
TOTAL XYLENES	0.56 U	0.7 U	4.7 U	47 U	5.6 U	4.7 U	2.3 U
TRANS-1,2-DICHLOROETHENE	1.4 J	1.2 J	6.3 U	63 U	7.6 U	6.3 U	5.2 J
TRANS-1,3-DICHLOROPROPENE	0.76 U	0.95 U	6.3 U	63 U	7.6 U	6.3 U	3.2 U

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LOCATION	DR-DPT-26	DR-DPT-26	DR-DPT-27	DR-DPT-27	DR-DPT-27	DR-DPT-27	DR-DPT-27
SAMPLE ID	DR-DPT-26-45	DR-DPT-26-48	DR-DPT-27-20	DR-DPT-27-25	DR-DPT-27-30	DR-DPT-27-35	DR-DPT-27-40
SAMPLE DATE	8/15/2013	8/16/2013	8/5/2013	8/5/2013	8/5/2013	8/6/2013	8/6/2013
TRICHLOROETHENE	130	140	650	7000	950	710	450
TRICHLOROFLUOROMETHANE	0.84 U	1.1 U	7 U	70 U	8.4 U	7 U	3.5 U
VINYL ACETATE	0.76 UR	0.95 UR	6.3 UR	63 UR	7.6 UR	6.3 UR	3.2 UR
VINYL CHLORIDE	29	26	81	91 J	56	35	17
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
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LOCATION	DR-DPT-27	DR-DPT-27	DR-DPT-28	DR-DPT-28	DR-DPT-28	DR-DPT-28	DR-DPT-29
SAMPLE ID	DR-DPT-27-45	DR-DPT-27-49	DR-DPT-28-15	DR-DPT-28-30	DR-DPT-28-35	DR-DPT-28-40	DR-DPT-29-10
SAMPLE DATE	8/6/2013	8/6/2013	8/2/2013	8/2/2013	8/2/2013	8/2/2013	8/1/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	3.8 U	2.3 U	0.23 U	19 U	3.3 U	3.8 U	0.23 U
1,1,1-TRICHLOROETHANE	3.7 U	2.2 U	0.22 U	18 U	3.1 U	3.7 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	3 U	1.8 U	0.18 U	15 U	2.6 U	3 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	4.7 U	2.8 U	0.28 U	23 U	4 U	4.7 U	0.28 U
1,1-DICHLOROETHANE	2.5 U	1.5 U	0.15 U	12 U	2.1 U	2.5 U	0.15 U
1,1-DICHLOROETHENE	3.2 U	1.9 U	0.19 U	32 J	2.7 U	3.2 U	0.19 U
1,1-DICHLOROPROPENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
1,2,3-TRICHLOROBENZENE	2.8 U	1.7 U	0.17 U	14 U	2.4 U	2.8 U	0.17 U
1,2,3-TRICHLOROPROPANE	7.2 U	4.3 U	0.43 U	36 U	6.1 U	7.2 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.098 U	0.059 U	0.0059 U	0.49 U	0.084 U	0.098 U	0.0059 U
1,2,4-TRICHLOROBENZENE	2.5 U	1.5 U	0.15 U	12 U	2.1 U	2.5 U	0.15 U
1,2,4-TRIMETHYLBENZENE	2 U	1.2 U	0.12 U	10 U	1.7 U	2 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	11 U	6.7 U	0.67 U	56 U	9.6 U	11 U	0.67 U
1,2-DIBROMOETHANE	4 U	2.4 U	0.24 U	20 U	3.4 U	4 U	0.24 U
1,2-DICHLOROBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
1,2-DICHLOROETHANE	3.7 U	2.3 J	0.22 U	20 J	3.5 J	3.7 U	0.22 U
1,2-DICHLOROPROPANE	3 U	1.8 U	0.18 U	15 U	2.6 U	3 U	0.18 U
1,3-DICHLOROBENZENE	2.3 U	1.4 U	0.14 U	12 U	2 U	2.3 U	0.14 U
1,3-DICHLOROPROPANE	2.7 U	1.6 U	0.16 U	13 U	2.3 U	2.7 U	0.16 U
1,4-DICHLOROBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	13 NJ	NA	NA	26 NJ	NA	NA
2,2-DICHLOROPROPANE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
2-BUTANONE	9.5 U	5.7 U	0.57 U	47 U	8.1 U	9.5 U	1.2 J
2-CHLOROETHYL VINYL ETHER	17 U	9.9 U	0.99 U	82 U	14 U	17 U	0.99 U
2-CHLOROTOLUENE	1.8 U	1.1 U	0.11 U	9.2 U	1.6 U	1.8 U	0.11 U
2-HEXANONE	6.8 U	4.1 U	0.41 U	34 U	5.9 U	6.8 U	0.41 U
2-METHYL-1-BUTENE	NA	17 NJ	NA	NA	NA	NA	NA
2-METHYLBUTANE	42 NJ	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	3 U	1.8 U	0.18 U	15 U	2.6 U	3 U	0.18 U
4-ISOPROPYLTOLUENE	2 U	1.2 U	0.12 U	10 U	1.7 U	2 U	0.12 U
4-METHYL-2-PENTANONE	5.3 U	3.2 U	0.32 U	27 U	4.6 U	5.3 U	0.32 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	18 U	19 J	3.9 B	92 U	20 B	18 U	7.6 B
BENZENE	2.2 U	1.6 J	0.13 U	12 J	2.3 J	2.2 U	0.16 J
BROMOBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
BROMOCHLOROMETHANE	4.8 U	2.9 U	0.29 U	24 U	4.1 U	4.8 U	0.29 U
BROMODICHLOROMETHANE	2.5 U	1.5 U	0.15 U	12 U	2.1 U	2.5 U	0.15 U

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LOCATION	DR-DPT-27	DR-DPT-27	DR-DPT-28	DR-DPT-28	DR-DPT-28	DR-DPT-28	DR-DPT-29
SAMPLE ID	DR-DPT-27-45	DR-DPT-27-49	DR-DPT-28-15	DR-DPT-28-30	DR-DPT-28-35	DR-DPT-28-40	DR-DPT-29-10
SAMPLE DATE	8/6/2013	8/6/2013	8/2/2013	8/2/2013	8/2/2013	8/2/2013	8/1/2013
BROMOFORM	11 U	6.4 U	0.64 U	53 U	9.1 U	11 U	0.64 U
BROMOMETHANE	6.8 U	4.1 U	0.41 U	34 U	5.9 U	6.8 U	0.41 U
CARBON DISULFIDE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
CARBON TETRACHLORIDE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
CHLOROBENZENE	2.5 U	1.5 U	0.15 U	12 U	2.1 U	2.5 U	0.15 U
CHLORODIBROMOMETHANE	3 U	1.8 U	0.18 U	15 U	2.6 U	3 U	0.18 U
CHLOROETHANE	4.8 U	2.9 U	0.29 U	24 U	4.1 U	4.8 U	0.29 U
CHLOROFORM	2.7 U	1.6 U	0.16 U	13 U	2.3 U	2.7 U	0.16 U
CHLOROMETHANE	5 U	3 U	0.3 U	25 U	4.3 U	5 U	0.3 U
CIS-1,2-DICHLOROETHENE	220	130	2.2	3000 L	300	85	0.17 U
CIS-1,3-DICHLOROPROPENE	2.3 U	1.4 U	0.14 U	12 U	2 U	2.3 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	4.7 U	2.8 U	0.28 U	23 U	4 U	4.7 U	0.28 U
DICHLORODIFLUOROMETHANE	5.2 U	3.1 U	0.31 U	26 U	4.4 U	5.2 U	0.31 U
DIISOPROPYL ETHER	25 U	15 U	1.5 U	120 U	21 U	25 U	1.5 U
ETHYL TERT-BUTYL ETHER	1.8 U	1.1 U	0.11 U	9.2 U	1.6 U	1.8 U	0.11 U
ETHYLBENZENE	2.8 U	1.7 U	0.17 U	14 U	2.4 U	2.8 U	0.17 U
HEXACHLOROBUTADIENE	5 U	3 U	0.3 U	25 U	4.3 U	5 U	0.3 U
HEXANE	7.5 J	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
M+P-XYLENES	4 U	2.4 U	0.24 U	20 U	3.4 U	4 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	2.8 U	1.7 U	0.17 U	14 U	2.4 U	2.8 U	0.17 U
METHYLENE CHLORIDE	5.5 U	3.3 U	0.33 U	91 B	39 B	27 B	0.33 U
NAPHTHALENE	4 U	2.4 UJ	0.24 U	20 UJ	3.4 UJ	4 UJ	0.24 U
N-BUTYLBENZENE	2 U	1.2 U	0.12 U	10 U	1.7 U	2 U	0.12 U
N-PROPYLBENZENE	2.3 U	1.4 U	0.14 U	12 U	2 U	2.3 U	0.14 U
O-XYLENE	2.3 U	1.4 U	0.14 U	12 U	2 U	2.3 U	0.14 U
PENTANE	49 NJ	NA	NA	NA	33 NJ	NA	NA
PROPYLENE	NA	NA	NA	NA	150 NJ	NA	NA
SEC-BUTYLBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
STYRENE	1.8 U	1.1 U	0.11 U	9.2 U	1.6 U	1.8 U	0.11 U
TERT-AMYL METHYL ETHER	1.1 U	0.67 U	0.067 U	5.6 U	0.96 U	1.1 U	0.067 U
TERT-BUTYLBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
TERTIARY-BUTYL ALCOHOL	65 UR	39 UR	3.9 UR	320 UR	56 UR	65 UR	3.9 UR
TETRACHLOROETHENE	4.8 U	2.9 U	0.29 U	24 U	4.1 U	4.8 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	2.2 U	1.3 U	0.23 J	11 U	1.9 U	2.2 U	0.13 U
TOTAL XYLENES	2.3 U	1.4 U	0.14 U	12 U	2 U	2.3 U	0.14 U
TRANS-1,2-DICHLOROETHENE	7.4 J	1.9 U	0.19 U	16 U	2.7 U	3.2 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	3.2 U	1.9 U	0.19 U	16 U	2.7 U	3.2 U	0.19 U

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LOCATION	DR-DPT-27	DR-DPT-27	DR-DPT-28	DR-DPT-28	DR-DPT-28	DR-DPT-28	DR-DPT-29
SAMPLE ID	DR-DPT-27-45	DR-DPT-27-49	DR-DPT-28-15	DR-DPT-28-30	DR-DPT-28-35	DR-DPT-28-40	DR-DPT-29-10
SAMPLE DATE	8/6/2013	8/6/2013	8/2/2013	8/2/2013	8/2/2013	8/2/2013	8/1/2013
TRICHLOROETHENE	390	120	0.57 J	3100	480	460	0.29 J
TRICHLOROFLUOROMETHANE	3.5 U	2.1 U	0.21 U	17 U	3 U	3.5 U	0.21 U
VINYL ACETATE	3.2 UR	1.9 UR	0.19 UR	16 UR	2.7 UR	3.2 UR	0.19 UR
VINYL CHLORIDE	15 J	2.2 U	0.22 U	280	16	5 J	0.22 U
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-30
SAMPLE ID	DR-DPT-29-15	DR-DPT-29-20	DR-DPT-29-25	DR-DPT-29-30	DR-DPT-29-35	DR-DPT-29-40	DR-DPT-30-20
SAMPLE DATE	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/15/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 UJ	0.92 UJ	0.66 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 UJ	0.88 UJ	0.63 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.72 UJ	0.51 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 UJ	1.1 UJ	0.8 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.6 UJ	0.43 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	0.76 UJ	0.54 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 UJ	0.68 UJ	0.49 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 UJ	1.7 UJ	1.2 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 UJ	0.024 UJ	0.017 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.6 UJ	0.43 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.15 J	0.48 UJ	0.34 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 UJ	2.7 UJ	1.9 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 UJ	0.96 UJ	0.69 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 UJ	0.88 UJ	0.63 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.72 UJ	0.51 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 UJ	0.56 UJ	0.4 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.64 UJ	0.46 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	53 NJ	NA
1-PENTENE	NA	NA	NA	NA	5.5 NJ	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.74 J	4 J	6.9 J	1.6 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	0.99 UJ	4 UJ	2.8 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 UJ	0.44 UJ	0.31 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.66 J	1.6 UJ	1.2 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	2.4 NJ	1.9 NJ	4 NJ	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	7.8 NJ	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.72 UJ	0.51 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 UJ	0.48 UJ	0.34 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 UJ	1.3 UJ	0.92 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	2.7 B	2.9 B	3.3 B	3 B	15 B	26 B	41
BENZENE	0.13 U	0.13 U	0.13 J	0.16 J	0.69 J	1.2 J	3.4
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 UJ	1.2 UJ	0.83 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.6 UJ	0.43 U

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LOCATION	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-30
SAMPLE ID	DR-DPT-29-15	DR-DPT-29-20	DR-DPT-29-25	DR-DPT-29-30	DR-DPT-29-35	DR-DPT-29-40	DR-DPT-30-20
SAMPLE DATE	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/15/2013
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 UJ	2.6 UJ	1.8 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 UJ	1.6 UJ	1.2 U
CARBON DISULFIDE	0.13 U	0.6 J	0.26 J	0.25 J	0.44 J	0.52 UJ	0.44 J
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.6 UJ	0.43 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.72 UJ	0.51 U
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 UJ	1.2 UJ	0.83 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.64 UJ	0.46 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	1.2 UJ	0.86 U
CIS-1,2-DICHLOROETHENE	0.23 J	2.1	0.17 U	0.17 U	0.17 UJ	0.68 UJ	100
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 UJ	0.56 UJ	0.4 U
CYCLOHEXANE	NA	NA	0.2 NJ	0.15 NJ	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 UJ	1.1 UJ	0.8 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 UJ	1.2 UJ	0.89 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 UJ	6 UJ	4.3 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 UJ	0.44 UJ	0.31 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.24 J	0.68 UJ	0.49 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	1.2 UJ	0.86 U
HEXANE	NA	NA	0.73 NJ	0.56 NJ	2.5 NJ	1.4 NJ	NA
ISOBUTANOL	NA	NA	NA	NA	27 NJ	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.52 J	0.96 UJ	0.69 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	0.17 UJ	0.68 UJ	0.49 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 UJ	3.7 J	2.5 B
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 UJ	0.96 UJ	0.69 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 UJ	0.48 UJ	0.34 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 UJ	0.56 UJ	0.4 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.21 J	0.56 UJ	0.4 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 UJ	0.44 UJ	0.31 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 UJ	0.27 UJ	0.19 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	8.9 J	3.9 UR	16 UR	11 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 UJ	1.2 UJ	0.83 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	1.7 NJ	NA
TOLUENE	0.13 U	0.13 U	0.16 J	0.19 J	1.3 J	1.6 J	0.37 U
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.14 U	0.73 J	0.56 UJ	0.4 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	0.76 UJ	1.2 J
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	0.76 UJ	0.54 U

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LOCATION	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-29	DR-DPT-30
SAMPLE ID	DR-DPT-29-15	DR-DPT-29-20	DR-DPT-29-25	DR-DPT-29-30	DR-DPT-29-35	DR-DPT-29-40	DR-DPT-30-20
SAMPLE DATE	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/15/2013
TRICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 UJ	0.68 UJ	20
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 UJ	0.84 UJ	0.6 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.76 UR	0.54 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 UJ	0.88 UJ	2.6 J
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	6.4 NJ	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-30	DR-DPT-30	DR-DPT-30	DR-DPT-30	DR-DPT-31	DR-DPT-31	DR-DPT-31
SAMPLE ID	DR-DPT-30-30	DR-DPT-30-35	DR-DPT-30-40	DR-DPT-30-40-D	DR-DPT-31-25	DR-DPT-31-30	DR-DPT-31-35
SAMPLE DATE	8/15/2013	8/15/2013	8/15/2013	8/15/2013	8/19/2013	8/20/2013	8/20/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	9.2 U	6.6 U	1.8 U	1.5 U	15 U	0.58 U	0.23 U
1,1,1-TRICHLOROETHANE	8.8 U	6.3 U	1.7 U	1.5 U	15 U	0.55 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	7.2 U	5.1 U	1.4 U	1.2 U	12 U	0.45 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	11 U	8 U	2.2 U	1.9 U	19 U	0.7 U	0.28 U
1,1-DICHLOROETHANE	6 U	4.3 U	1.2 U	1 U	10 U	0.38 U	0.15 U
1,1-DICHLOROETHENE	7.6 U	5.4 U	1.5 U	1.3 U	13 U	0.48 U	0.19 U
1,1-DICHLOROPROPENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
1,2,3-TRICHLOROBENZENE	6.8 U	4.9 U	1.3 U	1.1 U	11 U	0.43 U	0.17 U
1,2,3-TRICHLOROPROPANE	17 U	12 U	3.3 U	2.9 U	29 U	1.1 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.24 U	0.17 U	0.045 U	0.039 U	0.39 U	0.015 U	0.0059 U
1,2,4-TRICHLOROBENZENE	6 U	4.3 U	1.2 U	1 U	10 U	0.38 U	0.15 U
1,2,4-TRIMETHYLBENZENE	4.8 U	3.4 U	0.92 U	0.8 U	8 U	0.3 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	27 U	19 U	5.2 U	4.5 U	45 U	1.7 U	0.67 U
1,2-DIBROMOETHANE	9.6 U	6.9 U	1.8 U	1.6 U	16 U	0.6 U	0.24 U
1,2-DICHLOROBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
1,2-DICHLOROETHANE	8.8 U	6.3 U	1.7 U	1.5 U	15 U	0.55 U	0.27 J
1,2-DICHLOROPROPANE	7.2 U	5.1 U	1.4 U	1.2 U	12 U	0.45 U	0.18 U
1,3-DICHLOROBENZENE	5.6 U	4 U	1.1 U	0.93 U	9.3 U	0.35 U	0.14 U
1,3-DICHLOROPROPANE	6.4 U	4.6 U	1.2 U	1.1 U	11 U	0.4 U	0.16 U
1,4-DICHLOROBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
2-BUTANONE	23 U	16 U	4.4 U	3.8 U	38 U	1.4 U	0.57 U
2-CHLOROETHYL VINYL ETHER	40 UR	28 U	7.6 U	6.6 U	66 U	2.5 U	0.99 U
2-CHLOROTOLUENE	4.4 U	3.1 U	0.85 U	0.73 U	7.3 U	0.28 U	0.11 U
2-HEXANONE	16 U	12 U	3.2 U	2.7 U	27 U	1 U	0.41 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	7.2 U	5.1 U	1.4 U	1.2 U	12 U	0.45 U	0.18 U
4-ISOPROPYLTOLUENE	4.8 U	3.4 U	0.92 U	0.8 U	8 U	0.3 U	0.12 U
4-METHYL-2-PENTANONE	13 U	9.1 U	2.5 U	2.1 U	21 U	0.8 U	0.32 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	53 J	89 J	11 J	8.5 J	73 U	20 J	18
BENZENE	14 J	15 B	7.4 J	5.7 J	8.7 U	0.62 J	0.67 J
BROMOBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
BROMOCHLOROMETHANE	12 U	8.3 U	2.2 U	1.9 U	19 U	0.73 U	0.29 U
BROMODICHLOROMETHANE	6 U	4.3 U	1.2 U	1 U	10 U	0.38 U	0.15 U

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LOCATION	DR-DPT-30	DR-DPT-30	DR-DPT-30	DR-DPT-30	DR-DPT-31	DR-DPT-31	DR-DPT-31
SAMPLE ID	DR-DPT-30-30	DR-DPT-30-35	DR-DPT-30-40	DR-DPT-30-40-D	DR-DPT-31-25	DR-DPT-31-30	DR-DPT-31-35
SAMPLE DATE	8/15/2013	8/15/2013	8/15/2013	8/15/2013	8/19/2013	8/20/2013	8/20/2013
BROMOFORM	26 U	18 U	4.9 U	4.3 U	43 U	1.6 U	0.64 U
BROMOMETHANE	16 U	12 U	3.2 U	2.7 U	27 U	1 U	0.41 U
CARBON DISULFIDE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	1.5 J	0.86 J
CARBON TETRACHLORIDE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
CHLOROBENZENE	6 U	4.3 U	1.2 U	1 U	10 U	0.38 U	0.15 U
CHLORODIBROMOMETHANE	7.2 U	5.1 U	1.4 U	1.2 U	12 U	0.45 U	0.18 U
CHLOROETHANE	12 U	8.3 U	2.2 U	1.9 U	19 U	0.73 U	0.29 U
CHLOROFORM	6.4 U	4.6 U	1.2 U	1.1 U	11 U	1.1 J	0.43 J
CHLOROMETHANE	12 U	8.6 U	2.3 U	2 U	20 U	0.75 U	0.3 U
CIS-1,2-DICHLOROETHENE	920	530	130	100	2000	61	13
CIS-1,3-DICHLOROPROPENE	5.6 U	4 U	1.1 U	0.93 U	9.3 U	0.35 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	11 U	8 U	2.2 U	1.9 U	19 U	0.7 U	0.28 U
DICHLORODIFLUOROMETHANE	12 U	8.9 U	2.4 U	2.1 U	21 U	0.78 U	0.31 U
DIISOPROPYL ETHER	60 U	43 U	12 U	10 U	100 U	3.8 U	1.5 U
ETHYL TERT-BUTYL ETHER	4.4 U	3.1 U	0.85 U	0.73 U	7.3 U	0.28 U	0.11 U
ETHYLBENZENE	6.8 U	4.9 U	1.3 U	1.1 U	11 U	0.43 U	0.17 U
HEXACHLOROBUTADIENE	12 U	8.6 U	2.3 U	2 U	20 U	0.75 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
M+P-XYLENES	9.6 U	6.9 U	1.8 U	1.6 U	16 U	0.6 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	6.8 U	4.9 U	1.3 U	1.1 U	11 U	0.43 U	0.17 U
METHYLENE CHLORIDE	13 U	54 B	2.5 U	2.2 U	35 B	0.83 U	0.33 U
NAPHTHALENE	9.6 U	6.9 U	1.8 U	1.6 U	16 U	0.6 U	0.24 U
N-BUTYLBENZENE	4.8 U	3.4 U	0.92 U	0.8 U	8 U	0.3 U	0.12 U
N-PROPYLBENZENE	5.6 U	4 U	1.1 U	0.93 U	9.3 U	0.35 U	0.14 U
O-XYLENE	5.6 U	4 U	1.8 J	1 J	9.3 U	0.35 U	0.14 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
STYRENE	4.4 U	3.1 U	0.85 U	0.73 U	7.3 U	0.28 U	0.11 U
TERT-AMYL METHYL ETHER	2.7 U	1.9 U	0.52 U	0.45 U	4.5 U	0.17 U	0.067 U
TERT-BUTYLBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
TERTIARY-BUTYL ALCOHOL	160 UR	110 UR	30 UR	26 UR	260 UR	9.8 UR	3.9 UR
TETRACHLOROETHENE	12 U	8.3 U	2.2 U	1.9 U	19 U	0.73 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	6.9 J	3.7 U	1.9 J	0.87 U	16 B	1.2 B	0.33 B
TOTAL XYLENES	5.6 U	4 U	1.8 J	1 J	9.3 U	0.35 U	0.14 U
TRANS-1,2-DICHLOROETHENE	9.2 J	6 J	1.8 J	1.3 U	17 J	0.64 J	0.21 J
TRANS-1,3-DICHLOROPROPENE	7.6 U	5.4 U	1.5 U	1.3 U	13 U	0.48 U	0.19 U

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LOCATION	DR-DPT-30	DR-DPT-30	DR-DPT-30	DR-DPT-30	DR-DPT-31	DR-DPT-31	DR-DPT-31
SAMPLE ID	DR-DPT-30-30	DR-DPT-30-35	DR-DPT-30-40	DR-DPT-30-40-D	DR-DPT-31-25	DR-DPT-31-30	DR-DPT-31-35
SAMPLE DATE	8/15/2013	8/15/2013	8/15/2013	8/15/2013	8/19/2013	8/20/2013	8/20/2013
TRICHLOROETHENE	270	1000	230	160	61 J	3.6	3.1
TRICHLOROFLUOROMETHANE	8.4 U	6 U	1.6 U	1.4 U	14 U	0.53 U	0.21 U
VINYL ACETATE	7.6 UR	5.4 UR	1.5 UR	1.3 UR	13 UR	0.48 UR	0.19 UR
VINYL CHLORIDE	51	42	11	7.2	580	41	6.5
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-31	DR-DPT-31	DR-DPT-32	DR-DPT-32	DR-DPT-32	DR-DPT-32	DR-DPT-32
SAMPLE ID	DR-DPT-31-40	DR-DPT-31-45	DR-DPT-32-30	DR-DPT-32-35	DR-DPT-32-40	DR-DPT-32-45	DR-DPT-32-50
SAMPLE DATE	8/20/2013	8/20/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.77 U	0.77 U	0.92 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.73 U	0.73 U	0.88 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.6 U	0.6 U	0.72 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.93 U	0.93 U	1.1 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.5 U	0.6 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.29 J	0.19 U	0.63 U	0.63 U	0.76 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.57 U	0.57 U	0.68 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	1.4 U	1.4 U	1.7 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.02 U	0.02 U	0.024 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.5 U	0.6 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.4 U	0.4 U	0.48 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	2.2 U	2.2 U	2.7 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.8 U	0.8 U	0.96 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
1,2-DICHLOROETHANE	0.74 J	0.22 U	0.22 U	0.22 U	0.73 U	0.73 U	0.88 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.6 U	0.6 U	0.72 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.47 U	0.47 U	0.56 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.53 U	0.53 U	0.64 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 U	1.9 U	1.9 U	2.3 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	3.3 U	3.3 U	4 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.37 U	0.37 U	0.44 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	1.4 U	1.4 U	1.6 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.6 U	0.6 U	0.72 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.4 U	0.4 U	0.48 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	1.1 U	1.1 U	1.3 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	6.3 J	36	4.9 B	6.8 B	3.7 U	12 B	5.5 B
BENZENE	0.97 J	0.27 J	0.87 J	0.48 J	0.43 J	0.43 U	0.63 J
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.97 U	0.97 U	1.2 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.5 U	0.6 U

Table D-1

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LOCATION	DR-DPT-31	DR-DPT-31	DR-DPT-32	DR-DPT-32	DR-DPT-32	DR-DPT-32	DR-DPT-32
SAMPLE ID	DR-DPT-31-40	DR-DPT-31-45	DR-DPT-32-30	DR-DPT-32-35	DR-DPT-32-40	DR-DPT-32-45	DR-DPT-32-50
SAMPLE DATE	8/20/2013	8/20/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	2.1 U	2.1 U	2.6 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	1.4 U	1.4 U	1.6 U
CARBON DISULFIDE	0.51 J	0.5 J	0.66 J	1.2	0.43 U	0.43 U	0.52 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	12	2.3 J	6.6
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.5 U	0.6 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 UL	0.18 UL	0.6 U	0.6 U	0.72 U
CHLOROETHANE	0.29 U	0.29 U	0.7 J	0.73 J	0.97 U	0.97 U	1.2 U
CHLOROFORM	0.16 U	1.5	0.16 U	0.16 U	13	16	12
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1.2 U
CIS-1,2-DICHLOROETHENE	15	23	33	15	0.57 U	0.92 J	0.68 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.47 U	0.47 U	0.56 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.93 U	0.93 U	1.1 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	1 U	1 UJ	1.2 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	5 U	5 U	6 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.37 U	0.37 U	0.44 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.57 U	0.57 U	0.68 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1.2 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.8 U	0.8 U	0.96 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	0.57 U	0.57 U	0.68 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	1.1 U	1.1 U	1.3 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.8 U	0.8 U	0.96 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.4 U	0.4 U	0.48 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.47 U	0.47 U	0.56 U
O-XYLENE	0.72 J	0.14 U	0.14 U	0.14 U	0.47 U	0.47 U	0.56 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.37 U	0.37 U	0.44 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.22 U	0.22 U	0.27 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	8 J	3.9 UR	13 UR	13 UR	16 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.97 U	0.97 U	1.2 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.26 B	0.36 B	0.13 U	0.15 B	0.54 B	1 B	2 J
TOTAL XYLENES	0.72 J	0.14 U	0.14 U	0.14 U	0.47 U	0.47 U	0.56 U
TRANS-1,2-DICHLOROETHENE	0.27 J	0.19 U	0.41 J	0.19 U	0.63 U	0.63 U	0.76 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.63 U	0.63 U	0.76 U

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LOCATION	DR-DPT-31	DR-DPT-31	DR-DPT-32	DR-DPT-32	DR-DPT-32	DR-DPT-32	DR-DPT-32
SAMPLE ID	DR-DPT-31-40	DR-DPT-31-45	DR-DPT-32-30	DR-DPT-32-35	DR-DPT-32-40	DR-DPT-32-45	DR-DPT-32-50
SAMPLE DATE	8/20/2013	8/20/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013
TRICHLOROETHENE	6	11	3.7	2.8	120	120	130
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.7 U	0.7 U	0.84 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.63 UR	0.63 UR	0.76 UR
VINYL CHLORIDE	14	2.8	19	8.6	0.73 U	0.73 U	0.88 U
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-33	DR-DPT-33	DR-DPT-33	DR-DPT-33	DR-DPT-33	DR-DPT-34	DR-DPT-34
SAMPLE ID	DR-DPT-33-15	DR-DPT-33-25	DR-DPT-33-30	DR-DPT-33-40	DR-DPT-33-45	DR-DPT-34-15	DR-DPT-34-35
SAMPLE DATE	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	4.2 U	23 U	77 UJ	15 UJ	580 U	120 UJ
1,1,1-TRICHLOROETHANE	0.22 U	4 U	22 U	73 UJ	15 UJ	550 U	110 UJ
1,1,2,2-TETRACHLOROETHANE	0.18 U	3.3 U	18 U	60 UJ	12 UJ	450 U	90 UJ
1,1,2-TRICHLOROETHANE	NA	NA	27 J	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	5.1 U	28 U	93 UJ	19 UJ	700 U	140 UJ
1,1-DICHLOROETHANE	0.15 U	2.7 U	15 U	50 UJ	10 UJ	380 U	75 UJ
1,1-DICHLOROETHENE	0.19 U	3.5 U	19 U	63 UJ	13 UJ	480 U	95 UJ
1,1-DICHLOROPROPENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
1,2,3-TRICHLOROBENZENE	0.17 U	3.1 U	17 U	57 UJ	11 UJ	430 U	85 UJ
1,2,3-TRICHLOROPROPANE	0.43 U	7.8 U	43 U	140 UJ	29 UJ	1100 U	220 UJ
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.11 U	0.59 U	2 UJ	0.39 UJ	15 U	3 UJ
1,2,4-TRICHLOROBENZENE	0.15 U	2.7 U	15 U	50 UJ	10 UJ	380 U	75 UJ
1,2,4-TRIMETHYLBENZENE	0.12 U	2.2 U	12 U	40 UJ	8 UJ	300 U	60 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	12 U	67 U	220 UJ	45 UJ	1700 U	340 UJ
1,2-DIBROMOETHANE	0.24 U	4.4 U	24 U	80 UJ	16 UJ	600 U	120 UJ
1,2-DICHLOROBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
1,2-DICHLOROETHANE	0.22 U	4 U	22 U	73 UJ	15 UJ	550 U	110 UJ
1,2-DICHLOROPROPANE	0.18 U	3.3 U	18 U	60 UJ	12 UJ	450 U	90 UJ
1,3-DICHLOROBENZENE	0.14 U	2.5 U	14 U	47 UJ	9.3 UJ	350 U	70 UJ
1,3-DICHLOROPROPANE	0.16 U	2.9 U	16 U	53 UJ	11 UJ	400 U	80 UJ
1,4-DICHLOROBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
2-BUTANONE	0.57 U	10 U	57 U	190 UJ	38 UJ	1400 U	290 UJ
2-CHLOROETHYL VINYL ETHER	0.99 U	18 U	99 U	330 UJ	66 UJ	2500 U	500 UJ
2-CHLOROTOLUENE	0.11 U	2 U	11 U	37 UJ	7.3 UJ	280 U	55 UJ
2-HEXANONE	0.41 U	7.5 U	41 U	140 UJ	27 UJ	1000 U	210 UJ
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	3.3 U	18 U	60 UJ	12 UJ	450 U	90 UJ
4-ISOPROPYLTOLUENE	0.12 U	2.2 U	12 U	40 UJ	8 UJ	300 U	60 UJ
4-METHYL-2-PENTANONE	0.32 U	5.8 U	32 U	110 UJ	21 UJ	800 U	160 UJ
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	1.7 J	20 U	110 U	370 UJ	73 UJ	7000 J	550 UJ
BENZENE	0.25 B	2.4 U	13 U	43 UJ	9.4 J	660 B	80 J
BROMOBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
BROMOCHLOROMETHANE	0.29 U	5.3 U	29 U	97 UJ	19 UJ	730 U	150 UJ
BROMODICHLOROMETHANE	0.15 U	2.7 U	15 U	50 UJ	10 UJ	380 U	75 UJ

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LOCATION	DR-DPT-33	DR-DPT-33	DR-DPT-33	DR-DPT-33	DR-DPT-33	DR-DPT-34	DR-DPT-34
SAMPLE ID	DR-DPT-33-15	DR-DPT-33-25	DR-DPT-33-30	DR-DPT-33-40	DR-DPT-33-45	DR-DPT-34-15	DR-DPT-34-35
SAMPLE DATE	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013
BROMOFORM	0.64 U	12 U	64 U	210 UJ	43 UJ	1600 U	320 UJ
BROMOMETHANE	0.41 U	7.5 U	41 U	140 UJ	27 UJ	1000 U	210 UJ
CARBON DISULFIDE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
CARBON TETRACHLORIDE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
CHLOROBENZENE	0.15 U	2.7 U	15 U	50 UJ	10 UJ	380 U	75 UJ
CHLORODIBROMOMETHANE	0.18 U	3.3 U	18 U	60 UJ	12 UJ	450 U	90 UJ
CHLOROETHANE	0.29 U	5.3 U	29 U	97 UJ	19 UJ	730 U	150 UJ
CHLOROFORM	0.16 U	2.9 U	16 U	53 UJ	11 UJ	400 U	1000 J
CHLOROMETHANE	0.3 U	5.5 U	30 U	100 UJ	20 UJ	750 U	150 UJ
CIS-1,2-DICHLOROETHENE	0.17 U	100	760	4200 J	900 J	75000	2100 J
CIS-1,3-DICHLOROPROPENE	0.14 U	2.5 U	14 U	47 UJ	9.3 UJ	350 U	70 UJ
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	5.1 U	28 U	93 UJ	19 J	700 U	140 UJ
DICHLORODIFLUOROMETHANE	0.31 U	5.6 U	31 U	100 UJ	21 UJ	780 U	160 UJ
DIISOPROPYL ETHER	1.5 U	27 U	150 U	500 UJ	100 UJ	3800 U	750 UJ
ETHYL TERT-BUTYL ETHER	0.11 U	2 U	11 U	37 UJ	7.3 UJ	280 U	55 UJ
ETHYLBENZENE	0.17 U	3.1 U	17 U	57 UJ	11 UJ	430 U	85 UJ
HEXACHLOROBUTADIENE	0.3 U	5.5 U	30 U	100 UJ	20 UJ	750 U	150 UJ
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
M+P-XYLENES	0.24 U	4.4 U	24 U	80 UJ	16 UJ	670 J	120 UJ
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	3.1 U	17 U	57 UJ	11 UJ	430 U	85 UJ
METHYLENE CHLORIDE	0.33 U	6 U	33 U	110 UJ	22 UJ	4800 B	170 UJ
NAPHTHALENE	0.24 U	4.4 U	24 U	80 UJ	16 UJ	600 U	120 UJ
N-BUTYLBENZENE	0.12 U	2.2 U	12 U	40 UJ	8 UJ	300 U	60 UJ
N-PROPYLBENZENE	0.14 U	2.5 U	14 U	47 UJ	9.3 UJ	350 U	70 UJ
O-XYLENE	0.14 U	2.5 U	14 U	47 UJ	9.3 UJ	350 U	70 UJ
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
STYRENE	0.11 U	2 U	11 U	37 UJ	7.3 UJ	280 U	55 UJ
TERT-AMYL METHYL ETHER	0.067 U	1.2 U	6.7 U	22 UJ	4.5 UJ	170 U	34 UJ
TERT-BUTYLBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
TERTIARY-BUTYL ALCOHOL	3.9 UR	71 UR	390 UR	1300 UR	260 UR	9800 UR	2000 UR
TETRACHLOROETHENE	0.29 U	5.3 U	29 U	97 UJ	19 UJ	730 U	150 UJ
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	37000	310 J
TOTAL XYLENES	0.14 U	2.5 U	14 U	47 UJ	9.3 UJ	670 J	70 UJ
TRANS-1,2-DICHLOROETHENE	0.19 U	3.5 U	19 U	71 J	13 UJ	480 U	95 UJ
TRANS-1,3-DICHLOROPROPENE	0.19 U	3.5 U	19 U	63 UJ	13 UJ	480 U	95 UJ

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LOCATION	DR-DPT-33	DR-DPT-33	DR-DPT-33	DR-DPT-33	DR-DPT-33	DR-DPT-34	DR-DPT-34
SAMPLE ID	DR-DPT-33-15	DR-DPT-33-25	DR-DPT-33-30	DR-DPT-33-40	DR-DPT-33-45	DR-DPT-34-15	DR-DPT-34-35
SAMPLE DATE	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013
TRICHLOROETHENE	0.17 U	480	2400	9900 J	1600 J	430 U	7800 J
TRICHLOROFLUOROMETHANE	0.21 U	3.8 U	21 U	70 UJ	14 UJ	530 U	110 UJ
VINYL ACETATE	0.19 UR	3.5 UR	19 UR	63 UR	13 UR	480 UR	95 UR
VINYL CHLORIDE	0.22 U	7.8 J	27 J	460 J	110 J	87000	520 J
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-34	DR-DPT-34	DR-DPT-35	DR-DPT-35	DR-DPT-35	DR-DPT-35	DR-DPT-35
SAMPLE ID	DR-DPT-34-40	DR-DPT-34-45	DR-DPT-35-20	DR-DPT-35-25	DR-DPT-35-30	DR-DPT-35-35	DR-DPT-35-40
SAMPLE DATE	8/14/2013	8/14/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	190 UJ	9.2 UJ	0.23 UJ	38 U	7.7 UJ	3.8 UJ	1.6 UJ
1,1,1-TRICHLOROETHANE	180 UJ	8.8 UJ	0.22 UJ	37 U	7.3 UJ	3.7 UJ	1.6 UJ
1,1,2,2-TETRACHLOROETHANE	150 UJ	7.2 UJ	0.18 UJ	30 U	6 UJ	3 UJ	1.3 UJ
1,1,2-TRICHLOROETHANE	NA	14 J	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	230 UJ	11 UJ	0.28 UJ	47 U	9.3 UJ	4.7 UJ	2 UJ
1,1-DICHLOROETHANE	120 UJ	6 UJ	0.15 UJ	25 U	5 UJ	2.5 UJ	1.1 UJ
1,1-DICHLOROETHENE	160 UJ	7.6 UJ	0.19 UJ	32 U	6.3 UJ	3.2 UJ	1.4 UJ
1,1-DICHLOROPROPENE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
1,2,3-TRICHLOROBENZENE	140 UJ	6.8 UJ	0.17 UJ	28 U	5.7 UJ	2.8 UJ	1.2 UJ
1,2,3-TRICHLOROPROPANE	360 UJ	17 UJ	0.43 UJ	72 U	14 UJ	7.2 UJ	3.1 UJ
1,2,3-TRIMETHYLBENZENE	4.9 UJ	0.24 UJ	0.0059 UJ	0.98 U	0.2 UJ	0.098 UJ	0.042 UJ
1,2,4-TRICHLOROBENZENE	120 UJ	6 UJ	0.15 UJ	25 U	5 UJ	2.5 UJ	1.1 UJ
1,2,4-TRIMETHYLBENZENE	100 UJ	4.8 UJ	0.39 J	20 U	4 UJ	2.1 J	0.86 UJ
1,2-DIBROMO-3-CHLOROPROPANE	560 UJ	27 UJ	0.67 UJ	110 U	22 UJ	11 UJ	4.8 UJ
1,2-DIBROMOETHANE	200 UJ	9.6 UJ	0.24 UJ	40 U	8 UJ	4 UJ	1.7 UJ
1,2-DICHLOROBENZENE	110 UJ	5.2 UJ	2.1 J	22 U	4.3 UJ	2.6 J	1.5 J
1,2-DICHLOROETHANE	180 UJ	10 J	0.22 UJ	37 U	7.3 UJ	8.7 J	15 J
1,2-DICHLOROPROPANE	150 UJ	7.2 UJ	0.18 UJ	30 U	6 UJ	3 UJ	1.3 UJ
1,3-DICHLOROBENZENE	120 UJ	5.6 UJ	0.14 UJ	23 U	4.7 UJ	2.3 UJ	1 UJ
1,3-DICHLOROPROPANE	130 UJ	6.4 UJ	0.16 UJ	27 U	5.3 UJ	2.7 UJ	1.1 UJ
1,4-DICHLOROBENZENE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
2-BUTANONE	470 UJ	98 J	1.1 J	95 U	19 UJ	9.5 UJ	4.1 UJ
2-CHLOROETHYL VINYL ETHER	820 UJ	40 UJ	0.99 UJ	170 U	33 UJ	17 UJ	7.1 UJ
2-CHLOROTOLUENE	92 UJ	4.4 UJ	0.11 UJ	18 U	3.7 UJ	1.8 UJ	0.79 UJ
2-HEXANONE	340 UJ	16 UJ	0.41 UJ	68 U	14 UJ	6.8 UJ	2.9 UJ
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	150 UJ	7.2 UJ	0.18 UJ	30 U	6 UJ	3 UJ	1.3 UJ
4-ISOPROPYLTOLUENE	100 UJ	4.8 UJ	0.12 UJ	20 U	4 UJ	2 UJ	0.86 UJ
4-METHYL-2-PENTANONE	270 UJ	13 UJ	0.32 UJ	53 U	11 UJ	5.3 UJ	2.3 UJ
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	920 UJ	54 J	6.8 J	180 U	37 UJ	18 UJ	7.9 UJ
BENZENE	120 J	9.9 J	2.3 J	42 J	9.1 J	5.4 J	6.4 J
BROMOBENZENE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
BROMOCHLOROMETHANE	240 UJ	12 UJ	0.29 UJ	48 U	9.7 UJ	4.8 UJ	2.1 UJ
BROMODICHLOROMETHANE	120 UJ	6 UJ	0.15 UJ	25 U	5 UJ	2.5 UJ	1.1 UJ

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LOCATION	DR-DPT-34	DR-DPT-34	DR-DPT-35	DR-DPT-35	DR-DPT-35	DR-DPT-35	DR-DPT-35
SAMPLE ID	DR-DPT-34-40	DR-DPT-34-45	DR-DPT-35-20	DR-DPT-35-25	DR-DPT-35-30	DR-DPT-35-35	DR-DPT-35-40
SAMPLE DATE	8/14/2013	8/14/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013
BROMOFORM	530 UJ	26 UJ	0.64 UJ	110 U	21 UJ	11 UJ	4.6 UJ
BROMOMETHANE	340 UJ	16 UJ	0.41 UJ	68 U	14 UJ	6.8 UJ	2.9 UJ
CARBON DISULFIDE	110 UJ	24 J	1.3 J	54 J	12 J	5.5 J	4 J
CARBON TETRACHLORIDE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
CHLOROBENZENE	120 UJ	6 UJ	0.15 UJ	5300	470 J	93 J	220 J
CHLORODIBROMOMETHANE	150 UJ	7.2 UJ	0.18 UJ	30 U	6 UJ	3 UJ	1.3 UJ
CHLOROETHANE	240 UJ	12 UJ	0.29 UJ	48 U	9.7 UJ	4.8 UJ	2.1 UJ
CHLOROFORM	1700 J	270 J	0.16 UJ	27 U	5.3 UJ	2.7 UJ	1.1 UJ
CHLOROMETHANE	250 UJ	12 UJ	0.3 UJ	50 U	10 UJ	5 UJ	2.1 UJ
CIS-1,2-DICHLOROETHENE	3600 J	820 J	1.2 J	210	550 J	160 J	170 J
CIS-1,3-DICHLOROPROPENE	120 UJ	5.6 UJ	0.14 UJ	23 U	4.7 UJ	2.3 UJ	1 UJ
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	230 UJ	11 UJ	0.28 UJ	47 U	9.3 UJ	4.7 UJ	2 UJ
DICHLORODIFLUOROMETHANE	260 UJ	12 UJ	0.31 UJ	52 U	10 UJ	5.2 UJ	2.2 UJ
DIISOPROPYL ETHER	1200 UJ	60 UJ	2.7 J	250 U	50 UJ	25 UJ	11 UJ
ETHYL TERT-BUTYL ETHER	92 UJ	4.4 UJ	0.11 UJ	18 U	3.7 UJ	1.8 UJ	0.79 UJ
ETHYLBENZENE	140 UJ	6.8 UJ	0.17 UJ	28 U	5.7 UJ	2.8 UJ	1.2 UJ
HEXACHLOROBUTADIENE	250 UJ	12 UJ	0.3 UJ	50 U	10 UJ	5 UJ	2.1 UJ
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	110 UJ	5.2 UJ	0.2 J	22 U	4.3 UJ	2.2 UJ	0.93 UJ
M+P-XYLENES	200 UJ	9.6 UJ	0.4 J	40 U	8 UJ	4 UJ	1.7 UJ
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	140 UJ	6.8 UJ	0.17 UJ	28 U	5.7 UJ	2.8 UJ	1.2 UJ
METHYLENE CHLORIDE	270 UJ	80 J	0.33 UJ	55 U	11 UJ	5.5 UJ	2.4 UJ
NAPHTHALENE	200 UJ	9.6 UJ	0.26 J	40 U	8 UJ	4 UJ	1.7 UJ
N-BUTYLBENZENE	100 UJ	4.8 UJ	0.12 UJ	20 U	4 UJ	2 UJ	0.86 UJ
N-PROPYLBENZENE	120 UJ	5.6 UJ	0.15 J	23 U	4.7 UJ	2.3 UJ	1 UJ
O-XYLENE	120 J	5.6 UJ	0.14 UJ	23 U	4.7 UJ	2.3 UJ	1 UJ
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
STYRENE	92 UJ	4.4 UJ	0.11 UJ	18 U	3.7 UJ	1.8 UJ	0.79 UJ
TERT-AMYL METHYL ETHER	56 UJ	2.7 UJ	0.067 UJ	11 U	2.2 UJ	1.1 UJ	0.48 UJ
TERT-BUTYLBENZENE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
TERTIARY-BUTYL ALCOHOL	3200 UR	160 UR	3.9 UR	650 UR	130 UR	65 UR	28 UR
TETRACHLOROETHENE	240 UJ	12 UJ	0.3 J	48 U	9.7 UJ	4.8 UJ	2.1 UJ
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	3100 J	110 J	0.35 J	22 U	4.3 UJ	2.2 UJ	1.3 J
TOTAL XYLENES	120 J	5.6 UJ	0.4 J	23 U	4.7 UJ	2.3 UJ	1 UJ
TRANS-1,2-DICHLOROETHENE	160 UJ	7.6 UJ	2.1 J	32 U	6.3 UJ	5 J	3.9 J
TRANS-1,3-DICHLOROPROPENE	160 UJ	7.6 UJ	0.19 UJ	32 U	6.3 UJ	3.2 UJ	1.4 UJ

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LOCATION	DR-DPT-34	DR-DPT-34	DR-DPT-35	DR-DPT-35	DR-DPT-35	DR-DPT-35	DR-DPT-35
SAMPLE ID	DR-DPT-34-40	DR-DPT-34-45	DR-DPT-35-20	DR-DPT-35-25	DR-DPT-35-30	DR-DPT-35-35	DR-DPT-35-40
SAMPLE DATE	8/14/2013	8/14/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013
TRICHLOROETHENE	16000 J	1000 J	1.1 J	230	110 J	23 J	32 J
TRICHLOROFLUOROMETHANE	170 UJ	8.4 UJ	0.21 UJ	35 U	7 UJ	3.5 UJ	1.5 UJ
VINYL ACETATE	160 UR	7.6 UR	0.19 UR	32 UR	6.3 UR	3.2 UR	1.4 UR
VINYL CHLORIDE	400 J	210 J	0.63 J	210	160 J	77 J	170 J
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-35	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36
SAMPLE ID	DR-DPT-35-45	DR-DPT-36-10	DR-DPT-36-10-D	DR-DPT-36-30	DR-DPT-36-35	DR-DPT-36-40	DR-DPT-36-45
SAMPLE DATE	8/13/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	12 UJ	0.23 U	0.23 U	0.35 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	11 UJ	0.22 U	0.22 U	0.34 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	9 UJ	0.18 U	0.18 U	0.28 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	14 UJ	0.28 U	0.28 U	0.43 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	7.5 UJ	0.15 U	0.15 U	0.23 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	9.5 UJ	0.19 U	0.19 U	0.29 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	6.5 UJ	0.13 U	0.13 U	0.2 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	8.5 UJ	0.17 U	0.17 U	0.26 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	22 UJ	0.43 U	0.43 U	0.66 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.3 UJ	0.0059 U	0.0059 U	0.0091 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	7.5 UJ	0.15 U	0.15 U	0.23 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	6 UJ	0.12 U	0.12 U	0.18 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	34 UJ	0.67 U	0.67 U	1 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	12 UJ	0.24 U	0.24 U	0.37 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	6.5 UJ	0.13 U	0.13 U	0.2 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	46 J	0.22 U	0.22 U	0.34 U	0.7 J	0.39 J	0.69 J
1,2-DICHLOROPROPANE	9 UJ	0.18 U	0.18 U	0.28 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	7 UJ	0.14 U	0.14 U	0.22 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	8 UJ	0.16 U	0.16 U	0.25 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	6.5 UJ	0.13 U	0.13 U	0.2 U	0.13 U	0.13 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	6.5 UJ	0.13 U	0.13 U	0.2 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	29 UJ	2.1 J	1.4 J	0.88 U	0.57 U	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	50 UJ	0.99 U	0.99 U	1.5 U	0.99 U	0.99 U	0.99 U
2-CHLOROTOLUENE	5.5 UJ	0.11 U	0.11 U	0.17 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	21 UJ	0.41 U	0.41 U	0.63 U	0.41 U	0.41 U	0.41 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	9 UJ	0.18 U	0.18 U	0.28 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	6 UJ	0.12 U	0.12 U	0.18 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	16 UJ	0.32 U	0.32 U	0.49 U	0.32 U	0.32 U	0.32 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	55 UJ	23 B	17 B	7.7 B	3.7 B	5.1 B	5.7 B
BENZENE	13 J	0.13 U	0.13 U	0.22 J	0.13 U	0.13 U	0.13 U
BROMOBENZENE	6.5 UJ	0.13 U	0.13 U	0.2 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	15 UJ	0.29 U	0.29 U	0.45 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	7.5 UJ	0.15 U	0.15 U	0.23 U	0.15 U	0.15 U	0.15 U

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LOCATION	DR-DPT-35	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36
SAMPLE ID	DR-DPT-35-45	DR-DPT-36-10	DR-DPT-36-10-D	DR-DPT-36-30	DR-DPT-36-35	DR-DPT-36-40	DR-DPT-36-45
SAMPLE DATE	8/13/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013
BROMOFORM	32 UJ	0.64 U	0.64 U	0.99 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	21 UJ	0.41 U	0.41 U	0.63 U	0.41 U	0.41 U	0.41 U
CARBON DISULFIDE	16 J	0.13 J	0.13 J	0.2 U	0.13 J	0.22 J	0.27 J
CARBON TETRACHLORIDE	6.5 UJ	0.13 U	0.13 U	0.2 U	0.13 U	0.13 U	0.27 J
CHLOROBENZENE	34 J	0.15 U	0.15 U	0.23 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	9 UJ	0.18 UL	0.18 UL	0.28 U	0.18 UL	0.18 UL	0.18 UL
CHLOROETHANE	21 J	0.29 U	0.29 U	0.45 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	8 UJ	0.16 U	0.16 U	0.25 U	0.16 U	0.16 U	0.27 J
CHLOROMETHANE	15 UJ	0.3 U	0.3 U	0.46 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	860 J	0.17 U	0.17 U	41	0.44 J	0.97 J	1.4
CIS-1,3-DICHLOROPROPENE	7 UJ	0.14 U	0.14 U	0.22 U	0.14 U	0.14 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	14 UJ	0.28 U	0.28 U	0.43 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	16 UJ	0.31 U	0.31 U	0.48 UJ	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	75 UJ	1.5 U	1.5 U	2.3 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	5.5 UJ	0.11 U	0.11 U	0.17 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	8.5 UJ	0.17 U	0.17 U	0.26 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	15 UJ	0.3 U	0.3 U	0.46 U	0.3 U	0.3 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	6.5 UJ	0.13 U	0.13 U	0.2 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	12 UJ	0.24 U	0.24 U	0.37 U	0.24 U	0.24 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	8.5 UJ	0.17 U	0.17 U	0.26 U	0.17 U	0.17 U	0.17 U
METHYLENE CHLORIDE	17 UJ	0.33 U	0.33 U	0.51 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	12 UJ	0.24 U	0.24 U	0.37 U	0.24 U	0.24 U	0.24 U
N-BUTYLBENZENE	6 UJ	0.12 U	0.12 U	0.18 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	7 UJ	0.14 U	0.14 U	0.22 U	0.14 U	0.14 U	0.14 U
O-XYLENE	7 UJ	0.14 U	0.14 U	0.22 U	0.14 U	0.14 U	0.14 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	6.5 UJ	0.13 U	0.13 U	0.2 U	0.13 U	0.13 U	0.13 U
STYRENE	5.5 UJ	0.11 U	0.11 U	0.17 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	3.4 UJ	0.067 U	0.067 U	0.1 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	6.5 UJ	0.13 U	0.13 U	0.2 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	230 J	3.9 UR	8.8 J	6 UR	3.9 UR	3.9 UR	8.6 J
TETRACHLOROETHENE	15 UJ	0.29 U	0.29 U	0.45 U	0.29 U	0.29 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	6.5 UJ	0.13 U	0.13 U	0.46 B	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	7 UJ	0.14 U	0.14 U	0.22 U	0.14 U	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	12 J	0.19 U	0.19 U	1.4 J	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	9.5 UJ	0.19 U	0.19 U	0.29 U	0.19 U	0.19 U	0.19 U

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LOCATION	DR-DPT-35	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36
SAMPLE ID	DR-DPT-35-45	DR-DPT-36-10	DR-DPT-36-10-D	DR-DPT-36-30	DR-DPT-36-35	DR-DPT-36-40	DR-DPT-36-45
SAMPLE DATE	8/13/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013
TRICHLOROETHENE	110 J	0.2 J	0.17 U	5.6	4.6	19	5.6
TRICHLOROFLUOROMETHANE	11 UJ	0.21 U	0.21 U	0.32 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	9.5 UR	0.19 UR	0.19 UR	0.29 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	720 J	0.22 U	0.22 U	25	0.92 J	1.4	1
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-36	DR-DPT-36	DR-DPT-37	DR-DPT-37	DR-DPT-37	DR-DPT-37	DR-DPT-37
SAMPLE ID	DR-DPT-36-45-D	DR-DPT-36-50	DR-DPT-37-25	DR-DPT-37-30	DR-DPT-37-35	DR-DPT-37-40	DR-DPT-37-45
SAMPLE DATE	8/16/2013	8/19/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	1.5 U	1.5 U	0.23 U	0.23 U	0.58 U	2.3 U
1,1,1-TRICHLOROETHANE	0.22 U	1.5 U	1.5 U	0.22 U	0.22 U	0.55 U	2.2 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	1.2 U	1.2 U	0.18 U	0.18 U	0.45 U	1.8 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	1.9 U	1.9 U	0.28 U	0.28 U	0.7 U	2.8 U
1,1-DICHLOROETHANE	0.15 U	1 U	1 U	0.15 U	0.15 U	0.38 U	1.5 U
1,1-DICHLOROETHENE	0.19 U	1.3 U	1.3 U	0.19 U	0.19 U	0.48 U	1.9 U
1,1-DICHLOROPROPENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
1,2,3-TRICHLOROBENZENE	0.17 U	1.1 U	1.1 U	0.17 U	0.17 U	0.43 U	1.7 U
1,2,3-TRICHLOROPROPANE	0.43 U	2.9 U	2.9 U	0.43 U	0.43 U	1.1 U	4.3 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.039 U	0.039 U	0.0059 U	0.0059 U	0.015 U	0.059 U
1,2,4-TRICHLOROBENZENE	0.15 U	1 U	1 U	0.15 U	0.15 U	0.38 U	1.5 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.8 U	0.8 U	0.13 J	0.12 U	0.3 U	1.2 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	4.5 U	4.5 U	0.67 U	0.67 U	1.7 U	6.7 U
1,2-DIBROMOETHANE	0.24 U	1.6 U	1.6 U	0.24 U	0.24 U	0.6 U	2.4 U
1,2-DICHLOROBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
1,2-DICHLOROETHANE	0.64 J	1.5 U	1.5 U	0.22 U	0.22 U	1.4 J	2.4 J
1,2-DICHLOROPROPANE	0.18 U	1.2 U	1.2 U	0.18 U	0.18 U	0.45 U	1.8 U
1,3-DICHLOROBENZENE	0.14 U	0.93 U	0.93 U	0.14 U	0.14 U	0.35 U	1.4 U
1,3-DICHLOROPROPANE	0.16 U	1.1 U	1.1 U	0.16 U	0.16 U	0.4 U	1.6 U
1,4-DICHLOROBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
1,4-DIOXANE	NA	NA	NA	34 J	NA	NA	220 J
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	1.5 J	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
2-BUTANONE	0.57 U	3.8 U	3.8 U	0.57 U	0.57 U	1.6 J	5.7 U
2-CHLOROETHYL VINYL ETHER	0.99 U	6.6 U	6.6 U	0.99 U	0.99 U	2.5 U	9.9 U
2-CHLOROTOLUENE	0.11 U	0.73 U	0.73 U	0.11 U	0.11 U	0.28 U	1.1 U
2-HEXANONE	0.41 U	2.7 U	2.7 U	0.41 U	0.41 U	1 U	4.1 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	1.2 U	1.2 U	0.18 U	0.18 U	0.45 U	1.8 U
4-ISOPROPYLTOLUENE	0.12 U	0.8 U	0.8 U	0.12 U	0.12 U	0.3 U	1.2 U
4-METHYL-2-PENTANONE	0.32 U	2.1 U	2.1 U	0.32 U	0.32 U	0.8 U	3.2 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	4.3 B	34 B	7.3 U	5.1 J	1.9 J	3.1 J	11 U
BENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.79 J	2.5 J
BROMOBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
BROMOCHLOROMETHANE	0.29 U	1.9 U	1.9 U	0.29 U	0.29 U	0.73 U	2.9 U
BROMODICHLOROMETHANE	0.15 U	1 U	1 U	0.15 U	0.15 U	0.38 U	1.5 U

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LOCATION	DR-DPT-36	DR-DPT-36	DR-DPT-37	DR-DPT-37	DR-DPT-37	DR-DPT-37	DR-DPT-37
SAMPLE ID	DR-DPT-36-45-D	DR-DPT-36-50	DR-DPT-37-25	DR-DPT-37-30	DR-DPT-37-35	DR-DPT-37-40	DR-DPT-37-45
SAMPLE DATE	8/16/2013	8/19/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013
BROMOFORM	0.64 U	4.3 U	4.3 U	0.64 U	0.64 U	1.6 U	6.4 U
BROMOMETHANE	0.41 U	2.7 U	2.7 U	0.41 U	0.41 U	1 U	4.1 U
CARBON DISULFIDE	0.24 J	0.87 U	1.1 J	1.7 J	1.4	2.5	3.7 J
CARBON TETRACHLORIDE	0.29 J	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
CHLOROBENZENE	0.15 U	1 U	1 U	0.15 U	0.15 U	0.38 U	1.5 U
CHLORODIBROMOMETHANE	0.18 UL	1.2 U	1.2 U	0.18 U	0.18 U	0.45 U	1.8 U
CHLOROETHANE	0.29 U	1.9 U	1.9 U	0.29 U	0.29 U	0.73 U	2.9 U
CHLOROFORM	0.31 J	1.1 U	1.1 U	0.16 U	0.16 U	0.48 J	1.6 U
CHLOROMETHANE	0.3 U	2 U	2 U	0.3 U	0.3 U	0.75 U	3 U
CIS-1,2-DICHLOROETHENE	1.4	210	160	8.5	21	88	260
CIS-1,3-DICHLOROPROPENE	0.14 U	0.93 U	0.93 U	0.14 U	0.14 U	0.35 U	1.4 U
CYCLOHEXANE	NA	NA	0.86 J	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	1.9 U	1.9 U	0.28 U	0.28 U	0.7 U	2.8 U
DICHLORODIFLUOROMETHANE	0.31 U	2.1 U	2.1 U	0.31 U	0.31 U	0.78 U	3.1 U
DIISOPROPYL ETHER	1.5 U	10 U	10 U	1.5 U	1.5 U	3.8 U	15 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.73 U	0.73 U	0.11 U	0.11 U	0.28 U	1.1 U
ETHYLBENZENE	0.17 U	1.1 U	1.1 U	0.17 U	0.17 U	0.43 U	1.7 U
HEXACHLOROBUTADIENE	0.3 U	2 U	2 U	0.3 U	0.3 U	0.75 U	3 U
HEXANE	NA	NA	NA	0.35 J	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
M+P-XYLENES	0.24 U	1.6 U	1.6 U	0.33 J	0.24 U	0.6 U	2.4 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	1.1 U	1.1 U	0.17 U	0.17 U	0.43 U	1.7 U
METHYLENE CHLORIDE	0.33 U	2.3 B	2.2 U	0.33 U	0.33 U	0.83 U	3.3 U
NAPHTHALENE	0.24 U	1.6 U	1.6 U	0.24 U	0.24 U	0.6 U	2.4 U
N-BUTYLBENZENE	0.12 U	0.8 U	0.8 U	0.12 U	0.12 U	0.3 U	1.2 U
N-PROPYLBENZENE	0.14 U	0.93 U	0.93 U	0.14 U	0.14 U	0.35 U	1.4 U
O-XYLENE	0.14 U	0.93 U	0.93 U	0.14 U	0.14 U	0.35 U	1.4 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
STYRENE	0.11 U	0.73 U	0.73 U	0.11 U	0.11 U	0.28 U	1.1 U
TERT-AMYL METHYL ETHER	0.067 U	0.45 U	0.45 U	0.067 U	0.067 U	0.17 U	0.67 U
TERT-BUTYLBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
TERTIARY-BUTYL ALCOHOL	7.9 J	26 UR	26 UR	4.1 J	3.9 UR	9.8 UR	39 UR
TETRACHLOROETHENE	0.29 U	1.9 U	1.9 U	0.29 U	0.29 U	0.73 U	2.9 U
TETRAHYDROFURAN	NA	2.9 J	NA	NA	NA	NA	NA
TOLUENE	0.13 U	3.5 B	0.87 U	0.13 U	0.13 U	0.34 J	1.3 U
TOTAL XYLENES	0.14 U	0.93 U	0.93 U	0.33 J	0.14 U	0.35 U	1.4 U
TRANS-1,2-DICHLOROETHENE	0.19 U	1.3 U	1.3 U	0.41 J	1	0.6 J	1.9 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	1.3 U	1.3 U	0.19 U	0.19 U	0.48 U	1.9 U

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LOCATION	DR-DPT-36	DR-DPT-36	DR-DPT-37	DR-DPT-37	DR-DPT-37	DR-DPT-37	DR-DPT-37
SAMPLE ID	DR-DPT-36-45-D	DR-DPT-36-50	DR-DPT-37-25	DR-DPT-37-30	DR-DPT-37-35	DR-DPT-37-40	DR-DPT-37-45
SAMPLE DATE	8/16/2013	8/19/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013
TRICHLOROETHENE	5.6	9.3	5.9 J	2.1	9.7	21	73
TRICHLOROFLUOROMETHANE	0.21 U	1.4 U	1.4 U	0.21 U	0.21 U	0.53 U	2.1 U
VINYL ACETATE	0.19 UR	1.3 UR	1.3 UR	0.19 UR	0.19 UR	0.48 UR	1.9 UR
VINYL CHLORIDE	1.1	16	60	1.4	3.6	52	130
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-38	DR-DPT-38	DR-DPT-38	DR-DPT-38	DR-DPT-40	DR-DPT-40	DR-DPT-40
SAMPLE ID	DR-DPT-38-15	DR-DPT-38-30	DR-DPT-38-35	DR-DPT-38-40	DR-DPT-40-20	DR-DPT-40-25	DR-DPT-40-30
SAMPLE DATE	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/7/2013	8/7/2013	8/7/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	1.2 U	0.42 U	77 U	29 U	77 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	1.2 U	0.4 U	73 U	28 U	73 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.95 U	0.33 U	60 U	23 U	60 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	1.5 U	0.51 U	93 U	35 U	93 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.79 U	0.27 U	50 U	19 U	50 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	1 U	0.35 U	63 U	24 U	63 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.68 U	0.24 U	43 U	16 U	43 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.89 U	0.31 U	57 U	21 U	57 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	2.3 U	0.78 U	140 U	54 U	140 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.031 U	0.011 U	2 U	0.74 U	2 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.79 U	0.27 U	50 U	19 U	50 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.63 U	0.22 U	40 U	15 U	40 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	3.5 U	1.2 U	220 U	84 U	220 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	1.3 U	0.44 U	80 U	30 U	80 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.68 U	0.24 U	43 U	16 U	43 U
1,2-DICHLOROETHANE	0.99 J	2.1	4.8 J	3.6	73 U	28 U	73 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.95 U	0.33 U	60 U	23 U	60 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.74 U	0.25 U	47 U	18 U	47 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.84 U	0.29 U	53 U	20 U	53 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.68 U	0.24 U	43 U	16 U	43 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.68 U	0.24 U	43 U	16 U	43 U
2-BUTANONE	2.3 J	0.57 U	3 U	1 U	190 U	71 U	190 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	5.2 U	1.8 U	330 U	120 U	330 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.58 U	0.2 U	37 U	14 U	37 U
2-HEXANONE	0.41 U	0.41 U	2.2 U	0.75 U	140 U	51 U	140 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.95 U	0.33 U	60 U	23 U	60 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.63 U	0.22 U	40 U	15 U	40 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	1.7 U	0.58 U	110 U	40 U	110 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	8.7 B	20 B	21 B	51	370 U	140 U	370 U
BENZENE	6.3	0.98 J	3.3 J	1.3 J	43 U	16 U	43 U
BROMOBENZENE	0.13 U	0.13 U	0.68 U	0.24 U	43 U	16 U	43 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	1.5 U	0.53 U	97 U	36 U	97 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.79 U	0.5 J	50 U	19 U	50 U

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LOCATION	DR-DPT-38	DR-DPT-38	DR-DPT-38	DR-DPT-38	DR-DPT-40	DR-DPT-40	DR-DPT-40
SAMPLE ID	DR-DPT-38-15	DR-DPT-38-30	DR-DPT-38-35	DR-DPT-38-40	DR-DPT-40-20	DR-DPT-40-25	DR-DPT-40-30
SAMPLE DATE	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/7/2013	8/7/2013	8/7/2013
BROMOFORM	0.64 U	0.64 U	3.4 U	1.2 U	210 U	80 U	210 U
BROMOMETHANE	0.41 U	0.41 U	2.2 U	0.75 U	140 U	51 U	140 U
CARBON DISULFIDE	1.8	1.6	3.4 J	2.3	43 U	16 U	43 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.68 U	0.24 U	43 U	16 U	43 U
CHLOROBENZENE	0.15 U	0.78 J	1.4 J	0.27 U	50 U	19 U	50 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.95 U	0.33 U	60 U	23 U	60 U
CHLOROETHANE	0.29 U	0.29 U	1.5 U	0.53 U	97 U	36 U	97 U
CHLOROFORM	0.21 J	0.46 J	1.9 J	2.9	53 U	20 U	53 U
CHLOROMETHANE	0.3 U	0.3 U	1.6 U	0.55 U	100 U	38 U	100 U
CIS-1,2-DICHLOROETHENE	0.92 J	16	42	26	9100	3700	9000
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.74 U	0.25 U	47 U	18 U	47 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	1.5 U	0.51 U	93 U	35 U	93 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	1.6 U	0.56 U	100 U	39 U	100 U
DIISOPROPYL ETHER	1.5 U	1.5 U	7.9 U	2.7 U	500 U	190 U	500 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.58 U	0.2 U	37 U	14 U	37 U
ETHYLBENZENE	0.17 U	0.17 U	0.89 U	0.31 U	57 U	21 U	57 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	1.6 U	0.55 U	100 U	38 U	100 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.68 U	0.24 U	43 U	16 U	43 U
M+P-XYLENES	0.24 U	0.24 U	1.3 U	0.44 U	80 U	30 U	80 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.89 U	0.31 U	57 U	21 U	57 U
METHYLENE CHLORIDE	0.33 U	0.33 U	1.7 U	0.6 U	110 U	41 U	110 U
NAPHTHALENE	0.24 U	0.24 U	1.3 U	0.44 U	80 U	30 U	80 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.63 U	0.22 U	40 U	15 U	40 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.74 U	0.25 U	47 U	18 U	47 U
O-XYLENE	0.14 U	0.14 U	0.76 J	0.25 U	47 U	18 U	47 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.68 U	0.24 U	43 U	16 U	43 U
STYRENE	0.11 U	0.11 U	0.58 U	0.2 U	37 U	14 U	37 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.35 U	0.12 U	22 U	8.4 U	22 U
TERT-BUTYLBENZENE	0.4 J	0.13 U	0.68 U	0.24 U	43 U	16 U	43 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	12 J	42 J	22 B	1300 UR	490 UR	1300 UR
TETRACHLOROETHENE	0.29 U	0.29 U	1.5 U	0.53 U	97 U	36 U	97 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.41 J	0.98 J	4.6 J	2.4	43 U	16 U	43 U
TOTAL XYLENES	0.14 U	0.14 U	0.76 J	0.25 U	47 U	18 U	47 U
TRANS-1,2-DICHLOROETHENE	5.8	0.78 J	3.6 J	2.2	170 J	89 J	200 J
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	1 U	0.35 U	63 U	24 U	63 U

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LOCATION	DR-DPT-38	DR-DPT-38	DR-DPT-38	DR-DPT-38	DR-DPT-40	DR-DPT-40	DR-DPT-40
SAMPLE ID	DR-DPT-38-15	DR-DPT-38-30	DR-DPT-38-35	DR-DPT-38-40	DR-DPT-40-20	DR-DPT-40-25	DR-DPT-40-30
SAMPLE DATE	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/7/2013	8/7/2013	8/7/2013
TRICHLOROETHENE	0.17 U	6.5	32	21	460	210	2800
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	1.1 U	0.38 U	70 U	26 U	70 U
VINYL ACETATE	0.19 UR	0.19 UR	1 UR	0.35 UR	63 UR	24 UR	63 UR
VINYL CHLORIDE	8.1	17	95	63	350	51 J	130 J
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-40	DR-DPT-40	DR-DPT-41	DR-DPT-41	DR-DPT-41	DR-DPT-41	DR-DPT-42
SAMPLE ID	DR-DPT-40-35	DR-DPT-40-40	DR-DPT-41-25	DR-DPT-41-35	DR-DPT-41-40	DR-DPT-41-45	DR-DPT-42-10
SAMPLE DATE	8/7/2013	8/7/2013	8/6/2013	8/7/2013	8/7/2013	8/7/2013	8/9/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	58 U	12 U	290 U	190 U	9.2 U	5.8 U	0.23 U
1,1,1-TRICHLOROETHANE	160 J	11 U	280 U	180 U	8.8 U	5.5 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	45 U	9 U	230 U	150 U	7.2 U	4.5 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	70 U	14 U	350 U	230 U	11 U	7 U	0.28 U
1,1-DICHLOROETHANE	38 U	7.5 U	190 U	120 U	6 U	3.8 U	0.15 U
1,1-DICHLOROETHENE	48 U	9.5 U	240 U	160 U	7.6 U	4.8 U	0.19 U
1,1-DICHLOROPROPENE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
1,2,3-TRICHLOROBENZENE	43 U	8.5 U	210 U	140 U	6.8 U	4.3 U	0.17 U
1,2,3-TRICHLOROPROPANE	110 U	22 U	540 U	360 U	17 U	11 U	0.43 U
1,2,3-TRIMETHYLBENZENE	1.5 U	0.3 U	7.4 U	4.9 U	0.24 U	0.15 U	0.0059 U
1,2,4-TRICHLOROBENZENE	38 U	7.5 U	190 U	120 U	6 U	3.8 U	0.15 U
1,2,4-TRIMETHYLBENZENE	30 U	6 U	150 U	100 U	4.8 U	3 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	170 U	34 U	840 U	560 U	27 U	17 U	0.67 U
1,2-DIBROMOETHANE	60 U	12 U	300 U	200 U	9.6 U	6 U	0.24 U
1,2-DICHLOROBENZENE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
1,2-DICHLOROETHANE	55 U	11 U	280 U	180 U	8.8 J	7.6 J	0.22 U
1,2-DICHLOROPROPANE	45 U	9 U	230 U	150 U	7.2 U	4.5 U	0.18 U
1,3-DICHLOROBENZENE	35 U	7 U	180 U	120 U	5.6 U	3.5 U	0.14 U
1,3-DICHLOROPROPANE	40 U	8 U	200 U	130 U	6.4 U	4 U	0.16 U
1,4-DICHLOROBENZENE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
2-BUTANONE	140 U	29 U	710 U	470 U	23 U	14 U	0.57 U
2-CHLOROETHYL VINYL ETHER	250 U	50 U	1200 U	820 U	40 U	25 U	0.99 U
2-CHLOROTOLUENE	28 U	5.5 U	140 U	92 U	4.4 U	2.8 U	0.11 U
2-HEXANONE	100 U	21 U	510 U	340 U	16 U	10 U	0.41 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	45 U	9 U	230 U	150 U	7.2 U	4.5 U	0.18 U
4-ISOPROPYLTOLUENE	30 U	6 U	150 U	100 U	4.8 U	3 U	0.12 U
4-METHYL-2-PENTANONE	80 U	16 U	400 U	270 U	13 U	8 U	0.32 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	280 U	67 B	1400 U	920 U	44 U	28 U	5 J
BENZENE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
BROMOBENZENE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
BROMOCHLOROMETHANE	73 U	15 U	360 U	240 U	12 U	7.3 U	0.29 U
BROMODICHLOROMETHANE	38 U	7.5 U	190 U	120 U	6 U	3.8 U	0.15 U

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LOCATION	DR-DPT-40	DR-DPT-40	DR-DPT-41	DR-DPT-41	DR-DPT-41	DR-DPT-41	DR-DPT-42
SAMPLE ID	DR-DPT-40-35	DR-DPT-40-40	DR-DPT-41-25	DR-DPT-41-35	DR-DPT-41-40	DR-DPT-41-45	DR-DPT-42-10
SAMPLE DATE	8/7/2013	8/7/2013	8/6/2013	8/7/2013	8/7/2013	8/7/2013	8/9/2013
BROMOFORM	160 U	32 U	800 U	530 U	26 U	16 U	0.64 U
BROMOMETHANE	100 U	21 U	510 U	340 U	16 U	10 U	0.41 U
CARBON DISULFIDE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
CARBON TETRACHLORIDE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
CHLOROBENZENE	38 U	7.5 U	190 U	120 U	6 U	3.8 U	0.15 U
CHLORODIBROMOMETHANE	45 U	9 U	230 U	150 U	7.2 U	4.5 U	0.18 U
CHLOROETHANE	73 U	15 U	360 U	240 U	12 U	7.3 U	0.29 U
CHLOROFORM	40 U	8 U	200 U	130 U	6.4 U	4 U	0.16 U
CHLOROMETHANE	75 U	15 U	380 U	250 U	12 U	7.5 U	0.3 U
CIS-1,2-DICHLOROETHENE	5500	1100	17000	1900	320	340	0.26 J
CIS-1,3-DICHLOROPROPENE	35 U	7 U	180 U	120 U	5.6 U	3.5 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	70 U	14 U	350 U	230 U	11 U	7 U	0.28 U
DICHLORODIFLUOROMETHANE	78 U	16 U	390 U	260 U	12 U	7.8 U	0.31 U
DIISOPROPYL ETHER	380 U	75 U	1900 U	1200 U	60 U	38 U	1.5 U
ETHYL TERT-BUTYL ETHER	28 U	5.5 U	140 U	92 U	4.4 U	2.8 U	0.11 U
ETHYLBENZENE	43 U	8.5 U	210 U	140 U	6.8 U	4.3 U	0.17 U
HEXACHLOROBUTADIENE	75 U	15 U	380 U	250 U	12 U	7.5 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
M+P-XYLENES	60 U	12 U	300 U	200 U	9.6 U	6 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	43 U	8.5 U	210 U	140 U	6.8 U	4.3 U	0.17 U
METHYLENE CHLORIDE	83 U	17 U	1600 B	270 U	13 U	12 B	0.33 U
NAPHTHALENE	60 U	12 U	300 UJ	200 U	9.6 U	6 U	0.24 U
N-BUTYLBENZENE	30 U	6 U	150 U	100 U	4.8 U	3 U	0.12 U
N-PROPYLBENZENE	35 U	7 U	180 U	120 U	5.6 U	3.5 U	0.14 U
O-XYLENE	35 U	7 U	180 U	120 U	5.6 U	3.5 U	0.14 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
STYRENE	28 U	5.5 U	140 U	92 U	4.4 U	2.8 U	0.11 U
TERT-AMYL METHYL ETHER	17 U	3.4 U	84 U	56 U	2.7 U	1.7 U	0.067 U
TERT-BUTYLBENZENE	33 U	6.5 U	160 U	110 U	5.2 U	3.3 U	0.13 U
TERTIARY-BUTYL ALCOHOL	980 UR	200 UR	4900 UR	3200 UR	160 UR	98 UR	3.9 UR
TETRACHLOROETHENE	73 U	15 U	360 U	240 U	12 U	7.3 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	33 U	6.5 U	1700	110 U	66	62	0.13 U
TOTAL XYLENES	35 U	7 U	180 U	120 U	5.6 U	3.5 U	0.14 U
TRANS-1,2-DICHLOROETHENE	77 J	9.5 U	240 U	160 U	19 J	20 J	0.19 U
TRANS-1,3-DICHLOROPROPENE	48 U	9.5 U	240 U	160 U	7.6 U	4.8 U	0.19 U

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LOCATION	DR-DPT-40	DR-DPT-40	DR-DPT-41	DR-DPT-41	DR-DPT-41	DR-DPT-41	DR-DPT-42
SAMPLE ID	DR-DPT-40-35	DR-DPT-40-40	DR-DPT-41-25	DR-DPT-41-35	DR-DPT-41-40	DR-DPT-41-45	DR-DPT-42-10
SAMPLE DATE	8/7/2013	8/7/2013	8/6/2013	8/7/2013	8/7/2013	8/7/2013	8/9/2013
TRICHLOROETHENE	5800	120	23000	28000 K	1100	870	0.28 J
TRICHLOROFLUOROMETHANE	53 U	11 U	260 U	170 U	8.4 U	5.3 U	0.21 U
VINYL ACETATE	48 UR	9.5 UR	240 UR	160 UR	7.6 UR	4.8 UR	0.19 UR
VINYL CHLORIDE	71 J	43 J	280 U	180 U	16 J	11 J	0.22 U
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-42	DR-DPT-42	DR-DPT-42	DR-DPT-42	DR-DPT-42	DR-DPT-43	DR-DPT-43
SAMPLE ID	DR-DPT-42-15	DR-DPT-42-20	DR-DPT-42-25	DR-DPT-42-30	DR-DPT-42-35	DR-DPT-43-25	DR-DPT-43-30
SAMPLE DATE	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/21/2013	8/21/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	1.3 U	1.8 U	1.8 U	23 U	58 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	1.3 U	1.8 U	1.8 U	22 U	55 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	1 U	1.4 U	1.4 U	18 U	45 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	1.6 U	2.2 U	2.2 U	28 U	70 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.86 U	1.2 U	1.2 U	15 U	38 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	1.1 U	1.5 U	1.5 U	19 U	48 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.74 U	1 U	1 U	13 U	33 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.97 U	1.4 U	1.4 U	17 U	43 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	2.5 U	3.4 U	3.4 U	43 U	110 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.034 U	0.047 U	0.047 U	0.59 U	150 J
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.86 U	1.2 U	1.2 U	53 J	410
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.69 U	0.96 U	0.96 U	17 J	65 J
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	3.8 U	5.4 U	5.4 U	67 U	170 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	1.4 U	1.9 U	1.9 U	24 U	60 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.74 U	1 U	1 U	13 U	33 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	1.3 U	1.8 J	1.9 J	22 U	55 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	1 U	1.4 U	1.4 U	18 U	45 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.8 U	1.1 U	1.1 U	14 U	35 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.91 U	1.3 U	1.3 U	16 U	40 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.74 U	1 U	1 U	13 U	33 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.74 U	1 U	1 U	13 U	33 U
2-BUTANONE	0.57 U	0.95 J	3.3 U	4.6 U	4.6 U	57 U	140 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	5.7 U	7.9 U	7.9 U	99 U	250 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.63 U	0.88 U	0.88 U	11 U	28 U
2-HEXANONE	0.41 U	0.41 U	2.3 U	3.3 U	3.3 U	41 U	100 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	1 U	1.4 U	1.4 U	18 U	45 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.69 U	0.96 U	0.96 U	12 U	30 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	1.8 U	2.6 U	2.6 U	32 U	80 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	4.4 J	14 J	6.9 J	8.9 J	10 J	110 U	280 U
BENZENE	0.13 U	0.15 J	0.74 U	1.9 J	2.1 J	13 U	33 U
BROMOBENZENE	0.13 U	0.13 U	0.74 U	1 U	1 U	13 U	33 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	1.7 U	2.3 U	2.3 U	29 U	73 U
BROMODICHLOROMETHANE	0.15 U	0.25 J	0.86 U	1.2 U	1.2 U	15 U	38 U

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LOCATION	DR-DPT-42	DR-DPT-42	DR-DPT-42	DR-DPT-42	DR-DPT-42	DR-DPT-43	DR-DPT-43
SAMPLE ID	DR-DPT-42-15	DR-DPT-42-20	DR-DPT-42-25	DR-DPT-42-30	DR-DPT-42-35	DR-DPT-43-25	DR-DPT-43-30
SAMPLE DATE	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/21/2013	8/21/2013
BROMOFORM	0.64 U	0.64 U	3.7 U	5.1 U	5.1 U	64 U	160 U
BROMOMETHANE	0.41 U	0.41 U	2.3 U	3.3 U	3.3 U	41 U	100 U
CARBON DISULFIDE	1.7	0.41 J	0.74 U	1 U	1 U	32 J	33 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.74 U	1 U	1 U	13 U	33 U
CHLOROBENZENE	0.15 U	0.15 U	0.86 U	1.2 U	1.2 U	15 U	38 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	1 U	1.4 U	1.4 U	18 U	45 U
CHLOROETHANE	0.29 U	0.29 U	1.7 U	2.3 U	2.3 U	29 U	73 U
CHLOROFORM	0.44 J	1.6	0.91 U	1.3 U	1.3 U	16 U	40 U
CHLOROMETHANE	0.3 U	0.3 U	1.7 U	2.4 U	2.4 U	30 U	75 U
CIS-1,2-DICHLOROETHENE	0.69 J	0.17 U	83	200	170	1400	1200
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.8 U	1.1 U	1.1 U	14 U	35 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	1.6 U	2.2 U	2.2 U	28 U	70 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	1.8 U	2.5 U	2.5 U	31 U	78 U
DIISOPROPYL ETHER	1.5 U	1.5 U	8.6 U	12 U	12 U	150 U	380 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.63 U	0.88 U	0.88 U	11 U	28 U
ETHYLBENZENE	0.17 U	0.17 U	0.97 U	1.4 U	1.4 U	40 J	110 J
HEXACHLOROBUTADIENE	0.3 U	0.3 U	1.7 U	2.4 U	2.4 U	30 U	75 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.74 U	1 U	1 U	13 U	33 U
M+P-XYLENES	0.24 U	0.24 U	1.4 U	1.9 U	1.9 U	79 J	290 J
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.97 U	1.4 U	1.4 U	17 U	43 U
METHYLENE CHLORIDE	0.33 U	0.33 U	8.2 B	14 B	14 B	33 U	83 U
NAPHTHALENE	0.24 U	0.24 U	1.4 U	1.9 U	1.9 U	24 U	60 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.69 U	0.96 U	0.96 U	12 U	30 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.8 U	1.1 U	1.1 U	14 U	35 U
O-XYLENE	0.14 U	0.14 U	0.8 U	1.1 U	1.1 U	41 J	110 J
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.74 U	1 U	1 U	13 U	33 U
STYRENE	0.11 U	0.11 U	0.63 U	0.88 U	0.88 U	11 U	28 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.38 U	0.54 U	0.54 U	6.7 U	17 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.74 U	1 U	1 U	13 U	33 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	7.8 B	22 UR	31 UR	61 B	390 UR	980 UR
TETRACHLOROETHENE	0.29 U	0.29 U	1.7 U	2.3 U	2.3 U	29 U	120 J
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	140 NJ
TOLUENE	0.49 J	0.13 U	0.74 U	1 U	1 U	1200	2100
TOTAL XYLENES	0.14 U	0.14 U	0.8 U	1.1 U	1.1 U	120 J	400 J
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	4.4 J	2 J	1.6 J	19 U	48 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	1.1 U	1.5 U	1.5 U	19 U	48 U

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LOCATION	DR-DPT-42	DR-DPT-42	DR-DPT-42	DR-DPT-42	DR-DPT-42	DR-DPT-43	DR-DPT-43
SAMPLE ID	DR-DPT-42-15	DR-DPT-42-20	DR-DPT-42-25	DR-DPT-42-30	DR-DPT-42-35	DR-DPT-43-25	DR-DPT-43-30
SAMPLE DATE	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/21/2013	8/21/2013
TRICHLOROETHENE	0.9 J	0.17 U	160	89	86	3600	9400
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	1.2 U	1.7 U	1.7 U	21 U	53 U
VINYL ACETATE	0.19 UR	0.19 UR	1.1 UR	1.5 UR	1.5 UR	19 UR	48 UR
VINYL CHLORIDE	0.91 J	0.22 U	1.3 U	120	95	1100	210 J
TICOV (UG/L)							
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
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LOCATION	DR-DPT-43	DR-DPT-43	DR-DPT-43B	DR-DPT-43B	DR-DPT-43B	DR-DPT-43B
SAMPLE ID	DR-DPT-43-35	DR-DPT-43-40	DR-DPT-43B-10	DR-DPT-43B-15	DR-DPT-43B-15-D	DR-DPT-43B-20
SAMPLE DATE	8/21/2013	8/21/2013	8/20/2013	8/20/2013	8/20/2013	8/20/2013
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	4600 U	580 U	0.23 U	230 U	230 U	230 U
1,1,1-TRICHLOROETHANE	4400 U	550 U	0.22 U	220 U	220 U	220 U
1,1,2,2-TETRACHLOROETHANE	3600 U	450 U	0.18 U	180 U	180 U	180 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	5600 U	700 U	0.28 U	280 U	280 U	280 U
1,1-DICHLOROETHANE	3000 U	380 U	0.55 J	150 U	150 U	150 U
1,1-DICHLOROETHENE	3800 U	480 U	0.19 U	190 U	190 U	190 U
1,1-DICHLOROPROPENE	2600 U	330 U	0.13 U	130 U	130 U	130 U
1,2,3-TRICHLOROBENZENE	3400 U	430 U	0.17 U	170 U	170 U	170 U
1,2,3-TRICHLOROPROPANE	8600 U	1100 U	0.43 U	430 U	430 U	430 U
1,2,3-TRIMETHYLBENZENE	120 U	15 U	0.0059 U	5.9 U	5.9 U	5.9 U
1,2,4-TRICHLOROBENZENE	3000 U	380 U	0.15 U	150 U	150 U	150 U
1,2,4-TRIMETHYLBENZENE	2400 U	300 U	0.12 U	120 U	120 U	120 U
1,2-DIBROMO-3-CHLOROPROPANE	13000 U	1700 U	0.67 U	670 U	670 U	670 U
1,2-DIBROMOETHANE	4800 U	600 U	0.24 U	240 U	240 U	240 U
1,2-DICHLOROBENZENE	2600 U	330 U	0.37 J	130 U	130 U	130 U
1,2-DICHLOROETHANE	4400 U	550 U	0.22 U	220 U	220 U	220 U
1,2-DICHLOROPROPANE	3600 U	450 U	0.18 U	180 U	180 U	180 U
1,3-DICHLOROBENZENE	2800 U	350 U	0.51 J	140 U	140 U	140 U
1,3-DICHLOROPROPANE	3200 U	400 U	0.16 U	160 U	160 U	160 U
1,4-DICHLOROBENZENE	2600 U	330 U	2.4	130 U	130 U	130 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	2600 U	330 U	0.13 U	130 U	130 U	130 U
2-BUTANONE	11000 U	1400 U	0.69 J	570 U	570 U	570 U
2-CHLOROETHYL VINYL ETHER	20000 U	2500 U	0.99 U	990 U	990 U	990 U
2-CHLOROTOLUENE	2200 U	280 U	0.11 U	110 U	110 U	110 U
2-HEXANONE	8200 U	1000 U	0.41 U	410 U	410 U	410 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	3600 U	450 U	0.18 U	180 U	180 U	180 U
4-ISOPROPYLTOLUENE	2400 U	300 U	0.12 U	120 U	120 U	120 U
4-METHYL-2-PENTANONE	6400 U	800 U	0.54 J	320 U	320 U	320 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA
ACETONE	22000 U	2800 U	1.1 U	1100 U	1100 U	1100 U
BENZENE	2600 U	330 U	3.7	130 U	130 U	130 U
BROMOBENZENE	2600 U	330 U	0.13 U	130 U	130 U	130 U
BROMOCHLOROMETHANE	5800 U	730 U	0.29 U	290 U	290 U	290 U
BROMODICHLOROMETHANE	3000 U	380 U	0.15 U	150 U	150 U	150 U

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Chemical Results for DPT Groundwater Samples - 2013
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LOCATION	DR-DPT-43	DR-DPT-43	DR-DPT-43B	DR-DPT-43B	DR-DPT-43B	DR-DPT-43B
SAMPLE ID	DR-DPT-43-35	DR-DPT-43-40	DR-DPT-43B-10	DR-DPT-43B-15	DR-DPT-43B-15-D	DR-DPT-43B-20
SAMPLE DATE	8/21/2013	8/21/2013	8/20/2013	8/20/2013	8/20/2013	8/20/2013
BROMOFORM	13000 U	1600 U	0.64 U	640 U	640 U	640 U
BROMOMETHANE	8200 U	1000 U	0.41 U	410 U	410 U	410 U
CARBON DISULFIDE	2600 U	330 U	0.13 U	130 U	130 U	130 U
CARBON TETRACHLORIDE	2600 U	330 U	0.13 U	130 U	130 U	130 U
CHLOROBENZENE	3000 U	380 U	13	150 U	150 U	150 U
CHLORODIBROMOMETHANE	3600 U	450 U	0.18 U	180 U	180 U	180 U
CHLOROETHANE	5800 U	730 U	0.29 U	290 U	290 U	290 U
CHLOROFORM	3200 U	400 U	0.16 U	160 U	160 U	160 U
CHLOROMETHANE	6000 U	750 U	0.3 U	300 U	300 U	300 U
CIS-1,2-DICHLOROETHENE	3400 U	1100 J	7.1	29000	27000	5700
CIS-1,3-DICHLOROPROPENE	2800 U	350 U	0.14 U	140 U	140 U	140 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	5600 U	700 U	0.28 U	280 U	280 U	280 U
DICHLORODIFLUOROMETHANE	6200 U	780 U	0.31 U	310 U	310 U	310 U
DIISOPROPYL ETHER	30000 U	3800 U	1.5 U	1500 U	1500 U	1500 U
ETHYL TERT-BUTYL ETHER	2200 U	280 U	0.11 U	110 U	110 U	110 U
ETHYLBENZENE	3400 U	430 U	0.19 J	360 J	230 J	170 U
HEXACHLOROBUTADIENE	6000 U	750 U	0.3 U	300 U	300 U	300 U
HEXANE	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	2600 U	330 U	0.13 U	130 U	130 U	130 U
M+P-XYLENES	4800 U	600 U	0.35 J	420 J	420 J	240 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	3400 U	430 U	0.17 U	170 U	170 U	170 U
METHYLENE CHLORIDE	49000	830 U	0.33 U	330 U	330 U	330 U
NAPHTHALENE	4800 U	600 U	7.1	240 U	240 U	240 U
N-BUTYLBENZENE	2400 U	300 U	0.12 U	120 U	120 U	120 U
N-PROPYLBENZENE	2800 U	350 U	0.14 U	140 U	140 U	140 U
O-XYLENE	2800 U	350 U	0.14 J	250 J	210 J	140 U
PENTANE	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	2600 U	330 U	0.13 U	130 U	130 U	130 U
STYRENE	2200 U	280 U	0.11 U	110 U	110 U	110 U
TERT-AMYL METHYL ETHER	1300 U	170 U	0.067 U	67 U	67 U	67 U
TERT-BUTYLBENZENE	2600 U	330 U	0.13 U	130 U	130 U	130 U
TERTIARY-BUTYL ALCOHOL	78000 UR	9800 UR	3.9 UR	3900 UR	3900 UR	3900 UR
TETRACHLOROETHENE	5800 U	730 U	0.29 U	290 U	290 U	290 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	31000 B	3700	1	10000	9400	1800 B
TOTAL XYLENES	2800 U	350 U	0.49 J	670 J	630 J	140 U
TRANS-1,2-DICHLOROETHENE	3800 U	480 U	0.67 J	190 U	190 U	190 U
TRANS-1,3-DICHLOROPROPENE	3800 U	480 U	0.19 U	190 U	190 U	190 U

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Chemical Results for DPT Groundwater Samples - 2013
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LOCATION	DR-DPT-43	DR-DPT-43	DR-DPT-43B	DR-DPT-43B	DR-DPT-43B	DR-DPT-43B
SAMPLE ID	DR-DPT-43-35	DR-DPT-43-40	DR-DPT-43B-10	DR-DPT-43B-15	DR-DPT-43B-15-D	DR-DPT-43B-20
SAMPLE DATE	8/21/2013	8/21/2013	8/20/2013	8/20/2013	8/20/2013	8/20/2013
TRICHLOROETHENE	490000	30000	0.17 U	3700 J	820 J	22000
TRICHLOROFLUOROMETHANE	4200 U	530 U	0.21 U	210 U	210 U	210 U
VINYL ACETATE	3800 UR	480 UR	0.19 UR	190 UR	190 UR	190 UR
VINYL CHLORIDE	4400 U	550 U	6.2	5700	5600	1300
TICOV (UG/L)						
1-PENTENE, 2-METHYL-	NA	NA	NA	NA	NA	NA
TENTATIVELY IDENTIFIED COMPOUND	NA	NA	NA	NA	NA	NA

Table D-2

Chemical Results for Surface Water Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EP1-SW15 EP1-SW15 10/15/2013	EP1-SW16 EP1-SW16 10/15/2013	EWT-SW1 EWT-SW1 10/15/2013	EWT-SW2 EWT-SW2 10/15/2013	EWT-SW3 EWT-SW3-1 10/18/2013
METALS (UG/L)					
ANTIMONY	1.8 U	1.8 U	1.8 U	1.8 U	NA
ARSENIC	3.4 J	3.8 J	3.2 J	3.2 U	NA
BARIUM	41 J	41 J	89 J	87 J	NA
BERYLLIUM	0.46 U	0.46 U	0.46 U	0.46 U	NA
CADMIUM	0.84 J	0.68 J	12	11	NA
CHROMIUM	5.3 B	4.4 B	11 B	12	NA
COBALT	1.7 U	1.7 U	27	25	NA
COPPER	4.5 U	4.5 U	4.5 J	5.2 J	NA
LEAD	1.9 U	1.9 U	1.9 U	1.9 U	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	NA
MOLYBDENUM	1.8 J	2 J	3.2 J	3 J	NA
NICKEL	3.2 U	3.2 U	38 J	37 J	NA
SELENIUM	4.1 U	4.1 U	4.1 U	4.1 U	NA
SILVER	2.2 U	2.2 U	2.2 U	2.2 U	NA
THALLIUM	4.7 U	4.7 U	4.7 U	4.7 U	NA
VANADIUM	0.64 U	0.64 U	3.2 B	4.7 B	NA
ZINC	6.3 B	11 B	390	380	NA
DISSOLVED METALS (UG/L)					
ANTIMONY	1.8 U	1.8 U	1.8 U	1.8 U	NA
ARSENIC	4.5 J	3.2 U	3.2 U	3.2 U	NA
BARIUM	39 J	39 J	73 J	74 J	NA
BERYLLIUM	0.46 U	0.46 U	0.46 U	0.46 U	NA
CADMIUM	0.66 U	0.66 U	9.6	10	NA
CHROMIUM	2.2 B	2.2 B	3.7 B	3.2 B	NA
COBALT	1.7 U	1.7 U	24	24	NA
COPPER	4.5 U	4.5 U	4.5 U	4.5 U	NA
LEAD	1.9 U	1.9 U	1.9 U	1.9 U	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	NA
MOLYBDENUM	1.8 J	1.9 J	2.7 J	2.8 J	NA

Table D-2

Chemical Results for Surface Water Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EP1-SW15 EP1-SW15 10/15/2013	EP1-SW16 EP1-SW16 10/15/2013	EWT-SW1 EWT-SW1 10/15/2013	EWT-SW2 EWT-SW2 10/15/2013	EWT-SW3 EWT-SW3-1 10/18/2013
NICKEL	3.5 J	3.2 U	35 J	38 J	NA
SELENIUM	4.1 U	4.1 U	4.1 U	4.1 U	NA
SILVER	2.2 U	2.2 U	2.2 U	2.2 U	NA
THALLIUM	4.7 U	4.7 U	4.7 U	4.7 U	NA
VANADIUM	0.64 U	0.64 U	0.64 U	0.64 U	NA
ZINC	5 U	5 U	350	350	NA

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Chemical Results for Surface Water Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EP1-SW15 EP1-SW15 10/15/2013	EP1-SW16 EP1-SW16 10/15/2013	EWT-SW1 EWT-SW1 10/15/2013	EWT-SW2 EWT-SW2 10/15/2013	EWT-SW3 EWT-SW3-1 10/18/2013
MISCELLANEOUS PARAMETERS					
HEXAVALENT CHROMIUM (UG/L)	0.014 J	0.02 UL	1 J	1 UL	NA
PERCHLORATE (UG/L)	2 U	2 U	2 U	2 U	NA
SEMIVOLATILES (UG/L)					
1,4-DIOXANE	0.47 U	0.47 U	0.47 U	0.51 U	NA
VOLATILES (UG/L)					
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 UL
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 U	0.57 UR
2-CHLOROETHYL VINYL ETHER	0.99 UL	0.99 UL	0.99 UL	0.99 UL	0.99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U

Table D-2

Chemical Results for Surface Water Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EP1-SW15 EP1-SW15 10/15/2013	EP1-SW16 EP1-SW16 10/15/2013	EWT-SW1 EWT-SW1 10/15/2013	EWT-SW2 EWT-SW2 10/15/2013	EWT-SW3 EWT-SW3-1 10/18/2013
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
ACETONE	1.1 U	1.5 J	4.3 J	4.9 J	6.9 J
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U

Table D-2

Chemical Results for Surface Water Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EP1-SW15 EP1-SW15 10/15/2013	EP1-SW16 EP1-SW16 10/15/2013	EWT-SW1 EWT-SW1 10/15/2013	EWT-SW2 EWT-SW2 10/15/2013	EWT-SW3 EWT-SW3-1 10/18/2013
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
CIS-1,2-DICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

Table D-2

Chemical Results for Surface Water Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EP1-SW15 EP1-SW15 10/15/2013	EP1-SW16 EP1-SW16 10/15/2013	EWT-SW1 EWT-SW1 10/15/2013	EWT-SW2 EWT-SW2 10/15/2013	EWT-SW3 EWT-SW3-1 10/18/2013
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 U
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
PETROLEUM HYDROCARBONS (UG/L)					
TPH (C06-C10)	27 J	27 J	32 J	36 J	NA
TPH (C10-C32)	380 J	400 J	300 J	240 U	NA

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EP1-SD15	EP1-SD15	EP1-SD16	EP1-SD16	EP1-SD17	EP1-SD17
SAMPLE ID	EP1-SD15-0-1	EP1-SD15-1-2	EP1-SD16-0-1	EP1-SD16-1-2	EP1-SD17-0-1	EP1-SD17-1-2
SAMPLE DATE	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013
VOLATILES (UG/KG)						
1,1,1,2-TETRACHLOROETHANE	5 UJ	71 UJ	59 UJ	1000 UJ	62 UJ	650 UJ
1,1,1-TRICHLOROETHANE	4.5 UJ	160 UJ	140 UJ	2300 UJ	140 UJ	1500 UJ
1,1,2,2-TETRACHLOROETHANE	2.7 UJ	69 UJ	58 UJ	970 UJ	60 UJ	630 UJ
1,1,2-TRICHLOROTRIFLUOROETHANE	10 UJ	300 UJ	250 UJ	4300 UJ	260 UJ	2800 UJ
1,1-DICHLOROETHANE	2.9 UJ	130 UJ	110 UJ	1900 UJ	120 UJ	1200 UJ
1,1-DICHLOROETHENE	4.2 UJ	140 UJ	120 UJ	2000 UJ	120 UJ	1300 UJ
1,1-DICHLOROPROPENE	2.4 UJ	78 UJ	65 UJ	1100 UJ	68 UJ	710 UJ
1,2,3-TRICHLOROBENZENE	3.1 UJ	78 UJ	65 UJ	1100 UJ	68 UJ	710 UJ
1,2,3-TRICHLOROPROPANE	7.3 UJ	160 UJ	140 UJ	2300 UJ	140 UJ	1500 UJ
1,2,3-TRIMETHYLBENZENE	9 J	1300 J	72 J	11000 J	460 J	6800 J
1,2,4-TRICHLOROBENZENE	2.2 UJ	80 B	48 UJ	800 UJ	50 UJ	520 UJ
1,2,4-TRIMETHYLBENZENE	6.9 J	3500 J	120 J	23000 J	970 J	16000 J
1,2-DIBROMO-3-CHLOROPROPANE	10 UJ	390 UJ	330 UJ	5500 UJ	340 UJ	3500 UJ
1,2-DIBROMOETHANE	4 UJ	78 UJ	65 UJ	1100 UJ	68 UJ	710 UJ
1,2-DICHLOROBENZENE	35 J	240 J	170 J	940 UJ	92 J	610 UJ
1,2-DICHLOROETHANE	2.7 UJ	78 UJ	65 UJ	1100 UJ	68 UJ	710 UJ
1,2-DICHLOROPROPANE	5.6 UJ	64 UJ	54 UJ	900 UJ	56 UJ	580 UJ
1,3-DICHLOROBENZENE	2.8 UJ	37 UJ	31 UJ	530 UJ	33 UJ	340 UJ
1,3-DICHLOROPROPANE	2.7 UJ	170 UJ	140 UJ	2400 UJ	150 UJ	1600 UJ
1,4-DICHLOROBENZENE	7.5 J	62 UJ	52 UJ	880 UJ	54 UJ	570 UJ
2,2-DICHLOROPROPANE	7.6 UJ	180 UJ	150 UJ	2500 UJ	160 UJ	1600 UJ
2-BUTANONE	140 J	350 J	280 UJ	4700 UJ	360 J	3100 UJ
2-CHLOROETHYL VINYL ETHER	11 UJ	330 UJ	280 UJ	4700 UJ	290 UJ	3100 UJ
2-CHLOROTOLUENE	3.2 UJ	70 UJ	59 UJ	980 UJ	61 UJ	640 UJ
2-HEXANONE	5.1 UJ	160 UJ	130 UJ	2200 UJ	140 UJ	1400 UJ
4-CHLOROTOLUENE	3.3 UJ	77 UJ	65 UJ	1100 UJ	67 UJ	700 UJ
4-ISOPROPYLTOLUENE	2.9 J	280 J	34 J	1300 J	140 J	1100 J
4-METHYL-2-PENTANONE	4.4 UJ	370 UJ	310 UJ	5300 UJ	330 UJ	3400 UJ
ACETONE	580 J	1300 UJ	1100 UJ	19000 UJ	1200 UJ	12000 UJ
BENZENE	1.9 UJ	93 UJ	78 UJ	1300 UJ	82 UJ	1100 J
BROMOBENZENE	2.7 UJ	100 UJ	85 UJ	1400 UJ	88 UJ	920 UJ
BROMOCHLOROMETHANE	5.7 UJ	100 UJ	85 UJ	1400 UJ	88 UJ	920 UJ
BROMODICHLOROMETHANE	2.3 UJ	77 UJ	65 UJ	1100 UJ	67 UJ	700 UJ
BROMOFORM	2.7 UJ	150 UJ	120 UJ	2100 UJ	130 UJ	1300 UJ
BROMOMETHANE	4.4 UJ	220 UJ	190 UJ	3200 UJ	200 UJ	2100 UJ
CARBON DISULFIDE	29 J	93 UJ	78 UJ	1300 UJ	95 J	850 UJ

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EP1-SD15	EP1-SD15	EP1-SD16	EP1-SD16	EP1-SD17	EP1-SD17
SAMPLE ID	EP1-SD15-0-1	EP1-SD15-1-2	EP1-SD16-0-1	EP1-SD16-1-2	EP1-SD17-0-1	EP1-SD17-1-2
SAMPLE DATE	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013
CARBON TETRACHLORIDE	3 UJ	50 UJ	42 UJ	700 UJ	43 UJ	450 UJ
CHLOROBENZENE	530 J	2700 J	1400 J	7200 J	1300 J	6000 J
CHLORODIBROMOMETHANE	4.4 UJ	93 UJ	78 UJ	1300 UJ	82 UJ	850 UJ
CHLOROETHANE	6.9 UJ	470 UJ	400 UJ	6700 UJ	410 UJ	4300 UJ
CHLOROFORM	2.3 UJ	68 UJ	57 UJ	960 UJ	60 UJ	620 UJ
CHLOROMETHANE	3.3 UJ	110 UJ	91 UJ	1500 UJ	95 UJ	990 UJ
CIS-1,2-DICHLOROETHENE	2.9 UJ	54 UJ	45 UJ	750 UJ	47 UJ	37000 J
CIS-1,3-DICHLOROPROPENE	2.7 UJ	61 UJ	52 UJ	860 UJ	54 UJ	560 UJ
DIBROMOMETHANE	5.1 UJ	110 UJ	91 UJ	1500 UJ	95 UJ	990 UJ
DICHLORODIFLUOROMETHANE	4 UJ	120 UJ	100 UJ	1800 UJ	110 UJ	1100 UJ
DIISOPROPYL ETHER	12 UJ	390 UJ	330 UJ	5500 UJ	340 UJ	3500 UJ
ETHYL TERT-BUTYL ETHER	1.8 UJ	1.7 UJ	1.4 UJ	24 UJ	1.5 UJ	16 UJ
ETHYLBENZENE	8.3 J	540 J	35 UJ	57000 J	1600 J	52000 J
HEXACHLOROBUTADIENE	9.7 UJ	110 UJ	91 UJ	1500 UJ	95 UJ	990 UJ
ISOPROPYLBENZENE	98 J	750 J	500 J	2100 J	270 J	1700 J
M+P-XYLENES	28 J	4400 J	210 J	170000 J	4400 J	130000 J
METHYL TERT-BUTYL ETHER	3.5 UJ	55 UJ	46 UJ	780 UJ	48 UJ	500 UJ
METHYLENE CHLORIDE	40 B	600 UJ	500 UJ	8400 UJ	520 UJ	5500 UJ
NAPHTHALENE	1.5 UJ	1100 J	76 B	12000 J	390 J	7200 J
N-BUTYLBENZENE	43 J	690 J	220 J	1500 J	310 J	1200 J
N-PROPYLBENZENE	180 J	1300 J	640 J	2900 J	410 J	2100 J
O-XYLENE	8.7 J	1100 J	56 UJ	73000 J	1700 J	48000 J
SEC-BUTYLBENZENE	51 J	420 J	180 J	790 J	160 J	690 J
STYRENE	1.2 UJ	43 UJ	37 UJ	610 UJ	38 UJ	400 UJ
TERT-AMYL METHYL ETHER	3 UJ	2.9 UJ	2.4 UJ	40 UJ	2.5 UJ	26 UJ
TERT-BUTYLBENZENE	14 J	85 J	42 UJ	710 UJ	44 UJ	460 UJ
TERTIARY-BUTYL ALCOHOL	61 UR	1900 UR	1600 UR	26000 UR	1600 UR	17000 UR
TETRACHLOROETHENE	4.2 UJ	93 UJ	78 UJ	1300 UJ	82 UJ	1700 J
TOLUENE	59 J	480 J	110 UJ	440000 J	5700 J	650000 J
TOTAL XYLENES	37 J	5500 J	210 J	240000 J	6100 J	180000 J
TRANS-1,2-DICHLOROETHENE	3.3 UJ	120 J	60 UJ	1000 UJ	110 J	650 UJ
TRANS-1,3-DICHLOROPROPENE	4.4 UJ	160 UJ	130 UJ	2200 UJ	140 UJ	1400 UJ
TRICHLOROETHENE	3.4 UJ	75 UJ	68 J	1100 UJ	73 J	5400 J
TRICHLOROFLUOROMETHANE	2.7 UJ	120 UJ	100 UJ	1800 UJ	110 UJ	1100 UJ
VINYL ACETATE	2 UR	180 UR	150 UR	2500 UR	160 UR	1600 UR
VINYL CHLORIDE	3.1 UJ	140 UJ	120 UJ	2000 UJ	120 J	24000 J
SEMIVOLATILES (UG/KG)						

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EP1-SD15	EP1-SD15	EP1-SD16	EP1-SD16	EP1-SD17	EP1-SD17
SAMPLE ID	EP1-SD15-0-1	EP1-SD15-1-2	EP1-SD16-0-1	EP1-SD16-1-2	EP1-SD17-0-1	EP1-SD17-1-2
SAMPLE DATE	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013
1,1-BIPHENYL	21 UJ	220 UJ	81 UJ	650 UJ	190 UJ	5000 J
1,4-DIOXANE	130 UJ	1400 UJ	510 UJ	4100 UJ	1200 UJ	810 UJ
2,2'-OXYBIS(1-CHLOROPROPANE)	56 UJ	610 UJ	220 UJ	1800 UJ	510 UJ	350 UJ
2,4,5-TRICHLOROPHENOL	150 UJ	1600 UJ	580 UJ	4600 UJ	1300 UJ	920 UJ
2,4,6-TRICHLOROPHENOL	52 UJ	570 UJ	210 UJ	1600 UJ	480 UJ	330 UJ
2,4-DICHLOROPHENOL	120 UJ	1300 UJ	460 UJ	3700 UJ	1100 UJ	740 UJ
2,4-DIMETHYLPHENOL	120 UJ	1300 UJ	460 UJ	3700 UJ	1100 UJ	740 UJ
2,4-DINITROPHENOL	120 UJ	1300 UJ	490 UJ	3900 UJ	1100 UJ	780 UJ
2,4-DINITROTOLUENE	100 UJ	1100 UJ	390 UJ	3100 UJ	920 UJ	630 UJ
2,6-DINITROTOLUENE	120 UJ	1300 UJ	490 UJ	3900 UJ	1100 UJ	780 UJ
2-CHLORONAPHTHALENE	2.6 UJ	29 UJ	10 UJ	83 UJ	24 UJ	17 UJ
2-CHLOROPHENOL	48 UJ	530 UJ	190 UJ	1500 UJ	440 UJ	300 UJ
2-METHYLNAPHTHALENE	2.9 UJ	3800 J	1300 J	83000 J	3000 J	40000 J
2-METHYLPHENOL	65 UJ	700 UJ	250 UJ	2000 UJ	590 UJ	410 UJ
2-NITROANILINE	54 UJ	580 UJ	210 UJ	1700 UJ	490 UJ	340 UJ
2-NITROPHENOL	49 UJ	530 UJ	190 UJ	1500 UJ	450 UJ	310 UJ
3&4-METHYLPHENOL	120 UJ	1300 UJ	460 UJ	3700 UJ	1100 UJ	740 UJ
3,3'-DICHLOROBENZIDINE	110 UJ	1200 UJ	420 UJ	3300 UJ	970 UJ	660 UJ
3-NITROANILINE	94 UJ	1000 UJ	370 UJ	3000 UJ	860 UJ	590 UJ
4,6-DINITRO-2-METHYLPHENOL	54 UJ	590 UJ	210 UJ	1700 UJ	500 UJ	340 UJ
4-BROMOPHENYL PHENYL ETHER	76 UJ	830 UJ	300 UJ	2400 UJ	700 UJ	480 UJ
4-CHLORO-3-METHYLPHENOL	120 UJ	1300 UJ	490 UJ	3900 UJ	1100 UJ	780 UJ
4-CHLOROANILINE	100 UJ	1100 UJ	390 UJ	3100 UJ	920 UJ	630 UJ
4-CHLOROPHENYL PHENYL ETHER	76 UJ	830 UJ	300 UJ	2400 UJ	700 UJ	480 UJ
4-NITROANILINE	150 UJ	1700 UJ	600 UJ	4800 UJ	1400 UJ	960 UJ
4-NITROPHENOL	100 UJ	1100 UJ	390 UJ	3100 UJ	920 UJ	630 UJ
ACENAPHTHENE	4.5 UJ	49 UJ	18 UJ	5300 J	41 UJ	2400 J
ACENAPHTHYLENE	2.1 UJ	22 UJ	8.1 UJ	65 UJ	19 UJ	13 UJ
ACETOPHENONE	54 UJ	590 UJ	210 UJ	1700 UJ	500 UJ	340 UJ
ANTHRACENE	74 J	50 UJ	18 UJ	140 UJ	42 UJ	29 UJ
ATRAZINE	54 UJ	580 UJ	210 UJ	1700 UJ	490 UJ	340 UJ
BAP EQUIVALENT-HALFND	623.77	129.855	419.37	5364.2	993.9	1233.1
BAP EQUIVALENT-POS	623.77	85	411.87	5304.2	975.9	1221.1
BENZALDEHYDE	75 J	770 UJ	280 UJ	2200 UJ	650 UJ	440 UJ
BENZO(A)ANTHRACENE	370 J	40 UJ	400 J	4500 J	950 J	1700 J
BENZO(A)PYRENE	420 J	41 UJ	290 J	4100 J	700 J	770 J
BENZO(B)FLUORANTHENE	610 J	850 J	580 J	5200 J	1300 J	2100 J

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EP1-SD15	EP1-SD15	EP1-SD16	EP1-SD16	EP1-SD17	EP1-SD17
SAMPLE ID	EP1-SD15-0-1	EP1-SD15-1-2	EP1-SD16-0-1	EP1-SD16-1-2	EP1-SD17-0-1	EP1-SD17-1-2
SAMPLE DATE	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013
BENZO(G,H,I)PERYLENE	300 J	22 UJ	230 J	2500 J	560 J	670 J
BENZO(K)FLUORANTHENE	230 J	44 UJ	240 J	2000 J	370 J	790 J
BIS(2-CHLOROETHOXY)METHANE	130 UJ	1400 UJ	510 UJ	4100 UJ	1200 UJ	810 J
BIS(2-CHLOROETHYL)ETHER	12 UJ	130 UJ	46 UJ	370 UJ	110 UJ	74 UJ
BIS(2-ETHYLHEXYL)PHTHALATE	380 J	2800 J	1900 J	38000 J	5400 J	15000 J
BUTYL BENZYL PHTHALATE	59 UJ	640 UJ	230 UJ	1800 UJ	540 UJ	370 UJ
CAPROLACTAM	220 UJ	2400 UJ	860 UJ	6800 UJ	2000 UJ	1400 UJ
CARBAZOLE	160 UJ	1700 UJ	630 UJ	5000 UJ	1500 UJ	1000 UJ
CHRYSENE	470 J	70 UJ	470 J	4200 J	1200 J	2200 J
DIBENZO(A,H)ANTHRACENE	76 J	42 UJ	15 UJ	120 UJ	36 UJ	24 UJ
DIBENZOFURAN	3.9 UJ	42 UJ	15 UJ	5100 J	36 UJ	3700 J
DIETHYL PHTHALATE	94 UJ	1000 UJ	370 UJ	3000 UJ	860 UJ	590 UJ
DIMETHYL PHTHALATE	100 UJ	1100 UJ	390 UJ	3100 UJ	920 UJ	630 UJ
DI-N-BUTYL PHTHALATE	170 B	1200 B	820 B	20000 B	1300 B	13000 J
DI-N-OCTYL PHTHALATE	46 UJ	510 UJ	180 UJ	1500 UJ	430 UJ	290 UJ
FLUORANTHENE	740 J	1500 J	1000 J	8900 J	2200 J	5600 J
FLUORENE	35 J	560 J	270 J	4600 J	630 J	1900 J
HEXACHLOROBENZENE	12 UJ	130 UJ	49 UJ	390 UJ	110 UJ	78 UJ
HEXACHLOROBUTADIENE	33 UJ	360 UJ	130 UJ	1000 UJ	300 UJ	210 UJ
HEXACHLOROCYCLOPENTADIENE	48 UJ	520 UJ	190 UJ	1500 UJ	440 UJ	300 UJ
HEXACHLOROETHANE	53 UJ	580 UJ	210 UJ	1700 UJ	490 UJ	330 UJ
INDENO(1,2,3-CD)PYRENE	270 J	22 UJ	210 J	2100 J	460 J	610 J
ISOPHORONE	76 UJ	830 UJ	300 UJ	2400 UJ	700 UJ	480 UJ
NAPHTHALENE	51 J	2000 J	800 J	66000 J	1000 J	28000 J
NITROBENZENE	13 UJ	140 UJ	51 UJ	410 UJ	120 UJ	81 UJ
N-NITROSODIMETHYLAMINE	94 UJ	1000 UJ	370 UJ	3000 UJ	860 UJ	590 UJ
N-NITROSO-DI-N-PROPYLAMINE	37 UJ	400 UJ	150 UJ	1200 UJ	340 UJ	230 UJ
N-NITROSODIPHENYLAMINE	120 UJ	1300 UJ	490 UJ	3900 UJ	1100 UJ	780 UJ
PENTACHLOROPHENOL	54 UJ	580 UJ	210 UJ	1700 UJ	490 UJ	340 UJ
PHENANTHRENE	240 J	2500 J	1200 J	21000 J	2700 J	9200 J
PHENOL	43 UJ	470 UJ	170 UJ	1300 UJ	390 UJ	1800 UJ
PYRENE	620 J	1300 J	880 J	7800 J	2000 J	4000 J
PCBS (UG/KG)						
AROCLOR-1016	130 UJ	130 UJ	97 UJ	190 UJ	110 UJ	78 UJ
AROCLOR-1221	96 UJ	100 UJ	74 UJ	150 UJ	85 UJ	60 UJ
AROCLOR-1232	84 UJ	90 UJ	65 UJ	130 UJ	75 UJ	52 UJ
AROCLOR-1242	78 UJ	83 UJ	60 UJ	120 UJ	69 UJ	49 UJ

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EP1-SD15	EP1-SD15	EP1-SD16	EP1-SD16	EP1-SD17	EP1-SD17
SAMPLE ID	EP1-SD15-0-1	EP1-SD15-1-2	EP1-SD16-0-1	EP1-SD16-1-2	EP1-SD17-0-1	EP1-SD17-1-2
SAMPLE DATE	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013
AROCLOR-1248	100 UJ	110 UJ	79 UJ	160 UJ	91 UJ	63 UJ
AROCLOR-1254	100 UJ	110 UJ	79 UJ	160 UJ	340 J	63 UJ
AROCLOR-1260	100 UJ	550 J	260 J	850 J	91 UJ	890 J
TOTAL AROCLOR	0 U	550	260	850	340	890
TOTAL AROCLOR HALFND	344	861.5	487	1305	600.5	1072.5
METALS (MG/KG)						
ANTIMONY	4.6 J	11 UJ	7.1 UJ	30 UJ	1.8 UJ	6 J
ARSENIC	18 J	35 J	13 J	28 J	23 J	17 J
BARIUM	85 J	200 J	100 J	440 J	120 J	480 J
BERYLLIUM	1.2 J	1.2 UJ	0.84 J	3.3 UJ	1.2 J	0.82 J
CADMIUM	220 J	3400 J	820 J	530 J	1800 J	250 J
CHROMIUM	2500 J	36000 J	20000 J	78000 J	21000 J	36000 J
COBALT	11 J	17 J	7 J	12 UJ	13 J	1.7 J
COPPER	160 J	1200 J	410 J	10000 J	730 J	350 J
LEAD	190 J	870 J	200 J	1700 J	300 J	1100 J
MERCURY	0.23 J	0.77 J	0.26 J	6.9 J	0.30 J	2.5 J
MOLYBDENUM	6.5 J	25 J	7.2 J	180 J	12 J	59 J
NICKEL	61 J	290 J	63 J	1000 J	130 J	95 J
SELENIUM	2.5 UJ	13 UJ	8.2 UJ	35 UJ	2.1 UJ	1.4 UJ
SILVER	0.72 J	3.6 J	1.8 UJ	34 J	1.4 J	2.4 J
THALLIUM	3 UJ	16 UJ	10 UJ	42 UJ	4 J	7.2 J
VANADIUM	59 J	60 J	39 J	150 J	54 J	69 J
ZINC	680 J	4200 J	670 J	950 J	1500 J	310 J
PETROLEUM HYDROCARBONS (MG/KG)						
TPH (C06-C10)	4.9 J	83 J	58 J	2800 J	110 J	2200 J
TPH (C10-C32)	1100 J	17000 J	5600 J	39000 J	11000 J	29000 J

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EP1-SD18	EP1-SD18	EWT-SD1	EWT-SD1	EWT-SD2	EWT-SD2
SAMPLE ID	EP1-SD18-0-1	EP1-SD18-1-2	EWT-SD1-0-1	EWT-SD1-1-2	EWT-SD2-0-1	EWT-SD2-1-2
SAMPLE DATE	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013
VOLATILES (UG/KG)						
1,1,1,2-TETRACHLOROETHANE	4.8 UJ	57 UJ	1.3 U	1.2 U	1.3 U	1.3 U
1,1,1-TRICHLOROETHANE	4.4 UJ	130 UJ	1.1 U	1.1 U	1.2 U	1.2 U
1,1,2,2-TETRACHLOROETHANE	2.6 UJ	56 UJ	0.69 U	0.64 U	0.74 U	0.74 U
1,1,2-TRICHLOROTRIFLUOROETHANE	10 UJ	250 UJ	2.6 U	2.4 U	2.8 U	2.8 U
1,1-DICHLOROETHANE	2.8 UJ	110 UJ	0.73 U	0.68 U	0.78 U	0.78 U
1,1-DICHLOROETHENE	4.1 UJ	110 UJ	1.1 U	0.98 U	1.1 U	1.1 U
1,1-DICHLOROPROPENE	2.3 UJ	63 UJ	0.61 U	0.56 U	0.65 U	0.65 U
1,2,3-TRICHLOROBENZENE	3 UJ	63 UJ	0.77 U	0.71 U	0.83 U	0.82 U
1,2,3-TRICHLOROPROPANE	7 UJ	130 UJ	1.8 U	1.7 U	2 U	1.9 U
1,2,3-TRIMETHYLBENZENE	59 J	170 J	0.35 U	0.32 U	0.37 U	0.37 U
1,2,4-TRICHLOROBENZENE	2.1 UJ	46 UJ	0.55 U	0.51 U	0.59 U	0.58 U
1,2,4-TRIMETHYLBENZENE	120 J	350 J	1.3 U	1.2 U	1.4 U	1.4 U
1,2-DIBROMO-3-CHLOROPROPANE	10 UJ	310 UJ	2.6 U	2.4 U	2.8 U	2.8 U
1,2-DIBROMOETHANE	3.9 UJ	63 UJ	1 U	0.94 U	1.1 U	1.1 U
1,2-DICHLOROBENZENE	34 J	55 J	0.73 U	0.68 U	0.78 U	0.78 U
1,2-DICHLOROETHANE	2.6 UJ	63 UJ	0.69 U	0.64 U	0.74 U	0.74 U
1,2-DICHLOROPROPANE	5.4 UJ	52 UJ	1.4 U	1.3 U	1.5 U	1.5 U
1,3-DICHLOROBENZENE	2.7 UJ	30 UJ	0.71 U	0.66 U	0.76 U	0.76 U
1,3-DICHLOROPROPANE	2.6 UJ	140 UJ	0.69 U	0.64 U	0.74 U	0.74 U
1,4-DICHLOROBENZENE	9.5 J	50 UJ	1.3 U	1.2 U	1.4 U	1.4 U
2,2-DICHLOROPROPANE	7.3 UJ	140 UJ	1.9 U	1.8 U	2 U	2 U
2-BUTANONE	100 J	270 UJ	15 J	2.6 U	27 J	3 U
2-CHLOROETHYL VINYL ETHER	11 UJ	270 UJ	2.8 U	2.6 U	3 U	3 U
2-CHLOROTOLUENE	3.1 UJ	57 UJ	0.81 U	0.75 U	0.87 U	0.87 U
2-HEXANONE	4.9 UJ	130 UJ	1.3 U	1.2 U	1.4 U	1.4 U
4-CHLOROTOLUENE	3.2 UJ	62 UJ	0.83 U	0.77 U	0.89 U	0.89 U
4-ISOPROPYLTOLUENE	12 J	50 J	0.43 U	0.39 U	0.46 U	0.45 U
4-METHYL-2-PENTANONE	4.2 UJ	300 UJ	1.1 U	1 U	1.2 U	1.2 U
ACETONE	540 J	1100 UJ	91 J	12 U	120 J	23 J
BENZENE	7.1 J	75 UJ	0.47 U	0.43 U	0.50 U	0.50 U
BROMOBENZENE	2.6 UJ	82 UJ	0.67 U	0.62 U	0.72 U	0.71 U
BROMOCHLOROMETHANE	5.5 UJ	82 UJ	1.4 U	1.3 U	1.5 U	1.5 U
BROMODICHLOROMETHANE	2.2 UJ	62 UJ	0.57 U	0.53 U	0.61 U	0.61 U
BROMOFORM	2.6 UJ	120 UJ	0.67 U	0.62 U	0.72 U	0.71 U
BROMOMETHANE	4.2 UJ	180 UJ	1.1 U	1 U	1.2 U	1.2 U
CARBON DISULFIDE	51 J	95 J	0.89 U	0.83 U	0.96 U	0.95 U

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EP1-SD18	EP1-SD18	EWT-SD1	EWT-SD1	EWT-SD2	EWT-SD2
SAMPLE ID	EP1-SD18-0-1	EP1-SD18-1-2	EWT-SD1-0-1	EWT-SD1-1-2	EWT-SD2-0-1	EWT-SD2-1-2
SAMPLE DATE	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013
CARBON TETRACHLORIDE	2.9 UJ	40 UJ	0.75 U	0.70 U	0.80 U	0.80 U
CHLOROBENZENE	1100 J	1400 J	0.67 U	0.62 U	0.72 U	0.71 U
CHLORODIBROMOMETHANE	4.3 UJ	75 UJ	1.1 U	1 U	1.2 U	1.2 U
CHLOROETHANE	6.7 UJ	380 UJ	1.7 U	1.6 U	1.9 U	1.9 U
CHLOROFORM	2.3 UJ	55 UJ	0.59 U	0.54 U	0.63 U	0.63 U
CHLOROMETHANE	3.2 UJ	88 UJ	0.83 U	0.77 U	0.89 U	0.89 U
CIS-1,2-DICHLOROETHENE	23 J	120 J	0.73 U	0.68 U	0.78 U	0.78 U
CIS-1,3-DICHLOROPROPENE	2.6 UJ	50 UJ	0.69 U	0.64 U	0.74 U	0.74 U
DIBROMOMETHANE	4.9 UJ	88 UJ	1.3 U	1.2 U	1.4 U	1.4 U
DICHLORODIFLUOROMETHANE	3.9 UJ	100 UJ	1 U	0.94 U	1.1 U	1.1 U
DIISOPROPYL ETHER	12 UJ	310 UJ	3 U	2.8 U	3.3 U	3.2 U
ETHYL TERT-BUTYL ETHER	1.7 UJ	1.4 UJ	0.45 U	0.41 U	0.48 U	0.48 U
ETHYLBENZENE	59 J	280 J	0.53 U	0.49 U	0.56 U	0.56 U
HEXACHLOROBUTADIENE	9.3 UJ	88 UJ	2.4 U	2.3 U	2.6 U	2.6 U
ISOPROPYLBENZENE	150 J	230 J	0.32 U	0.30 U	0.35 U	0.35 U
M+P-XYLENES	470 J	1600 J	2.4 U	2.3 U	2.6 U	2.6 U
METHYL TERT-BUTYL ETHER	3.3 UJ	45 UJ	0.87 U	0.81 U	0.93 U	0.93 U
METHYLENE CHLORIDE	5.2 UJ	480 UJ	6.1 B	3.6 B	5.8 B	7 B
NAPHTHALENE	21 J	160 B	0.39 U	0.36 U	0.41 U	0.41 U
N-BUTYLBENZENE	68 J	140 J	0.47 U	0.43 U	0.50 U	0.50 U
N-PROPYLBENZENE	300 J	320 J	0.81 U	0.75 U	0.87 U	0.87 U
O-XYLENE	180 J	730 J	0.71 U	0.66 U	0.76 U	0.76 U
SEC-BUTYLBENZENE	59 J	94 J	0.37 U	0.34 U	0.39 U	0.39 U
STYRENE	1.2 UJ	35 UJ	0.30 U	0.28 U	0.33 U	0.32 U
TERT-AMYL METHYL ETHER	2.9 UJ	2.3 UJ	0.75 U	0.70 U	0.80 U	0.80 U
TERT-BUTYLBENZENE	15 J	41 UJ	0.59 U	0.54 U	0.63 U	0.63 U
TERTIARY-BUTYL ALCOHOL	59 UR	1500 UR	15 UR	14 UR	17 UR	16 UR
TETRACHLOROETHENE	4.1 UJ	75 UJ	1.1 U	0.98 U	1.1 U	1.1 U
TOLUENE	200 J	1900 J	0.55 U	0.51 U	0.59 U	0.58 U
TOTAL XYLENES	650 J	2300 J	0.71 U	0.66 U	0.76 U	0.76 U
TRANS-1,2-DICHLOROETHENE	7.7 J	96 J	0.83 U	0.77 U	0.98 J	0.89 U
TRANS-1,3-DICHLOROPROPENE	4.2 UJ	130 UJ	1.1 U	1 U	1.2 U	1.2 U
TRICHLOROETHENE	180 J	2400 J	0.85 U	0.79 U	0.91 U	0.91 U
TRICHLOROFLUOROMETHANE	2.6 UJ	100 UJ	0.69 U	0.64 U	0.74 U	0.74 U
VINYL ACETATE	1.9 UR	140 UR	0.51 UR	0.47 UR	0.54 UR	0.54 UR
VINYL CHLORIDE	3 UJ	110 UJ	0.79 U	0.73 U	0.85 U	0.84 U
SEMIVOLATILES (UG/KG)						

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EP1-SD18	EP1-SD18	EWT-SD1	EWT-SD1	EWT-SD2	EWT-SD2
SAMPLE ID	EP1-SD18-0-1	EP1-SD18-1-2	EWT-SD1-0-1	EWT-SD1-1-2	EWT-SD2-0-1	EWT-SD2-1-2
SAMPLE DATE	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013
1,1-BIPHENYL	18 UJ	160 UJ	7.4 U	6.6 U	7.7 U	7 U
1,4-DIOXANE	110 UJ	1000 UJ	47 U	42 U	49 U	44 U
2,2'-OXYBIS(1-CHLOROPROPANE)	49 UJ	430 UJ	20 U	18 U	21 U	19 U
2,4,5-TRICHLOROPHENOL	130 UJ	1100 UJ	53 U	47 U	55 U	50 U
2,4,6-TRICHLOROPHENOL	46 UJ	410 UJ	19 U	17 U	20 U	18 U
2,4-DICHLOROPHENOL	100 UJ	910 UJ	42 U	38 U	44 U	40 U
2,4-DIMETHYLPHENOL	100 UJ	910 UJ	42 U	38 U	44 U	40 U
2,4-DINITROPHENOL	110 UJ	960 UJ	45 U	40 U	46 U	42 U
2,4-DINITROTOLUENE	87 UJ	780 UJ	36 U	32 U	38 U	34 U
2,6-DINITROTOLUENE	110 UJ	960 UJ	45 U	40 U	46 U	42 U
2-CHLORONAPHTHALENE	2.3 UJ	21 UJ	0.96 U	0.85 U	1 U	0.90 U
2-CHLOROPHENOL	42 UJ	370 UJ	17 U	15 U	18 U	16 U
2-METHYLNAPHTHALENE	19 J	700 J	1.1 U	0.94 U	1.1 U	13
2-METHYLPHENOL	57 UJ	500 UJ	23 U	21 U	24 U	22 U
2-NITROANILINE	47 UJ	420 UJ	19 U	17 U	20 U	18 U
2-NITROPHENOL	43 UJ	380 UJ	18 U	16 U	18 U	17 U
3&4-METHYLPHENOL	100 UJ	910 UJ	42 U	38 U	44 U	40 U
3,3'-DICHLOROBENZIDINE	93 UJ	820 UJ	38 U	34 U	40 U	36 U
3-NITROANILINE	82 UJ	730 UJ	34 U	30 U	35 U	32 U
4,6-DINITRO-2-METHYLPHENOL	47 UJ	420 UJ	20 U	17 U	20 U	18 U
4-BROMOPHENYL PHENYL ETHER	67 UJ	590 UJ	28 U	25 U	29 U	26 U
4-CHLORO-3-METHYLPHENOL	110 UJ	960 UJ	45 U	40 U	46 U	42 U
4-CHLOROANILINE	87 UJ	780 UJ	36 U	32 U	38 U	34 U
4-CHLOROPHENYL PHENYL ETHER	67 UJ	590 UJ	28 U	25 U	29 U	26 U
4-NITROANILINE	130 UJ	1200 UJ	55 U	49 U	57 U	52 U
4-NITROPHENOL	87 UJ	780 UJ	36 U	32 U	38 U	34 U
ACENAPHTHENE	3.9 UJ	35 UJ	1.6 U	1.4 U	1.7 U	1.5 U
ACENAPHTHYLENE	1.8 UJ	16 UJ	14	7.2 J	14 J	20
ACETOPHENONE	47 UJ	420 UJ	20 U	17 U	20 U	18 U
ANTHRACENE	60 J	36 UJ	30	19	24	32
ATRAZINE	47 UJ	420 UJ	19 U	17 U	20 U	18 U
BAP EQUIVALENT-HALFND	305.24	818.275	257.97	138.759	207.91	277.23
BAP EQUIVALENT-POS	303.54	801.8	257.97	138.759	207.91	277.23
BENZALDEHYDE	62 UJ	550 UJ	61 J	26 J	77 J	24 UL
BENZO(A)ANTHRACENE	240 J	29 UJ	150	90	120	170
BENZO(A)PYRENE	230 J	640 J	170	92	130	170
BENZO(B)FLUORANTHENE	330 J	1100 J	250	130	220	300

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EP1-SD18	EP1-SD18	EWT-SD1	EWT-SD1	EWT-SD2	EWT-SD2
SAMPLE ID	EP1-SD18-0-1	EP1-SD18-1-2	EWT-SD1-0-1	EWT-SD1-1-2	EWT-SD2-0-1	EWT-SD2-1-2
SAMPLE DATE	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013
BENZO(G,H,I)PERYLENE	180 J	540 J	140	77	120	180
BENZO(K)FLUORANTHENE	130 J	380 J	79	46	75	100
BIS(2-CHLOROETHOXY)METHANE	110 UJ	1000 UJ	47 U	42 U	49 U	44 U
BIS(2-CHLOROETHYL)ETHER	10 UJ	91 UJ	4.2 U	3.8 U	4.4 U	4 U
BIS(2-ETHYLHEXYL)PHTHALATE	220 J	4800 J	40 U	36 U	42 U	38 U
BUTYL BENZYL PHTHALATE	51 UJ	460 UJ	21 U	19 U	22 U	20 U
CAPROLACTAM	190 UJ	1700 UJ	79 U	70 U	82 U	74 U
CARBAZOLE	140 UJ	1200 UJ	57 U	51 U	60 U	54 U
CHRYSENE	240 J	50 UJ	180	99	160	230
DIBENZO(A,H)ANTHRACENE	3.4 UJ	30 UJ	35	18	32	44
DIBENZOFURAN	3.4 UJ	30 UJ	1.4 U	8.4 J	7.9 J	13 J
DIETHYL PHTHALATE	82 UJ	730 UJ	34 U	30 U	35 U	32 U
DIMETHYL PHTHALATE	87 UJ	780 UJ	36 U	32 U	38 U	34 U
DI-N-BUTYL PHTHALATE	190 B	680 UJ	85 B	54 B	110 B	110 B
DI-N-OCTYL PHTHALATE	41 UJ	360 UJ	17 U	15 U	17 U	16 U
FLUORANTHENE	450 J	1800 J	270	150	210	260
FLUORENE	34 J	24 UJ	10 J	1 U	1.2 U	1.1 U
HEXACHLOROBENZENE	11 UJ	96 UJ	4.5 U	4 U	4.6 U	4.2 U
HEXACHLOROBUTADIENE	29 UJ	260 UJ	12 U	11 U	12 U	11 U
HEXACHLOROCYCLOPENTADIENE	42 UJ	370 UJ	17 U	15 U	18 U	16 U
HEXACHLOROETHANE	46 UJ	410 UJ	19 U	17 U	20 U	18 U
INDENO(1,2,3-CD)PYRENE	150 J	480 J	120	62	110	150
ISOPHORONE	67 UJ	590 UJ	28 U	25 U	29 U	26 U
NAPHTHALENE	22 J	380 J	15	12 J	14 J	16
NITROBENZENE	11 UJ	100 UJ	4.7 U	4.2 U	4.9 U	4.4 U
N-NITROSODIMETHYLAMINE	82 UJ	730 UJ	34 U	30 U	35 U	32 U
N-NITROSO-DI-N-PROPYLAMINE	32 UJ	290 UJ	13 U	12 U	14 U	13 U
N-NITROSODIPHENYLAMINE	110 UJ	960 UJ	45 U	40 U	46 U	42 U
PENTACHLOROPHENOL	47 UJ	420 UJ	19 U	17 U	20 U	18 U
PHENANTHRENE	190 J	2100 J	110	66	82	100
PHENOL	38 UJ	330 UJ	16 U	14 U	16 U	15 U
PYRENE	380 J	1700 J	260	150	200	250
PCBS (UG/KG)						
AROCLOR-1016	110 UJ	190 UJ	45 U	40 U	48 U	42 U
AROCLOR-1221	83 UJ	140 UJ	34 U	30 U	36 U	32 U
AROCLOR-1232	73 UJ	130 UJ	30 U	26 U	32 U	28 U
AROCLOR-1242	68 UJ	120 UJ	28 U	25 U	29 U	26 U

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EP1-SD18	EP1-SD18	EWT-SD1	EWT-SD1	EWT-SD2	EWT-SD2
SAMPLE ID	EP1-SD18-0-1	EP1-SD18-1-2	EWT-SD1-0-1	EWT-SD1-1-2	EWT-SD2-0-1	EWT-SD2-1-2
SAMPLE DATE	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013
AROCLOR-1248	88 UJ	150 UJ	36 U	32 U	38 U	34 U
AROCLOR-1254	88 UJ	1500 J	36 U	32 U	38 U	34 U
AROCLOR-1260	88 UJ	150 UJ	36 U	32 U	38 U	170
TOTAL AROCLOR	0 U	1500	0 U	0 U	0 U	170
TOTAL AROCLOR HALFND	299	1940	122.5	108.5	129.5	268
METALS (MG/KG)						
ANTIMONY	1.7 UJ	1.8 UJ	1.1 J	0.63 UL	0.93 J	1 J
ARSENIC	15 J	24 J	6 J	4.8 J	5.5 J	12 J
BARIUM	74 J	150 J	85	40	100	72
BERYLLIUM	0.99 J	1 J	0.74 J	1.1	0.44 J	2.1
CADMIUM	630 J	2300 J	3.3	2.6	3	0.92 J
CHROMIUM	4300 J	22000 J	62	59	48	86
COBALT	8.5 J	13 J	9.2	8.2	4.8	8.9
COPPER	230 J	1100 J	49	25	39	60
LEAD	120 J	410 J	57 J	44 J	53 J	91 J
MERCURY	0.19 J	0.23 J	0.45	0.27	0.29	0.83
MOLYBDENUM	4 J	15 J	4.3 J	1.4 J	6.2 J	5.8 J
NICKEL	60 J	140 J	22	19	13	26
SELENIUM	1.9 UJ	2.1 UJ	0.90 J	0.73 U	1.1 J	0.88 U
SILVER	0.90 J	2 J	0.71 J	0.17 J	0.76 J	1.3 J
THALLIUM	2.4 UJ	4.1 J	0.90 U	0.89 U	1.1 U	1.1 U
VANADIUM	41 J	51 J	43 J	32 J	42 J	81 J
ZINC	770 J	2200 J	210	82	140	300
PETROLEUM HYDROCARBONS (MG/KG)						
TPH (C06-C10)	9.3 J	46 J	0.097 U	0.081 U	0.10 U	0.09 U
TPH (C10-C32)	500 J	12000 J	47 J	20 J	52 J	71 J

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EWT-SD3	EWT-SD3
SAMPLE ID	EWT-SD3-0-1	EWT-SD3-1-2
SAMPLE DATE	10/15/2013	10/15/2013
VOLATILES (UG/KG)		
1,1,1,2-TETRACHLOROETHANE	1.5 U	0.81 U
1,1,1-TRICHLOROETHANE	1.4 U	0.73 U
1,1,2,2-TETRACHLOROETHANE	0.83 U	0.44 U
1,1,2-TRICHLOROTRIFLUOROETHANE	3.2 U	1.7 U
1,1-DICHLOROETHANE	0.88 U	0.47 U
1,1-DICHLOROETHENE	1.3 U	0.68 U
1,1-DICHLOROPROPENE	0.73 U	0.39 U
1,2,3-TRICHLOROBENZENE	0.92 U	0.50 U
1,2,3-TRICHLOROPROPANE	2.2 U	1.2 U
1,2,3-TRIMETHYLBENZENE	0.41 U	0.22 U
1,2,4-TRICHLOROBENZENE	0.66 U	0.35 U
1,2,4-TRIMETHYLBENZENE	1.6 U	0.85 U
1,2-DIBROMO-3-CHLOROPROPANE	3.2 U	1.7 U
1,2-DIBROMOETHANE	1.2 U	0.65 U
1,2-DICHLOROBENZENE	0.88 U	0.47 U
1,2-DICHLOROETHANE	0.83 U	0.44 U
1,2-DICHLOROPROPANE	1.7 U	0.90 U
1,3-DICHLOROBENZENE	0.85 U	0.46 U
1,3-DICHLOROPROPANE	0.83 U	0.44 U
1,4-DICHLOROBENZENE	1.6 U	0.86 U
2,2-DICHLOROPROPANE	2.3 U	1.2 U
2-BUTANONE	3.4 U	7 J
2-CHLOROETHYL VINYL ETHER	3.4 U	1.8 U
2-CHLOROTOLUENE	0.97 U	0.52 U
2-HEXANONE	1.5 U	0.82 U
4-CHLOROTOLUENE	1 U	0.54 UL
4-ISOPROPYLTOLUENE	0.51 U	0.27 U
4-METHYL-2-PENTANONE	1.3 U	0.71 U
ACETONE	15 U	83 J
BENZENE	0.56 U	0.30 U
BROMOBENZENE	0.80 U	0.43 U
BROMOCHLOROMETHANE	1.7 U	0.93 U
BROMODICHLOROMETHANE	0.68 U	0.37 U
BROMOFORM	0.80 U	0.43 U
BROMOMETHANE	1.3 U	0.71 U
CARBON DISULFIDE	1.1 U	0.58 U

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EWT-SD3	EWT-SD3
SAMPLE ID	EWT-SD3-0-1	EWT-SD3-1-2
SAMPLE DATE	10/15/2013	10/15/2013
CARBON TETRACHLORIDE	0.90 U	0.48 U
CHLOROBENZENE	0.80 U	0.43 UL
CHLORODIBROMOMETHANE	1.3 U	0.72 U
CHLOROETHANE	2.1 U	1.1 U
CHLOROFORM	0.71 U	0.38 U
CHLOROMETHANE	1 U	0.54 U
CIS-1,2-DICHLOROETHENE	0.88 U	0.47 U
CIS-1,3-DICHLOROPROPENE	0.83 U	0.44 U
DIBROMOMETHANE	1.5 U	0.82 U
DICHLORODIFLUOROMETHANE	1.2 U	0.65 U
DIISOPROPYL ETHER	3.6 U	2 U
ETHYL TERT-BUTYL ETHER	0.54 U	0.29 U
ETHYLBENZENE	0.63 U	0.34 U
HEXACHLOROBUTADIENE	2.9 U	1.6 UL
ISOPROPYLBENZENE	0.39 U	0.21 UL
M+P-XYLENES	2.9 U	1.6 UL
METHYL TERT-BUTYL ETHER	1 U	0.56 U
METHYLENE CHLORIDE	13 B	5.1 B
NAPHTHALENE	0.46 U	0.25 U
N-BUTYLBENZENE	0.56 U	0.30 UL
N-PROPYLBENZENE	0.97 U	0.52 U
O-XYLENE	0.85 U	0.46 UL
SEC-BUTYLBENZENE	0.44 U	0.24 U
STYRENE	0.36 U	0.20 UL
TERT-AMYL METHYL ETHER	0.90 U	0.48 U
TERT-BUTYLBENZENE	0.71 U	0.38 U
TERTIARY-BUTYL ALCOHOL	18 UR	9.9 UR
TETRACHLOROETHENE	1.3 U	0.68 UL
TOLUENE	0.66 U	0.35 UL
TOTAL XYLENES	0.85 U	0.46 UL
TRANS-1,2-DICHLOROETHENE	1.4 J	0.80 J
TRANS-1,3-DICHLOROPROPENE	1.3 U	0.71 U
TRICHLOROETHENE	1 U	0.55 U
TRICHLOROFLUOROMETHANE	0.83 U	0.44 U
VINYL ACETATE	0.61 UR	0.33 UR
VINYL CHLORIDE	0.95 U	0.51 U
SEMIVOLATILES (UG/KG)		

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EWT-SD3	EWT-SD3
SAMPLE ID	EWT-SD3-0-1	EWT-SD3-1-2
SAMPLE DATE	10/15/2013	10/15/2013
1,1-BIPHENYL	8.2 U	5.3 U
1,4-DIOXANE	52 U	33 U
2,2'-OXYBIS(1-CHLOROPROPANE)	22 U	14 U
2,4,5-TRICHLOROPHENOL	59 U	38 U
2,4,6-TRICHLOROPHENOL	21 U	13 U
2,4-DICHLOROPHENOL	47 U	30 U
2,4-DIMETHYLPHENOL	47 U	30 U
2,4-DINITROPHENOL	49 U	32 U
2,4-DINITROTOLUENE	40 U	26 U
2,6-DINITROTOLUENE	49 U	32 U
2-CHLORONAPHTHALENE	1.1 U	0.68 U
2-CHLOROPHENOL	19 U	12 U
2-METHYLNAPHTHALENE	1.2 U	0.75 U
2-METHYLPHENOL	26 U	17 U
2-NITROANILINE	21 U	14 U
2-NITROPHENOL	19 U	12 U
3&4-METHYLPHENOL	47 U	30 U
3,3'-DICHLOROBENZIDINE	42 U	27 U
3-NITROANILINE	37 U	24 U
4,6-DINITRO-2-METHYLPHENOL	22 U	14 U
4-BROMOPHENYL PHENYL ETHER	30 U	20 U
4-CHLORO-3-METHYLPHENOL	49 U	32 U
4-CHLOROANILINE	40 U	26 U
4-CHLOROPHENYL PHENYL ETHER	30 U	20 U
4-NITROANILINE	61 U	39 U
4-NITROPHENOL	40 U	26 U
ACENAPHTHENE	1.8 U	1.1 U
ACENAPHTHYLENE	12 J	0.53 U
ACETOPHENONE	22 U	14 U
ANTHRACENE	22	1.2 U
ATRAZINE	21 U	14 U
BAP EQUIVALENT-HALFND	146	23.307
BAP EQUIVALENT-POS	145.25	22.812
BENZALDEHYDE	28 UL	18 UL
BENZO(A)ANTHRACENE	100	21
BENZO(A)PYRENE	110	16
BENZO(B)FLUORANTHENE	180	33

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EWT-SD3	EWT-SD3
SAMPLE ID	EWT-SD3-0-1	EWT-SD3-1-2
SAMPLE DATE	10/15/2013	10/15/2013
BENZO(G,H,I)PERYLENE	84	15
BENZO(K)FLUORANTHENE	62	9.1 J
BIS(2-CHLOROETHOXY)METHANE	52 U	33 U
BIS(2-CHLOROETHYL)ETHER	4.7 U	3 U
BIS(2-ETHYLHEXYL)PHTHALATE	44 U	29 U
BUTYL BENZYL PHTHALATE	23 U	15 U
CAPROLACTAM	87 U	56 U
CARBAZOLE	63 U	41 U
CHRYSENE	130	21
DIBENZO(A,H)ANTHRACENE	1.5 U	0.99 U
DIBENZOFURAN	1.5 U	0.99 U
DIETHYL PHTHALATE	37 U	24 U
DIMETHYL PHTHALATE	40 U	26 U
DI-N-BUTYL PHTHALATE	140 B	69 B
DI-N-OCTYL PHTHALATE	19 U	12 U
FLUORANTHENE	210	37
FLUORENE	9.6 J	0.80 U
HEXACHLOROBENZENE	4.9 U	3.2 U
HEXACHLOROBUTADIENE	13 U	8.4 U
HEXACHLOROCYCLOPENTADIENE	19 U	12 UL
HEXACHLOROETHANE	21 U	14 U
INDENO(1,2,3-CD)PYRENE	65	13
ISOPHORONE	30 U	20 U
NAPHTHALENE	1.9 U	1.2 U
NITROBENZENE	5.2 U	3.3 U
N-NITROSODIMETHYLAMINE	37 U	24 U
N-NITROSO-DI-N-PROPYLAMINE	15 U	9.5 U
N-NITROSODIPHENYLAMINE	49 U	32 U
PENTACHLOROPHENOL	21 U	14 U
PHENANTHRENE	100	17
PHENOL	17 U	11 U
PYRENE	190	31
PCBS (UG/KG)		
AROCLOR-1016	50 U	31 U
AROCLOR-1221	38 U	24 U
AROCLOR-1232	33 U	21 U
AROCLOR-1242	31 U	19 U

Table D-3

Chemical Results for Sediment Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EWT-SD3	EWT-SD3
SAMPLE ID	EWT-SD3-0-1	EWT-SD3-1-2
SAMPLE DATE	10/15/2013	10/15/2013
AROCLOR-1248	40 U	25 U
AROCLOR-1254	40 U	25 U
AROCLOR-1260	40 U	25 U
TOTAL AROCLOR	0 U	0 U
TOTAL AROCLOR HALFND	136	85
METALS (MG/KG)		
ANTIMONY	0.82 UL	0.54 UL
ARSENIC	7.5 J	5.1 J
BARIUM	41 J	27 J
BERYLLIUM	1.2	0.41 J
CADMIUM	1.3	0.17 J
CHROMIUM	75	66
COBALT	5	3
COPPER	39	15
LEAD	43 J	21 J
MERCURY	0.17 J	0.2
MOLYBDENUM	3.1 J	1.2 J
NICKEL	16	8.2
SELENIUM	1.1 J	0.62 U
SILVER	0.61 J	0.43 J
THALLIUM	1.2 U	0.76 U
VANADIUM	40 J	31 J
ZINC	86	36
PETROLEUM HYDROCARBONS (MG/KG)		
TPH (C06-C10)	0.11 U	0.067 U
TPH (C10-C32)	43 J	14 UJ

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-46D MSA-MW46D-101613 10/16/2013	DR-MW-46I MSA-MW46I-101613 10/16/2013	DR-MW-46S MSA-MW46S-101613 10/16/2013	DR-MW-47D MSA-MW47D-101713 10/17/2013
VOLATILES (UG/L)				
1,1,1,2-TETRACHLOROETHANE	0.23 U	1.5 U	0.23 U	3.3 U
1,1,1-TRICHLOROETHANE	0.22 U	1.5 U	0.22 U	3.1 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	1.2 U	0.18 U	2.6 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	1.9 U	0.28 U	4 U
1,1-DICHLOROETHANE	0.15 U	1 U	1.2	2.1 U
1,1-DICHLOROETHENE	0.19 U	1.8 J	0.19 U	2.7 U
1,1-DICHLOROPROPENE	0.13 U	0.87 U	0.13 U	1.9 U
1,2,3-TRICHLOROBENZENE	0.17 U	1.1 U	0.17 U	2.4 U
1,2,3-TRICHLOROPROPANE	0.43 U	2.9 U	0.43 U	6.1 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.039 U	0.0059 U	0.084 U
1,2,4-TRICHLOROBENZENE	0.15 U	1 U	0.15 U	2.1 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.80 U	0.12 U	1.7 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	4.5 U	0.67 U	9.6 U
1,2-DIBROMOETHANE	0.24 U	1.6 U	0.24 U	3.4 U
1,2-DICHLOROBENZENE	0.13 U	0.87 U	0.13 U	1.9 U
1,2-DICHLOROETHANE	0.22 U	10	0.53 J	5.1 J
1,2-DICHLOROPROPANE	0.18 U	1.2 U	0.18 U	2.6 U
1,3-DICHLOROBENZENE	0.14 U	0.93 U	0.14 U	2 U
1,3-DICHLOROPROPANE	0.16 U	1.1 U	0.16 U	2.3 U
1,4-DICHLOROBENZENE	0.13 U	0.87 U	0.13 U	1.9 U
2,2-DICHLOROPROPANE	0.13 U	0.87 U	0.13 U	1.9 U
2-BUTANONE	0.57 U	3.8 U	0.57 U	8.1 U
2-CHLOROETHYL VINYL ETHER	0.99 U	6.6 U	0.99 U	14 U
2-CHLOROTOLUENE	0.11 U	0.73 U	0.11 U	1.6 U
2-HEXANONE	0.41 U	2.7 U	0.41 U	5.9 U
4-CHLOROTOLUENE	0.18 U	1.2 U	0.18 U	2.6 U
4-ISOPROPYLTOLUENE	0.12 U	0.80 U	0.12 U	1.7 U
4-METHYL-2-PENTANONE	0.32 U	2.1 U	0.32 U	4.6 U
ACETONE	1.1 U	7.3 U	6.2 J	16 U
BENZENE	0.22 J	1.9 J	0.13 U	1.9 U
BROMOBENZENE	0.13 U	0.87 U	0.13 U	1.9 U
BROMOCHLOROMETHANE	0.29 U	1.9 U	0.29 U	4.1 U
BROMODICHLOROMETHANE	0.15 U	1 U	0.15 U	2.1 U

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-46D MSA-MW46D-101613 10/16/2013	DR-MW-46I MSA-MW46I-101613 10/16/2013	DR-MW-46S MSA-MW46S-101613 10/16/2013	DR-MW-47D MSA-MW47D-101713 10/17/2013
BROMOFORM	0.64 U	4.3 U	0.64 U	9.1 U
BROMOMETHANE	0.41 U	2.7 U	0.41 U	5.9 U
CARBON DISULFIDE	1.2	0.87 U	0.42 J	3.5 J
CARBON TETRACHLORIDE	0.13 U	0.87 U	0.13 U	1.9 U
CHLOROBENZENE	0.52 J	25	0.20 J	2.2 J
CHLORODIBROMOMETHANE	0.18 U	1.2 U	0.18 U	2.6 U
CHLOROETHANE	0.29 U	1.9 U	0.29 U	4.1 U
CHLOROFORM	4.7	1.8 B	2 B	25 B
CHLOROMETHANE	0.30 U	2 U	0.30 U	4.3 U
CIS-1,2-DICHLOROETHENE	3.5	81	2.1	32
CIS-1,3-DICHLOROPROPENE	0.14 U	0.93 U	0.14 U	2 U
DIBROMOMETHANE	0.28 U	1.9 U	0.28 U	4 U
DICHLORODIFLUOROMETHANE	0.31 U	2.1 U	0.31 U	4.4 U
DIISOPROPYL ETHER	1.5 U	10 U	1.5 U	21 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.73 U	0.11 U	1.6 U
ETHYLBENZENE	0.17 U	1.1 U	0.17 U	2.4 U
HEXACHLOROBUTADIENE	0.30 U	2 U	0.30 U	4.3 U
ISOPROPYLBENZENE	0.13 U	0.87 U	0.13 U	1.9 U
M+P-XYLENES	0.24 U	1.6 U	0.24 U	3.4 U
METHYL TERT-BUTYL ETHER	0.17 U	1.1 U	0.17 U	2.4 U
METHYLENE CHLORIDE	0.33 U	4 B	0.33 U	4.7 U
NAPHTHALENE	0.24 U	1.6 U	0.24 U	3.4 U
N-BUTYLBENZENE	0.12 U	0.80 U	0.12 U	1.7 U
N-PROPYLBENZENE	0.14 U	0.93 U	0.14 U	2 U
O-XYLENE	0.14 U	0.93 U	0.14 U	2 U
SEC-BUTYLBENZENE	0.13 U	0.87 U	0.13 U	1.9 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	2.6 R	NA
SILANOL, TRIMETHYL-	NA	7.6 R	NA	NA
STYRENE	0.11 U	0.73 U	0.11 U	1.6 U
TERT-AMYL METHYL ETHER	0.067 U	0.45 U	0.067 U	0.96 U
TERT-BUTYLBENZENE	0.13 U	0.87 U	0.13 U	1.9 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	26 UR	3.9 UR	56 UR
TETRACHLOROETHENE	0.29 U	1.9 U	0.29 U	4.1 U

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-46D MSA-MW46D-101613 10/16/2013	DR-MW-46I MSA-MW46I-101613 10/16/2013	DR-MW-46S MSA-MW46S-101613 10/16/2013	DR-MW-47D MSA-MW47D-101713 10/17/2013
TOLUENE	0.13 U	0.87 U	0.33 J	1.9 U
TOTAL XYLENES	0.14 U	0.93 U	0.14 U	2 U
TRANS-1,2-DICHLOROETHENE	0.19 U	1.3 U	0.19 U	2.7 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	1.3 U	0.19 U	2.7 U
TRICHLOROETHENE	12	150	4.5	450
TRICHLOROFLUOROMETHANE	0.21 U	1.4 U	0.21 U	3 U
UNKNOWN	NA	NA	NA	NA
VINYL ACETATE	0.19 UR	1.3 UR	0.19 U	2.7 U
VINYL CHLORIDE	0.22 U	85	0.87 J	6.6 J
VOLATILE GASES (UG/L)				
ETHANE	NA	NA	NA	NA
METHANE	NA	NA	NA	NA
TICOV (UG/L)				
SPIRO[5.6]DODECANE	NA	NA	NA	NA
SEMIVOLATILES (UG/L)				
1,1-BIPHENYL	0.13 U	0.13 U	0.14 U	0.13 U
1,4-DIOXANE	0.48 U	21	5	12
2,2'-OXYBIS(1-CHLOROPROPANE)	0.39 U	0.40 U	0.43 U	0.41 U
2,4,5-TRICHLOROPHENOL	0.29 U	0.30 U	0.32 U	0.31 U
2,4,6-TRICHLOROPHENOL	0.24 U	0.24 U	0.26 U	0.25 U
2,4-DICHLOROPHENOL	0.19 U	0.19 U	0.20 U	0.20 U
2,4-DIMETHYLPHENOL	0.25 U	0.25 U	0.27 U	0.26 U
2,4-DINITROPHENOL	0.31 U	0.32 U	0.34 U	0.33 U
2,4-DINITROTOLUENE	0.25 U	0.25 U	0.27 U	0.26 U
2,6-DINITROTOLUENE	0.78 U	0.80 U	0.85 U	0.82 U
2-CHLORONAPHTHALENE	0.098 U	0.10 U	0.11 U	0.10 U
2-CHLOROPHENOL	0.28 U	0.29 U	0.31 U	0.30 U
2-METHYLNAPHTHALENE	0.089 U	0.09 U	0.096 U	0.093 U
2-METHYLPHENOL	0.17 U	0.17 U	0.18 U	0.18 U
2-NITROANILINE	0.21 U	0.21 U	0.22 U	0.22 U
2-NITROPHENOL	0.27 U	0.28 U	0.30 U	0.29 U
3&4-METHYLPHENOL	0.78 U	0.80 U	0.85 U	0.82 U
3,3'-DICHLOROBENZIDINE	0.36 U	0.37 U	0.39 U	0.38 U
3-NITROANILINE	0.27 U	0.28 U	0.30 U	0.29 U

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-46D MSA-MW46D-101613 10/16/2013	DR-MW-46I MSA-MW46I-101613 10/16/2013	DR-MW-46S MSA-MW46S-101613 10/16/2013	DR-MW-47D MSA-MW47D-101713 10/17/2013
4,6-DINITRO-2-METHYLPHENOL	2.4 U	2.4 U	2.6 U	2.5 U
4-BROMOPHENYL PHENYL ETHER	0.22 U	0.22 U	0.23 U	0.23 U
4-CHLORO-3-METHYLPHENOL	0.21 U	0.21 U	0.22 U	0.22 U
4-CHLOROANILINE	0.21 U	0.21 U	0.22 U	0.22 U
4-CHLOROPHENYL PHENYL ETHER	0.29 U	0.30 U	0.32 U	0.31 U
4-NITROANILINE	0.22 U	0.22 U	0.23 U	0.23 U
4-NITROPHENOL	0.28 U	0.29 U	0.31 U	0.30 U
ACENAPHTHENE	0.043 U	0.044 U	0.047 U	0.046 U
ACENAPHTHYLENE	0.047 U	0.048 U	0.051 U	0.05 U
ACETOPHENONE	0.33 U	0.34 U	0.41 J	0.35 U
ANTHRACENE	0.086 U	0.088 U	0.094 U	0.091 U
ATRAZINE	0.33 U	0.34 U	0.36 U	0.35 U
BAP EQUIVALENT-HALFND	0.05 U	0.051 U	0.055 U	0.053 U
BAP EQUIVALENT-POS	0.05 U	0.051 U	0.055 U	0.053 U
BENZALDEHYDE	0.38 U	0.39 U	0.41 U	0.40 U
BENZO(A)ANTHRACENE	0.029 U	0.03 U	0.031 U	0.03 U
BENZO(A)PYRENE	0.05 U	0.051 U	0.055 U	0.053 U
BENZO(B)FLUORANTHENE	0.039 U	0.039 U	0.042 U	0.041 U
BENZO(G,H,I)PERYLENE	0.045 U	0.046 U	0.049 U	0.048 U
BENZO(K)FLUORANTHENE	0.044 U	0.045 U	0.048 U	0.046 U
BIS(2-CHLOROETHOXY)METHANE	0.31 U	0.32 U	0.34 U	0.33 U
BIS(2-CHLOROETHYL)ETHER	0.098 U	0.10 U	0.11 U	0.10 U
BIS(2-ETHYLHEXYL)PHTHALATE	0.51 B	0.29 B	0.57 B	0.28 B
BUTYL BENZYL PHTHALATE	0.25 U	0.26 U	0.28 U	0.27 U
CAPROLACTAM	0.20 U	0.20 U	0.21 U	0.21 U
CARBAZOLE	0.27 U	0.28 U	0.30 U	0.29 U
CHRYSENE	0.049 U	0.05 U	0.053 U	0.052 U
DIBENZO(A,H)ANTHRACENE	0.044 U	0.045 U	0.047 U	0.046 U
DIBENZOFURAN	0.02 U	0.02 U	0.021 U	0.021 U
DIETHYL PHTHALATE	0.59 U	0.60 U	0.64 U	0.62 U
DIMETHYL PHTHALATE	0.28 U	0.29 U	0.31 U	0.30 U
DI-N-BUTYL PHTHALATE	0.86 B	0.67 U	0.79 B	0.69 U
DI-N-OCTYL PHTHALATE	0.23 U	0.23 U	0.24 U	0.24 U
FLUORANTHENE	0.044 U	0.045 U	0.047 U	0.046 U

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-46D MSA-MW46D-101613 10/16/2013	DR-MW-46I MSA-MW46I-101613 10/16/2013	DR-MW-46S MSA-MW46S-101613 10/16/2013	DR-MW-47D MSA-MW47D-101713 10/17/2013
FLUORENE	0.04 U	0.041 U	0.043 U	0.042 U
HEXACHLOROBENZENE	0.084 U	0.085 U	0.091 U	0.088 U
HEXACHLOROBUTADIENE	0.26 U	0.27 U	0.29 U	0.28 U
HEXACHLOROCYCLOPENTADIENE	0.24 U	0.24 U	0.26 U	0.25 U
HEXACHLOROETHANE	0.19 U	0.19 U	0.20 U	0.20 U
INDENO(1,2,3-CD)PYRENE	0.042 U	0.043 U	0.046 U	0.045 U
ISOPHORONE	0.26 U	0.27 U	0.29 U	0.28 U
NAPHTHALENE	0.061 U	0.063 U	0.067 U	0.065 U
NITROBENZENE	0.039 U	0.04 U	0.043 U	0.041 U
N-NITROSODIMETHYLAMINE	0.30 U	0.31 U	0.33 U	0.32 U
N-NITROSO-DI-N-PROPYLAMINE	0.24 U	0.24 U	0.26 U	0.25 U
N-NITROSODIPHENYLAMINE	0.30 U	0.31 U	0.33 U	0.32 U
PENTACHLOROPHENOL	0.26 U	0.27 U	0.29 U	0.28 U
PHENANTHRENE	0.061 U	0.062 U	0.066 U	0.064 U
PHENOL	0.59 U	0.60 U	0.64 U	0.62 U
PYRENE	0.041 U	0.042 U	0.045 U	0.043 U
METALS (UG/L)				
ANTIMONY	1.8 U	1.8 U	1.8 U	1.8 U
ARSENIC	3.2 U	4.1 J	8.1 J	3.2 U
BARIUM	39 J	26 J	73 J	30 J
BERYLLIUM	0.46 U	0.46 U	0.46 U	0.46 U
CADMIUM	0.66 U	0.66 U	0.66 U	0.66 U
CALCIUM	NA	NA	NA	NA
CHROMIUM	2.2 U	2.2 U	4.5 J	2.2 U
COBALT	4.4 J	80	74	6.1 J
COPPER	4.5 U	4.5 U	25 K	4.5 U
IRON	NA	NA	NA	NA
LEAD	1.9 U	1.9 U	1.9 U	1.9 U
MAGNESIUM	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	1.4 J	1.3 J	3.3 J	2.1 J
NICKEL	3.6 J	40	78	3.2 U
POTASSIUM	NA	NA	NA	NA

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-46D MSA-MW46D-101613 10/16/2013	DR-MW-46I MSA-MW46I-101613 10/16/2013	DR-MW-46S MSA-MW46S-101613 10/16/2013	DR-MW-47D MSA-MW47D-101713 10/17/2013
SELENIUM	4.1 U	4.1 U	4.1 U	4.1 U
SILICON DIOXIDE	NA	NA	NA	NA
SILVER	2.2 U	2.2 U	2.2 U	2.2 U
SODIUM	NA	NA	NA	NA
THALLIUM	4.7 U	4.7 U	4.7 U	4.7 U
VANADIUM	0.64 UL	0.64 UL	0.64 UL	1.3 J
ZINC	8.6 B	29 B	97	11 J
DISSOLVED METALS (UG/L)				
ANTIMONY	2.4 B	2.4 B	1.8 U	2 B
ARSENIC	3.8 J	3.2 U	6.6 J	4.2 J
BARIUM	38 J	26 J	72 J	28 J
BERYLLIUM	0.46 U	0.46 U	0.46 U	0.46 U
CADMIUM	0.66 U	0.66 U	0.66 U	0.66 U
CHROMIUM	2.2 U	2.2 U	3.7 J	2.2 U
COBALT	3.5 J	81	72	2.5 J
COPPER	4.5 U	4.5 U	4.5 U	4.5 U
LEAD	1.9 U	1.9 U	1.9 U	1.9 U
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	1.3 U	1.3 U	3 J	1.3 U
NICKEL	4.3 J	44	78	4.2 J
SELENIUM	4.1 U	4.1 U	4.1 U	4.1 U
SILVER	2.2 U	2.2 U	2.2 U	2.2 U
THALLIUM	4.7 U	4.7 U	4.7 U	4.7 U
VANADIUM	0.64 UL	0.64 UL	1.8 J	0.64 UL
ZINC	5 U	24 B	56 B	5 U
MISCELLANEOUS PARAMETERS				
ALKALINITY (MG/L)	NA	NA	NA	NA
AMMONIA-N (MG/L)	NA	NA	NA	NA
CHLORIDE (MG/L)	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON (MG/L)	NA	NA	NA	NA
NITRATE-N (MG/L)	NA	NA	NA	NA
NITRITE-N (MG/L)	NA	NA	NA	NA
ORTHOPHOSPHATE-P (MG/L)	NA	NA	NA	NA
SULFATE (MG/L)	NA	NA	NA	NA

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-46D MSA-MW46D-101613 10/16/2013	DR-MW-46I MSA-MW46I-101613 10/16/2013	DR-MW-46S MSA-MW46S-101613 10/16/2013	DR-MW-47D MSA-MW47D-101713 10/17/2013
TOTAL DISSOLVED SOLIDS (MG/L)	NA	NA	NA	NA
HEXAVALENT CHROMIUM (UG/L)	0.04 UL	0.04 UL	0.04 UL	0.015 J
PETROLEUM HYDROCARBONS (UG/L)				
TPH (C06-C10)	36 J	160	31 J	210
TPH (C10-C32)	1200	240 U	1300	240 UJ

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-47I MSA-MW47I-101713 10/17/2013	DR-MW-47S MSA-MW47S-101613 10/16/2013	DR-MW-48D MSA-MW48D-101813 10/18/2013	DR-MW-48I MSA-MW48I-101713 10/17/2013
VOLATILES (UG/L)				
1,1,1,2-TETRACHLOROETHANE	29 U	13 U	0.66 U	33 U
1,1,1-TRICHLOROETHANE	28 U	12 U	0.63 U	31 U
1,1,2,2-TETRACHLOROETHANE	23 U	10 U	0.51 U	26 U
1,1,2-TRICHLOROTRIFLUOROETHANE	35 U	16 U	0.80 UL	40 U
1,1-DICHLOROETHANE	19 U	8.3 U	0.43 U	21 U
1,1-DICHLOROETHENE	24 U	11 U	0.91 J	27 U
1,1-DICHLOROPROPENE	16 U	7.2 U	0.37 U	19 U
1,2,3-TRICHLOROBENZENE	21 U	9.4 U	0.49 U	24 U
1,2,3-TRICHLOROPROPANE	54 U	24 U	1.2 U	61 U
1,2,3-TRIMETHYLBENZENE	0.74 U	0.33 U	0.017 U	0.84 U
1,2,4-TRICHLOROBENZENE	19 U	8.3 U	0.43 U	21 U
1,2,4-TRIMETHYLBENZENE	15 U	6.7 U	0.34 U	17 U
1,2-DIBROMO-3-CHLOROPROPANE	84 U	37 U	1.9 U	96 U
1,2-DIBROMOETHANE	30 U	13 U	0.69 U	34 U
1,2-DICHLOROBENZENE	16 U	7.2 U	0.37 U	19 U
1,2-DICHLOROETHANE	80 J	27 J	1.8 J	32 J
1,2-DICHLOROPROPANE	23 U	10 U	0.51 U	26 U
1,3-DICHLOROBENZENE	18 U	7.8 U	0.40 U	20 U
1,3-DICHLOROPROPANE	20 U	8.9 U	0.46 U	23 U
1,4-DICHLOROBENZENE	16 U	7.2 U	0.46 J	19 U
2,2-DICHLOROPROPANE	16 U	7.2 U	0.37 U	19 U
2-BUTANONE	71 U	32 U	1.6 UR	81 U
2-CHLOROETHYL VINYL ETHER	120 U	55 U	2.8 U	140 U
2-CHLOROTOLUENE	14 U	6.1 U	0.31 U	16 U
2-HEXANONE	51 U	23 U	1.2 U	59 U
4-CHLOROTOLUENE	23 U	10 U	0.51 U	26 U
4-ISOPROPYLTOLUENE	15 U	6.7 U	0.34 U	17 U
4-METHYL-2-PENTANONE	40 U	18 U	0.91 U	46 U
ACETONE	140 U	61 U	3.1 U	160 U
BENZENE	16 U	7.2 U	0.83 J	19 U
BROMOBENZENE	16 U	7.2 U	0.37 U	19 U
BROMOCHLOROMETHANE	36 U	16 U	0.83 U	41 U
BROMODICHLOROMETHANE	19 U	8.3 U	0.43 U	21 U

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-47I MSA-MW47I-101713 10/17/2013	DR-MW-47S MSA-MW47S-101613 10/16/2013	DR-MW-48D MSA-MW48D-101813 10/18/2013	DR-MW-48I MSA-MW48I-101713 10/17/2013
BROMOFORM	80 U	36 U	1.8 U	91 U
BROMOMETHANE	51 U	23 U	1.2 U	59 U
CARBON DISULFIDE	16 U	7.2 U	0.37 U	19 U
CARBON TETRACHLORIDE	16 U	7.2 U	0.37 U	19 U
CHLOROBENZENE	50 J	20 J	0.43 U	21 U
CHLORODIBROMOMETHANE	23 U	10 U	0.51 U	26 U
CHLOROETHANE	36 U	16 U	0.83 U	41 U
CHLOROFORM	37 B	14 B	1.1 J	23 U
CHLOROMETHANE	38 U	17 U	0.86 U	43 U
CIS-1,2-DICHLOROETHENE	630	230	75	480
CIS-1,3-DICHLOROPROPENE	18 U	7.8 U	0.40 U	20 U
DIBROMOMETHANE	35 U	16 U	0.80 U	40 U
DICHLORODIFLUOROMETHANE	39 U	17 U	0.89 U	44 U
DIISOPROPYL ETHER	190 U	83 U	4.3 U	210 U
ETHYL TERT-BUTYL ETHER	14 U	6.1 U	0.31 U	16 U
ETHYLBENZENE	21 U	9.4 U	0.49 U	24 U
HEXACHLOROBUTADIENE	38 U	17 U	0.86 U	43 U
ISOPROPYLBENZENE	16 U	7.2 U	0.37 U	19 U
M+P-XYLENES	30 U	13 U	0.69 U	34 U
METHYL TERT-BUTYL ETHER	21 U	9.4 U	0.49 U	24 U
METHYLENE CHLORIDE	41 U	79 B	0.94 U	47 U
NAPHTHALENE	30 U	13 U	0.69 U	34 U
N-BUTYLBENZENE	15 U	6.7 U	0.34 U	17 U
N-PROPYLBENZENE	18 U	7.8 U	0.40 U	20 U
O-XYLENE	18 U	7.8 U	0.40 U	20 U
SEC-BUTYLBENZENE	16 U	7.2 U	0.37 U	19 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA
STYRENE	14 U	6.1 U	0.31 U	16 U
TERT-AMYL METHYL ETHER	8.4 U	3.7 U	0.19 U	9.6 U
TERT-BUTYLBENZENE	16 U	7.2 U	0.37 U	19 U
TERTIARY-BUTYL ALCOHOL	490 UR	220 UR	11 U	560 UR
TETRACHLOROETHENE	36 U	16 U	0.83 U	41 U

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-47I MSA-MW47I-101713 10/17/2013	DR-MW-47S MSA-MW47S-101613 10/16/2013	DR-MW-48D MSA-MW48D-101813 10/18/2013	DR-MW-48I MSA-MW48I-101713 10/17/2013
TOLUENE	16 U	7.2 U	0.54 J	19 U
TOTAL XYLENES	18 U	7.8 U	0.40 U	20 U
TRANS-1,2-DICHLOROETHENE	24 U	11 U	1.1 J	27 U
TRANS-1,3-DICHLOROPROPENE	24 U	11 U	0.54 U	27 U
TRICHLOROETHENE	4300	1500	150	3900
TRICHLOROFLUOROMETHANE	26 U	12 U	0.60 U	30 U
UNKNOWN	NA	NA	NA	NA
VINYL ACETATE	24 UR	11 UR	0.54 UR	27 U
VINYL CHLORIDE	550	250	32	61 J
VOLATILE GASES (UG/L)				
ETHANE	NA	NA	NA	NA
METHANE	NA	NA	NA	NA
TICOV (UG/L)				
SPIRO[5.6]DODECANE	NA	NA	NA	NA
SEMIVOLATILES (UG/L)				
1,1-BIPHENYL	0.52 U	0.27 U	0.13 U	0.14 U
1,4-DIOXANE	200	73	26	190
2,2'-OXYBIS(1-CHLOROPROPANE)	1.6 U	0.82 U	0.38 U	0.42 U
2,4,5-TRICHLOROPHENOL	1.2 U	0.62 U	0.29 U	0.31 U
2,4,6-TRICHLOROPHENOL	0.96 U	0.49 U	0.23 U	0.25 U
2,4-DICHLOROPHENOL	0.76 U	0.39 U	0.18 U	0.20 U
2,4-DIMETHYLPHENOL	1 U	0.52 U	0.24 U	0.26 U
2,4-DINITROPHENOL	1.3 U	0.66 U	0.31 U	0.33 U
2,4-DINITROTOLUENE	1 U	0.52 U	0.24 U	0.26 U
2,6-DINITROTOLUENE	3.2 U	1.6 U	0.77 U	0.83 U
2-CHLORONAPHTHALENE	0.40 U	0.21 U	0.096 U	0.10 U
2-CHLOROPHENOL	1.2 U	0.60 U	0.28 U	0.30 U
2-METHYLNAPHTHALENE	0.36 U	0.19 U	0.087 U	0.32
2-METHYLPHENOL	0.68 U	0.35 U	0.16 U	0.18 U
2-NITROANILINE	0.84 U	0.43 U	0.20 U	0.22 U
2-NITROPHENOL	1.1 U	0.58 U	0.27 U	0.29 U
3&4-METHYLPHENOL	3.2 U	1.6 U	0.77 U	0.83 U
3,3'-DICHLOROBENZIDINE	1.5 U	0.76 U	0.36 U	0.39 U
3-NITROANILINE	1.1 U	0.58 U	0.27 U	0.29 U

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-47I MSA-MW47I-101713 10/17/2013	DR-MW-47S MSA-MW47S-101613 10/16/2013	DR-MW-48D MSA-MW48D-101813 10/18/2013	DR-MW-48I MSA-MW48I-101713 10/17/2013
4,6-DINITRO-2-METHYLPHENOL	9.6 U	4.9 U	2.3 U	2.5 U
4-BROMOPHENYL PHENYL ETHER	0.88 U	0.45 U	0.21 U	0.23 U
4-CHLORO-3-METHYLPHENOL	0.84 U	0.43 U	0.20 U	0.22 U
4-CHLOROANILINE	0.84 U	0.43 U	0.20 U	0.22 U
4-CHLOROPHENYL PHENYL ETHER	1.2 U	0.62 U	0.29 U	0.31 U
4-NITROANILINE	0.88 U	0.45 U	0.21 U	0.23 U
4-NITROPHENOL	1.2 U	0.60 U	0.28 U	0.30 U
ACENAPHTHENE	0.18 U	0.091 U	0.043 U	0.046 U
ACENAPHTHYLENE	0.19 U	0.099 U	0.046 U	0.05 U
ACETOPHENONE	1.4 U	0.70 U	0.33 U	0.35 U
ANTHRACENE	0.35 U	0.18 U	0.085 U	0.092 U
ATRAZINE	1.4 U	0.70 U	0.33 U	0.35 U
BAP EQUIVALENT-HALFND	0.21 U	0.11 U	0.049 U	0.054 U
BAP EQUIVALENT-POS	0.21 U	0.11 U	0.049 U	0.054 U
BENZALDEHYDE	1.6 U	0.80 U	0.37 U	0.41 U
BENZO(A)ANTHRACENE	0.12 U	0.061 U	0.028 U	0.031 U
BENZO(A)PYRENE	0.21 U	0.11 U	0.049 U	0.054 U
BENZO(B)FLUORANTHENE	0.16 U	0.081 U	0.038 U	0.041 U
BENZO(G,H,I)PERYLENE	0.19 U	0.096 U	0.045 U	0.048 U
BENZO(K)FLUORANTHENE	0.18 U	0.092 U	0.043 U	0.047 U
BIS(2-CHLOROETHOXY)METHANE	1.3 U	0.66 U	0.31 U	0.33 U
BIS(2-CHLOROETHYL)ETHER	0.40 U	0.21 U	0.096 U	0.10 U
BIS(2-ETHYLHEXYL)PHTHALATE	0.88 U	0.45 U	0.23 B	0.23 B
BUTYL BENZYL PHTHALATE	1 U	0.54 U	0.25 U	0.27 U
CAPROLACTAM	0.80 U	0.41 U	0.19 U	0.21 U
CARBAZOLE	1.1 U	0.58 U	0.27 U	0.29 U
CHRYSENE	0.20 U	0.10 U	0.048 U	0.052 U
DIBENZO(A,H)ANTHRACENE	0.18 U	0.092 U	0.043 U	0.046 U
DIBENZOFURAN	0.08 U	0.041 U	0.019 U	0.021 U
DIETHYL PHTHALATE	2.4 U	1.2 U	0.58 U	0.62 U
DIMETHYL PHTHALATE	1.2 U	0.60 U	0.28 U	0.30 U
DI-N-BUTYL PHTHALATE	2.7 U	1.4 U	0.64 U	0.70 U
DI-N-OCTYL PHTHALATE	0.92 U	0.47 U	0.22 U	0.24 U
FLUORANTHENE	0.18 U	0.092 U	0.043 U	0.046 U

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-47I MSA-MW47I-101713 10/17/2013	DR-MW-47S MSA-MW47S-101613 10/16/2013	DR-MW-48D MSA-MW48D-101813 10/18/2013	DR-MW-48I MSA-MW48I-101713 10/17/2013
FLUORENE	0.16 U	0.084 U	0.039 U	0.042 U
HEXACHLOROBENZENE	0.34 U	0.18 U	0.082 U	0.089 U
HEXACHLOROBUTADIENE	1.1 U	0.56 U	0.26 U	0.28 U
HEXACHLOROCYCLOPENTADIENE	0.96 U	0.49 U	0.23 U	0.25 U
HEXACHLOROETHANE	0.76 U	0.39 U	0.18 U	0.20 U
INDENO(1,2,3-CD)PYRENE	0.17 U	0.089 U	0.042 U	0.045 U
ISOPHORONE	1.1 U	0.56 U	0.26 U	0.28 U
NAPHTHALENE	0.67 J	0.13 U	0.06 U	0.69
NITROBENZENE	0.16 U	0.082 U	0.038 U	0.042 U
N-NITROSODIMETHYLAMINE	1.2 U	0.64 U	0.30 U	0.32 U
N-NITROSO-DI-N-PROPYLAMINE	0.96 U	0.49 U	0.23 U	0.25 U
N-NITROSODIPHENYLAMINE	1.2 U	0.64 U	0.30 U	0.32 U
PENTACHLOROPHENOL	1.1 U	0.56 U	0.26 U	0.28 U
PHENANTHRENE	0.25 U	0.13 U	0.06 U	0.064 U
PHENOL	2.4 U	1.2 U	0.58 U	0.62 U
PYRENE	0.17 U	0.087 U	0.04 U	0.044 U
METALS (UG/L)				
ANTIMONY	1.8 U	1.8 U	1.8 U	1.8 U
ARSENIC	6.9 J	12 J	3.2 U	4.1 J
BARIUM	45 J	49 J	41 J	26 J
BERYLLIUM	1.1 J	0.46 U	0.72 J	1.4 J
CADMIUM	70	5.4	2.2 J	170
CALCIUM	NA	NA	NA	NA
CHROMIUM	7.9 J	5.1 J	5.5 J	17 K
COBALT	320	130	150	360
COPPER	30 J	4.5 U	4.5 U	8.7 J
IRON	NA	NA	NA	NA
LEAD	1.9 U	1.9 U	1.9 U	2.2 J
MAGNESIUM	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	2.2 J	1.3 U	1.3 U	1.3 U
NICKEL	120	47	72	140
POTASSIUM	NA	NA	NA	NA

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-47I MSA-MW47I-101713 10/17/2013	DR-MW-47S MSA-MW47S-101613 10/16/2013	DR-MW-48D MSA-MW48D-101813 10/18/2013	DR-MW-48I MSA-MW48I-101713 10/17/2013
SELENIUM	4.1 U	4.1 U	4.1 U	4.1 U
SILICON DIOXIDE	NA	NA	NA	NA
SILVER	4.4 U	2.2 U	2.2 U	2.2 U
SODIUM	NA	NA	NA	NA
THALLIUM	4.7 U	4.7 U	4.7 U	4.7 U
VANADIUM	1.3 UL	0.64 UL	0.64 UJ	0.64 UL
ZINC	220	63	140	370
DISSOLVED METALS (UG/L)				
ANTIMONY	1.8 U	1.8 U	1.8 U	1.8 U
ARSENIC	6.5 J	12 J	3.2 U	3.6 J
BARIUM	40 J	50 J	42 J	24 J
BERYLLIUM	0.77 J	0.46 U	0.68 J	1.2 J
CADMIUM	19	0.66 U	1.9 J	21
CHROMIUM	4.9 J	4.4 J	5.3 J	14 K
COBALT	310	130	150	360
COPPER	4.5 U	4.5 U	4.5 U	4.5 U
LEAD	1.9 U	1.9 U	1.9 U	1.9 U
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	2.1 J	1.3 U	1.3 U	1.3 U
NICKEL	120	47	73	140
SELENIUM	4.1 U	4.1 U	4.1 U	4.1 U
SILVER	2.2 U	2.2 U	2.2 U	2.2 U
THALLIUM	4.7 U	4.7 U	4.7 U	4.7 U
VANADIUM	0.64 UL	0.64 UL	0.64 UJ	0.64 UL
ZINC	170	52 B	140	270
MISCELLANEOUS PARAMETERS				
ALKALINITY (MG/L)	NA	NA	NA	NA
AMMONIA-N (MG/L)	NA	NA	NA	NA
CHLORIDE (MG/L)	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON (MG/L)	NA	NA	NA	NA
NITRATE-N (MG/L)	NA	NA	NA	NA
NITRITE-N (MG/L)	NA	NA	NA	NA
ORTHOPHOSPHATE-P (MG/L)	NA	NA	NA	NA
SULFATE (MG/L)	NA	NA	NA	NA

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-47I MSA-MW47I-101713 10/17/2013	DR-MW-47S MSA-MW47S-101613 10/16/2013	DR-MW-48D MSA-MW48D-101813 10/18/2013	DR-MW-48I MSA-MW48I-101713 10/17/2013
TOTAL DISSOLVED SOLIDS (MG/L)	NA	NA	NA	NA
HEXAVALENT CHROMIUM (UG/L)	0.021 J	0.04 UL	0.02 UR	0.035 B
PETROLEUM HYDROCARBONS (UG/L)				
TPH (C06-C10)	1800	670	140 K	1500
TPH (C10-C32)	240 UJ	370 J	230 U	270 J

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	DR-MW-48S MSA-MW48S-101813 10/18/2013	DR-MW-49D MSA-MW49D-101614 10/17/2013	DR-MW-49D MSA-MW49D-101713 10/17/2013	DR-MW-49I MSA-MW49I-101614 10/17/2013	DR-MW-49I MSA-MW49I-101713 10/17/2013
VOLATILES (UG/L)					
1,1,1,2-TETRACHLOROETHANE	23 U	NA	58 U	NA	77 U
1,1,1-TRICHLOROETHANE	22 U	NA	72 J	NA	73 U
1,1,2,2-TETRACHLOROETHANE	18 U	NA	45 U	NA	60 U
1,1,2-TRICHLOROTRIFLUOROETHANE	28 UL	NA	70 U	NA	93 U
1,1-DICHLOROETHANE	15 U	NA	38 U	NA	84 J
1,1-DICHLOROETHENE	19 U	NA	140 J	NA	190 J
1,1-DICHLOROPROPENE	13 U	NA	33 U	NA	43 U
1,2,3-TRICHLOROBENZENE	17 U	NA	43 U	NA	57 U
1,2,3-TRICHLOROPROPANE	43 U	NA	110 U	NA	140 U
1,2,3-TRIMETHYLBENZENE	0.59 U	NA	1.5 U	NA	2 U
1,2,4-TRICHLOROBENZENE	15 U	NA	38 U	NA	50 U
1,2,4-TRIMETHYLBENZENE	12 U	NA	30 U	NA	40 U
1,2-DIBROMO-3-CHLOROPROPANE	67 U	NA	170 U	NA	220 U
1,2-DIBROMOETHANE	24 U	NA	60 U	NA	80 U
1,2-DICHLOROBENZENE	13 U	NA	33 U	NA	43 U
1,2-DICHLOROETHANE	22 U	NA	55 U	NA	73 U
1,2-DICHLOROPROPANE	18 U	NA	45 U	NA	60 U
1,3-DICHLOROBENZENE	14 U	NA	35 U	NA	47 U
1,3-DICHLOROPROPANE	16 U	NA	40 U	NA	53 U
1,4-DICHLOROBENZENE	26 J	NA	33 U	NA	43 U
2,2-DICHLOROPROPANE	13 U	NA	33 U	NA	43 U
2-BUTANONE	57 UR	NA	140 U	NA	190 U
2-CHLOROETHYL VINYL ETHER	99 U	NA	250 U	NA	330 U
2-CHLOROTOLUENE	11 U	NA	28 U	NA	37 U
2-HEXANONE	41 U	NA	100 U	NA	140 U
4-CHLOROTOLUENE	18 U	NA	45 U	NA	60 U
4-ISOPROPYLTOLUENE	12 U	NA	30 U	NA	40 U
4-METHYL-2-PENTANONE	32 U	NA	80 U	NA	110 U
ACETONE	110 U	NA	280 U	NA	370 U
BENZENE	13 U	NA	33 U	NA	43 U
BROMOBENZENE	13 U	NA	33 U	NA	43 U
BROMOCHLOROMETHANE	29 U	NA	73 U	NA	97 U
BROMODICHLOROMETHANE	15 U	NA	38 U	NA	50 U

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-48S MSA-MW48S-101813 10/18/2013	DR-MW-49D MSA-MW49D-101614 10/17/2013	DR-MW-49D MSA-MW49D-101713 10/17/2013	DR-MW-49I MSA-MW49I-101614 10/17/2013	DR-MW-49I MSA-MW49I-101713 10/17/2013
BROMOFORM	64 U	NA	160 U	NA	210 U
BROMOMETHANE	41 U	NA	100 U	NA	140 U
CARBON DISULFIDE	13 U	NA	33 U	NA	43 U
CARBON TETRACHLORIDE	13 U	NA	33 U	NA	43 U
CHLOROBENZENE	15 U	NA	38 U	NA	50 U
CHLORODIBROMOMETHANE	18 U	NA	45 U	NA	60 U
CHLOROETHANE	29 U	NA	73 U	NA	97 U
CHLOROFORM	16 U	NA	40 U	NA	53 U
CHLOROMETHANE	30 U	NA	75 U	NA	100 U
CIS-1,2-DICHLOROETHENE	440	NA	2100	NA	1800
CIS-1,3-DICHLOROPROPENE	14 U	NA	35 U	NA	47 U
DIBROMOMETHANE	28 U	NA	70 U	NA	93 U
DICHLORODIFLUOROMETHANE	31 U	NA	78 U	NA	100 U
DIISOPROPYL ETHER	150 U	NA	380 U	NA	500 U
ETHYL TERT-BUTYL ETHER	11 U	NA	28 U	NA	37 U
ETHYLBENZENE	17 U	NA	43 U	NA	57 U
HEXACHLOROBUTADIENE	30 U	NA	75 U	NA	100 U
ISOPROPYLBENZENE	13 U	NA	33 U	NA	43 U
M+P-XYLENES	24 U	NA	60 U	NA	80 U
METHYL TERT-BUTYL ETHER	17 U	NA	43 U	NA	57 U
METHYLENE CHLORIDE	33 U	NA	83 U	NA	110 U
NAPHTHALENE	24 U	NA	60 U	NA	80 U
N-BUTYLBENZENE	12 U	NA	30 U	NA	40 U
N-PROPYLBENZENE	14 U	NA	35 U	NA	47 U
O-XYLENE	14 U	NA	35 U	NA	47 U
SEC-BUTYLBENZENE	13 U	NA	33 U	NA	43 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA
STYRENE	11 U	NA	28 U	NA	37 U
TERT-AMYL METHYL ETHER	6.7 U	NA	17 U	NA	22 U
TERT-BUTYLBENZENE	13 U	NA	33 U	NA	43 U
TERTIARY-BUTYL ALCOHOL	390 U	NA	980 UR	NA	1300 UR
TETRACHLOROETHENE	29 U	NA	73 U	NA	97 U

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-48S MSA-MW48S-101813 10/18/2013	DR-MW-49D MSA-MW49D-101614 10/17/2013	DR-MW-49D MSA-MW49D-101713 10/17/2013	DR-MW-49I MSA-MW49I-101614 10/17/2013	DR-MW-49I MSA-MW49I-101713 10/17/2013
TOLUENE	25 J	NA	33 U	NA	43 U
TOTAL XYLENES	14 U	NA	35 U	NA	47 U
TRANS-1,2-DICHLOROETHENE	19 U	NA	48 U	NA	63 U
TRANS-1,3-DICHLOROPROPENE	19 U	NA	48 U	NA	63 U
TRICHLOROETHENE	17 U	NA	9300	NA	6900
TRICHLOROFLUOROMETHANE	21 U	NA	53 U	NA	70 U
UNKNOWN	NA	NA	NA	NA	NA
VINYL ACETATE	19 UR	NA	48 U	NA	63 U
VINYL CHLORIDE	2300	NA	580	NA	1400
VOLATILE GASES (UG/L)					
ETHANE	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA
TICOV (UG/L)					
SPIRO[5.6]DODECANE	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)					
1,1-BIPHENYL	0.33 U	NA	0.13 U	NA	0.13 U
1,4-DIOXANE	31	NA	34	NA	81
2,2'-OXYBIS(1-CHLOROPROPANE)	1 U	NA	0.40 U	NA	0.40 U
2,4,5-TRICHLOROPHENOL	0.76 U	NA	0.30 U	NA	0.30 U
2,4,6-TRICHLOROPHENOL	0.61 U	NA	0.24 U	NA	0.24 U
2,4-DICHLOROPHENOL	0.48 U	NA	0.19 U	NA	0.19 U
2,4-DIMETHYLPHENOL	0.63 U	NA	0.25 U	NA	0.25 U
2,4-DINITROPHENOL	0.81 U	NA	0.32 U	NA	0.32 U
2,4-DINITROTOLUENE	0.63 U	NA	0.25 U	NA	0.25 U
2,6-DINITROTOLUENE	2 U	NA	0.81 U	NA	0.79 U
2-CHLORONAPHTHALENE	0.25 U	NA	0.10 U	NA	0.099 U
2-CHLOROPHENOL	0.73 U	NA	0.29 U	NA	0.29 U
2-METHYLNAPHTHALENE	0.23 U	NA	0.091 U	NA	0.15 J
2-METHYLPHENOL	0.43 U	NA	0.17 U	NA	0.17 U
2-NITROANILINE	0.53 U	NA	0.21 U	NA	0.21 U
2-NITROPHENOL	0.71 U	NA	0.28 U	NA	0.28 U
3&4-METHYLPHENOL	2 U	NA	0.81 U	NA	0.79 U
3,3'-DICHLOROBENZIDINE	0.93 U	NA	0.37 U	NA	0.37 U
3-NITROANILINE	0.71 U	NA	0.28 U	NA	0.28 U

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-48S MSA-MW48S-101813 10/18/2013	DR-MW-49D MSA-MW49D-101614 10/17/2013	DR-MW-49D MSA-MW49D-101713 10/17/2013	DR-MW-49I MSA-MW49I-101614 10/17/2013	DR-MW-49I MSA-MW49I-101713 10/17/2013
4,6-DINITRO-2-METHYLPHENOL	6.1 U	NA	2.4 U	NA	2.4 U
4-BROMOPHENYL PHENYL ETHER	0.56 U	NA	0.22 U	NA	0.22 U
4-CHLORO-3-METHYLPHENOL	0.53 U	NA	0.21 U	NA	0.21 U
4-CHLOROANILINE	0.53 U	NA	0.21 U	NA	0.21 U
4-CHLOROPHENYL PHENYL ETHER	0.76 U	NA	0.30 U	NA	0.30 U
4-NITROANILINE	0.56 U	NA	0.22 U	NA	0.22 U
4-NITROPHENOL	0.73 U	NA	0.29 U	NA	0.29 U
ACENAPHTHENE	0.67	NA	0.045 U	NA	0.044 U
ACENAPHTHYLENE	0.12 U	NA	0.049 U	NA	0.048 U
ACETOPHENONE	0.86 U	NA	0.34 U	NA	0.34 U
ANTHRACENE	0.30 J	NA	0.089 U	NA	0.087 U
ATRAZINE	0.86 U	NA	0.34 U	NA	0.34 U
BAP EQUIVALENT-HALFND	0.13 U	NA	0.052 U	NA	0.051 U
BAP EQUIVALENT-POS	0.13 U	NA	0.052 U	NA	0.051 U
BENZALDEHYDE	0.98 U	NA	0.39 U	NA	0.39 U
BENZO(A)ANTHRACENE	0.074 U	NA	0.03 U	NA	0.029 U
BENZO(A)PYRENE	0.13 U	NA	0.052 U	NA	0.051 U
BENZO(B)FLUORANTHENE	0.099 U	NA	0.04 U	NA	0.039 U
BENZO(G,H,I)PERYLENE	0.12 U	NA	0.047 U	NA	0.046 U
BENZO(K)FLUORANTHENE	0.11 U	NA	0.045 U	NA	0.044 U
BIS(2-CHLOROETHOXY)METHANE	0.81 U	NA	0.32 U	NA	0.32 U
BIS(2-CHLOROETHYL)ETHER	0.25 U	NA	0.10 U	NA	0.099 U
BIS(2-ETHYLHEXYL)PHTHALATE	0.56 U	NA	0.26 B	NA	0.23 B
BUTYL BENZYL PHTHALATE	0.66 U	NA	0.26 U	NA	0.26 U
CAPROLACTAM	0.51 U	NA	0.20 U	NA	0.20 U
CARBAZOLE	1.1 J	NA	0.28 U	NA	0.28 U
CHRYSENE	0.13 U	NA	0.051 U	NA	0.05 U
DIBENZO(A,H)ANTHRACENE	0.11 U	NA	0.045 U	NA	0.044 U
DIBENZOFURAN	0.051 U	NA	0.02 U	NA	0.02 U
DIETHYL PHTHALATE	1.5 U	NA	0.61 U	NA	0.59 U
DIMETHYL PHTHALATE	0.73 U	NA	0.29 U	NA	0.29 U
DI-N-BUTYL PHTHALATE	1.7 U	NA	0.68 U	NA	0.66 U
DI-N-OCTYL PHTHALATE	0.58 U	NA	0.23 U	NA	0.23 U
FLUORANTHENE	0.11 U	NA	0.045 U	NA	0.044 U

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-48S MSA-MW48S-101813 10/18/2013	DR-MW-49D MSA-MW49D-101614 10/17/2013	DR-MW-49D MSA-MW49D-101713 10/17/2013	DR-MW-49I MSA-MW49I-101614 10/17/2013	DR-MW-49I MSA-MW49I-101713 10/17/2013
FLUORENE	0.39 J	NA	0.041 U	NA	0.04 U
HEXACHLOROBENZENE	0.22 U	NA	0.086 U	NA	0.084 U
HEXACHLOROBUTADIENE	0.68 U	NA	0.27 U	NA	0.27 U
HEXACHLOROCYCLOPENTADIENE	0.61 U	NA	0.24 U	NA	0.24 U
HEXACHLOROETHANE	0.48 U	NA	0.19 U	NA	0.19 U
INDENO(1,2,3-CD)PYRENE	0.11 U	NA	0.044 U	NA	0.043 U
ISOPHORONE	0.68 U	NA	0.27 U	NA	0.27 U
NAPHTHALENE	0.16 U	NA	0.65	NA	1.2
NITROBENZENE	0.10 U	NA	0.04 U	NA	0.04 U
N-NITROSODIMETHYLAMINE	0.78 U	NA	0.31 U	NA	0.31 U
N-NITROSO-DI-N-PROPYLAMINE	0.61 U	NA	0.24 U	NA	0.24 U
N-NITROSODIPHENYLAMINE	0.78 U	NA	0.31 U	NA	0.31 U
PENTACHLOROPHENOL	0.68 U	NA	0.27 U	NA	0.27 U
PHENANTHRENE	0.16 U	NA	0.063 U	NA	0.061 U
PHENOL	1.5 U	NA	0.61 U	NA	0.59 U
PYRENE	0.11 U	NA	0.042 U	NA	0.042 U
METALS (UG/L)					
ANTIMONY	1.8 U	NA	18 U	NA	18 U
ARSENIC	4.1 J	NA	32 U	NA	32 U
BARIUM	680	NA	17 B	NA	15 B
BERYLLIUM	0.46 U	NA	7.3 J	NA	8.7 J
CADMIUM	0.66 U	NA	19 J	NA	38 J
CALCIUM	NA	NA	NA	NA	NA
CHROMIUM	7.7 J	NA	40 J	NA	24 J
COBALT	1.7 U	NA	120	NA	150
COPPER	4.5 U	NA	120 J	NA	140 J
IRON	NA	NA	NA	NA	NA
LEAD	1.9 U	NA	19 U	NA	19 U
MAGNESIUM	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA
MERCURY	0.12 U	NA	0.12 U	NA	0.12 U
MOLYBDENUM	4 J	NA	13 U	NA	13 U
NICKEL	3.2 UL	NA	110	NA	97
POTASSIUM	NA	NA	NA	NA	NA

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-48S MSA-MW48S-101813 10/18/2013	DR-MW-49D MSA-MW49D-101614 10/17/2013	DR-MW-49D MSA-MW49D-101713 10/17/2013	DR-MW-49I MSA-MW49I-101614 10/17/2013	DR-MW-49I MSA-MW49I-101713 10/17/2013
SELENIUM	4.1 U	NA	41 U	NA	41 U
SILICON DIOXIDE	NA	NA	NA	NA	NA
SILVER	2.2 U	NA	22 U	NA	22 U
SODIUM	NA	NA	NA	NA	NA
THALLIUM	4.7 U	NA	4.7 U	NA	4.7 U
VANADIUM	1.2 B	NA	6.4 UL	NA	6.4 UL
ZINC	5 U	NA	400 B	NA	420 B
DISSOLVED METALS (UG/L)					
ANTIMONY	1.8 U	NA	18 U	NA	18 U
ARSENIC	3.9 J	NA	32 U	NA	32 U
BARIUM	710	NA	13 B	NA	16 B
BERYLLIUM	0.46 U	NA	8.1 J	NA	8.5 J
CADMIUM	0.66 U	NA	18 J	NA	37 J
CHROMIUM	7.8 J	NA	38 J	NA	22 U
COBALT	1.7 U	NA	120	NA	150
COPPER	4.5 U	NA	84 J	NA	150 J
LEAD	1.9 U	NA	19 U	NA	19 U
MERCURY	0.12 U	NA	0.12 U	NA	0.12 U
MOLYBDENUM	4 J	NA	13 U	NA	13 U
NICKEL	3.2 UL	NA	120	NA	100
SELENIUM	4.1 U	NA	41 U	NA	41 U
SILVER	2.2 U	NA	22 U	NA	22 U
THALLIUM	4.7 U	NA	4.7 U	NA	4.7 U
VANADIUM	0.64 UJ	NA	6.4 UL	NA	6.4 UL
ZINC	5.5 B	NA	410 B	NA	430 B
MISCELLANEOUS PARAMETERS					
ALKALINITY (MG/L)	NA	NA	NA	NA	NA
AMMONIA-N (MG/L)	NA	NA	NA	NA	NA
CHLORIDE (MG/L)	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON (MG/L)	NA	NA	NA	NA	NA
NITRATE-N (MG/L)	NA	NA	NA	NA	NA
NITRITE-N (MG/L)	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P (MG/L)	NA	NA	NA	NA	NA
SULFATE (MG/L)	NA	NA	NA	NA	NA

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-48S MSA-MW48S-101813 10/18/2013	DR-MW-49D MSA-MW49D-101614 10/17/2013	DR-MW-49D MSA-MW49D-101713 10/17/2013	DR-MW-49I MSA-MW49I-101614 10/17/2013	DR-MW-49I MSA-MW49I-101713 10/17/2013
TOTAL DISSOLVED SOLIDS (MG/L)	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM (UG/L)	0.02 UR	0.02 U	NA	0.045 J	NA
PETROLEUM HYDROCARBONS (UG/L)					
TPH (C06-C10)	400 K	NA	2600	NA	3100
TPH (C10-C32)	750	NA	250 J	NA	260 J

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-49S MSA-MW49S-101713 10/17/2013	DR-MW-50D MSA-MW50D-102113 10/21/2013	DR-MW-50I MSA-MW50I-101813 10/18/2013	DR-MW-50S MSA-MW50S-101813 10/18/2013	DR-MW-51D MSA-MW51D-102113 10/21/2013
VOLATILES (UG/L)					
1,1,1,2-TETRACHLOROETHANE	1.3 U	0.23 U	0.23 U	0.92 U	0.23 U
1,1,1-TRICHLOROETHANE	1.3 U	0.22 U	0.22 U	0.88 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	1 U	0.18 U	0.18 U	0.72 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1.6 U	0.28 U	0.28 UL	1.1 UL	0.28 U
1,1-DICHLOROETHANE	0.86 U	0.15 U	0.15 U	0.60 U	0.15 U
1,1-DICHLOROETHENE	2.6 J	0.21 J	0.19 U	0.76 U	0.19 J
1,1-DICHLOROPROPENE	0.74 U	0.13 U	0.13 U	0.52 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.97 U	0.17 U	0.17 U	0.68 U	0.17 U
1,2,3-TRICHLOROPROPANE	2.5 U	0.43 U	0.43 U	1.7 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.034 U	0.0059 U	0.0059 U	0.024 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.86 U	0.15 U	0.15 U	0.60 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.69 U	0.12 U	0.12 U	0.48 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	3.8 U	0.67 U	0.67 U	2.7 U	0.67 U
1,2-DIBROMOETHANE	1.4 U	0.24 U	0.24 U	0.96 U	0.24 U
1,2-DICHLOROBENZENE	0.74 U	0.13 U	0.13 U	0.52 U	0.13 U
1,2-DICHLOROETHANE	2.9 J	1.2	0.57 J	0.92 J	0.22 U
1,2-DICHLOROPROPANE	1 U	0.18 U	0.18 U	0.72 U	0.18 U
1,3-DICHLOROBENZENE	0.80 U	0.14 U	0.14 U	0.56 U	0.14 U
1,3-DICHLOROPROPANE	0.91 U	0.16 U	0.16 U	0.64 U	0.16 U
1,4-DICHLOROBENZENE	0.74 U	0.13 U	0.13 U	0.52 U	0.13 U
2,2-DICHLOROPROPANE	0.74 U	0.13 U	0.13 U	0.52 U	0.13 U
2-BUTANONE	3.3 U	0.57 U	0.57 UR	2.3 UR	0.57 U
2-CHLOROETHYL VINYL ETHER	5.7 U	0.99 U	0.99 U	4 U	0.99 U
2-CHLOROTOLUENE	0.63 U	0.11 U	0.11 U	0.44 U	0.11 U
2-HEXANONE	2.3 U	0.41 U	0.41 U	1.6 U	0.41 U
4-CHLOROTOLUENE	1 U	0.18 U	0.18 U	0.72 U	0.18 U
4-ISOPROPYLTOLUENE	0.69 U	0.12 U	0.12 U	0.48 U	0.12 U
4-METHYL-2-PENTANONE	1.8 U	0.32 U	0.32 U	1.3 U	0.32 U
ACETONE	6.3 U	1.6 J	1.1 U	4.4 U	1.7 J
BENZENE	1.2 J	0.27 J	0.23 J	0.52 U	0.13 J
BROMOBENZENE	0.74 U	0.13 U	0.13 U	0.52 U	0.13 U
BROMOCHLOROMETHANE	1.7 U	0.29 U	0.29 U	1.2 U	0.29 U
BROMODICHLOROMETHANE	0.86 U	0.15 U	0.15 U	0.60 U	0.88 J

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-49S MSA-MW49S-101713 10/17/2013	DR-MW-50D MSA-MW50D-102113 10/21/2013	DR-MW-50I MSA-MW50I-101813 10/18/2013	DR-MW-50S MSA-MW50S-101813 10/18/2013	DR-MW-51D MSA-MW51D-102113 10/21/2013
BROMOFORM	3.7 U	0.64 U	0.64 U	2.6 U	0.64 U
BROMOMETHANE	2.3 U	0.41 U	0.41 U	1.6 U	0.41 U
CARBON DISULFIDE	0.74 U	0.82 B	0.13 U	0.66 J	1.1 B
CARBON TETRACHLORIDE	0.74 U	0.13 U	0.13 U	0.52 U	0.13 U
CHLOROBENZENE	1.9 J	0.90 J	0.50 J	0.60 U	0.15 U
CHLORODIBROMOMETHANE	1 U	0.18 U	0.18 U	0.72 U	0.18 U
CHLOROETHANE	1.7 U	0.29 U	0.29 U	1.2 U	0.29 U
CHLOROFORM	0.91 U	2.4 B	1.7	3.2 J	24
CHLOROMETHANE	1.7 U	0.30 U	0.30 U	1.2 U	0.30 U
CIS-1,2-DICHLOROETHENE	88	46	21	46	10
CIS-1,3-DICHLOROPROPENE	0.80 U	0.14 U	0.14 U	0.56 U	0.14 U
DIBROMOMETHANE	1.6 U	0.28 U	0.28 U	1.1 U	0.28 U
DICHLORODIFLUOROMETHANE	1.8 U	0.31 U	0.31 U	1.2 U	0.31 U
DIISOPROPYL ETHER	8.6 U	1.5 U	1.5 U	6 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.63 U	0.11 U	0.11 U	0.44 U	0.11 U
ETHYLBENZENE	0.97 U	0.17 U	0.17 U	0.68 U	0.17 U
HEXACHLOROBUTADIENE	1.7 U	0.30 U	0.30 U	1.2 U	0.30 U
ISOPROPYLBENZENE	0.74 U	0.13 U	0.13 U	0.52 U	0.13 U
M+P-XYLENES	1.4 U	0.24 U	0.24 U	0.96 U	0.26 J
METHYL TERT-BUTYL ETHER	0.97 U	0.17 U	0.17 U	0.68 U	0.17 U
METHYLENE CHLORIDE	1.9 U	0.33 U	0.33 U	2.2 J	0.33 U
NAPHTHALENE	1.4 U	0.24 U	0.24 U	0.96 U	0.24 U
N-BUTYLBENZENE	0.69 U	0.12 U	0.12 U	0.48 U	0.12 U
N-PROPYLBENZENE	0.80 U	0.14 U	0.14 U	0.56 U	0.14 U
O-XYLENE	0.80 U	0.14 U	0.14 U	0.56 U	0.14 U
SEC-BUTYLBENZENE	0.74 U	0.13 U	0.13 U	0.52 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA
STYRENE	0.63 U	0.11 U	0.11 U	0.44 U	0.11 U
TERT-AMYL METHYL ETHER	0.38 U	0.067 U	0.067 U	0.27 U	0.067 U
TERT-BUTYLBENZENE	0.74 U	0.13 U	0.13 U	0.52 U	0.13 U
TERTIARY-BUTYL ALCOHOL	22 UR	3.9 UR	3.9 U	16 U	3.9 UR
TETRACHLOROETHENE	1.7 U	0.29 U	0.29 U	1.2 U	0.37 J

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-49S MSA-MW49S-101713 10/17/2013	DR-MW-50D MSA-MW50D-102113 10/21/2013	DR-MW-50I MSA-MW50I-101813 10/18/2013	DR-MW-50S MSA-MW50S-101813 10/18/2013	DR-MW-51D MSA-MW51D-102113 10/21/2013
TOLUENE	0.74 U	0.62 B	0.13 U	0.52 U	0.72 B
TOTAL XYLENES	0.80 U	0.14 U	0.14 U	0.56 U	0.26 J
TRANS-1,2-DICHLOROETHENE	1.8 J	1.2	0.71 J	1.5 J	0.33 J
TRANS-1,3-DICHLOROPROPENE	1.1 U	0.19 U	0.19 U	0.76 U	0.19 U
TRICHLOROETHENE	160	64	32	170	40
TRICHLOROFLUOROMETHANE	1.2 U	0.21 U	0.21 U	0.84 U	0.21 U
UNKNOWN	NA	NA	15 NJ	NA	NA
VINYL ACETATE	1.1 U	0.19 U	0.19 UR	0.76 UR	0.19 U
VINYL CHLORIDE	35	9.7	4.5	11	0.92 J
VOLATILE GASES (UG/L)					
ETHANE	NA	NA	NA	NA	5.5
METHANE	NA	NA	NA	NA	15
TICOV (UG/L)					
SPIRO[5.6]DODECANE	NA	NA	NA	NA	5.5 J
SEMIVOLATILES (UG/L)					
1,1-BIPHENYL	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U
1,4-DIOXANE	54	2.7	2.7	3.5	2.5
2,2'-OXYBIS(1-CHLOROPROPANE)	0.40 U	0.40 U	0.41 U	0.39 U	0.43 U
2,4,5-TRICHLOROPHENOL	0.30 U	0.30 U	0.31 U	0.29 U	0.33 U
2,4,6-TRICHLOROPHENOL	0.24 U	0.24 U	0.24 U	0.23 U	0.26 U
2,4-DICHLOROPHENOL	0.19 U	0.19 U	0.19 U	0.18 U	0.21 U
2,4-DIMETHYLPHENOL	0.25 U	0.25 U	0.26 U	0.24 U	0.27 U
2,4-DINITROPHENOL	0.32 U	0.32 U	0.33 U	0.31 U	0.35 U
2,4-DINITROTOLUENE	0.25 U	0.25 U	0.26 U	0.24 U	0.27 U
2,6-DINITROTOLUENE	0.79 U	0.81 U	0.82 U	0.78 U	0.87 U
2-CHLORONAPHTHALENE	0.099 U	0.10 U	0.10 U	0.097 U	0.11 U
2-CHLOROPHENOL	0.29 U	0.29 U	0.30 U	0.28 U	0.32 U
2-METHYLNAPHTHALENE	0.09 U	0.091 U	0.092 U	0.088 U	0.098 U
2-METHYLPHENOL	0.17 U	0.17 U	0.17 U	0.17 U	0.18 U
2-NITROANILINE	0.21 U	0.21 U	0.21 U	0.20 U	0.23 U
2-NITROPHENOL	0.28 U	0.28 U	0.29 U	0.27 U	0.30 U
3&4-METHYLPHENOL	0.79 U	0.81 U	0.82 U	0.78 U	0.87 U
3,3'-DICHLOROBENZIDINE	0.37 U	0.37 U	0.38 U	0.36 U	0.40 U
3-NITROANILINE	0.28 U	0.28 U	0.29 U	0.27 U	0.30 U

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LOCATION SAMPLE ID SAMPLE DATE	DR-MW-49S MSA-MW49S-101713 10/17/2013	DR-MW-50D MSA-MW50D-102113 10/21/2013	DR-MW-50I MSA-MW50I-101813 10/18/2013	DR-MW-50S MSA-MW50S-101813 10/18/2013	DR-MW-51D MSA-MW51D-102113 10/21/2013
4,6-DINITRO-2-METHYLPHENOL	2.4 U	2.4 U	2.4 U	2.3 U	2.6 U
4-BROMOPHENYL PHENYL ETHER	0.22 U	0.22 U	0.22 U	0.21 U	0.24 U
4-CHLORO-3-METHYLPHENOL	0.21 U	0.21 U	0.21 U	0.20 U	0.23 U
4-CHLOROANILINE	0.21 U	0.21 U	0.21 U	0.20 U	0.23 U
4-CHLOROPHENYL PHENYL ETHER	0.30 U	0.30 U	0.31 U	0.29 U	0.33 U
4-NITROANILINE	0.22 U	0.22 U	0.22 U	0.21 U	0.24 U
4-NITROPHENOL	0.29 U	0.29 U	0.30 U	0.28 U	0.32 U
ACENAPHTHENE	0.044 U	0.045 U	0.045 U	0.043 U	0.048 U
ACENAPHTHYLENE	0.048 U	0.049 U	0.049 U	0.047 U	0.052 U
ACETOPHENONE	0.34 U	0.34 U	0.35 U	0.33 U	0.37 U
ANTHRACENE	0.087 U	0.089 U	0.09 U	0.085 U	0.096 U
ATRAZINE	0.34 U	0.34 U	0.35 U	0.33 U	0.37 U
BAP EQUIVALENT-HALFND	0.051 U	0.052 U	0.052 U	0.05 U	0.056 U
BAP EQUIVALENT-POS	0.051 U	0.052 U	0.052 U	0.05 U	0.056 U
BENZALDEHYDE	0.39 U	0.39 U	0.40 U	0.38 U	0.42 U
BENZO(A)ANTHRACENE	0.029 U	0.03 U	0.03 U	0.029 U	0.032 U
BENZO(A)PYRENE	0.051 U	0.052 U	0.052 U	0.05 U	0.056 U
BENZO(B)FLUORANTHENE	0.039 U	0.04 U	0.04 U	0.038 U	0.043 U
BENZO(G,H,I)PERYLENE	0.046 U	0.047 U	0.047 U	0.045 U	0.05 U
BENZO(K)FLUORANTHENE	0.044 U	0.045 U	0.046 U	0.043 U	0.049 U
BIS(2-CHLOROETHOXY)METHANE	0.32 U	0.32 U	0.33 U	0.31 U	0.35 U
BIS(2-CHLOROETHYL)ETHER	0.099 U	0.10 U	0.10 U	0.097 U	0.11 U
BIS(2-ETHYLHEXYL)PHTHALATE	0.23 B	0.22 U	0.60 B	0.32 B	0.32 B
BUTYL BENZYL PHTHALATE	0.26 U	0.26 U	0.27 U	0.25 U	0.28 U
CAPROLACTAM	0.20 U	0.20 U	0.20 U	0.19 U	0.22 U
CARBAZOLE	0.28 U	0.28 U	0.29 U	0.27 U	0.30 U
CHRYSENE	0.05 U	0.051 U	0.051 U	0.049 U	0.055 U
DIBENZO(A,H)ANTHRACENE	0.044 U	0.045 U	0.046 U	0.043 U	0.048 U
DIBENZOFURAN	0.02 U	0.02 U	0.02 U	0.019 U	0.022 U
DIETHYL PHTHALATE	0.59 U	0.61 U	0.61 U	0.58 U	0.65 U
DIMETHYL PHTHALATE	0.29 U	0.29 U	0.30 U	0.28 U	0.32 U
DI-N-BUTYL PHTHALATE	0.66 U	0.68 U	0.76 J	0.65 U	0.73 U
DI-N-OCTYL PHTHALATE	0.23 U	0.23 U	0.23 U	0.22 U	0.25 U
FLUORANTHENE	0.044 U	0.045 U	0.046 U	0.043 U	0.048 U

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Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-49S MSA-MW49S-101713 10/17/2013	DR-MW-50D MSA-MW50D-102113 10/21/2013	DR-MW-50I MSA-MW50I-101813 10/18/2013	DR-MW-50S MSA-MW50S-101813 10/18/2013	DR-MW-51D MSA-MW51D-102113 10/21/2013
FLUORENE	0.04 U	0.041 U	0.041 U	0.039 U	0.044 U
HEXACHLOROBENZENE	0.084 U	0.086 U	0.087 U	0.083 U	0.093 U
HEXACHLOROBUTADIENE	0.27 U	0.27 U	0.28 U	0.26 U	0.29 U
HEXACHLOROCYCLOPENTADIENE	0.24 U	0.24 U	0.24 U	0.23 U	0.26 U
HEXACHLOROETHANE	0.19 U	0.19 U	0.19 U	0.18 U	0.21 U
INDENO(1,2,3-CD)PYRENE	0.043 U	0.044 U	0.044 U	0.042 U	0.047 U
ISOPHORONE	0.27 U	0.27 U	0.28 U	0.26 U	0.29 U
NAPHTHALENE	0.062 U	0.063 U	0.064 U	0.061 U	0.068 U
NITROBENZENE	0.04 U	0.04 U	0.041 U	0.039 U	0.043 U
N-NITROSODIMETHYLAMINE	0.31 U	0.31 U	0.32 U	0.30 U	0.34 U
N-NITROSO-DI-N-PROPYLAMINE	0.24 U	0.24 U	0.24 U	0.23 U	0.26 U
N-NITROSODIPHENYLAMINE	0.31 U	0.31 U	0.32 U	0.30 U	0.34 U
PENTACHLOROPHENOL	0.27 U	0.27 U	0.28 U	0.26 U	0.29 U
PHENANTHRENE	0.061 U	0.063 U	0.063 U	0.06 U	0.067 U
PHENOL	0.59 U	0.61 U	0.61 U	0.58 U	0.65 U
PYRENE	0.042 U	0.042 U	0.043 U	0.041 U	0.046 U
METALS (UG/L)					
ANTIMONY	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ARSENIC	3.7 J	3.2 U	3.2 U	3.2 U	3.2 U
BARIUM	17 J	79 J	120 J	49 J	60 J
BERYLLIUM	1.7 J	0.46 U	0.46 U	0.46 U	0.46 U
CADMIUM	8.8	0.66 U	0.66 U	0.66 U	0.66 U
CALCIUM	NA	NA	NA	NA	36000
CHROMIUM	6.9 J	4.8 J	5.5 J	4.3 J	2.3 J
COBALT	180	58	19	67	28
COPPER	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
IRON	NA	NA	NA	NA	27000
LEAD	1.9 U	1.9 U	1.9 U	1.9 U	2.1 J
MAGNESIUM	NA	NA	NA	NA	15000
MANGANESE	NA	NA	NA	NA	1400
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	1.3 U	1.3 U	1.4 J	1.3 J	1.3 J
NICKEL	68	30 B	3.7 J	34 J	6.2 B
POTASSIUM	NA	NA	NA	NA	4000 J

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Chemical Results for Monitoring Well Groundwater Samples - 2013
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LOCATION SAMPLE ID SAMPLE DATE	DR-MW-49S MSA-MW49S-101713 10/17/2013	DR-MW-50D MSA-MW50D-102113 10/21/2013	DR-MW-50I MSA-MW50I-101813 10/18/2013	DR-MW-50S MSA-MW50S-101813 10/18/2013	DR-MW-51D MSA-MW51D-102113 10/21/2013
SELENIUM	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
SILICON DIOXIDE	NA	NA	NA	NA	12000
SILVER	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
SODIUM	NA	NA	NA	NA	57000
THALLIUM	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
VANADIUM	0.64 UL	0.64 UL	0.64 UJ	0.64 UJ	0.64 UL
ZINC	130	32 B	20 B	39 B	19 B
DISSOLVED METALS (UG/L)					
ANTIMONY	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ARSENIC	4.7 J	3.2 U	3.2 U	3.2 U	3.2 U
BARIUM	17 J	79 J	120 J	48 J	45 J
BERYLLIUM	1.7 J	0.46 U	0.46 U	0.46 U	0.46 U
CADMIUM	8.4	0.66 U	0.66 U	0.66 U	0.66 U
CHROMIUM	7.2 J	4.3 J	2.2 U	3.7 J	2.2 U
COBALT	180	59	12	64	28
COPPER	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
LEAD	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
NICKEL	70	33 B	3.2 UL	32 J	5.7 B
SELENIUM	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
SILVER	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
THALLIUM	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
VANADIUM	0.64 UL	1.7 B	0.64 UJ	0.64 UJ	0.64 UL
ZINC	130	32 B	5 U	24 B	6 B
MISCELLANEOUS PARAMETERS					
ALKALINITY (MG/L)	NA	NA	NA	NA	36
AMMONIA-N (MG/L)	NA	NA	NA	NA	6.7
CHLORIDE (MG/L)	NA	NA	NA	NA	110
DISSOLVED ORGANIC CARBON (MG/L)	NA	NA	NA	NA	11
NITRATE-N (MG/L)	NA	NA	NA	NA	0.023 U
NITRITE-N (MG/L)	NA	NA	NA	NA	0.012 U
ORTHOPHOSPHATE-P (MG/L)	NA	NA	NA	NA	NA
SULFATE (MG/L)	NA	NA	NA	NA	140

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Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-49S MSA-MW49S-101713 10/17/2013	DR-MW-50D MSA-MW50D-102113 10/21/2013	DR-MW-50I MSA-MW50I-101813 10/18/2013	DR-MW-50S MSA-MW50S-101813 10/18/2013	DR-MW-51D MSA-MW51D-102113 10/21/2013
TOTAL DISSOLVED SOLIDS (MG/L)	NA	NA	NA	NA	390
HEXAVALENT CHROMIUM (UG/L)	0.02 J	0.01 UL	0.02 UR	0.02 UR	0.01 U
PETROLEUM HYDROCARBONS (UG/L)					
TPH (C06-C10)	150	89 B	68 K	130 K	70 B
TPH (C10-C32)	240 UJ	230 U	230 U	240 U	1700

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Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-MW-51D	DR-MW-51I	DR-MW-51I	DR-MW-51S	DR-MW-51S
SAMPLE ID	MSA-MW51D-102113A	MSA-MW51I-102113	MSA-MW51I-102113A	MSA-MW51S-102113	MSA-MW51S-102113A
SAMPLE DATE	10/21/2013	10/21/2013	10/21/2013	10/21/2013	10/21/2013
VOLATILES (UG/L)					
1,1,1,2-TETRACHLOROETHANE	NA	0.29 U	NA	46 U	NA
1,1,1-TRICHLOROETHANE	NA	0.28 U	NA	44 U	NA
1,1,2,2-TETRACHLOROETHANE	NA	0.23 U	NA	36 U	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	NA	0.35 U	NA	56 U	NA
1,1-DICHLOROETHANE	NA	0.19 U	NA	30 U	NA
1,1-DICHLOROETHENE	NA	0.24 J	NA	38 U	NA
1,1-DICHLOROPROPENE	NA	0.16 U	NA	26 U	NA
1,2,3-TRICHLOROBENZENE	NA	0.21 U	NA	34 U	NA
1,2,3-TRICHLOROPROPANE	NA	0.54 U	NA	86 U	NA
1,2,3-TRIMETHYLBENZENE	NA	0.0074 U	NA	1.2 U	NA
1,2,4-TRICHLOROBENZENE	NA	0.19 U	NA	30 U	NA
1,2,4-TRIMETHYLBENZENE	NA	0.15 U	NA	24 U	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	0.84 U	NA	130 U	NA
1,2-DIBROMOETHANE	NA	0.30 U	NA	48 U	NA
1,2-DICHLOROBENZENE	NA	0.16 U	NA	26 U	NA
1,2-DICHLOROETHANE	NA	0.28 U	NA	44 U	NA
1,2-DICHLOROPROPANE	NA	0.23 U	NA	36 U	NA
1,3-DICHLOROBENZENE	NA	0.18 U	NA	28 U	NA
1,3-DICHLOROPROPANE	NA	0.20 U	NA	32 U	NA
1,4-DICHLOROBENZENE	NA	0.16 U	NA	26 U	NA
2,2-DICHLOROPROPANE	NA	0.16 U	NA	26 U	NA
2-BUTANONE	NA	0.71 U	NA	110 U	NA
2-CHLOROETHYL VINYL ETHER	NA	1.2 U	NA	200 U	NA
2-CHLOROTOLUENE	NA	0.14 U	NA	22 U	NA
2-HEXANONE	NA	0.51 U	NA	82 U	NA
4-CHLOROTOLUENE	NA	0.23 U	NA	36 U	NA
4-ISOPROPYLTOLUENE	NA	0.15 U	NA	24 U	NA
4-METHYL-2-PENTANONE	NA	0.40 U	NA	64 U	NA
ACETONE	NA	1.4 U	NA	220 U	NA
BENZENE	NA	0.16 U	NA	26 U	NA
BROMOBENZENE	NA	0.16 U	NA	26 U	NA
BROMOCHLOROMETHANE	NA	0.36 U	NA	58 U	NA
BROMODICHLOROMETHANE	NA	0.19 U	NA	30 U	NA

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-51D MSA-MW51D-102113A 10/21/2013	DR-MW-51I MSA-MW51I-102113 10/21/2013	DR-MW-51I MSA-MW51I-102113A 10/21/2013	DR-MW-51S MSA-MW51S-102113 10/21/2013	DR-MW-51S MSA-MW51S-102113A 10/21/2013
BROMOFORM	NA	0.80 U	NA	130 U	NA
BROMOMETHANE	NA	0.51 U	NA	82 U	NA
CARBON DISULFIDE	NA	1.2 B	NA	30 B	NA
CARBON TETRACHLORIDE	NA	0.16 U	NA	26 U	NA
CHLOROBENZENE	NA	0.19 U	NA	30 U	NA
CHLORODIBROMOMETHANE	NA	0.23 U	NA	36 U	NA
CHLOROETHANE	NA	0.36 U	NA	58 U	NA
CHLOROFORM	NA	0.20 U	NA	32 U	NA
CHLOROMETHANE	NA	0.38 U	NA	60 U	NA
CIS-1,2-DICHLOROETHENE	NA	70	NA	5200	NA
CIS-1,3-DICHLOROPROPENE	NA	0.18 U	NA	28 U	NA
DIBROMOMETHANE	NA	0.35 U	NA	56 U	NA
DICHLORODIFLUOROMETHANE	NA	0.39 U	NA	62 U	NA
DIISOPROPYL ETHER	NA	1.9 U	NA	300 U	NA
ETHYL TERT-BUTYL ETHER	NA	0.14 U	NA	22 U	NA
ETHYLBENZENE	NA	0.21 U	NA	34 U	NA
HEXACHLOROBUTADIENE	NA	0.38 U	NA	60 U	NA
ISOPROPYLBENZENE	NA	0.16 U	NA	26 U	NA
M+P-XYLENES	NA	0.30 U	NA	48 U	NA
METHYL TERT-BUTYL ETHER	NA	0.21 U	NA	34 U	NA
METHYLENE CHLORIDE	NA	0.41 U	NA	66 U	NA
NAPHTHALENE	NA	0.30 U	NA	48 U	NA
N-BUTYLBENZENE	NA	0.15 U	NA	24 U	NA
N-PROPYLBENZENE	NA	0.18 U	NA	28 U	NA
O-XYLENE	NA	0.18 U	NA	28 U	NA
SEC-BUTYLBENZENE	NA	0.16 U	NA	26 U	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA
STYRENE	NA	0.14 U	NA	22 U	NA
TERT-AMYL METHYL ETHER	NA	0.084 U	NA	13 U	NA
TERT-BUTYLBENZENE	NA	0.16 U	NA	26 U	NA
TERTIARY-BUTYL ALCOHOL	NA	4.9 UR	NA	780 UR	NA
TETRACHLOROETHENE	NA	0.36 U	NA	58 U	NA

Table D-4

Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-51D MSA-MW51D-102113A 10/21/2013	DR-MW-51I MSA-MW51I-102113 10/21/2013	DR-MW-51I MSA-MW51I-102113A 10/21/2013	DR-MW-51S MSA-MW51S-102113 10/21/2013	DR-MW-51S MSA-MW51S-102113A 10/21/2013
TOLUENE	NA	0.32 B	NA	26 U	NA
TOTAL XYLENES	NA	0.18 U	NA	28 U	NA
TRANS-1,2-DICHLOROETHENE	NA	0.93 J	NA	38 U	NA
TRANS-1,3-DICHLOROPROPENE	NA	0.24 U	NA	38 U	NA
TRICHLOROETHENE	NA	58	NA	13000	NA
TRICHLOROFLUOROMETHANE	NA	0.26 U	NA	42 U	NA
UNKNOWN	NA	NA	NA	NA	NA
VINYL ACETATE	NA	0.24 U	NA	38 U	NA
VINYL CHLORIDE	NA	3.3	NA	150 J	NA
VOLATILE GASES (UG/L)					
ETHANE	NA	6.7	NA	4.8	NA
METHANE	NA	38	NA	38	NA
TICOV (UG/L)					
SPIRO[5.6]DODECANE	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)					
1,1-BIPHENYL	NA	0.14 U	NA	0.14 U	NA
1,4-DIOXANE	NA	1.8	NA	43	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	0.43 U	NA	0.43 U	NA
2,4,5-TRICHLOROPHENOL	NA	0.33 U	NA	0.33 U	NA
2,4,6-TRICHLOROPHENOL	NA	0.26 U	NA	0.26 U	NA
2,4-DICHLOROPHENOL	NA	0.21 U	NA	0.21 U	NA
2,4-DIMETHYLPHENOL	NA	0.27 U	NA	0.27 U	NA
2,4-DINITROPHENOL	NA	0.35 U	NA	0.35 U	NA
2,4-DINITROTOLUENE	NA	0.27 U	NA	0.27 U	NA
2,6-DINITROTOLUENE	NA	0.87 U	NA	0.87 U	NA
2-CHLORONAPHTHALENE	NA	0.11 U	NA	0.11 U	NA
2-CHLOROPHENOL	NA	0.32 U	NA	0.32 U	NA
2-METHYLNAPHTHALENE	NA	0.098 U	NA	0.14 J	NA
2-METHYLPHENOL	NA	0.18 U	NA	0.18 U	NA
2-NITROANILINE	NA	0.23 U	NA	0.23 U	NA
2-NITROPHENOL	NA	0.30 U	NA	0.30 U	NA
3&4-METHYLPHENOL	NA	0.87 U	NA	0.87 U	NA
3,3'-DICHLOROBENZIDINE	NA	0.40 U	NA	0.40 U	NA
3-NITROANILINE	NA	0.30 U	NA	0.30 U	NA

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-51D MSA-MW51D-102113A 10/21/2013	DR-MW-51I MSA-MW51I-102113 10/21/2013	DR-MW-51I MSA-MW51I-102113A 10/21/2013	DR-MW-51S MSA-MW51S-102113 10/21/2013	DR-MW-51S MSA-MW51S-102113A 10/21/2013
4,6-DINITRO-2-METHYLPHENOL	NA	2.6 U	NA	2.6 U	NA
4-BROMOPHENYL PHENYL ETHER	NA	0.24 U	NA	0.24 U	NA
4-CHLORO-3-METHYLPHENOL	NA	0.23 U	NA	0.23 U	NA
4-CHLOROANILINE	NA	0.23 U	NA	0.23 U	NA
4-CHLOROPHENYL PHENYL ETHER	NA	0.33 U	NA	0.33 U	NA
4-NITROANILINE	NA	0.24 U	NA	0.24 U	NA
4-NITROPHENOL	NA	0.32 U	NA	0.32 U	NA
ACENAPHTHENE	NA	0.048 U	NA	0.048 U	NA
ACENAPHTHYLENE	NA	0.052 U	NA	0.052 U	NA
ACETOPHENONE	NA	0.37 U	NA	0.37 U	NA
ANTHRACENE	NA	0.096 U	NA	0.096 U	NA
ATRAZINE	NA	0.37 U	NA	0.37 U	NA
BAP EQUIVALENT-HALFND	NA	0.056 U	NA	0.056 U	NA
BAP EQUIVALENT-POS	NA	0.056 U	NA	0.056 U	NA
BENZALDEHYDE	NA	0.42 U	NA	0.42 U	NA
BENZO(A)ANTHRACENE	NA	0.032 U	NA	0.032 U	NA
BENZO(A)PYRENE	NA	0.056 U	NA	0.056 U	NA
BENZO(B)FLUORANTHENE	NA	0.043 U	NA	0.043 U	NA
BENZO(G,H,I)PERYLENE	NA	0.05 U	NA	0.05 U	NA
BENZO(K)FLUORANTHENE	NA	0.049 U	NA	0.049 U	NA
BIS(2-CHLOROETHOXY)METHANE	NA	0.35 U	NA	0.35 U	NA
BIS(2-CHLOROETHYL)ETHER	NA	0.11 U	NA	0.11 U	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	0.24 U	NA	0.30 B	NA
BUTYL BENZYL PHTHALATE	NA	0.28 U	NA	0.28 U	NA
CAPROLACTAM	NA	0.22 U	NA	0.22 U	NA
CARBAZOLE	NA	0.30 U	NA	0.30 U	NA
CHRYSENE	NA	0.055 U	NA	0.055 U	NA
DIBENZO(A,H)ANTHRACENE	NA	0.048 U	NA	0.048 U	NA
DIBENZOFURAN	NA	0.022 U	NA	0.022 U	NA
DIETHYL PHTHALATE	NA	0.65 U	NA	0.65 U	NA
DIMETHYL PHTHALATE	NA	0.32 U	NA	0.32 U	NA
DI-N-BUTYL PHTHALATE	NA	0.73 U	NA	0.73 U	NA
DI-N-OCTYL PHTHALATE	NA	0.25 U	NA	0.25 U	NA
FLUORANTHENE	NA	0.048 U	NA	0.048 U	NA

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-51D MSA-MW51D-102113A 10/21/2013	DR-MW-51I MSA-MW51I-102113 10/21/2013	DR-MW-51I MSA-MW51I-102113A 10/21/2013	DR-MW-51S MSA-MW51S-102113 10/21/2013	DR-MW-51S MSA-MW51S-102113A 10/21/2013
FLUORENE	NA	0.044 U	NA	0.044 U	NA
HEXACHLOROBENZENE	NA	0.093 U	NA	0.093 U	NA
HEXACHLOROBUTADIENE	NA	0.29 U	NA	0.29 U	NA
HEXACHLOROCYCLOPENTADIENE	NA	0.26 U	NA	0.26 U	NA
HEXACHLOROETHANE	NA	0.21 U	NA	0.21 U	NA
INDENO(1,2,3-CD)PYRENE	NA	0.047 U	NA	0.047 U	NA
ISOPHORONE	NA	0.29 U	NA	0.29 U	NA
NAPHTHALENE	NA	0.068 U	NA	1.2	NA
NITROBENZENE	NA	0.043 U	NA	0.043 U	NA
N-NITROSODIMETHYLAMINE	NA	0.34 U	NA	0.34 U	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	0.26 U	NA	0.26 U	NA
N-NITROSODIPHENYLAMINE	NA	0.34 U	NA	0.34 U	NA
PENTACHLOROPHENOL	NA	0.29 U	NA	0.29 U	NA
PHENANTHRENE	NA	0.067 U	NA	0.067 U	NA
PHENOL	NA	0.65 U	NA	0.65 U	NA
PYRENE	NA	0.046 U	NA	0.046 U	NA
METALS (UG/L)					
ANTIMONY	NA	1.8 U	NA	1.8 U	NA
ARSENIC	NA	4.7 J	NA	3.2 U	NA
BARIUM	NA	25 J	NA	25 J	NA
BERYLLIUM	NA	0.60 J	NA	1 J	NA
CADMIUM	NA	0.66 U	NA	0.66 U	NA
CALCIUM	NA	40000	NA	80000	NA
CHROMIUM	NA	17	NA	14	NA
COBALT	NA	71	NA	35	NA
COPPER	NA	4.5 U	NA	4.5 U	NA
IRON	NA	68000	NA	72000	NA
LEAD	NA	1.9 U	NA	1.9 U	NA
MAGNESIUM	NA	32000	NA	55000	NA
MANGANESE	NA	2900	NA	5000	NA
MERCURY	NA	0.12 U	NA	0.12 U	NA
MOLYBDENUM	NA	1.3 U	NA	1.3 U	NA
NICKEL	NA	28 B	NA	23 B	NA
POTASSIUM	NA	4000 J	NA	9800	NA

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-51D MSA-MW51D-102113A 10/21/2013	DR-MW-51I MSA-MW51I-102113 10/21/2013	DR-MW-51I MSA-MW51I-102113A 10/21/2013	DR-MW-51S MSA-MW51S-102113 10/21/2013	DR-MW-51S MSA-MW51S-102113A 10/21/2013
SELENIUM	NA	4.1 U	NA	4.1 U	NA
SILICON DIOXIDE	NA	16000	NA	18000	NA
SILVER	NA	2.2 U	NA	2.2 U	NA
SODIUM	NA	130000	NA	120000	NA
THALLIUM	NA	4.7 U	NA	4.7 U	NA
VANADIUM	NA	0.64 UL	NA	0.64 UL	NA
ZINC	NA	43 B	NA	22 B	NA
DISSOLVED METALS (UG/L)					
ANTIMONY	NA	1.8 U	NA	1.8 U	NA
ARSENIC	NA	3.2 U	NA	3.2 U	NA
BARIUM	NA	25 J	NA	24 J	NA
BERYLLIUM	NA	0.59 J	NA	0.96 J	NA
CADMIUM	NA	0.66 U	NA	0.66 U	NA
CHROMIUM	NA	14	NA	13	NA
COBALT	NA	66	NA	34	NA
COPPER	NA	4.5 U	NA	4.5 U	NA
LEAD	NA	1.9 U	NA	2.1 J	NA
MERCURY	NA	0.12 U	NA	0.12 U	NA
MOLYBDENUM	NA	1.3 U	NA	1.3 U	NA
NICKEL	NA	25 B	NA	24 B	NA
SELENIUM	NA	4.1 U	NA	4.1 U	NA
SILVER	NA	2.2 U	NA	2.2 U	NA
THALLIUM	NA	4.7 U	NA	4.7 U	NA
VANADIUM	NA	0.64 UL	NA	0.64 UL	NA
ZINC	NA	35 B	NA	23 B	NA
MISCELLANEOUS PARAMETERS					
ALKALINITY (MG/L)	NA	52	NA	49	NA
AMMONIA-N (MG/L)	NA	1.1	NA	2.2	NA
CHLORIDE (MG/L)	NA	240	NA	140	NA
DISSOLVED ORGANIC CARBON (MG/L)	NA	7.7	NA	6.4	NA
NITRATE-N (MG/L)	NA	0.057 J	NA	0.023 U	NA
NITRITE-N (MG/L)	NA	0.012 U	NA	0.012 U	NA
ORTHOPHOSPHATE-P (MG/L)	0.044 UL	NA	0.044 UL	NA	0.087 J
SULFATE (MG/L)	NA	440	NA	760	NA

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Chemical Results for Monitoring Well Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-MW-51D MSA-MW51D-102113A 10/21/2013	DR-MW-51I MSA-MW51I-102113 10/21/2013	DR-MW-51I MSA-MW51I-102113A 10/21/2013	DR-MW-51S MSA-MW51S-102113 10/21/2013	DR-MW-51S MSA-MW51S-102113A 10/21/2013
TOTAL DISSOLVED SOLIDS (MG/L)	NA	1100	NA	1300	NA
HEXAVALENT CHROMIUM (UG/L)	NA	0.01 U	NA	0.01 UL	NA
PETROLEUM HYDROCARBONS (UG/L)					
TPH (C06-C10)	NA	64 J	NA	6200 K	NA
TPH (C10-C32)	NA	260 U	NA	270 J	NA

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23
SAMPLE ID	DR-DPT-23-20	DR-DPT-23-25	DR-DPT-23-30	DR-DPT-23-35	DR-DPT-23-40	DR-DPT-23-45	DR-DPT-23-50
SAMPLE DATE	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	1.9 U	0.23 U	0.77 UJ
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	1.8 U	0.22 U	0.73 UJ
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	1.5 U	0.18 U	0.60 UJ
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	2.3 U	0.28 U	0.93 UJ
1,1-DICHLOROETHANE	1.4	2	1.5	1.4	1.2 U	0.15 U	0.50 UJ
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	2.4 J	0.19 U	0.63 UJ
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 UJ
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	1.4 U	0.17 U	0.57 UJ
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	3.6 U	0.43 U	1.4 UJ
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.049 U	0.0059 U	0.02 UJ
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	1.2 U	0.15 U	0.50 UJ
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	1 U	0.12 U	0.40 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	5.6 U	0.67 U	2.2 UJ
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	2 U	0.24 U	0.80 UJ
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 UJ
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.45 J	0.31 J	18	0.72 J	2.5 J
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	1.5 U	0.18 U	0.60 UJ
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	1.2 U	0.14 U	0.47 UJ
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	1.3 U	0.16 U	0.53 UJ
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 UJ
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	13 J	48 J
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 UJ
2-BUTANONE	0.94 J	1.4 J	0.57 U	0.57 U	4.7 U	0.57 U	17 J
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	8.2 U	0.99 U	3.3 UJ
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.92 U	0.11 U	0.37 UJ
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	3.4 U	0.41 U	1.4 UJ
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	2 NJ	NA	1.1 NJ	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	1.5 U	0.18 U	0.60 UJ
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	1 U	0.12 U	0.40 UJ
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	2.7 U	0.32 U	1.1 UJ
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	4.3 NJ
ACETONE	11 B	19 B	4.4 B	4.2 B	9.2 U	2.7 B	68 B
BENZENE	0.13 U	0.14 J	0.13 U	0.16 J	2.6 J	0.15 J	1.2 J
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 UJ
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	2.4 U	0.29 U	0.97 UJ
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	1.2 U	0.15 U	0.50 UJ
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	5.3 U	0.64 U	2.1 UJ
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	3.4 U	0.41 U	1.4 UJ

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-23 DR-DPT-23-20 7/30/2013	DR-DPT-23 DR-DPT-23-25 7/30/2013	DR-DPT-23 DR-DPT-23-30 7/30/2013	DR-DPT-23 DR-DPT-23-35 7/30/2013	DR-DPT-23 DR-DPT-23-40 7/30/2013	DR-DPT-23 DR-DPT-23-45 7/30/2013	DR-DPT-23 DR-DPT-23-50 7/30/2013
CARBON DISULFIDE	0.18 J	0.33 J	0.17 J	0.34 J	1.1 U	0.27 J	0.43 UJ
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 UJ
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	35	0.49 J	1.2 J
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	1.5 U	0.18 U	0.60 UJ
CHLOROETHANE	0.29 U	0.29 U	0.30 J	0.37 J	2.4 U	0.29 U	0.97 UJ
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	3.4 J	0.16 U	0.53 UJ
CHLOROMETHANE	0.30 U	0.30 U	0.30 U	0.30 U	2.5 U	0.30 U	1 UJ
CIS-1,2-DICHLOROETHENE	0.23 J	0.32 J	0.74 J	0.55 J	130	9.7	5.7 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	1.2 U	0.14 U	0.47 UJ
CYCLOHEXANE	NA	NA	NA	0.14 J	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	2.3 U	0.28 U	0.93 UJ
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	2.6 U	0.31 U	1 UJ
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	12 U	1.5 U	5 UJ
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.92 U	0.11 U	0.37 UJ
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	1.4 U	0.17 U	0.57 UJ
HEXACHLOROBUTADIENE	0.30 U	0.30 U	0.30 U	0.30 U	2.5 U	0.30 U	1 UJ
HEXANE	NA	NA	NA	0.62 J	NA	NA	NA
ISOBUTANOL	NA	NA	NA	8.9 J	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 UJ
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	2 U	0.24 U	0.80 UJ
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	1.4 U	0.17 U	0.57 UJ
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	2.7 U	0.33 U	11 B
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	2 U	0.24 U	0.80 UJ
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	1 U	0.12 U	0.40 UJ
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	1.2 U	0.14 U	0.47 UJ
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	1.2 U	0.14 U	0.47 UJ
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 UJ
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.92 U	0.11 U	0.37 UJ
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.56 U	0.067 U	0.22 UJ
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	0.43 UJ
TERTIARY-BUTYL ALCOHOL	8 J	10 J	8.9 J	9.6 J	32 UR	3.9 UR	40 J
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	2.4 U	0.29 U	0.97 UJ
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 U	0.13 U	1.1 J
TOTAL XYLENES	0.28 U	0.28 U	0.28 U	0.28 U	2.3 U	0.28 U	0.93 UJ
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	1.6 U	0.19 U	0.63 UJ
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	1.6 U	0.19 U	0.63 UJ
TRICHLOROETHENE	0.17 U	0.22 J	3.4	2.4	210	38	3.2 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	1.7 U	0.21 U	0.70 UJ
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23	DR-DPT-23
SAMPLE ID	DR-DPT-23-20	DR-DPT-23-25	DR-DPT-23-30	DR-DPT-23-35	DR-DPT-23-40	DR-DPT-23-45	DR-DPT-23-50
SAMPLE DATE	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	1.6 UR	0.19 UR	0.63 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.29 J	0.69 J	80	2.2	0.73 UJ
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	1.4 R	NA	NA	NA	NA	1.2 R	NA

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-24 DR-DPT-24-15 7/31/2013	DR-DPT-24 DR-DPT-24-25 7/31/2013	DR-DPT-24 DR-DPT-24-30 7/31/2013	DR-DPT-24 DR-DPT-24-35 7/31/2013	DR-DPT-24 DR-DPT-24-40 7/31/2013	DR-DPT-24 DR-DPT-24-45 7/31/2013	DR-DPT-24 DR-DPT-24-50 7/31/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	23 U	140 U	15 U	2.6 U	12 U	7.7 U
1,1,1-TRICHLOROETHANE	0.22 U	22 U	140 U	15 U	2.4 U	11 U	7.3 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	18 U	110 U	12 U	2 U	9 U	6 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	28 U	180 U	19 U	3.1 U	14 U	9.3 U
1,1-DICHLOROETHANE	1.4	15 U	94 U	10 U	1.7 U	7.5 U	5 U
1,1-DICHLOROETHENE	0.19 U	19 U	120 U	14 J	2.1 U	9.5 U	6.3 U
1,1-DICHLOROPROPENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
1,2,3-TRICHLOROBENZENE	0.17 U	17 U	110 U	11 U	1.9 U	8.5 U	5.7 U
1,2,3-TRICHLOROPROPANE	0.43 U	43 U	270 U	29 U	4.8 U	22 U	14 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.59 U	3.7 U	0.39 U	0.066 U	0.30 U	0.20 U
1,2,4-TRICHLOROBENZENE	0.15 U	15 U	94 U	10 U	1.7 U	7.5 U	5 U
1,2,4-TRIMETHYLBENZENE	0.12 U	12 U	75 U	8 U	1.3 U	6 U	4 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	67 U	420 U	45 U	7.4 U	34 U	22 U
1,2-DIBROMOETHANE	0.24 U	24 U	150 U	16 U	2.7 U	12 U	8 U
1,2-DICHLOROBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
1,2-DICHLOROETHANE	0.22 U	25 J	140 U	100	4.1 J	17 J	10 J
1,2-DICHLOROPROPANE	0.18 U	18 U	110 U	12 U	2 U	9 U	6 U
1,3-DICHLOROBENZENE	0.14 U	14 U	88 U	9.3 U	1.6 U	7 U	4.7 U
1,3-DICHLOROPROPANE	0.16 U	16 U	100 U	11 U	1.8 U	8 U	5.3 U
1,4-DICHLOROBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
2-BUTANONE	1.3 J	57 U	360 U	38 U	6.3 U	29 U	19 U
2-CHLOROETHYL VINYL ETHER	0.99 U	99 U	620 U	66 U	11 U	50 U	33 U
2-CHLOROTOLUENE	0.11 U	11 U	69 U	7.3 U	1.2 U	5.5 U	3.7 U
2-HEXANONE	0.41 U	41 U	260 U	27 U	4.6 U	21 U	14 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	18 U	110 U	12 U	2 U	9 U	6 U
4-ISOPROPYLTOLUENE	0.12 U	12 U	75 U	8 U	1.3 U	6 U	4 U
4-METHYL-2-PENTANONE	0.32 U	32 U	200 U	21 U	3.6 U	16 U	11 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	5 B	110 U	690 U	73 U	12 U	55 U	37 U
BENZENE	0.80 J	13 U	81 U	16 J	1.4 U	6.5 U	4.3 U
BROMOBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
BROMOCHLOROMETHANE	0.29 U	29 U	180 U	19 U	3.2 U	15 U	9.7 U
BROMODICHLOROMETHANE	0.15 U	15 U	94 U	10 U	1.7 U	7.5 U	5 U
BROMOFORM	0.64 U	64 U	400 U	43 U	7.1 U	32 U	21 U
BROMOMETHANE	0.41 U	41 U	260 U	27 U	4.6 U	21 U	14 U

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CARBON DISULFIDE	0.42 J	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
CARBON TETRACHLORIDE	0.13 U	13 U	81 U	8.7 U	2.3 J	6.5 U	7.2 J
CHLOROBENZENE	0.30 J	15 U	94 U	58 J	1.7 U	7.5 U	5 U
CHLORODIBROMOMETHANE	0.18 U	18 U	110 U	12 U	2 U	9 U	6 U
CHLOROETHANE	0.29 U	29 U	180 U	19 U	3.2 U	15 U	9.7 U
CHLOROFORM	0.16 U	16 U	100 U	20 J	18	48 J	90
CHLOROMETHANE	0.30 U	30 U	190 U	20 U	3.3 U	15 U	10 U
CIS-1,2-DICHLOROETHENE	0.17 U	340	580 J	500	29	66	93
CIS-1,3-DICHLOROPROPENE	0.14 U	14 U	88 U	9.3 U	1.6 U	7 U	4.7 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	28 U	180 U	19 U	3.1 U	14 U	9.3 U
DICHLORODIFLUOROMETHANE	0.31 U	31 U	190 U	21 U	3.4 U	16 U	10 U
DIISOPROPYL ETHER	1.5 U	150 U	940 U	100 U	17 U	75 U	50 U
ETHYL TERT-BUTYL ETHER	0.11 U	11 U	69 U	7.3 U	1.2 U	5.5 U	3.7 U
ETHYLBENZENE	0.17 U	17 U	110 U	11 U	1.9 U	8.5 U	5.7 U
HEXACHLOROBUTADIENE	0.30 U	30 U	190 U	20 U	3.3 U	15 U	10 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
M+P-XYLENES	0.24 U	24 U	150 U	16 U	2.7 U	12 U	8 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	17 U	110 U	11 U	1.9 U	8.5 U	5.7 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	55 J	610 B	44 B	3.7 U	31 B	17 J
NAPHTHALENE	0.24 UJ	24 UJ	150 U	16 U	2.7 UJ	12 U	8 UJ
N-BUTYLBENZENE	0.12 U	12 U	75 U	8 U	1.3 U	6 U	4 U
N-PROPYLBENZENE	0.14 U	14 U	88 U	9.3 U	1.6 U	7 U	4.7 U
O-XYLENE	0.14 U	14 U	88 U	9.3 U	1.6 U	7 U	4.7 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
STYRENE	0.11 U	11 U	69 U	7.3 U	1.2 U	5.5 U	3.7 U
TERT-AMYL METHYL ETHER	0.067 U	6.7 U	42 U	4.5 U	0.74 U	3.4 U	2.2 U
TERT-BUTYLBENZENE	0.13 U	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	390 UR	2400 UR	260 UR	43 UR	200 UR	130 UR
TETRACHLOROETHENE	0.29 U	29 U	180 U	19 U	3.2 U	15 U	9.7 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.26 J	13 U	81 U	8.7 U	1.4 U	6.5 U	4.3 U
TOTAL XYLENES	0.14 U	14 U	88 U	9.3 U	1.6 U	7 U	4.7 U
TRANS-1,2-DICHLOROETHENE	0.19 U	19 U	120 U	13 U	2.1 U	9.5 U	6.3 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	19 U	120 U	13 U	2.1 U	9.5 U	6.3 U
TRICHLOROETHENE	0.17 U	3100	17000	1800	420	1100	1300
TRICHLOROFLUOROMETHANE	0.21 U	21 U	130 U	14 U	2.3 U	11 U	7 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-24 DR-DPT-24-15 7/31/2013	DR-DPT-24 DR-DPT-24-25 7/31/2013	DR-DPT-24 DR-DPT-24-30 7/31/2013	DR-DPT-24 DR-DPT-24-35 7/31/2013	DR-DPT-24 DR-DPT-24-40 7/31/2013	DR-DPT-24 DR-DPT-24-45 7/31/2013	DR-DPT-24 DR-DPT-24-50 7/31/2013
VINYL ACETATE	0.19 UR	19 UR	120 UR	13 UR	2.1 UR	9.5 UR	6.3 UR
VINYL CHLORIDE	4.5	150	140 U	420	2.4 U	11 U	7.3 U
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-24 DR-DPT-24-55 7/31/2013	DR-DPT-24 DR-DPT-24-60 8/1/2013	DR-DPT-24 DR-DPT-24-60A 8/1/2013	DR-DPT-25 DR-DPT-25-30 9/6/2013	DR-DPT-25 DR-DPT-25-35 9/6/2013	DR-DPT-25 DR-DPT-25-40 9/6/2013	DR-DPT-25 DR-DPT-25-45 9/6/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	1.4 UJ	0.46 UJ	NA	58 U	120 U	230 U	160 U
1,1,1-TRICHLOROETHANE	1.3 UJ	0.44 UJ	NA	55 U	110 U	220 U	160 U
1,1,2,2-TETRACHLOROETHANE	1.1 UJ	0.36 UJ	NA	45 U	90 U	180 U	130 U
1,1,2-TRICHLOROETHANE	2 J	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	1.6 UJ	0.56 UJ	NA	70 U	140 U	280 U	200 U
1,1-DICHLOROETHANE	0.88 UJ	0.30 UJ	NA	38 U	75 U	150 U	110 U
1,1-DICHLOROETHENE	2.7 J	0.38 UJ	NA	48 U	95 U	190 U	140 U
1,1-DICHLOROPROPENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
1,2,3-TRICHLOROBENZENE	1 UJ	0.34 UJ	NA	43 U	85 U	170 U	120 U
1,2,3-TRICHLOROPROPANE	2.5 UJ	0.86 UJ	NA	110 U	220 U	430 U	310 U
1,2,3-TRIMETHYLBENZENE	0.035 UJ	0.012 UJ	NA	1.5 U	3 U	5.9 U	4.2 U
1,2,4-TRICHLOROBENZENE	0.88 UJ	0.30 UJ	NA	38 U	75 U	150 U	110 U
1,2,4-TRIMETHYLBENZENE	0.71 UJ	0.24 UJ	NA	30 U	60 U	120 U	86 U
1,2-DIBROMO-3-CHLOROPROPANE	3.9 UJ	1.3 UJ	NA	170 U	340 U	670 U	480 U
1,2-DIBROMOETHANE	1.4 UJ	0.48 UJ	NA	60 U	120 U	240 U	170 U
1,2-DICHLOROBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
1,2-DICHLOROETHANE	35 J	4.1 J	NA	58 J	120 J	220 U	200 J
1,2-DICHLOROPROPANE	1.1 UJ	0.36 UJ	NA	45 U	90 U	180 U	130 U
1,3-DICHLOROBENZENE	0.82 UJ	0.28 UJ	NA	35 U	70 U	140 U	100 U
1,3-DICHLOROPROPANE	0.94 UJ	0.32 UJ	NA	40 U	80 U	160 U	110 U
1,4-DICHLOROBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
1,4-DIOXANE	160 Z1	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	37 J	NA	NA	NA	NA	NA
1-PENTENE	9 Z1	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
2-BUTANONE	3.4 UJ	6.6 J	NA	140 U	290 U	570 U	410 U
2-CHLOROETHYL VINYL ETHER	5.8 UJ	2 UJ	NA	250 UJ	500 UJ	990 UJ	710 UJ
2-CHLOROTOLUENE	0.65 UJ	0.22 UJ	NA	28 U	55 U	110 U	79 U
2-HEXANONE	2.4 UJ	0.82 UJ	NA	100 U	210 U	410 U	290 U
2-METHYL-1-BUTENE	NA	7.2 NJ	4.5 NJ	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	1.1 UJ	0.36 UJ	NA	45 U	90 U	180 U	130 U
4-ISOPROPYLTOLUENE	0.71 UJ	0.24 UJ	NA	30 U	60 U	120 U	86 U
4-METHYL-2-PENTANONE	1.9 UJ	0.64 UJ	NA	80 U	160 U	320 U	230 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	40 B	31 B	NA	280 U	550 U	1100 U	790 U
BENZENE	3.2 J	0.60 J	NA	33 U	65 U	130 U	93 U
BROMOBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
BROMOCHLOROMETHANE	1.7 UJ	0.58 UJ	NA	73 U	150 U	290 U	210 U
BROMODICHLOROMETHANE	0.88 UJ	0.30 UJ	NA	38 U	75 U	150 U	110 U
BROMOFORM	3.8 UJ	1.3 UJ	NA	160 U	320 U	640 U	460 U
BROMOMETHANE	2.4 UJ	0.82 UJ	NA	100 U	210 U	410 U	290 U

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-24 DR-DPT-24-55 7/31/2013	DR-DPT-24 DR-DPT-24-60 8/1/2013	DR-DPT-24 DR-DPT-24-60A 8/1/2013	DR-DPT-25 DR-DPT-25-30 9/6/2013	DR-DPT-25 DR-DPT-25-35 9/6/2013	DR-DPT-25 DR-DPT-25-40 9/6/2013	DR-DPT-25 DR-DPT-25-45 9/6/2013
CARBON DISULFIDE	0.76 UJ	0.54 J	NA	33 U	65 U	130 U	93 U
CARBON TETRACHLORIDE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
CHLOROBENZENE	8.1 J	0.30 UJ	NA	38 U	75 U	150 U	110 J
CHLORODIBROMOMETHANE	1.1 UJ	0.36 UJ	NA	45 U	90 U	180 U	130 U
CHLOROETHANE	1.7 UJ	0.58 UJ	NA	73 UJ	150 UJ	290 UJ	210 UJ
CHLOROFORM	13 J	0.92 J	NA	40 U	80 U	160 U	110 U
CHLOROMETHANE	1.8 UJ	0.60 UJ	NA	75 U	150 U	300 U	210 U
CIS-1,2-DICHLOROETHENE	130 J	5.4 J	NA	5000	2700	7100	5900
CIS-1,3-DICHLOROPROPENE	0.82 UJ	0.28 UJ	NA	35 U	70 U	140 U	100 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	1.6 UJ	0.56 UJ	NA	70 U	140 U	280 U	200 U
DICHLORODIFLUOROMETHANE	1.8 UJ	0.62 UJ	NA	78 U	160 U	310 U	220 U
DIISOPROPYL ETHER	8.8 UJ	3 UJ	NA	380 U	750 U	1500 U	1100 U
ETHYL TERT-BUTYL ETHER	0.65 UJ	0.22 UJ	NA	28 U	55 U	110 U	79 U
ETHYLBENZENE	1 UJ	0.34 UJ	NA	43 U	85 U	170 U	120 U
HEXACHLOROBUTADIENE	1.8 UJ	0.60 UJ	NA	75 U	150 U	300 U	210 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
M+P-XYLENES	1.4 UJ	0.48 UJ	NA	60 U	120 U	240 U	170 U
METHYL ACETATE	2.2 J	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	1 UJ	0.34 UJ	NA	43 U	85 U	170 U	120 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	25 J	4.2 J	NA	83 U	170 U	330 U	240 U
NAPHTHALENE	1.4 UJ	0.48 UJ	NA	60 U	120 U	240 U	170 U
N-BUTYLBENZENE	0.71 UJ	0.24 UJ	NA	30 U	60 U	120 U	86 U
N-PROPYLBENZENE	0.82 UJ	0.28 UJ	NA	35 U	70 U	140 U	100 U
O-XYLENE	0.82 UJ	0.28 UJ	NA	35 U	70 U	140 U	100 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
STYRENE	0.65 UJ	0.22 UJ	NA	28 U	55 U	110 U	79 U
TERT-AMYL METHYL ETHER	0.39 UJ	0.13 UJ	NA	17 U	34 U	67 U	48 U
TERT-BUTYLBENZENE	0.76 UJ	0.26 UJ	NA	33 U	65 U	130 U	93 U
TERTIARY-BUTYL ALCOHOL	28 J	26 J	NA	980 UR	2000 UR	3900 UR	2800 UR
TETRACHLOROETHENE	1.7 UJ	0.58 UJ	NA	73 U	150 U	290 U	210 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	2.8 J	0.98 J	NA	33 U	65 U	130 U	93 U
TOTAL XYLENES	0.82 UJ	0.28 UJ	NA	35 U	70 U	140 U	100 U
TRANS-1,2-DICHLOROETHENE	1.1 UJ	0.38 UJ	NA	48 U	95 U	190 U	140 U
TRANS-1,3-DICHLOROPROPENE	1.1 UJ	0.38 UJ	NA	48 U	95 U	190 U	140 U
TRICHLOROETHENE	260 J	5 J	NA	3000	14000	25000	21000
TRICHLOROFLUOROMETHANE	1.2 UJ	0.42 UJ	NA	53 U	110 U	210 U	150 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-24	DR-DPT-24	DR-DPT-24	DR-DPT-25	DR-DPT-25	DR-DPT-25	DR-DPT-25
SAMPLE ID	DR-DPT-24-55	DR-DPT-24-60	DR-DPT-24-60A	DR-DPT-25-30	DR-DPT-25-35	DR-DPT-25-40	DR-DPT-25-45
SAMPLE DATE	7/31/2013	8/1/2013	8/1/2013	9/6/2013	9/6/2013	9/6/2013	9/6/2013
VINYL ACETATE	1.1 UR	0.38 UR	NA	48 UR	95 UR	190 UR	140 UR
VINYL CHLORIDE	29 J	0.44 UJ	NA	580	810	2500	2200
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-25 DR-DPT-25-50 9/6/2013	DR-DPT-26 DR-DPT-26-20 8/15/2013	DR-DPT-26 DR-DPT-26-25 8/15/2013	DR-DPT-26 DR-DPT-26-25-D 8/15/2013	DR-DPT-26 DR-DPT-26-30 8/15/2013	DR-DPT-26 DR-DPT-26-35 8/15/2013	DR-DPT-26 DR-DPT-26-40 8/15/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	190 U	120 U	160 U	190 U	160 U	12 U	3.8 U
1,1,1-TRICHLOROETHANE	180 U	110 U	160 U	180 U	160 U	11 U	3.7 U
1,1,2,2-TETRACHLOROETHANE	150 U	90 U	130 U	150 U	130 U	9 U	3 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	230 U	140 U	200 U	230 U	200 U	14 U	4.7 U
1,1-DICHLOROETHANE	120 U	75 U	110 U	120 U	110 U	7.5 U	2.5 U
1,1-DICHLOROETHENE	160 U	95 U	160 J	190 J	140 U	9.5 U	3.2 J
1,1-DICHLOROPROPENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
1,2,3-TRICHLOROBENZENE	140 U	85 U	120 U	140 U	120 U	8.5 U	2.8 U
1,2,3-TRICHLOROPROPANE	360 U	220 U	310 U	360 U	310 U	22 U	7.2 U
1,2,3-TRIMETHYLBENZENE	4.9 U	3 U	4.2 U	4.9 U	4.2 U	0.30 U	0.098 U
1,2,4-TRICHLOROBENZENE	120 U	75 U	110 U	120 U	110 U	13 J	2.5 U
1,2,4-TRIMETHYLBENZENE	100 U	60 U	86 U	100 U	86 U	6 U	2 U
1,2-DIBROMO-3-CHLOROPROPANE	560 U	340 U	480 U	560 U	480 U	34 U	11 U
1,2-DIBROMOETHANE	200 U	120 U	170 U	200 U	170 U	12 U	4 U
1,2-DICHLOROBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
1,2-DICHLOROETHANE	180 U	110 U	160 U	180 U	180 J	15 J	7.8 J
1,2-DICHLOROPROPANE	150 U	90 U	130 U	150 U	130 U	9 U	3 U
1,3-DICHLOROBENZENE	120 U	70 U	100 U	120 U	100 U	7 U	2.3 U
1,3-DICHLOROPROPANE	130 U	80 U	110 U	130 U	110 U	8 U	2.7 U
1,4-DICHLOROBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
2-BUTANONE	470 U	290 U	410 U	470 U	410 U	29 U	9.5 U
2-CHLOROETHYL VINYL ETHER	820 U	500 U	710 U	820 U	710 U	50 U	17 U
2-CHLOROTOLUENE	92 U	55 U	79 U	92 U	79 U	5.5 U	1.8 U
2-HEXANONE	340 U	210 U	290 U	340 U	290 U	21 U	6.8 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	150 U	90 U	130 U	150 U	130 U	9 U	3 U
4-ISOPROPYLTOLUENE	100 U	60 U	86 U	100 U	86 U	6 U	2 U
4-METHYL-2-PENTANONE	270 U	160 U	230 U	270 U	230 U	16 U	5.3 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	920 U	550 U	1800 J	920 U	2000 J	160 J	55 J
BENZENE	110 U	86 J	94 B	110 U	150 B	8.6 B	4.1 B
BROMOBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
BROMOCHLOROMETHANE	240 U	150 U	210 U	240 U	210 U	15 U	4.8 U
BROMODICHLOROMETHANE	120 U	75 U	110 U	120 U	110 U	7.5 U	2.5 U
BROMOFORM	530 U	320 U	460 U	530 U	460 U	32 U	11 U
BROMOMETHANE	340 U	210 U	290 U	340 U	290 U	21 U	6.8 U

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-25 DR-DPT-25-50 9/6/2013	DR-DPT-26 DR-DPT-26-20 8/15/2013	DR-DPT-26 DR-DPT-26-25 8/15/2013	DR-DPT-26 DR-DPT-26-25-D 8/15/2013	DR-DPT-26 DR-DPT-26-30 8/15/2013	DR-DPT-26 DR-DPT-26-35 8/15/2013	DR-DPT-26 DR-DPT-26-40 8/15/2013
CARBON DISULFIDE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
CARBON TETRACHLORIDE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
CHLOROBENZENE	120 U	75 U	110 U	120 U	110 U	7.5 U	2.5 U
CHLORODIBROMOMETHANE	150 U	90 U	130 U	150 U	130 U	9 U	3 U
CHLOROETHANE	240 U	150 U	210 U	240 U	210 U	15 U	4.8 U
CHLOROFORM	130 U	80 U	110 U	130 U	110 U	8 U	2.7 U
CHLOROMETHANE	250 U	150 U	210 U	250 U	210 U	15 U	5 U
CIS-1,2-DICHLOROETHENE	6700	85 U	24000	24000	4500	500	410
CIS-1,3-DICHLOROPROPENE	120 U	70 U	100 U	120 U	100 U	7 U	2.3 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	230 U	140 U	200 U	230 U	200 U	14 U	4.7 U
DICHLORODIFLUOROMETHANE	260 U	160 U	220 U	260 U	220 U	16 U	5.2 U
DIISOPROPYL ETHER	1200 U	750 U	1100 U	1200 U	1100 U	75 U	25 U
ETHYL TERT-BUTYL ETHER	92 U	55 U	79 U	92 U	79 U	5.5 U	1.8 U
ETHYLBENZENE	140 U	85 U	120 U	140 U	120 U	8.5 U	2.8 U
HEXACHLOROBUTADIENE	250 U	150 U	210 U	250 U	210 U	15 U	5 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
M+P-XYLENES	200 U	120 U	170 U	200 U	170 U	12 U	4 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	140 U	85 U	120 U	140 U	120 U	8.5 U	2.8 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	270 U	170 U	1400 B	270 U	1400 B	160 B	55 B
NAPHTHALENE	200 U	120 U	170 U	200 U	170 U	12 U	4 U
N-BUTYLBENZENE	100 U	60 U	86 U	100 U	86 U	6 U	2 U
N-PROPYLBENZENE	120 U	70 U	100 U	120 U	100 U	7 U	2.3 U
O-XYLENE	120 U	70 U	100 U	120 U	100 U	7 U	2.3 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
STYRENE	92 U	55 U	79 U	92 U	79 U	5.5 U	1.8 U
TERT-AMYL METHYL ETHER	56 U	34 U	48 U	56 U	48 U	3.4 U	1.1 U
TERT-BUTYLBENZENE	110 U	65 U	93 U	110 U	93 U	6.5 U	2.2 U
TERTIARY-BUTYL ALCOHOL	3200 UR	2000 UR	2800 UR	3200 UR	2800 UR	200 UR	65 UR
TETRACHLOROETHENE	240 U	150 U	210 U	240 U	210 U	15 U	4.8 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	280 B	65 U	120 J	230 J	93 U	6.5 U	2.2 U
TOTAL XYLENES	120 U	70 U	100 U	120 U	100 U	7 U	2.3 U
TRANS-1,2-DICHLOROETHENE	160 U	95 U	140 U	160 U	140 U	9.5 U	3.2 U
TRANS-1,3-DICHLOROPROPENE	160 U	95 U	140 U	160 U	140 U	9.5 U	3.2 U
TRICHLOROETHENE	16000	85 U	850	790 J	26000	1600	540
TRICHLOROFLUOROMETHANE	170 U	110 U	150 U	170 U	150 U	11 U	3.5 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-25 DR-DPT-25-50 9/6/2013	DR-DPT-26 DR-DPT-26-20 8/15/2013	DR-DPT-26 DR-DPT-26-25 8/15/2013	DR-DPT-26 DR-DPT-26-25-D 8/15/2013	DR-DPT-26 DR-DPT-26-30 8/15/2013	DR-DPT-26 DR-DPT-26-35 8/15/2013	DR-DPT-26 DR-DPT-26-40 8/15/2013
VINYL ACETATE	160 UR	95 UR	140 UR	160 UR	140 UR	9.5 UR	3.2 UR
VINYL CHLORIDE	1600	5800	7600	7800	550 J	94	59
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
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LOCATION	DR-DPT-26	DR-DPT-26	DR-DPT-27	DR-DPT-27	DR-DPT-27	DR-DPT-27	DR-DPT-27
SAMPLE ID	DR-DPT-26-45	DR-DPT-26-48	DR-DPT-27-20	DR-DPT-27-25	DR-DPT-27-30	DR-DPT-27-35	DR-DPT-27-40
SAMPLE DATE	8/15/2013	8/16/2013	8/5/2013	8/5/2013	8/5/2013	8/6/2013	8/6/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.92 U	1.2 U	7.7 U	77 U	9.2 U	7.7 U	3.8 U
1,1,1-TRICHLOROETHANE	0.88 U	1.1 U	7.3 U	73 U	8.8 U	7.3 U	3.7 U
1,1,2,2-TETRACHLOROETHANE	0.72 U	0.90 U	6 U	60 U	7.2 U	6 U	3 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U	1.4 U	9.3 U	93 U	11 U	9.3 U	4.7 U
1,1-DICHLOROETHANE	0.60 U	0.75 U	5 U	50 U	6 U	5 U	2.5 U
1,1-DICHLOROETHENE	0.76 U	0.95 U	6.3 U	63 U	9.6 J	6.3 U	3.2 U
1,1-DICHLOROPROPENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
1,2,3-TRICHLOROBENZENE	0.68 U	0.85 U	5.7 U	57 U	6.8 U	5.7 U	2.8 U
1,2,3-TRICHLOROPROPANE	1.7 U	2.2 U	14 U	140 U	17 U	14 U	7.2 U
1,2,3-TRIMETHYLBENZENE	0.024 U	0.03 U	0.20 U	2 U	0.24 U	0.20 U	0.098 U
1,2,4-TRICHLOROBENZENE	0.60 U	0.75 U	5 U	50 U	6 U	5 U	2.5 U
1,2,4-TRIMETHYLBENZENE	0.48 U	0.60 U	4 U	40 U	4.8 U	4 U	2 U
1,2-DIBROMO-3-CHLOROPROPANE	2.7 U	3.4 U	22 U	220 U	27 U	22 U	11 U
1,2-DIBROMOETHANE	0.96 U	1.2 U	8 U	80 U	9.6 U	8 U	4 U
1,2-DICHLOROBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
1,2-DICHLOROETHANE	2.1 J	3.1 J	7.3 U	73 U	8.8 U	7.3 U	3.7 U
1,2-DICHLOROPROPANE	0.72 U	0.90 U	6 U	60 U	7.2 U	6 U	3 U
1,3-DICHLOROBENZENE	0.56 U	0.70 U	4.7 U	47 U	5.6 U	4.7 U	2.3 U
1,3-DICHLOROPROPANE	0.64 U	0.80 U	5.3 U	53 U	6.4 U	5.3 U	2.7 U
1,4-DICHLOROBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
2-BUTANONE	2.3 U	2.9 U	19 U	190 U	23 U	19 U	9.5 U
2-CHLOROETHYL VINYL ETHER	4 U	5 U	33 UR	330 U	40 U	33 U	17 U
2-CHLOROTOLUENE	0.44 U	0.55 U	3.7 U	37 U	4.4 U	3.7 U	1.8 U
2-HEXANONE	1.6 U	2.1 U	14 U	140 U	16 U	14 U	6.8 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.72 U	0.90 U	6 U	60 U	7.2 U	6 U	3 U
4-ISOPROPYLTOLUENE	0.48 U	0.60 U	4 U	40 U	4.8 U	4 U	2 U
4-METHYL-2-PENTANONE	1.3 U	1.6 U	11 U	110 U	13 U	11 U	5.3 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	13 J	9.4 B	37 U	370 U	44 U	37 U	18 U
BENZENE	1.3 B	0.97 J	4.3 U	43 U	5.2 U	4.3 U	2.2 U
BROMOBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
BROMOCHLOROMETHANE	1.2 U	1.5 U	9.7 U	97 U	12 U	9.7 U	4.8 U
BROMODICHLOROMETHANE	0.60 U	0.75 U	5 U	50 U	6 U	5 U	2.5 U
BROMOFORM	2.6 U	3.2 U	21 U	210 U	26 U	21 U	11 U
BROMOMETHANE	1.6 U	2.1 U	14 U	140 U	16 U	14 U	6.8 U

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-26 DR-DPT-26-45 8/15/2013	DR-DPT-26 DR-DPT-26-48 8/16/2013	DR-DPT-27 DR-DPT-27-20 8/5/2013	DR-DPT-27 DR-DPT-27-25 8/5/2013	DR-DPT-27 DR-DPT-27-30 8/5/2013	DR-DPT-27 DR-DPT-27-35 8/6/2013	DR-DPT-27 DR-DPT-27-40 8/6/2013
CARBON DISULFIDE	0.67 J	1.6 J	4.3 U	43 U	5.2 U	4.3 U	2.2 U
CARBON TETRACHLORIDE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
CHLOROBENZENE	0.60 U	0.75 U	5 U	50 U	6 U	5 U	2.5 U
CHLORODIBROMOMETHANE	0.72 U	0.90 UL	6 U	60 U	7.2 U	6 U	3 U
CHLOROETHANE	1.2 U	1.5 U	9.7 U	97 U	12 U	9.7 U	4.8 U
CHLOROFORM	0.69 J	0.98 J	5.3 U	53 U	6.4 U	5.3 U	2.7 U
CHLOROMETHANE	1.2 U	1.5 U	10 U	100 U	12 U	10 U	5 U
CIS-1,2-DICHLOROETHENE	110	110	410	1700	300	200	160
CIS-1,3-DICHLOROPROPENE	0.56 U	0.70 U	4.7 U	47 U	5.6 U	4.7 U	2.3 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	1.1 U	1.4 U	9.3 U	93 U	11 U	9.3 U	4.7 U
DICHLORODIFLUOROMETHANE	1.2 U	1.6 U	10 U	100 U	12 U	10 U	5.2 U
DIISOPROPYL ETHER	6 U	7.5 U	50 U	500 U	60 U	50 U	25 U
ETHYL TERT-BUTYL ETHER	0.44 U	0.55 U	3.7 U	37 U	4.4 U	3.7 U	1.8 U
ETHYLBENZENE	0.68 U	0.85 U	5.7 U	57 U	6.8 U	5.7 U	2.8 U
HEXACHLOROBUTADIENE	1.2 U	1.5 U	10 U	100 U	12 U	10 U	5 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
M+P-XYLENES	0.96 U	1.2 U	8 U	80 U	9.6 U	8 U	4 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.68 U	0.85 U	5.7 U	57 U	6.8 U	5.7 U	2.8 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5.8 B	1.7 U	11 U	110 U	13 U	11 U	5.5 U
NAPHTHALENE	0.96 U	1.2 U	8 U	80 U	9.6 U	8 U	4 UJ
N-BUTYLBENZENE	0.48 U	0.60 U	4 U	40 U	4.8 U	4 U	2 U
N-PROPYLBENZENE	0.56 U	0.70 U	4.7 U	47 U	5.6 U	4.7 U	2.3 U
O-XYLENE	0.56 U	0.70 U	4.7 U	47 U	5.6 U	4.7 U	2.3 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
STYRENE	0.44 U	0.55 U	3.7 U	37 U	4.4 U	3.7 U	1.8 U
TERT-AMYL METHYL ETHER	0.27 U	0.34 U	2.2 U	22 U	2.7 U	2.2 U	1.1 U
TERT-BUTYLBENZENE	0.52 U	0.65 U	4.3 U	43 U	5.2 U	4.3 U	2.2 U
TERTIARY-BUTYL ALCOHOL	16 UR	38 J	130 UR	1300 UR	160 UR	130 UR	65 UR
TETRACHLOROETHENE	1.2 U	1.5 U	9.7 U	97 U	12 U	9.7 U	4.8 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.52 U	2.8 J	4.3 U	43 U	5.2 U	4.3 U	2.2 U
TOTAL XYLENES	0.56 U	0.70 U	4.7 U	47 U	5.6 U	4.7 U	2.3 U
TRANS-1,2-DICHLOROETHENE	1.4 J	1.2 J	6.3 U	63 U	7.6 U	6.3 U	5.2 J
TRANS-1,3-DICHLOROPROPENE	0.76 U	0.95 U	6.3 U	63 U	7.6 U	6.3 U	3.2 U
TRICHLOROETHENE	130	140	650	7000	950	710	450
TRICHLOROFLUOROMETHANE	0.84 U	1.1 U	7 U	70 U	8.4 U	7 U	3.5 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-26 DR-DPT-26-45 8/15/2013	DR-DPT-26 DR-DPT-26-48 8/16/2013	DR-DPT-27 DR-DPT-27-20 8/5/2013	DR-DPT-27 DR-DPT-27-25 8/5/2013	DR-DPT-27 DR-DPT-27-30 8/5/2013	DR-DPT-27 DR-DPT-27-35 8/6/2013	DR-DPT-27 DR-DPT-27-40 8/6/2013
VINYL ACETATE	0.76 UR	0.95 UR	6.3 UR	63 UR	7.6 UR	6.3 UR	3.2 UR
VINYL CHLORIDE	29	26	81	91 J	56	35	17
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-27 DR-DPT-27-45 8/6/2013	DR-DPT-27 DR-DPT-27-49 8/6/2013	DR-DPT-28 DR-DPT-28-15 8/2/2013	DR-DPT-28 DR-DPT-28-30 8/2/2013	DR-DPT-28 DR-DPT-28-35 8/2/2013	DR-DPT-28 DR-DPT-28-40 8/2/2013	DR-DPT-29 DR-DPT-29-10 8/1/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	3.8 U	2.3 U	0.23 U	19 U	3.3 U	3.8 U	0.23 U
1,1,1-TRICHLOROETHANE	3.7 U	2.2 U	0.22 U	18 U	3.1 U	3.7 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	3 U	1.8 U	0.18 U	15 U	2.6 U	3 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	4.7 U	2.8 U	0.28 U	23 U	4 U	4.7 U	0.28 U
1,1-DICHLOROETHANE	2.5 U	1.5 U	0.15 U	12 U	2.1 U	2.5 U	0.15 U
1,1-DICHLOROETHENE	3.2 U	1.9 U	0.19 U	32 J	2.7 U	3.2 U	0.19 U
1,1-DICHLOROPROPENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
1,2,3-TRICHLOROBENZENE	2.8 U	1.7 U	0.17 U	14 U	2.4 U	2.8 U	0.17 U
1,2,3-TRICHLOROPROPANE	7.2 U	4.3 U	0.43 U	36 U	6.1 U	7.2 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.098 U	0.059 U	0.0059 U	0.49 U	0.084 U	0.098 U	0.0059 U
1,2,4-TRICHLOROBENZENE	2.5 U	1.5 U	0.15 U	12 U	2.1 U	2.5 U	0.15 U
1,2,4-TRIMETHYLBENZENE	2 U	1.2 U	0.12 U	10 U	1.7 U	2 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	11 U	6.7 U	0.67 U	56 U	9.6 U	11 U	0.67 U
1,2-DIBROMOETHANE	4 U	2.4 U	0.24 U	20 U	3.4 U	4 U	0.24 U
1,2-DICHLOROBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
1,2-DICHLOROETHANE	3.7 U	2.3 J	0.22 U	20 J	3.5 J	3.7 U	0.22 U
1,2-DICHLOROPROPANE	3 U	1.8 U	0.18 U	15 U	2.6 U	3 U	0.18 U
1,3-DICHLOROBENZENE	2.3 U	1.4 U	0.14 U	12 U	2 U	2.3 U	0.14 U
1,3-DICHLOROPROPANE	2.7 U	1.6 U	0.16 U	13 U	2.3 U	2.7 U	0.16 U
1,4-DICHLOROBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	13 NJ	NA	NA	26 NJ	NA	NA
2,2-DICHLOROPROPANE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
2-BUTANONE	9.5 U	5.7 U	0.57 U	47 U	8.1 U	9.5 U	1.2 J
2-CHLOROETHYL VINYL ETHER	17 U	9.9 U	0.99 U	82 U	14 U	17 U	0.99 U
2-CHLOROTOLUENE	1.8 U	1.1 U	0.11 U	9.2 U	1.6 U	1.8 U	0.11 U
2-HEXANONE	6.8 U	4.1 U	0.41 U	34 U	5.9 U	6.8 U	0.41 U
2-METHYL-1-BUTENE	NA	17 NJ	NA	NA	NA	NA	NA
2-METHYLBUTANE	42 NJ	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	3 U	1.8 U	0.18 U	15 U	2.6 U	3 U	0.18 U
4-ISOPROPYLTOLUENE	2 U	1.2 U	0.12 U	10 U	1.7 U	2 U	0.12 U
4-METHYL-2-PENTANONE	5.3 U	3.2 U	0.32 U	27 U	4.6 U	5.3 U	0.32 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	18 U	19 J	3.9 B	92 U	20 B	18 U	7.6 B
BENZENE	2.2 U	1.6 J	0.13 U	12 J	2.3 J	2.2 U	0.16 J
BROMOBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
BROMOCHLOROMETHANE	4.8 U	2.9 U	0.29 U	24 U	4.1 U	4.8 U	0.29 U
BROMODICHLOROMETHANE	2.5 U	1.5 U	0.15 U	12 U	2.1 U	2.5 U	0.15 U
BROMOFORM	11 U	6.4 U	0.64 U	53 U	9.1 U	11 U	0.64 U
BROMOMETHANE	6.8 U	4.1 U	0.41 U	34 U	5.9 U	6.8 U	0.41 U

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Chemical Results for DPT Groundwater Samples - 2013
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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-27 DR-DPT-27-45 8/6/2013	DR-DPT-27 DR-DPT-27-49 8/6/2013	DR-DPT-28 DR-DPT-28-15 8/2/2013	DR-DPT-28 DR-DPT-28-30 8/2/2013	DR-DPT-28 DR-DPT-28-35 8/2/2013	DR-DPT-28 DR-DPT-28-40 8/2/2013	DR-DPT-29 DR-DPT-29-10 8/1/2013
CARBON DISULFIDE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
CARBON TETRACHLORIDE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
CHLOROBENZENE	2.5 U	1.5 U	0.15 U	12 U	2.1 U	2.5 U	0.15 U
CHLORODIBROMOMETHANE	3 U	1.8 U	0.18 U	15 U	2.6 U	3 U	0.18 U
CHLOROETHANE	4.8 U	2.9 U	0.29 U	24 U	4.1 U	4.8 U	0.29 U
CHLOROFORM	2.7 U	1.6 U	0.16 U	13 U	2.3 U	2.7 U	0.16 U
CHLOROMETHANE	5 U	3 U	0.30 U	25 U	4.3 U	5 U	0.30 U
CIS-1,2-DICHLOROETHENE	220	130	2.2	3000 J	300	85	0.17 U
CIS-1,3-DICHLOROPROPENE	2.3 U	1.4 U	0.14 U	12 U	2 U	2.3 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	4.7 U	2.8 U	0.28 U	23 U	4 U	4.7 U	0.28 U
DICHLORODIFLUOROMETHANE	5.2 U	3.1 U	0.31 U	26 U	4.4 U	5.2 U	0.31 U
DIISOPROPYL ETHER	25 U	15 U	1.5 U	120 U	21 U	25 U	1.5 U
ETHYL TERT-BUTYL ETHER	1.8 U	1.1 U	0.11 U	9.2 U	1.6 U	1.8 U	0.11 U
ETHYLBENZENE	2.8 U	1.7 U	0.17 U	14 U	2.4 U	2.8 U	0.17 U
HEXACHLOROBUTADIENE	5 U	3 U	0.30 U	25 U	4.3 U	5 U	0.30 U
HEXANE	7.5 J	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
M+P-XYLENES	4 U	2.4 U	0.24 U	20 U	3.4 U	4 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	2.8 U	1.7 U	0.17 U	14 U	2.4 U	2.8 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5.5 U	3.3 U	0.33 U	91 B	39 B	27 B	0.33 U
NAPHTHALENE	4 U	2.4 UJ	0.24 U	20 UJ	3.4 UJ	4 UJ	0.24 U
N-BUTYLBENZENE	2 U	1.2 U	0.12 U	10 U	1.7 U	2 U	0.12 U
N-PROPYLBENZENE	2.3 U	1.4 U	0.14 U	12 U	2 U	2.3 U	0.14 U
O-XYLENE	2.3 U	1.4 U	0.14 U	12 U	2 U	2.3 U	0.14 U
PENTANE	49 NJ	NA	NA	NA	33 NJ	NA	NA
PROPYLENE	NA	NA	NA	NA	150 NJ	NA	NA
SEC-BUTYLBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
STYRENE	1.8 U	1.1 U	0.11 U	9.2 U	1.6 U	1.8 U	0.11 U
TERT-AMYL METHYL ETHER	1.1 U	0.67 U	0.067 U	5.6 U	0.96 U	1.1 U	0.067 U
TERT-BUTYLBENZENE	2.2 U	1.3 U	0.13 U	11 U	1.9 U	2.2 U	0.13 U
TERTIARY-BUTYL ALCOHOL	65 UR	39 UR	3.9 UR	320 UR	56 UR	65 UR	3.9 UR
TETRACHLOROETHENE	4.8 U	2.9 U	0.29 U	24 U	4.1 U	4.8 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	2.2 U	1.3 U	0.23 J	11 U	1.9 U	2.2 U	0.13 U
TOTAL XYLENES	2.3 U	1.4 U	0.14 U	12 U	2 U	2.3 U	0.14 U
TRANS-1,2-DICHLOROETHENE	7.4 J	1.9 U	0.19 U	16 U	2.7 U	3.2 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	3.2 U	1.9 U	0.19 U	16 U	2.7 U	3.2 U	0.19 U
TRICHLOROETHENE	390	120	0.57 J	3100	480	460	0.29 J
TRICHLOROFLUOROMETHANE	3.5 U	2.1 U	0.21 U	17 U	3 U	3.5 U	0.21 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-27 DR-DPT-27-45 8/6/2013	DR-DPT-27 DR-DPT-27-49 8/6/2013	DR-DPT-28 DR-DPT-28-15 8/2/2013	DR-DPT-28 DR-DPT-28-30 8/2/2013	DR-DPT-28 DR-DPT-28-35 8/2/2013	DR-DPT-28 DR-DPT-28-40 8/2/2013	DR-DPT-29 DR-DPT-29-10 8/1/2013
VINYL ACETATE	3.2 UR	1.9 UR	0.19 UR	16 UR	2.7 UR	3.2 UR	0.19 UR
VINYL CHLORIDE	15 J	2.2 U	0.22 U	280	16	5 J	0.22 U
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-29 DR-DPT-29-15 8/1/2013	DR-DPT-29 DR-DPT-29-20 8/1/2013	DR-DPT-29 DR-DPT-29-25 8/1/2013	DR-DPT-29 DR-DPT-29-30 8/1/2013	DR-DPT-29 DR-DPT-29-35 8/1/2013	DR-DPT-29 DR-DPT-29-40 8/1/2013	DR-DPT-30 DR-DPT-30-20 8/15/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 UJ	0.92 UJ	0.66 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 UJ	0.88 UJ	0.63 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.72 UJ	0.51 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 UJ	1.1 UJ	0.80 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.60 UJ	0.43 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	0.76 UJ	0.54 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 UJ	0.68 UJ	0.49 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 UJ	1.7 UJ	1.2 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 UJ	0.024 UJ	0.017 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.60 UJ	0.43 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.15 J	0.48 UJ	0.34 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 UJ	2.7 UJ	1.9 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 UJ	0.96 UJ	0.69 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 UJ	0.88 UJ	0.63 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.72 UJ	0.51 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 UJ	0.56 UJ	0.40 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.64 UJ	0.46 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	53 J	NA
1-PENTENE	NA	NA	NA	NA	5.5 NJ	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.74 J	4 J	6.9 J	1.6 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	0.99 UJ	4 UJ	2.8 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 UJ	0.44 UJ	0.31 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.66 J	1.6 UJ	1.2 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	2.4 NJ	1.9 NJ	4 NJ	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	7.8 NJ	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.72 UJ	0.51 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 UJ	0.48 UJ	0.34 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 UJ	1.3 UJ	0.92 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	2.7 B	2.9 B	3.3 B	3 B	15 B	26 B	41
BENZENE	0.13 U	0.13 U	0.13 J	0.16 J	0.69 J	1.2 J	3.4
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 UJ	1.2 UJ	0.83 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.60 UJ	0.43 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 UJ	2.6 UJ	1.8 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 UJ	1.6 UJ	1.2 U

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Chemical Results for DPT Groundwater Samples - 2013
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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-29 DR-DPT-29-15 8/1/2013	DR-DPT-29 DR-DPT-29-20 8/1/2013	DR-DPT-29 DR-DPT-29-25 8/1/2013	DR-DPT-29 DR-DPT-29-30 8/1/2013	DR-DPT-29 DR-DPT-29-35 8/1/2013	DR-DPT-29 DR-DPT-29-40 8/1/2013	DR-DPT-30 DR-DPT-30-20 8/15/2013
CARBON DISULFIDE	0.13 U	0.60 J	0.26 J	0.25 J	0.44 J	0.52 UJ	0.44 J
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.60 UJ	0.43 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.72 UJ	0.51 U
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 UJ	1.2 UJ	0.83 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.64 UJ	0.46 U
CHLOROMETHANE	0.30 U	0.30 U	0.30 U	0.30 U	0.30 UJ	1.2 UJ	0.86 U
CIS-1,2-DICHLOROETHENE	0.23 J	2.1	0.17 U	0.17 U	0.17 UJ	0.68 UJ	100
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 UJ	0.56 UJ	0.40 U
CYCLOHEXANE	NA	NA	0.20 J	0.15 J	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 UJ	1.1 UJ	0.80 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 UJ	1.2 UJ	0.89 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 UJ	6 UJ	4.3 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 UJ	0.44 UJ	0.31 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.24 J	0.68 UJ	0.49 U
HEXACHLOROBUTADIENE	0.30 U	0.30 U	0.30 U	0.30 U	0.30 UJ	1.2 UJ	0.86 U
HEXANE	NA	NA	0.73 J	0.56 J	2.5 NJ	1.4 J	NA
ISOBUTANOL	NA	NA	NA	NA	27 J	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.52 J	0.96 UJ	0.69 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	0.17 UJ	0.68 UJ	0.49 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 UJ	3.7 J	2.5 B
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 UJ	0.96 UJ	0.69 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 UJ	0.48 UJ	0.34 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 UJ	0.56 UJ	0.40 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.21 J	0.56 UJ	0.40 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 UJ	0.44 UJ	0.31 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 UJ	0.27 UJ	0.19 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.52 UJ	0.37 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	8.9 J	3.9 UR	16 UR	11 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 UJ	1.2 UJ	0.83 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	1.7 J	NA
TOLUENE	0.13 U	0.13 U	0.16 J	0.19 J	1.3 J	1.6 J	0.37 U
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.14 U	0.73 J	0.56 UJ	0.40 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	0.76 UJ	1.2 J
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	0.76 UJ	0.54 U
TRICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 UJ	0.68 UJ	20
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 UJ	0.84 UJ	0.60 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-29 DR-DPT-29-15 8/1/2013	DR-DPT-29 DR-DPT-29-20 8/1/2013	DR-DPT-29 DR-DPT-29-25 8/1/2013	DR-DPT-29 DR-DPT-29-30 8/1/2013	DR-DPT-29 DR-DPT-29-35 8/1/2013	DR-DPT-29 DR-DPT-29-40 8/1/2013	DR-DPT-30 DR-DPT-30-20 8/15/2013
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.76 UR	0.54 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 UJ	0.88 UJ	2.6 J
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-30 DR-DPT-30-30 8/15/2013	DR-DPT-30 DR-DPT-30-35 8/15/2013	DR-DPT-30 DR-DPT-30-40 8/15/2013	DR-DPT-30 DR-DPT-30-40-D 8/15/2013	DR-DPT-31 DR-DPT-31-25 8/19/2013	DR-DPT-31 DR-DPT-31-30 8/20/2013	DR-DPT-31 DR-DPT-31-35 8/20/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	9.2 U	6.6 U	1.8 U	1.5 U	15 U	0.58 U	0.23 U
1,1,1-TRICHLOROETHANE	8.8 U	6.3 U	1.7 U	1.5 U	15 U	0.55 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	7.2 U	5.1 U	1.4 U	1.2 U	12 U	0.45 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	11 U	8 U	2.2 U	1.9 U	19 U	0.70 U	0.28 U
1,1-DICHLOROETHANE	6 U	4.3 U	1.2 U	1 U	10 U	0.38 U	0.15 U
1,1-DICHLOROETHENE	7.6 U	5.4 U	1.5 U	1.3 U	13 U	0.48 U	0.19 U
1,1-DICHLOROPROPENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
1,2,3-TRICHLOROBENZENE	6.8 U	4.9 U	1.3 U	1.1 U	11 U	0.43 U	0.17 U
1,2,3-TRICHLOROPROPANE	17 U	12 U	3.3 U	2.9 U	29 U	1.1 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.24 U	0.17 U	0.045 U	0.039 U	0.39 U	0.015 U	0.0059 U
1,2,4-TRICHLOROBENZENE	6 U	4.3 U	1.2 U	1 U	10 U	0.38 U	0.15 U
1,2,4-TRIMETHYLBENZENE	4.8 U	3.4 U	0.92 U	0.80 U	8 U	0.30 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	27 U	19 U	5.2 U	4.5 U	45 U	1.7 U	0.67 U
1,2-DIBROMOETHANE	9.6 U	6.9 U	1.8 U	1.6 U	16 U	0.60 U	0.24 U
1,2-DICHLOROBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
1,2-DICHLOROETHANE	8.8 U	6.3 U	1.7 U	1.5 U	15 U	0.55 U	0.27 J
1,2-DICHLOROPROPANE	7.2 U	5.1 U	1.4 U	1.2 U	12 U	0.45 U	0.18 U
1,3-DICHLOROBENZENE	5.6 U	4 U	1.1 U	0.93 U	9.3 U	0.35 U	0.14 U
1,3-DICHLOROPROPANE	6.4 U	4.6 U	1.2 U	1.1 U	11 U	0.40 U	0.16 U
1,4-DICHLOROBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
2-BUTANONE	23 U	16 U	4.4 U	3.8 U	38 U	1.4 U	0.57 U
2-CHLOROETHYL VINYL ETHER	40 UR	28 U	7.6 U	6.6 U	66 U	2.5 U	0.99 U
2-CHLOROTOLUENE	4.4 U	3.1 U	0.85 U	0.73 U	7.3 U	0.28 U	0.11 U
2-HEXANONE	16 U	12 U	3.2 U	2.7 U	27 U	1 U	0.41 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	7.2 U	5.1 U	1.4 U	1.2 U	12 U	0.45 U	0.18 U
4-ISOPROPYLTOLUENE	4.8 U	3.4 U	0.92 U	0.80 U	8 U	0.30 U	0.12 U
4-METHYL-2-PENTANONE	13 U	9.1 U	2.5 U	2.1 U	21 U	0.80 U	0.32 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	53 J	89 J	11 J	8.5 J	73 U	20 J	18
BENZENE	14 J	15 B	7.4 J	5.7 J	8.7 U	0.62 J	0.67 J
BROMOBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
BROMOCHLOROMETHANE	12 U	8.3 U	2.2 U	1.9 U	19 U	0.73 U	0.29 U
BROMODICHLOROMETHANE	6 U	4.3 U	1.2 U	1 U	10 U	0.38 U	0.15 U
BROMOFORM	26 U	18 U	4.9 U	4.3 U	43 U	1.6 U	0.64 U
BROMOMETHANE	16 U	12 U	3.2 U	2.7 U	27 U	1 U	0.41 U

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-30 DR-DPT-30-30 8/15/2013	DR-DPT-30 DR-DPT-30-35 8/15/2013	DR-DPT-30 DR-DPT-30-40 8/15/2013	DR-DPT-30 DR-DPT-30-40-D 8/15/2013	DR-DPT-31 DR-DPT-31-25 8/19/2013	DR-DPT-31 DR-DPT-31-30 8/20/2013	DR-DPT-31 DR-DPT-31-35 8/20/2013
CARBON DISULFIDE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	1.5 J	0.86 J
CARBON TETRACHLORIDE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
CHLOROBENZENE	6 U	4.3 U	1.2 U	1 U	10 U	0.38 U	0.15 U
CHLORODIBROMOMETHANE	7.2 U	5.1 U	1.4 U	1.2 U	12 U	0.45 U	0.18 U
CHLOROETHANE	12 U	8.3 U	2.2 U	1.9 U	19 U	0.73 U	0.29 U
CHLOROFORM	6.4 U	4.6 U	1.2 U	1.1 U	11 U	1.1 J	0.43 J
CHLOROMETHANE	12 U	8.6 U	2.3 U	2 U	20 U	0.75 U	0.30 U
CIS-1,2-DICHLOROETHENE	920	530	130	100	2000	61	13
CIS-1,3-DICHLOROPROPENE	5.6 U	4 U	1.1 U	0.93 U	9.3 U	0.35 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	11 U	8 U	2.2 U	1.9 U	19 U	0.70 U	0.28 U
DICHLORODIFLUOROMETHANE	12 U	8.9 U	2.4 U	2.1 U	21 U	0.78 U	0.31 U
DIISOPROPYL ETHER	60 U	43 U	12 U	10 U	100 U	3.8 U	1.5 U
ETHYL TERT-BUTYL ETHER	4.4 U	3.1 U	0.85 U	0.73 U	7.3 U	0.28 U	0.11 U
ETHYLBENZENE	6.8 U	4.9 U	1.3 U	1.1 U	11 U	0.43 U	0.17 U
HEXACHLOROBUTADIENE	12 U	8.6 U	2.3 U	2 U	20 U	0.75 U	0.30 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
M+P-XYLENES	9.6 U	6.9 U	1.8 U	1.6 U	16 U	0.60 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	6.8 U	4.9 U	1.3 U	1.1 U	11 U	0.43 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	13 U	54 B	2.5 U	2.2 U	35 B	0.83 U	0.33 U
NAPHTHALENE	9.6 U	6.9 U	1.8 U	1.6 U	16 U	0.60 U	0.24 U
N-BUTYLBENZENE	4.8 U	3.4 U	0.92 U	0.80 U	8 U	0.30 U	0.12 U
N-PROPYLBENZENE	5.6 U	4 U	1.1 U	0.93 U	9.3 U	0.35 U	0.14 U
O-XYLENE	5.6 U	4 U	1.8 J	1 J	9.3 U	0.35 U	0.14 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
STYRENE	4.4 U	3.1 U	0.85 U	0.73 U	7.3 U	0.28 U	0.11 U
TERT-AMYL METHYL ETHER	2.7 U	1.9 U	0.52 U	0.45 U	4.5 U	0.17 U	0.067 U
TERT-BUTYLBENZENE	5.2 U	3.7 U	1 U	0.87 U	8.7 U	0.33 U	0.13 U
TERTIARY-BUTYL ALCOHOL	160 UR	110 UR	30 UR	26 UR	260 UR	9.8 UR	3.9 UR
TETRACHLOROETHENE	12 U	8.3 U	2.2 U	1.9 U	19 U	0.73 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	6.9 J	3.7 U	1.9 J	0.87 U	16 B	1.2 B	0.33 B
TOTAL XYLENES	5.6 U	4 U	1.8 J	1 J	9.3 U	0.35 U	0.14 U
TRANS-1,2-DICHLOROETHENE	9.2 J	6 J	1.8 J	1.3 U	17 J	0.64 J	0.21 J
TRANS-1,3-DICHLOROPROPENE	7.6 U	5.4 U	1.5 U	1.3 U	13 U	0.48 U	0.19 U
TRICHLOROETHENE	270	1000	230	160	61 J	3.6	3.1
TRICHLOROFLUOROMETHANE	8.4 U	6 U	1.6 U	1.4 U	14 U	0.53 U	0.21 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-30 DR-DPT-30-30 8/15/2013	DR-DPT-30 DR-DPT-30-35 8/15/2013	DR-DPT-30 DR-DPT-30-40 8/15/2013	DR-DPT-30 DR-DPT-30-40-D 8/15/2013	DR-DPT-31 DR-DPT-31-25 8/19/2013	DR-DPT-31 DR-DPT-31-30 8/20/2013	DR-DPT-31 DR-DPT-31-35 8/20/2013
VINYL ACETATE	7.6 UR	5.4 UR	1.5 UR	1.3 UR	13 UR	0.48 UR	0.19 UR
VINYL CHLORIDE	51	42	11	7.2	580	41	6.5
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	3.1 R

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-31 DR-DPT-31-40 8/20/2013	DR-DPT-31 DR-DPT-31-45 8/20/2013	DR-DPT-32 DR-DPT-32-30 8/16/2013	DR-DPT-32 DR-DPT-32-35 8/16/2013	DR-DPT-32 DR-DPT-32-40 8/16/2013	DR-DPT-32 DR-DPT-32-45 8/16/2013	DR-DPT-32 DR-DPT-32-50 8/16/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.77 U	0.77 U	0.92 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.73 U	0.73 U	0.88 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.60 U	0.60 U	0.72 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.93 U	0.93 U	1.1 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.50 U	0.50 U	0.60 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.29 J	0.19 U	0.63 U	0.63 U	0.76 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.57 U	0.57 U	0.68 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	1.4 U	1.4 U	1.7 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.02 U	0.02 U	0.024 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.50 U	0.50 U	0.60 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.40 U	0.40 U	0.48 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	2.2 U	2.2 U	2.7 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.80 U	0.80 U	0.96 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
1,2-DICHLOROETHANE	0.74 J	0.22 U	0.22 U	0.22 U	0.73 U	0.73 U	0.88 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.60 U	0.60 U	0.72 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.47 U	0.47 U	0.56 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.53 U	0.53 U	0.64 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 U	1.9 U	1.9 U	2.3 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	3.3 U	3.3 U	4 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.37 U	0.37 U	0.44 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	1.4 U	1.4 U	1.6 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.60 U	0.60 U	0.72 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.40 U	0.40 U	0.48 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	1.1 U	1.1 U	1.3 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	6.3 J	36	4.9 B	6.8 B	3.7 U	12 B	5.5 B
BENZENE	0.97 J	0.27 J	0.87 J	0.48 J	0.43 J	0.43 U	0.63 J
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.97 U	0.97 U	1.2 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.50 U	0.50 U	0.60 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	2.1 U	2.1 U	2.6 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	1.4 U	1.4 U	1.6 U

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-31 DR-DPT-31-40 8/20/2013	DR-DPT-31 DR-DPT-31-45 8/20/2013	DR-DPT-32 DR-DPT-32-30 8/16/2013	DR-DPT-32 DR-DPT-32-35 8/16/2013	DR-DPT-32 DR-DPT-32-40 8/16/2013	DR-DPT-32 DR-DPT-32-45 8/16/2013	DR-DPT-32 DR-DPT-32-50 8/16/2013
CARBON DISULFIDE	0.51 J	0.50 J	0.66 J	1.2	0.43 U	0.43 U	0.52 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	12	2.3 J	6.6
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.50 U	0.50 U	0.60 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 UL	0.18 UL	0.60 U	0.60 U	0.72 U
CHLOROETHANE	0.29 U	0.29 U	0.70 J	0.73 J	0.97 U	0.97 U	1.2 U
CHLOROFORM	0.16 U	1.5	0.16 U	0.16 U	13	16	12
CHLOROMETHANE	0.30 U	0.30 U	0.30 U	0.30 U	1 U	1 U	1.2 U
CIS-1,2-DICHLOROETHENE	15	23	33	15	0.57 U	0.92 J	0.68 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.47 U	0.47 U	0.56 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.93 U	0.93 U	1.1 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	1 U	1 UJ	1.2 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	5 U	5 U	6 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.37 U	0.37 U	0.44 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.57 U	0.57 U	0.68 U
HEXACHLOROBUTADIENE	0.30 U	0.30 U	0.30 U	0.30 U	1 U	1 U	1.2 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.80 U	0.80 U	0.96 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	0.57 U	0.57 U	0.68 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	1.1 U	1.1 U	1.3 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.80 U	0.80 U	0.96 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.40 U	0.40 U	0.48 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.47 U	0.47 U	0.56 U
O-XYLENE	0.72 J	0.14 U	0.14 U	0.14 U	0.47 U	0.47 U	0.56 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.37 U	0.37 U	0.44 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.22 U	0.22 U	0.27 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.43 U	0.43 U	0.52 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	8 J	3.9 UR	13 UR	13 UR	16 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.97 U	0.97 U	1.2 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.26 B	0.36 B	0.13 U	0.15 B	0.54 B	1 B	2 J
TOTAL XYLENES	0.72 J	0.14 U	0.14 U	0.14 U	0.47 U	0.47 U	0.56 U
TRANS-1,2-DICHLOROETHENE	0.27 J	0.19 U	0.41 J	0.19 U	0.63 U	0.63 U	0.76 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.63 U	0.63 U	0.76 U
TRICHLOROETHENE	6	11	3.7	2.8	120	120	130
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.70 U	0.70 U	0.84 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.63 UR	0.63 UR	0.76 UR
VINYL CHLORIDE	14	2.8	19	8.6	0.73 U	0.73 U	0.88 U
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-33 DR-DPT-33-15 8/14/2013	DR-DPT-33 DR-DPT-33-25 8/14/2013	DR-DPT-33 DR-DPT-33-30 8/14/2013	DR-DPT-33 DR-DPT-33-40 8/14/2013	DR-DPT-33 DR-DPT-33-45 8/14/2013	DR-DPT-34 DR-DPT-34-15 8/14/2013	DR-DPT-34 DR-DPT-34-35 8/14/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	4.2 U	23 U	77 UJ	15 UJ	580 U	120 UJ
1,1,1-TRICHLOROETHANE	0.22 U	4 U	22 U	73 UJ	15 UJ	550 U	110 UJ
1,1,2,2-TETRACHLOROETHANE	0.18 U	3.3 U	18 U	60 UJ	12 UJ	450 U	90 UJ
1,1,2-TRICHLOROETHANE	NA	NA	27 J	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	5.1 U	28 U	93 UJ	19 UJ	700 U	140 UJ
1,1-DICHLOROETHANE	0.15 U	2.7 U	15 U	50 UJ	10 UJ	380 U	75 UJ
1,1-DICHLOROETHENE	0.19 U	3.5 U	19 U	63 UJ	13 UJ	480 U	95 UJ
1,1-DICHLOROPROPENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
1,2,3-TRICHLOROBENZENE	0.17 U	3.1 U	17 U	57 UJ	11 UJ	430 U	85 UJ
1,2,3-TRICHLOROPROPANE	0.43 U	7.8 U	43 U	140 UJ	29 UJ	1100 U	220 UJ
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.11 U	0.59 U	2 UJ	0.39 UJ	15 U	3 UJ
1,2,4-TRICHLOROBENZENE	0.15 U	2.7 U	15 U	50 UJ	10 UJ	380 U	75 UJ
1,2,4-TRIMETHYLBENZENE	0.12 U	2.2 U	12 U	40 UJ	8 UJ	300 U	60 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	12 U	67 U	220 UJ	45 UJ	1700 U	340 UJ
1,2-DIBROMOETHANE	0.24 U	4.4 U	24 U	80 UJ	16 UJ	600 U	120 UJ
1,2-DICHLOROBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
1,2-DICHLOROETHANE	0.22 U	4 U	22 U	73 UJ	15 UJ	550 U	110 UJ
1,2-DICHLOROPROPANE	0.18 U	3.3 U	18 U	60 UJ	12 UJ	450 U	90 UJ
1,3-DICHLOROBENZENE	0.14 U	2.5 U	14 U	47 UJ	9.3 UJ	350 U	70 UJ
1,3-DICHLOROPROPANE	0.16 U	2.9 U	16 U	53 UJ	11 UJ	400 U	80 UJ
1,4-DICHLOROBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
2-BUTANONE	0.57 U	10 U	57 U	190 UJ	38 UJ	1400 U	290 UJ
2-CHLOROETHYL VINYL ETHER	0.99 U	18 U	99 U	330 UJ	66 UJ	2500 U	500 UJ
2-CHLOROTOLUENE	0.11 U	2 U	11 U	37 UJ	7.3 UJ	280 U	55 UJ
2-HEXANONE	0.41 U	7.5 U	41 U	140 UJ	27 UJ	1000 U	210 UJ
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	3.3 U	18 U	60 UJ	12 UJ	450 U	90 UJ
4-ISOPROPYLTOLUENE	0.12 U	2.2 U	12 U	40 UJ	8 UJ	300 U	60 UJ
4-METHYL-2-PENTANONE	0.32 U	5.8 U	32 U	110 UJ	21 UJ	800 U	160 UJ
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	1.7 J	20 U	110 U	370 UJ	73 UJ	7000 J	550 UJ
BENZENE	0.25 B	2.4 U	13 U	43 UJ	9.4 J	660 B	80 J
BROMOBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
BROMOCHLOROMETHANE	0.29 U	5.3 U	29 U	97 UJ	19 UJ	730 U	150 UJ
BROMODICHLOROMETHANE	0.15 U	2.7 U	15 U	50 UJ	10 UJ	380 U	75 UJ
BROMOFORM	0.64 U	12 U	64 U	210 UJ	43 UJ	1600 U	320 UJ
BROMOMETHANE	0.41 U	7.5 U	41 U	140 UJ	27 UJ	1000 U	210 UJ

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CARBON DISULFIDE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
CARBON TETRACHLORIDE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
CHLOROBENZENE	0.15 U	2.7 U	15 U	50 UJ	10 UJ	380 U	75 UJ
CHLORODIBROMOMETHANE	0.18 U	3.3 U	18 U	60 UJ	12 UJ	450 U	90 UJ
CHLOROETHANE	0.29 U	5.3 U	29 U	97 UJ	19 UJ	730 U	150 UJ
CHLOROFORM	0.16 U	2.9 U	16 U	53 UJ	11 UJ	400 U	1000 J
CHLOROMETHANE	0.30 U	5.5 U	30 U	100 UJ	20 UJ	750 U	150 UJ
CIS-1,2-DICHLOROETHENE	0.17 U	100	760	4200 J	900 J	75000	2100 J
CIS-1,3-DICHLOROPROPENE	0.14 U	2.5 U	14 U	47 UJ	9.3 UJ	350 U	70 UJ
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	5.1 U	28 U	93 UJ	19 UJ	700 U	140 UJ
DICHLORODIFLUOROMETHANE	0.31 U	5.6 U	31 U	100 UJ	21 UJ	780 U	160 UJ
DIISOPROPYL ETHER	1.5 U	27 U	150 U	500 UJ	100 UJ	3800 U	750 UJ
ETHYL TERT-BUTYL ETHER	0.11 U	2 U	11 U	37 UJ	7.3 UJ	280 U	55 UJ
ETHYLBENZENE	0.17 U	3.1 U	17 U	57 UJ	11 UJ	430 U	85 UJ
HEXACHLOROBUTADIENE	0.30 U	5.5 U	30 U	100 UJ	20 UJ	750 U	150 UJ
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
M+P-XYLENES	0.24 U	4.4 U	24 U	80 UJ	16 UJ	670 J	120 UJ
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	3.1 U	17 U	57 UJ	11 UJ	430 U	85 UJ
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	6 U	33 U	110 UJ	22 UJ	4800 B	170 UJ
NAPHTHALENE	0.24 U	4.4 U	24 U	80 UJ	16 UJ	600 U	120 UJ
N-BUTYLBENZENE	0.12 U	2.2 U	12 U	40 UJ	8 UJ	300 U	60 UJ
N-PROPYLBENZENE	0.14 U	2.5 U	14 U	47 UJ	9.3 UJ	350 U	70 UJ
O-XYLENE	0.14 U	2.5 U	14 U	47 UJ	9.3 UJ	350 U	70 UJ
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
STYRENE	0.11 U	2 U	11 U	37 UJ	7.3 UJ	280 U	55 UJ
TERT-AMYL METHYL ETHER	0.067 U	1.2 U	6.7 U	22 UJ	4.5 UJ	170 U	34 UJ
TERT-BUTYLBENZENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	330 U	65 UJ
TERTIARY-BUTYL ALCOHOL	3.9 UR	71 UR	390 UR	1300 UR	260 UR	9800 UR	2000 UR
TETRACHLOROETHENE	0.29 U	5.3 U	29 U	97 UJ	19 UJ	730 U	150 UJ
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.13 U	2.4 U	13 U	43 UJ	8.7 UJ	37000	310 J
TOTAL XYLENES	0.14 U	2.5 U	14 U	47 UJ	9.3 UJ	670 J	70 UJ
TRANS-1,2-DICHLOROETHENE	0.19 U	3.5 U	19 U	71 J	13 UJ	480 U	95 UJ
TRANS-1,3-DICHLOROPROPENE	0.19 U	3.5 U	19 U	63 UJ	13 UJ	480 U	95 UJ
TRICHLOROETHENE	0.17 U	480	2400	9900 J	1600 J	430 U	7800 J
TRICHLOROFLUOROMETHANE	0.21 U	3.8 U	21 U	70 UJ	14 UJ	530 U	110 UJ
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-33 DR-DPT-33-15 8/14/2013	DR-DPT-33 DR-DPT-33-25 8/14/2013	DR-DPT-33 DR-DPT-33-30 8/14/2013	DR-DPT-33 DR-DPT-33-40 8/14/2013	DR-DPT-33 DR-DPT-33-45 8/14/2013	DR-DPT-34 DR-DPT-34-15 8/14/2013	DR-DPT-34 DR-DPT-34-35 8/14/2013
VINYL ACETATE	0.19 UR	3.5 UR	19 UR	63 UR	13 UR	480 UR	95 UR
VINYL CHLORIDE	0.22 U	7.8 J	27 J	460 J	110 J	87000	520 J
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-34 DR-DPT-34-40 8/14/2013	DR-DPT-34 DR-DPT-34-45 8/14/2013	DR-DPT-35 DR-DPT-35-20 8/13/2013	DR-DPT-35 DR-DPT-35-25 8/13/2013	DR-DPT-35 DR-DPT-35-30 8/13/2013	DR-DPT-35 DR-DPT-35-35 8/13/2013	DR-DPT-35 DR-DPT-35-40 8/13/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	190 UJ	9.2 UJ	0.23 UJ	38 U	7.7 UJ	3.8 UJ	1.6 UJ
1,1,1-TRICHLOROETHANE	180 UJ	8.8 UJ	0.22 UJ	37 U	7.3 UJ	3.7 UJ	1.6 UJ
1,1,2,2-TETRACHLOROETHANE	150 UJ	7.2 UJ	0.18 UJ	30 U	6 UJ	3 UJ	1.3 UJ
1,1,2-TRICHLOROETHANE	NA	14 J	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	230 UJ	11 UJ	0.28 UJ	47 U	9.3 UJ	4.7 UJ	2 UJ
1,1-DICHLOROETHANE	120 UJ	6 UJ	0.15 UJ	25 U	5 UJ	2.5 UJ	1.1 UJ
1,1-DICHLOROETHENE	160 UJ	7.6 UJ	0.19 UJ	32 U	6.3 UJ	3.2 UJ	1.4 UJ
1,1-DICHLOROPROPENE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
1,2,3-TRICHLOROBENZENE	140 UJ	6.8 UJ	0.17 UJ	28 U	5.7 UJ	2.8 UJ	1.2 UJ
1,2,3-TRICHLOROPROPANE	360 UJ	17 UJ	0.43 UJ	72 U	14 UJ	7.2 UJ	3.1 UJ
1,2,3-TRIMETHYLBENZENE	4.9 UJ	0.24 UJ	0.0059 UJ	0.98 U	0.20 UJ	0.098 UJ	0.042 UJ
1,2,4-TRICHLOROBENZENE	120 UJ	6 UJ	0.15 UJ	25 U	5 UJ	2.5 UJ	1.1 UJ
1,2,4-TRIMETHYLBENZENE	100 UJ	4.8 UJ	0.39 J	20 U	4 UJ	2.1 J	0.86 UJ
1,2-DIBROMO-3-CHLOROPROPANE	560 UJ	27 UJ	0.67 UJ	110 U	22 UJ	11 UJ	4.8 UJ
1,2-DIBROMOETHANE	200 UJ	9.6 UJ	0.24 UJ	40 U	8 UJ	4 UJ	1.7 UJ
1,2-DICHLOROBENZENE	110 UJ	5.2 UJ	2.1 J	22 U	4.3 UJ	2.6 J	1.5 J
1,2-DICHLOROETHANE	180 UJ	10 J	0.22 UJ	37 U	7.3 UJ	8.7 J	15 J
1,2-DICHLOROPROPANE	150 UJ	7.2 UJ	0.18 UJ	30 U	6 UJ	3 UJ	1.3 UJ
1,3-DICHLOROBENZENE	120 UJ	5.6 UJ	0.14 UJ	23 U	4.7 UJ	2.3 UJ	1 UJ
1,3-DICHLOROPROPANE	130 UJ	6.4 UJ	0.16 UJ	27 U	5.3 UJ	2.7 UJ	1.1 UJ
1,4-DICHLOROBENZENE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
2-BUTANONE	470 UJ	98 J	1.1 J	95 U	19 UJ	9.5 UJ	4.1 UJ
2-CHLOROETHYL VINYL ETHER	820 UJ	40 UJ	0.99 UJ	170 U	33 UJ	17 UJ	7.1 UJ
2-CHLOROTOLUENE	92 UJ	4.4 UJ	0.11 UJ	18 U	3.7 UJ	1.8 UJ	0.79 UJ
2-HEXANONE	340 UJ	16 UJ	0.41 UJ	68 U	14 UJ	6.8 UJ	2.9 UJ
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	150 UJ	7.2 UJ	0.18 UJ	30 U	6 UJ	3 UJ	1.3 UJ
4-ISOPROPYLTOLUENE	100 UJ	4.8 UJ	0.12 UJ	20 U	4 UJ	2 UJ	0.86 UJ
4-METHYL-2-PENTANONE	270 UJ	13 UJ	0.32 UJ	53 U	11 UJ	5.3 UJ	2.3 UJ
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	920 UJ	54 J	6.8 J	180 U	37 UJ	18 UJ	7.9 UJ
BENZENE	120 J	9.9 J	2.3 J	42 J	9.1 J	5.4 J	6.4 J
BROMOBENZENE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
BROMOCHLOROMETHANE	240 UJ	12 UJ	0.29 UJ	48 U	9.7 UJ	4.8 UJ	2.1 UJ
BROMODICHLOROMETHANE	120 UJ	6 UJ	0.15 UJ	25 U	5 UJ	2.5 UJ	1.1 UJ
BROMOFORM	530 UJ	26 UJ	0.64 UJ	110 U	21 UJ	11 UJ	4.6 UJ
BROMOMETHANE	340 UJ	16 UJ	0.41 UJ	68 U	14 UJ	6.8 UJ	2.9 UJ

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CARBON DISULFIDE	110 UJ	24 J	1.3 J	54 J	12 J	5.5 J	4 J
CARBON TETRACHLORIDE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
CHLOROBENZENE	120 UJ	6 UJ	0.15 UJ	5300	470 J	93 J	220 J
CHLORODIBROMOMETHANE	150 UJ	7.2 UJ	0.18 UJ	30 U	6 UJ	3 UJ	1.3 UJ
CHLOROETHANE	240 UJ	12 UJ	0.29 UJ	48 U	9.7 UJ	4.8 UJ	2.1 UJ
CHLOROFORM	1700 J	270 J	0.16 UJ	27 U	5.3 UJ	2.7 UJ	1.1 UJ
CHLOROMETHANE	250 UJ	12 UJ	0.30 UJ	50 U	10 UJ	5 UJ	2.1 UJ
CIS-1,2-DICHLOROETHENE	3600 J	820 J	1.2 J	210	550 J	160 J	170 J
CIS-1,3-DICHLOROPROPENE	120 UJ	5.6 UJ	0.14 UJ	23 U	4.7 UJ	2.3 UJ	1 UJ
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	230 UJ	11 UJ	0.28 UJ	47 U	9.3 UJ	4.7 UJ	2 UJ
DICHLORODIFLUOROMETHANE	260 UJ	12 UJ	0.31 UJ	52 U	10 UJ	5.2 UJ	2.2 UJ
DIISOPROPYL ETHER	1200 UJ	60 UJ	2.7 J	250 U	50 UJ	25 UJ	11 UJ
ETHYL TERT-BUTYL ETHER	92 UJ	4.4 UJ	0.11 UJ	18 U	3.7 UJ	1.8 UJ	0.79 UJ
ETHYLBENZENE	140 UJ	6.8 UJ	0.17 UJ	28 U	5.7 UJ	2.8 UJ	1.2 UJ
HEXACHLOROBUTADIENE	250 UJ	12 UJ	0.30 UJ	50 U	10 UJ	5 UJ	2.1 UJ
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	110 UJ	5.2 UJ	0.20 J	22 U	4.3 UJ	2.2 UJ	0.93 UJ
M+P-XYLENES	200 UJ	9.6 UJ	0.40 J	40 U	8 UJ	4 UJ	1.7 UJ
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	140 UJ	6.8 UJ	0.17 UJ	28 U	5.7 UJ	2.8 UJ	1.2 UJ
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	270 UJ	80 J	0.33 UJ	55 U	11 UJ	5.5 UJ	2.4 UJ
NAPHTHALENE	200 UJ	9.6 UJ	0.26 J	40 U	8 UJ	4 UJ	1.7 UJ
N-BUTYLBENZENE	100 UJ	4.8 UJ	0.12 UJ	20 U	4 UJ	2 UJ	0.86 UJ
N-PROPYLBENZENE	120 UJ	5.6 UJ	0.15 J	23 U	4.7 UJ	2.3 UJ	1 UJ
O-XYLENE	120 J	5.6 UJ	0.14 UJ	23 U	4.7 UJ	2.3 UJ	1 UJ
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
STYRENE	92 UJ	4.4 UJ	0.11 UJ	18 U	3.7 UJ	1.8 UJ	0.79 UJ
TERT-AMYL METHYL ETHER	56 UJ	2.7 UJ	0.067 UJ	11 U	2.2 UJ	1.1 UJ	0.48 UJ
TERT-BUTYLBENZENE	110 UJ	5.2 UJ	0.13 UJ	22 U	4.3 UJ	2.2 UJ	0.93 UJ
TERTIARY-BUTYL ALCOHOL	3200 UR	160 UR	3.9 UR	650 UR	130 UR	65 UR	28 UR
TETRACHLOROETHENE	240 UJ	12 UJ	0.30 J	48 U	9.7 UJ	4.8 UJ	2.1 UJ
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	3100 J	110 J	0.35 J	22 U	4.3 UJ	2.2 UJ	1.3 J
TOTAL XYLENES	120 J	5.6 UJ	0.40 J	23 U	4.7 UJ	2.3 UJ	1 UJ
TRANS-1,2-DICHLOROETHENE	160 UJ	7.6 UJ	2.1 J	32 U	6.3 UJ	5 J	3.9 J
TRANS-1,3-DICHLOROPROPENE	160 UJ	7.6 UJ	0.19 UJ	32 U	6.3 UJ	3.2 UJ	1.4 UJ
TRICHLOROETHENE	16000 J	1000 J	1.1 J	230	110 J	23 J	32 J
TRICHLOROFLUOROMETHANE	170 UJ	8.4 UJ	0.21 UJ	35 U	7 UJ	3.5 UJ	1.5 UJ
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-34 DR-DPT-34-40 8/14/2013	DR-DPT-34 DR-DPT-34-45 8/14/2013	DR-DPT-35 DR-DPT-35-20 8/13/2013	DR-DPT-35 DR-DPT-35-25 8/13/2013	DR-DPT-35 DR-DPT-35-30 8/13/2013	DR-DPT-35 DR-DPT-35-35 8/13/2013	DR-DPT-35 DR-DPT-35-40 8/13/2013
VINYL ACETATE	160 UR	7.6 UR	0.19 UR	32 UR	6.3 UR	3.2 UR	1.4 UR
VINYL CHLORIDE	400 J	210 J	0.63 J	210	160 J	77 J	170 J
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-DPT-35	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36	DR-DPT-36
SAMPLE ID	DR-DPT-35-45	DR-DPT-36-10	DR-DPT-36-10-D	DR-DPT-36-30	DR-DPT-36-35	DR-DPT-36-40	DR-DPT-36-45
SAMPLE DATE	8/13/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	12 UJ	0.23 U	0.23 U	0.35 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	11 UJ	0.22 U	0.22 U	0.34 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	9 UJ	0.18 U	0.18 U	0.28 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	14 UJ	0.28 U	0.28 U	0.43 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	7.5 UJ	0.15 U	0.15 U	0.23 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	9.5 UJ	0.19 U	0.19 U	0.29 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	6.5 UJ	0.13 U	0.13 U	0.20 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	8.5 UJ	0.17 U	0.17 U	0.26 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	22 UJ	0.43 U	0.43 U	0.66 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.30 UJ	0.0059 U	0.0059 U	0.0091 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	7.5 UJ	0.15 U	0.15 U	0.23 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	6 UJ	0.12 U	0.12 U	0.18 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	34 UJ	0.67 U	0.67 U	1 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	12 UJ	0.24 U	0.24 U	0.37 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	6.5 UJ	0.13 U	0.13 U	0.20 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	46 J	0.22 U	0.22 U	0.34 U	0.70 J	0.39 J	0.69 J
1,2-DICHLOROPROPANE	9 UJ	0.18 U	0.18 U	0.28 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	7 UJ	0.14 U	0.14 U	0.22 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	8 UJ	0.16 U	0.16 U	0.25 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	6.5 UJ	0.13 U	0.13 U	0.20 U	0.13 U	0.13 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	6.5 UJ	0.13 U	0.13 U	0.20 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	29 UJ	2.1 J	1.4 J	0.88 U	0.57 U	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	50 UJ	0.99 U	0.99 U	1.5 U	0.99 U	0.99 U	0.99 U
2-CHLOROTOLUENE	5.5 UJ	0.11 U	0.11 U	0.17 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	21 UJ	0.41 U	0.41 U	0.63 U	0.41 U	0.41 U	0.41 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	9 UJ	0.18 U	0.18 U	0.28 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	6 UJ	0.12 U	0.12 U	0.18 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	16 UJ	0.32 U	0.32 U	0.49 U	0.32 U	0.32 U	0.32 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	55 UJ	23 B	17 B	7.7 B	3.7 B	5.1 B	5.7 B
BENZENE	13 J	0.13 U	0.13 U	0.22 J	0.13 U	0.13 U	0.13 U
BROMOBENZENE	6.5 UJ	0.13 U	0.13 U	0.20 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	15 UJ	0.29 U	0.29 U	0.45 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	7.5 UJ	0.15 U	0.15 U	0.23 U	0.15 U	0.15 U	0.15 U
BROMOFORM	32 UJ	0.64 U	0.64 U	0.99 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	21 UJ	0.41 U	0.41 U	0.63 U	0.41 U	0.41 U	0.41 U

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Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-35 DR-DPT-35-45 8/13/2013	DR-DPT-36 DR-DPT-36-10 8/16/2013	DR-DPT-36 DR-DPT-36-10-D 8/16/2013	DR-DPT-36 DR-DPT-36-30 8/16/2013	DR-DPT-36 DR-DPT-36-35 8/16/2013	DR-DPT-36 DR-DPT-36-40 8/16/2013	DR-DPT-36 DR-DPT-36-45 8/16/2013
CARBON DISULFIDE	16 J	0.13 J	0.13 J	0.20 U	0.13 J	0.22 J	0.27 J
CARBON TETRACHLORIDE	6.5 UJ	0.13 U	0.13 U	0.20 U	0.13 U	0.13 U	0.27 J
CHLOROBENZENE	34 J	0.15 U	0.15 U	0.23 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	9 UJ	0.18 UL	0.18 UL	0.28 U	0.18 UL	0.18 UL	0.18 UL
CHLOROETHANE	21 J	0.29 U	0.29 U	0.45 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	8 UJ	0.16 U	0.16 U	0.25 U	0.16 U	0.16 U	0.27 J
CHLOROMETHANE	15 UJ	0.30 U	0.30 U	0.46 U	0.30 U	0.30 U	0.30 U
CIS-1,2-DICHLOROETHENE	860 J	0.17 U	0.17 U	41	0.44 J	0.97 J	1.4
CIS-1,3-DICHLOROPROPENE	7 UJ	0.14 U	0.14 U	0.22 U	0.14 U	0.14 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	14 UJ	0.28 U	0.28 U	0.43 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	16 UJ	0.31 U	0.31 U	0.48 UJ	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	75 UJ	1.5 U	1.5 U	2.3 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	5.5 UJ	0.11 U	0.11 U	0.17 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	8.5 UJ	0.17 U	0.17 U	0.26 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	15 UJ	0.30 U	0.30 U	0.46 U	0.30 U	0.30 U	0.30 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	6.5 UJ	0.13 U	0.13 U	0.20 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	12 UJ	0.24 U	0.24 U	0.37 U	0.24 U	0.24 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	8.5 UJ	0.17 U	0.17 U	0.26 U	0.17 U	0.17 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	17 UJ	0.33 U	0.33 U	0.51 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	12 UJ	0.24 U	0.24 U	0.37 U	0.24 U	0.24 U	0.24 U
N-BUTYLBENZENE	6 UJ	0.12 U	0.12 U	0.18 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	7 UJ	0.14 U	0.14 U	0.22 U	0.14 U	0.14 U	0.14 U
O-XYLENE	7 UJ	0.14 U	0.14 U	0.22 U	0.14 U	0.14 U	0.14 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	6.5 UJ	0.13 U	0.13 U	0.20 U	0.13 U	0.13 U	0.13 U
STYRENE	5.5 UJ	0.11 U	0.11 U	0.17 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	3.4 UJ	0.067 U	0.067 U	0.10 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	6.5 UJ	0.13 U	0.13 U	0.20 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	230 J	3.9 UR	8.8 J	6 UR	3.9 UR	3.9 UR	8.6 J
TETRACHLOROETHENE	15 UJ	0.29 U	0.29 U	0.45 U	0.29 U	0.29 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	6.5 UJ	0.13 U	0.13 U	0.46 B	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	7 UJ	0.14 U	0.14 U	0.22 U	0.14 U	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	12 J	0.19 U	0.19 U	1.4 J	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	9.5 UJ	0.19 U	0.19 U	0.29 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	110 J	0.20 J	0.17 U	5.6	4.6	19	5.6
TRICHLOROFLUOROMETHANE	11 UJ	0.21 U	0.21 U	0.32 U	0.21 U	0.21 U	0.21 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-35 DR-DPT-35-45 8/13/2013	DR-DPT-36 DR-DPT-36-10 8/16/2013	DR-DPT-36 DR-DPT-36-10-D 8/16/2013	DR-DPT-36 DR-DPT-36-30 8/16/2013	DR-DPT-36 DR-DPT-36-35 8/16/2013	DR-DPT-36 DR-DPT-36-40 8/16/2013	DR-DPT-36 DR-DPT-36-45 8/16/2013
VINYL ACETATE	9.5 UR	0.19 UR	0.19 UR	0.29 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	720 J	0.22 U	0.22 U	25	0.92 J	1.4	1
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
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LOCATION	DR-DPT-36	DR-DPT-36	DR-DPT-37	DR-DPT-37	DR-DPT-37	DR-DPT-37	DR-DPT-37
SAMPLE ID	DR-DPT-36-45-D	DR-DPT-36-50	DR-DPT-37-25	DR-DPT-37-30	DR-DPT-37-35	DR-DPT-37-40	DR-DPT-37-45
SAMPLE DATE	8/16/2013	8/19/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	1.5 U	1.5 U	0.23 U	0.23 U	0.58 U	2.3 U
1,1,1-TRICHLOROETHANE	0.22 U	1.5 U	1.5 U	0.22 U	0.22 U	0.55 U	2.2 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	1.2 U	1.2 U	0.18 U	0.18 U	0.45 U	1.8 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	1.9 U	1.9 U	0.28 U	0.28 U	0.70 U	2.8 U
1,1-DICHLOROETHANE	0.15 U	1 U	1 U	0.15 U	0.15 U	0.38 U	1.5 U
1,1-DICHLOROETHENE	0.19 U	1.3 U	1.3 U	0.19 U	0.19 U	0.48 U	1.9 U
1,1-DICHLOROPROPENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
1,2,3-TRICHLOROBENZENE	0.17 U	1.1 U	1.1 U	0.17 U	0.17 U	0.43 U	1.7 U
1,2,3-TRICHLOROPROPANE	0.43 U	2.9 U	2.9 U	0.43 U	0.43 U	1.1 U	4.3 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.039 U	0.039 U	0.0059 U	0.0059 U	0.015 U	0.059 U
1,2,4-TRICHLOROBENZENE	0.15 U	1 U	1 U	0.15 U	0.15 U	0.38 U	1.5 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.80 U	0.80 U	0.13 J	0.12 U	0.30 U	1.2 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	4.5 U	4.5 U	0.67 U	0.67 U	1.7 U	6.7 U
1,2-DIBROMOETHANE	0.24 U	1.6 U	1.6 U	0.24 U	0.24 U	0.60 U	2.4 U
1,2-DICHLOROBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
1,2-DICHLOROETHANE	0.64 J	1.5 U	1.5 U	0.22 U	0.22 U	1.4 J	2.4 J
1,2-DICHLOROPROPANE	0.18 U	1.2 U	1.2 U	0.18 U	0.18 U	0.45 U	1.8 U
1,3-DICHLOROBENZENE	0.14 U	0.93 U	0.93 U	0.14 U	0.14 U	0.35 U	1.4 U
1,3-DICHLOROPROPANE	0.16 U	1.1 U	1.1 U	0.16 U	0.16 U	0.40 U	1.6 U
1,4-DICHLOROBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
1,4-DIOXANE	NA	NA	NA	34 J	NA	NA	220 J
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	1.5 NJ	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
2-BUTANONE	0.57 U	3.8 U	3.8 U	0.57 U	0.57 U	1.6 J	5.7 U
2-CHLOROETHYL VINYL ETHER	0.99 U	6.6 U	6.6 U	0.99 U	0.99 U	2.5 U	9.9 U
2-CHLOROTOLUENE	0.11 U	0.73 U	0.73 U	0.11 U	0.11 U	0.28 U	1.1 U
2-HEXANONE	0.41 U	2.7 U	2.7 U	0.41 U	0.41 U	1 U	4.1 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	1.2 U	1.2 U	0.18 U	0.18 U	0.45 U	1.8 U
4-ISOPROPYLTOLUENE	0.12 U	0.80 U	0.80 U	0.12 U	0.12 U	0.30 U	1.2 U
4-METHYL-2-PENTANONE	0.32 U	2.1 U	2.1 U	0.32 U	0.32 U	0.80 U	3.2 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	4.3 B	34 B	7.3 U	5.1 J	1.9 J	3.1 J	11 U
BENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.79 J	2.5 J
BROMOBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
BROMOCHLOROMETHANE	0.29 U	1.9 U	1.9 U	0.29 U	0.29 U	0.73 U	2.9 U
BROMODICHLOROMETHANE	0.15 U	1 U	1 U	0.15 U	0.15 U	0.38 U	1.5 U
BROMOFORM	0.64 U	4.3 U	4.3 U	0.64 U	0.64 U	1.6 U	6.4 U
BROMOMETHANE	0.41 U	2.7 U	2.7 U	0.41 U	0.41 U	1 U	4.1 U

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-36 DR-DPT-36-45-D 8/16/2013	DR-DPT-36 DR-DPT-36-50 8/19/2013	DR-DPT-37 DR-DPT-37-25 8/12/2013	DR-DPT-37 DR-DPT-37-30 8/12/2013	DR-DPT-37 DR-DPT-37-35 8/12/2013	DR-DPT-37 DR-DPT-37-40 8/12/2013	DR-DPT-37 DR-DPT-37-45 8/12/2013
CARBON DISULFIDE	0.24 J	0.87 U	1.1 J	1.7 J	1.4	2.5	3.7 J
CARBON TETRACHLORIDE	0.29 J	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
CHLOROBENZENE	0.15 U	1 U	1 U	0.15 U	0.15 U	0.38 U	1.5 U
CHLORODIBROMOMETHANE	0.18 UL	1.2 U	1.2 U	0.18 U	0.18 U	0.45 U	1.8 U
CHLOROETHANE	0.29 U	1.9 U	1.9 U	0.29 U	0.29 U	0.73 U	2.9 U
CHLOROFORM	0.31 J	1.1 U	1.1 U	0.16 U	0.16 U	0.48 J	1.6 U
CHLOROMETHANE	0.30 U	2 U	2 U	0.30 U	0.30 U	0.75 U	3 U
CIS-1,2-DICHLOROETHENE	1.4	210	160	8.5	21	88	260
CIS-1,3-DICHLOROPROPENE	0.14 U	0.93 U	0.93 U	0.14 U	0.14 U	0.35 U	1.4 U
CYCLOHEXANE	NA	NA	0.86 J	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	1.9 U	1.9 U	0.28 U	0.28 U	0.70 U	2.8 U
DICHLORODIFLUOROMETHANE	0.31 U	2.1 U	2.1 U	0.31 U	0.31 U	0.78 U	3.1 U
DIISOPROPYL ETHER	1.5 U	10 U	10 U	1.5 U	1.5 U	3.8 U	15 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.73 U	0.73 U	0.11 U	0.11 U	0.28 U	1.1 U
ETHYLBENZENE	0.17 U	1.1 U	1.1 U	0.17 U	0.17 U	0.43 U	1.7 U
HEXACHLOROBUTADIENE	0.30 U	2 U	2 U	0.30 U	0.30 U	0.75 U	3 U
HEXANE	NA	NA	NA	0.35 J	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
M+P-XYLENES	0.24 U	1.6 U	1.6 U	0.33 J	0.24 U	0.60 U	2.4 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	1.1 U	1.1 U	0.17 U	0.17 U	0.43 U	1.7 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	2.3 B	2.2 U	0.33 U	0.33 U	0.83 U	3.3 U
NAPHTHALENE	0.24 U	1.6 U	1.6 U	0.24 U	0.24 U	0.60 U	2.4 U
N-BUTYLBENZENE	0.12 U	0.80 U	0.80 U	0.12 U	0.12 U	0.30 U	1.2 U
N-PROPYLBENZENE	0.14 U	0.93 U	0.93 U	0.14 U	0.14 U	0.35 U	1.4 U
O-XYLENE	0.14 U	0.93 U	0.93 U	0.14 U	0.14 U	0.35 U	1.4 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
STYRENE	0.11 U	0.73 U	0.73 U	0.11 U	0.11 U	0.28 U	1.1 U
TERT-AMYL METHYL ETHER	0.067 U	0.45 U	0.45 U	0.067 U	0.067 U	0.17 U	0.67 U
TERT-BUTYLBENZENE	0.13 U	0.87 U	0.87 U	0.13 U	0.13 U	0.33 U	1.3 U
TERTIARY-BUTYL ALCOHOL	7.9 J	26 UR	26 UR	4.1 J	3.9 UR	9.8 UR	39 UR
TETRACHLOROETHENE	0.29 U	1.9 U	1.9 U	0.29 U	0.29 U	0.73 U	2.9 U
TETRAHYDROFURAN	NA	2.9 J	NA	NA	NA	NA	NA
TOLUENE	0.13 U	3.5 B	0.87 U	0.13 U	0.13 U	0.34 J	1.3 U
TOTAL XYLENES	0.14 U	0.93 U	0.93 U	0.33 J	0.14 U	0.35 U	1.4 U
TRANS-1,2-DICHLOROETHENE	0.19 U	1.3 U	1.3 U	0.41 J	1	0.60 J	1.9 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	1.3 U	1.3 U	0.19 U	0.19 U	0.48 U	1.9 U
TRICHLOROETHENE	5.6	9.3	5.9 J	2.1	9.7	21	73
TRICHLOROFLUOROMETHANE	0.21 U	1.4 U	1.4 U	0.21 U	0.21 U	0.53 U	2.1 U
UNKNOWN	NA	NA	NA	NA	NA	NA	11 NJ

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-36 DR-DPT-36-45-D 8/16/2013	DR-DPT-36 DR-DPT-36-50 8/19/2013	DR-DPT-37 DR-DPT-37-25 8/12/2013	DR-DPT-37 DR-DPT-37-30 8/12/2013	DR-DPT-37 DR-DPT-37-35 8/12/2013	DR-DPT-37 DR-DPT-37-40 8/12/2013	DR-DPT-37 DR-DPT-37-45 8/12/2013
VINYL ACETATE	0.19 UR	1.3 UR	1.3 UR	0.19 UR	0.19 UR	0.48 UR	1.9 UR
VINYL CHLORIDE	1.1	16	60	1.4	3.6	52	130
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-38 DR-DPT-38-15 8/8/2013	DR-DPT-38 DR-DPT-38-30 8/8/2013	DR-DPT-38 DR-DPT-38-35 8/8/2013	DR-DPT-38 DR-DPT-38-40 8/8/2013	DR-DPT-39 DR-DPT-39-15 10/20/2013	DR-DPT-39 DR-DPT-39-20 10/20/2013	DR-DPT-39 DR-DPT-39-30 10/20/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	1.2 U	0.42 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	1.2 U	0.40 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.95 U	0.33 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	1.5 U	0.51 U	0.28 UL	0.28 UL	0.28 UL
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.79 U	0.27 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	1 U	0.35 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.68 U	0.24 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.89 U	0.31 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	2.3 U	0.78 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.031 U	0.011 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.79 U	0.27 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.63 U	0.22 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	3.5 U	1.2 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	1.3 U	0.44 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.68 U	0.24 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.99 J	2.1	4.8 J	3.6	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.95 U	0.33 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.74 U	0.25 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.84 U	0.29 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.68 U	0.24 U	0.13 U	0.13 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.68 U	0.24 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	2.3 J	0.57 U	3 U	1 U	0.57 UR	0.57 UR	0.62 J
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	5.2 U	1.8 U	0.99 U	0.99 U	0.99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.58 U	0.20 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	2.2 U	0.75 U	0.41 U	0.41 U	0.41 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.95 U	0.33 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.63 U	0.22 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	1.7 U	0.58 U	0.32 U	0.32 U	0.32 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	8.7 B	20 B	21 B	51	1.2 J	3 J	8.9 J
BENZENE	6.3	0.98 J	3.3 J	1.3 J	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.68 U	0.24 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	1.5 U	0.53 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.79 U	0.50 J	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	3.4 U	1.2 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	2.2 U	0.75 U	0.41 U	0.41 U	0.41 U

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-38 DR-DPT-38-15 8/8/2013	DR-DPT-38 DR-DPT-38-30 8/8/2013	DR-DPT-38 DR-DPT-38-35 8/8/2013	DR-DPT-38 DR-DPT-38-40 8/8/2013	DR-DPT-39 DR-DPT-39-15 10/20/2013	DR-DPT-39 DR-DPT-39-20 10/20/2013	DR-DPT-39 DR-DPT-39-30 10/20/2013
CARBON DISULFIDE	1.8	1.6	3.4 J	2.3	0.13 J	1.3	0.30 J
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.68 U	0.24 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.78 J	1.4 J	0.27 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.95 U	0.33 U	0.18 U	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	1.5 U	0.53 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	0.21 J	0.46 J	1.9 J	2.9	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.30 U	0.30 U	1.6 U	0.55 U	0.30 U	0.30 U	0.30 U
CIS-1,2-DICHLOROETHENE	0.92 J	16	42	26	0.17 U	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.74 U	0.25 U	0.14 U	0.14 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	1.5 U	0.51 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	1.6 U	0.56 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	7.9 U	2.7 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.58 U	0.20 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.89 U	0.31 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.30 U	0.30 U	1.6 U	0.55 U	0.30 U	0.30 U	0.30 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.68 U	0.24 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	1.3 U	0.44 U	0.24 U	0.24 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.89 U	0.31 U	0.17 U	0.17 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	0.33 U	1.7 U	0.60 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	1.3 U	0.44 U	0.24 U	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.63 U	0.22 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.74 U	0.25 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.76 J	0.25 U	0.14 U	0.14 U	0.14 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.68 U	0.24 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.58 U	0.20 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.35 U	0.12 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.40 J	0.13 U	0.68 U	0.24 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	12 J	42 J	22 B	3.9 U	3.9 U	3.9 U
TETRACHLOROETHENE	0.29 U	0.29 U	1.5 U	0.53 U	0.29 U	0.29 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.41 J	0.98 J	4.6 J	2.4	0.13 U	0.13 U	0.15 J
TOTAL XYLENES	0.14 U	0.14 U	0.76 J	0.25 U	0.14 U	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	5.8	0.78 J	3.6 J	2.2	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	1 U	0.35 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	0.17 U	6.5	32	21	0.17 U	0.17 U	16
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	1.1 U	0.38 U	0.21 U	0.21 U	0.21 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-38 DR-DPT-38-15 8/8/2013	DR-DPT-38 DR-DPT-38-30 8/8/2013	DR-DPT-38 DR-DPT-38-35 8/8/2013	DR-DPT-38 DR-DPT-38-40 8/8/2013	DR-DPT-39 DR-DPT-39-15 10/20/2013	DR-DPT-39 DR-DPT-39-20 10/20/2013	DR-DPT-39 DR-DPT-39-30 10/20/2013
VINYL ACETATE	0.19 UR	0.19 UR	1 UR	0.35 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	8.1	17	95	63	0.22 U	0.22 U	0.22 U
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-39 DR-DPT-39-35 10/21/2013	DR-DPT-39 DR-DPT-39-38 10/21/2013	DR-DPT-40 DR-DPT-40-20 8/7/2013	DR-DPT-40 DR-DPT-40-25 8/7/2013	DR-DPT-40 DR-DPT-40-30 8/7/2013	DR-DPT-40 DR-DPT-40-35 8/7/2013	DR-DPT-40 DR-DPT-40-40 8/7/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	77 U	29 U	77 U	58 U	12 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	73 U	28 U	73 U	160 J	11 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	60 U	23 U	60 U	45 U	9 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 UL	0.28 UL	93 U	35 U	93 U	70 U	14 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	50 U	19 U	50 U	38 U	7.5 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	63 U	24 U	63 U	48 U	9.5 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	43 U	16 U	43 U	33 U	6.5 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	57 U	21 U	57 U	43 U	8.5 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	140 U	54 U	140 U	110 U	22 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	2 U	0.74 U	2 U	1.5 U	0.30 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	50 U	19 U	50 U	38 U	7.5 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	40 U	15 U	40 U	30 U	6 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	220 U	84 U	220 U	170 U	34 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	80 U	30 U	80 U	60 U	12 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	43 U	16 U	43 U	33 U	6.5 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	73 U	28 U	73 U	55 U	11 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	60 U	23 U	60 U	45 U	9 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	47 U	18 U	47 U	35 U	7 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	53 U	20 U	53 U	40 U	8 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	43 U	16 U	43 U	33 U	6.5 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	43 U	16 U	43 U	33 U	6.5 U
2-BUTANONE	0.99 J	6.1 J	190 U	71 U	190 U	140 U	29 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	330 U	120 U	330 U	250 U	50 U
2-CHLOROTOLUENE	0.11 U	0.11 U	37 U	14 U	37 U	28 U	5.5 U
2-HEXANONE	0.41 U	0.53 J	140 U	51 U	140 U	100 U	21 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	60 U	23 U	60 U	45 U	9 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	40 U	15 U	40 U	30 U	6 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	110 U	40 U	110 U	80 U	16 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	5.2 J	22	370 U	140 U	370 U	280 U	67 B
BENZENE	0.13 U	0.54 J	43 U	16 U	43 U	33 U	6.5 U
BROMOBENZENE	0.13 U	0.13 U	43 U	16 U	43 U	33 U	6.5 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	97 U	36 U	97 U	73 U	15 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	50 U	19 U	50 U	38 U	7.5 U
BROMOFORM	0.64 U	0.64 U	210 U	80 U	210 U	160 U	32 U
BROMOMETHANE	0.41 U	0.41 U	140 U	51 U	140 U	100 U	21 U

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-39 DR-DPT-39-35 10/21/2013	DR-DPT-39 DR-DPT-39-38 10/21/2013	DR-DPT-40 DR-DPT-40-20 8/7/2013	DR-DPT-40 DR-DPT-40-25 8/7/2013	DR-DPT-40 DR-DPT-40-30 8/7/2013	DR-DPT-40 DR-DPT-40-35 8/7/2013	DR-DPT-40 DR-DPT-40-40 8/7/2013
CARBON DISULFIDE	0.28 J	0.13 U	43 U	16 U	43 U	33 U	6.5 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	43 U	16 U	43 U	33 U	6.5 U
CHLOROBENZENE	0.15 U	0.15 U	50 U	19 U	50 U	38 U	7.5 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	60 U	23 U	60 U	45 U	9 U
CHLOROETHANE	0.29 U	0.29 U	97 U	36 U	97 U	73 U	15 U
CHLOROFORM	0.16 U	0.16 U	53 U	20 U	53 U	40 U	8 U
CHLOROMETHANE	0.30 U	0.30 U	100 U	38 U	100 U	75 U	15 U
CIS-1,2-DICHLOROETHENE	0.17 U	0.17 U	9100	3700	9000	5500	1100
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	47 U	18 U	47 U	35 U	7 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	93 U	35 U	93 U	70 U	14 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	100 U	39 U	100 U	78 U	16 U
DIISOPROPYL ETHER	1.5 U	1.5 U	500 U	190 U	500 U	380 U	75 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	37 U	14 U	37 U	28 U	5.5 U
ETHYLBENZENE	0.17 U	0.17 U	57 U	21 U	57 U	43 U	8.5 U
HEXACHLOROBUTADIENE	0.30 U	0.30 U	100 U	38 U	100 U	75 U	15 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	43 U	16 U	43 U	33 U	6.5 U
M+P-XYLENES	0.24 U	0.24 U	80 U	30 U	80 U	60 U	12 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	57 U	21 U	57 U	43 U	8.5 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	0.33 U	110 U	41 U	110 U	83 U	17 U
NAPHTHALENE	0.24 U	0.24 U	80 U	30 U	80 U	60 U	12 U
N-BUTYLBENZENE	0.12 U	0.12 U	40 U	15 U	40 U	30 U	6 U
N-PROPYLBENZENE	0.14 U	0.14 U	47 U	18 U	47 U	35 U	7 U
O-XYLENE	0.14 U	0.14 U	47 U	18 U	47 U	35 U	7 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	0.13 U	43 U	16 U	43 U	33 U	6.5 U
STYRENE	0.11 U	0.11 U	37 U	14 U	37 U	28 U	5.5 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	22 U	8.4 U	22 U	17 U	3.4 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	43 U	16 U	43 U	33 U	6.5 U
TERTIARY-BUTYL ALCOHOL	3.9 U	3.9 U	1300 UR	490 UR	1300 UR	980 UR	200 UR
TETRACHLOROETHENE	0.29 U	0.29 U	97 U	36 U	97 U	73 U	15 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.13 U	0.46 J	43 U	16 U	43 U	33 U	6.5 U
TOTAL XYLENES	0.14 U	0.14 U	47 U	18 U	47 U	35 U	7 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	170 J	89 J	200 J	77 J	9.5 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	63 U	24 U	63 U	48 U	9.5 U
TRICHLOROETHENE	0.36 J	2.1	460	210	2800	5800	120
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	70 U	26 U	70 U	53 U	11 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-DPT-39	DR-DPT-39	DR-DPT-40	DR-DPT-40	DR-DPT-40	DR-DPT-40	DR-DPT-40
SAMPLE ID	DR-DPT-39-35	DR-DPT-39-38	DR-DPT-40-20	DR-DPT-40-25	DR-DPT-40-30	DR-DPT-40-35	DR-DPT-40-40
SAMPLE DATE	10/21/2013	10/21/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013
VINYL ACETATE	0.19 UR	0.19 UR	63 UR	24 UR	63 UR	48 UR	9.5 UR
VINYL CHLORIDE	0.22 U	0.22 U	350	51 J	130 J	71 J	43 J
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-41 DR-DPT-41-25 8/6/2013	DR-DPT-41 DR-DPT-41-35 8/7/2013	DR-DPT-41 DR-DPT-41-40 8/7/2013	DR-DPT-41 DR-DPT-41-45 8/7/2013	DR-DPT-42 DR-DPT-42-10 8/9/2013	DR-DPT-42 DR-DPT-42-15 8/9/2013	DR-DPT-42 DR-DPT-42-20 8/9/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	290 U	190 U	9.2 U	5.8 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	280 U	180 U	8.8 U	5.5 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	230 U	150 U	7.2 U	4.5 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	350 U	230 U	11 U	7 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	190 U	120 U	6 U	3.8 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	240 U	160 U	7.6 U	4.8 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	160 U	110 U	5.2 U	3.3 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	210 U	140 U	6.8 U	4.3 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	540 U	360 U	17 U	11 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	7.4 U	4.9 U	0.24 U	0.15 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	190 U	120 U	6 U	3.8 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	150 U	100 U	4.8 U	3 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	840 U	560 U	27 U	17 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	300 U	200 U	9.6 U	6 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	160 U	110 U	5.2 U	3.3 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	280 U	180 U	8.8 J	7.6 J	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	230 U	150 U	7.2 U	4.5 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	180 U	120 U	5.6 U	3.5 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	200 U	130 U	6.4 U	4 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	160 U	110 U	5.2 U	3.3 U	0.13 U	0.13 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	160 U	110 U	5.2 U	3.3 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	710 U	470 U	23 U	14 U	0.57 U	0.57 U	0.95 J
2-CHLOROETHYL VINYL ETHER	1200 U	820 U	40 U	25 U	0.99 U	0.99 U	0.99 U
2-CHLOROTOLUENE	140 U	92 U	4.4 U	2.8 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	510 U	340 U	16 U	10 U	0.41 U	0.41 U	0.41 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	230 U	150 U	7.2 U	4.5 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	150 U	100 U	4.8 U	3 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	400 U	270 U	13 U	8 U	0.32 U	0.32 U	0.32 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	1400 U	920 U	44 U	28 U	5 J	4.4 J	14 J
BENZENE	160 U	110 U	5.2 U	3.3 U	0.13 U	0.13 U	0.15 J
BROMOBENZENE	160 U	110 U	5.2 U	3.3 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	360 U	240 U	12 U	7.3 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	190 U	120 U	6 U	3.8 U	0.15 U	0.15 U	0.25 J
BROMOFORM	800 U	530 U	26 U	16 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	510 U	340 U	16 U	10 U	0.41 U	0.41 U	0.41 U

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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-41 DR-DPT-41-25 8/6/2013	DR-DPT-41 DR-DPT-41-35 8/7/2013	DR-DPT-41 DR-DPT-41-40 8/7/2013	DR-DPT-41 DR-DPT-41-45 8/7/2013	DR-DPT-42 DR-DPT-42-10 8/9/2013	DR-DPT-42 DR-DPT-42-15 8/9/2013	DR-DPT-42 DR-DPT-42-20 8/9/2013
CARBON DISULFIDE	160 U	110 U	5.2 U	3.3 U	0.13 U	1.7	0.41 J
CARBON TETRACHLORIDE	160 U	110 U	5.2 U	3.3 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	190 U	120 U	6 U	3.8 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	230 U	150 U	7.2 U	4.5 U	0.18 U	0.18 U	0.18 U
CHLOROETHANE	360 U	240 U	12 U	7.3 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	200 U	130 U	6.4 U	4 U	0.16 U	0.44 J	1.6
CHLOROMETHANE	380 U	250 U	12 U	7.5 U	0.30 U	0.30 U	0.30 U
CIS-1,2-DICHLOROETHENE	17000	1900	320	340	0.26 J	0.69 J	0.17 U
CIS-1,3-DICHLOROPROPENE	180 U	120 U	5.6 U	3.5 U	0.14 U	0.14 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	350 U	230 U	11 U	7 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	390 U	260 U	12 U	7.8 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1900 U	1200 U	60 U	38 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	140 U	92 U	4.4 U	2.8 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	210 U	140 U	6.8 U	4.3 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	380 U	250 U	12 U	7.5 U	0.30 U	0.30 U	0.30 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	160 U	110 U	5.2 U	3.3 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	300 U	200 U	9.6 U	6 U	0.24 U	0.24 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	210 U	140 U	6.8 U	4.3 U	0.17 U	0.17 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	1600 B	270 U	13 U	12 B	0.33 U	0.33 U	0.33 U
NAPHTHALENE	300 UJ	200 U	9.6 U	6 U	0.24 U	0.24 U	0.24 U
N-BUTYLBENZENE	150 U	100 U	4.8 U	3 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	180 U	120 U	5.6 U	3.5 U	0.14 U	0.14 U	0.14 U
O-XYLENE	180 U	120 U	5.6 U	3.5 U	0.14 U	0.14 U	0.14 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	160 U	110 U	5.2 U	3.3 U	0.13 U	0.13 U	0.13 U
STYRENE	140 U	92 U	4.4 U	2.8 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	84 U	56 U	2.7 U	1.7 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	160 U	110 U	5.2 U	3.3 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	4900 UR	3200 UR	160 UR	98 UR	3.9 UR	3.9 UR	7.8 B
TETRACHLOROETHENE	360 U	240 U	12 U	7.3 U	0.29 U	0.29 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA	NA
TOLUENE	1700	110 U	66	62	0.13 U	0.49 J	0.13 U
TOTAL XYLENES	180 U	120 U	5.6 U	3.5 U	0.14 U	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	240 U	160 U	19 J	20 J	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	240 U	160 U	7.6 U	4.8 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	23000	28000 K	1100	870	0.28 J	0.90 J	0.17 U
TRICHLOROFLUOROMETHANE	260 U	170 U	8.4 U	5.3 U	0.21 U	0.21 U	0.21 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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LOCATION	DR-DPT-41	DR-DPT-41	DR-DPT-41	DR-DPT-41	DR-DPT-42	DR-DPT-42	DR-DPT-42
SAMPLE ID	DR-DPT-41-25	DR-DPT-41-35	DR-DPT-41-40	DR-DPT-41-45	DR-DPT-42-10	DR-DPT-42-15	DR-DPT-42-20
SAMPLE DATE	8/6/2013	8/7/2013	8/7/2013	8/7/2013	8/9/2013	8/9/2013	8/9/2013
VINYL ACETATE	240 UR	160 UR	7.6 UR	4.8 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	280 U	180 U	16 J	11 J	0.22 U	0.91 J	0.22 U
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-42 DR-DPT-42-25 8/9/2013	DR-DPT-42 DR-DPT-42-30 8/9/2013	DR-DPT-42 DR-DPT-42-35 8/9/2013	DR-DPT-43 DR-DPT-43-25 8/21/2013	DR-DPT-43 DR-DPT-43-30 8/21/2013	DR-DPT-43 DR-DPT-43-35 8/21/2013	DR-DPT-43 DR-DPT-43-40 8/21/2013
VOLATILES (UG/L)							
1,1,1,2-TETRACHLOROETHANE	1.3 U	1.8 U	1.8 U	23 U	58 U	4600 U	580 U
1,1,1-TRICHLOROETHANE	1.3 U	1.8 U	1.8 U	22 U	55 U	4400 U	550 U
1,1,2,2-TETRACHLOROETHANE	1 U	1.4 U	1.4 U	18 U	45 U	3600 U	450 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	1.6 U	2.2 U	2.2 U	28 U	70 U	5600 U	700 U
1,1-DICHLOROETHANE	0.86 U	1.2 U	1.2 U	15 U	38 U	3000 U	380 U
1,1-DICHLOROETHENE	1.1 U	1.5 U	1.5 U	19 U	48 U	3800 U	480 U
1,1-DICHLOROPROPENE	0.74 U	1 U	1 U	13 U	33 U	2600 U	330 U
1,2,3-TRICHLOROBENZENE	0.97 U	1.4 U	1.4 U	17 U	43 U	3400 U	430 U
1,2,3-TRICHLOROPROPANE	2.5 U	3.4 U	3.4 U	43 U	110 U	8600 U	1100 U
1,2,3-TRIMETHYLBENZENE	0.034 U	0.047 U	0.047 U	0.59 U	150 J	120 U	15 U
1,2,4-TRICHLOROBENZENE	0.86 U	1.2 U	1.2 U	53 J	410	3000 U	380 U
1,2,4-TRIMETHYLBENZENE	0.69 U	0.96 U	0.96 U	17 J	65 J	2400 U	300 U
1,2-DIBROMO-3-CHLOROPROPANE	3.8 U	5.4 U	5.4 U	67 U	170 U	13000 U	1700 U
1,2-DIBROMOETHANE	1.4 U	1.9 U	1.9 U	24 U	60 U	4800 U	600 U
1,2-DICHLOROBENZENE	0.74 U	1 U	1 U	13 U	33 U	2600 U	330 U
1,2-DICHLOROETHANE	1.3 U	1.8 J	1.9 J	22 U	55 U	4400 U	550 U
1,2-DICHLOROPROPANE	1 U	1.4 U	1.4 U	18 U	45 U	3600 U	450 U
1,3-DICHLOROBENZENE	0.80 U	1.1 U	1.1 U	14 U	35 U	2800 U	350 U
1,3-DICHLOROPROPANE	0.91 U	1.3 U	1.3 U	16 U	40 U	3200 U	400 U
1,4-DICHLOROBENZENE	0.74 U	1 U	1 U	13 U	33 U	2600 U	330 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.74 U	1 U	1 U	13 U	33 U	2600 U	330 U
2-BUTANONE	3.3 U	4.6 U	4.6 U	57 U	140 U	11000 U	1400 U
2-CHLOROETHYL VINYL ETHER	5.7 U	7.9 U	7.9 U	99 U	250 U	20000 U	2500 U
2-CHLOROTOLUENE	0.63 U	0.88 U	0.88 U	11 U	28 U	2200 U	280 U
2-HEXANONE	2.3 U	3.3 U	3.3 U	41 U	100 U	8200 U	1000 U
2-METHYL-1-BUTENE	NA	NA	NA	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	1 U	1.4 U	1.4 U	18 U	45 U	3600 U	450 U
4-ISOPROPYLTOLUENE	0.69 U	0.96 U	0.96 U	12 U	30 U	2400 U	300 U
4-METHYL-2-PENTANONE	1.8 U	2.6 U	2.6 U	32 U	80 U	6400 U	800 U
ACETALDEHYDE	NA	NA	NA	NA	NA	NA	NA
ACETONE	6.9 J	8.9 J	10 J	110 U	280 U	22000 U	2800 U
BENZENE	0.74 U	1.9 J	2.1 J	13 U	33 U	2600 U	330 U
BROMOBENZENE	0.74 U	1 U	1 U	13 U	33 U	2600 U	330 U
BROMOCHLOROMETHANE	1.7 U	2.3 U	2.3 U	29 U	73 U	5800 U	730 U
BROMODICHLOROMETHANE	0.86 U	1.2 U	1.2 U	15 U	38 U	3000 U	380 U
BROMOFORM	3.7 U	5.1 U	5.1 U	64 U	160 U	13000 U	1600 U
BROMOMETHANE	2.3 U	3.3 U	3.3 U	41 U	100 U	8200 U	1000 U

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Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-42 DR-DPT-42-25 8/9/2013	DR-DPT-42 DR-DPT-42-30 8/9/2013	DR-DPT-42 DR-DPT-42-35 8/9/2013	DR-DPT-43 DR-DPT-43-25 8/21/2013	DR-DPT-43 DR-DPT-43-30 8/21/2013	DR-DPT-43 DR-DPT-43-35 8/21/2013	DR-DPT-43 DR-DPT-43-40 8/21/2013
CARBON DISULFIDE	0.74 U	1 U	1 U	32 J	33 U	2600 U	330 U
CARBON TETRACHLORIDE	0.74 U	1 U	1 U	13 U	33 U	2600 U	330 U
CHLOROBENZENE	0.86 U	1.2 U	1.2 U	15 U	38 U	3000 U	380 U
CHLORODIBROMOMETHANE	1 U	1.4 U	1.4 U	18 U	45 U	3600 U	450 U
CHLOROETHANE	1.7 U	2.3 U	2.3 U	29 U	73 U	5800 U	730 U
CHLOROFORM	0.91 U	1.3 U	1.3 U	16 U	40 U	3200 U	400 U
CHLOROMETHANE	1.7 U	2.4 U	2.4 U	30 U	75 U	6000 U	750 U
CIS-1,2-DICHLOROETHENE	83	200	170	1400	1200	3400 U	1100 J
CIS-1,3-DICHLOROPROPENE	0.80 U	1.1 U	1.1 U	14 U	35 U	2800 U	350 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	1.6 U	2.2 U	2.2 U	28 U	70 U	5600 U	700 U
DICHLORODIFLUOROMETHANE	1.8 U	2.5 U	2.5 U	31 U	78 U	6200 U	780 U
DIISOPROPYL ETHER	8.6 U	12 U	12 U	150 U	380 U	30000 U	3800 U
ETHYL TERT-BUTYL ETHER	0.63 U	0.88 U	0.88 U	11 U	28 U	2200 U	280 U
ETHYLBENZENE	0.97 U	1.4 U	1.4 U	40 J	110 J	3400 U	430 U
HEXACHLOROBUTADIENE	1.7 U	2.4 U	2.4 U	30 U	75 U	6000 U	750 U
HEXANE	NA	NA	NA	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.74 U	1 U	1 U	13 U	33 U	2600 U	330 U
M+P-XYLENES	1.4 U	1.9 U	1.9 U	79 J	290 J	4800 U	600 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.97 U	1.4 U	1.4 U	17 U	43 U	3400 U	430 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	49 J	NA	NA
METHYLENE CHLORIDE	8.2 B	14 B	14 B	33 U	83 U	49000 J	830 U
NAPHTHALENE	1.4 U	1.9 U	1.9 U	24 U	60 U	4800 U	600 U
N-BUTYLBENZENE	0.69 U	0.96 U	0.96 U	12 U	30 U	2400 U	300 U
N-PROPYLBENZENE	0.80 U	1.1 U	1.1 U	14 U	35 U	2800 U	350 U
O-XYLENE	0.80 U	1.1 U	1.1 U	41 J	110 J	2800 U	350 U
PENTANE	NA	NA	NA	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.74 U	1 U	1 U	13 U	33 U	2600 U	330 U
STYRENE	0.63 U	0.88 U	0.88 U	11 U	28 U	2200 U	280 U
TERT-AMYL METHYL ETHER	0.38 U	0.54 U	0.54 U	6.7 U	17 U	1300 U	170 U
TERT-BUTYLBENZENE	0.74 U	1 U	1 U	13 U	33 U	2600 U	330 U
TERTIARY-BUTYL ALCOHOL	22 UR	31 UR	61 B	390 UR	980 UR	78000 UR	9800 UR
TETRACHLOROETHENE	1.7 U	2.3 U	2.3 U	29 U	120 J	5800 U	730 U
TETRAHYDROFURAN	NA	NA	NA	NA	140 J	NA	NA
TOLUENE	0.74 U	1 U	1 U	1200	2100	31000 B	3700
TOTAL XYLENES	0.80 U	1.1 U	1.1 U	120 J	400 J	2800 U	350 U
TRANS-1,2-DICHLOROETHENE	4.4 J	2 J	1.6 J	19 U	48 U	3800 U	480 U
TRANS-1,3-DICHLOROPROPENE	1.1 U	1.5 U	1.5 U	19 U	48 U	3800 U	480 U
TRICHLOROETHENE	160	89	86	3600	9400	490000	30000
TRICHLOROFLUOROMETHANE	1.2 U	1.7 U	1.7 U	21 U	53 U	4200 U	530 U
UNKNOWN	NA	NA	NA	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-42 DR-DPT-42-25 8/9/2013	DR-DPT-42 DR-DPT-42-30 8/9/2013	DR-DPT-42 DR-DPT-42-35 8/9/2013	DR-DPT-43 DR-DPT-43-25 8/21/2013	DR-DPT-43 DR-DPT-43-30 8/21/2013	DR-DPT-43 DR-DPT-43-35 8/21/2013	DR-DPT-43 DR-DPT-43-40 8/21/2013
VINYL ACETATE	1.1 UR	1.5 UR	1.5 UR	19 UR	48 UR	3800 UR	480 UR
VINYL CHLORIDE	1.3 U	120	95	1100	210 J	4400 U	550 U
TICOV (UG/L)							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA	NA

Table D-5

Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-43B DR-DPT-43B-10 8/20/2013	DR-DPT-43B DR-DPT-43B-15 8/20/2013	DR-DPT-43B DR-DPT-43B-15-D 8/20/2013	DR-DPT-43B DR-DPT-43B-20 8/20/2013
VOLATILES (UG/L)				
1,1,1,2-TETRACHLOROETHANE	0.23 U	230 U	230 U	230 U
1,1,1-TRICHLOROETHANE	0.22 U	220 U	220 U	220 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	180 U	180 U	180 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	280 U	280 U	280 U
1,1-DICHLOROETHANE	0.55 J	150 U	150 U	150 U
1,1-DICHLOROETHENE	0.19 U	190 U	190 U	190 U
1,1-DICHLOROPROPENE	0.13 U	130 U	130 U	130 U
1,2,3-TRICHLOROBENZENE	0.17 U	170 U	170 U	170 U
1,2,3-TRICHLOROPROPANE	0.43 U	430 U	430 U	430 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	5.9 U	5.9 U	5.9 U
1,2,4-TRICHLOROBENZENE	0.15 U	150 U	150 U	150 U
1,2,4-TRIMETHYLBENZENE	0.12 U	120 U	120 U	120 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	670 U	670 U	670 U
1,2-DIBROMOETHANE	0.24 U	240 U	240 U	240 U
1,2-DICHLOROBENZENE	0.37 J	130 U	130 U	130 U
1,2-DICHLOROETHANE	0.22 U	220 U	220 U	220 U
1,2-DICHLOROPROPANE	0.18 U	180 U	180 U	180 U
1,3-DICHLOROBENZENE	0.51 J	140 U	140 U	140 U
1,3-DICHLOROPROPANE	0.16 U	160 U	160 U	160 U
1,4-DICHLOROBENZENE	2.4	130 U	130 U	130 U
1,4-DIOXANE	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA
1-PENTENE	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	130 U	130 U	130 U
2-BUTANONE	0.69 J	570 U	570 U	570 U
2-CHLOROETHYL VINYL ETHER	0.99 U	990 U	990 U	990 U
2-CHLOROTOLUENE	0.11 U	110 U	110 U	110 U
2-HEXANONE	0.41 U	410 U	410 U	410 U
2-METHYL-1-BUTENE	NA	NA	NA	NA
2-METHYLBUTANE	NA	NA	NA	NA
2-PENTENE (CIS)	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	180 U	180 U	180 U
4-ISOPROPYLTOLUENE	0.12 U	120 U	120 U	120 U
4-METHYL-2-PENTANONE	0.54 J	320 U	320 U	320 U
ACETALDEHYDE	NA	NA	NA	NA
ACETONE	1.1 U	1100 U	1100 U	1100 U
BENZENE	3.7	130 U	130 U	130 U
BROMOBENZENE	0.13 U	130 U	130 U	130 U
BROMOCHLOROMETHANE	0.29 U	290 U	290 U	290 U
BROMODICHLOROMETHANE	0.15 U	150 U	150 U	150 U
BROMOFORM	0.64 U	640 U	640 U	640 U
BROMOMETHANE	0.41 U	410 U	410 U	410 U

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-43B DR-DPT-43B-10 8/20/2013	DR-DPT-43B DR-DPT-43B-15 8/20/2013	DR-DPT-43B DR-DPT-43B-15-D 8/20/2013	DR-DPT-43B DR-DPT-43B-20 8/20/2013
CARBON DISULFIDE	0.13 U	130 U	130 U	130 U
CARBON TETRACHLORIDE	0.13 U	130 U	130 U	130 U
CHLOROBENZENE	13	150 U	150 U	150 U
CHLORODIBROMOMETHANE	0.18 U	180 U	180 U	180 U
CHLOROETHANE	0.29 U	290 U	290 U	290 U
CHLOROFORM	0.16 U	160 U	160 U	160 U
CHLOROMETHANE	0.30 U	300 U	300 U	300 U
CIS-1,2-DICHLOROETHENE	7.1	29000	27000	5700
CIS-1,3-DICHLOROPROPENE	0.14 U	140 U	140 U	140 U
CYCLOHEXANE	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	280 U	280 U	280 U
DICHLORODIFLUOROMETHANE	0.31 U	310 U	310 U	310 U
DIISOPROPYL ETHER	1.5 U	1500 U	1500 U	1500 U
ETHYL TERT-BUTYL ETHER	0.11 U	110 U	110 U	110 U
ETHYLBENZENE	0.19 J	360 J	230 J	170 U
HEXACHLOROBUTADIENE	0.30 U	300 U	300 U	300 U
HEXANE	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	130 U	130 U	130 U
M+P-XYLENES	0.35 J	420 J	420 J	240 U
METHYL ACETATE	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	170 U	170 U	170 U
METHYLCYCLOHEXANE	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	330 U	330 U	330 U
NAPHTHALENE	7.1	240 U	240 U	240 U
N-BUTYLBENZENE	0.12 U	120 U	120 U	120 U
N-PROPYLBENZENE	0.14 U	140 U	140 U	140 U
O-XYLENE	0.14 J	250 J	210 J	140 U
PENTANE	NA	NA	NA	NA
PROPYLENE	NA	NA	NA	NA
SEC-BUTYLBENZENE	0.13 U	130 U	130 U	130 U
STYRENE	0.11 U	110 U	110 U	110 U
TERT-AMYL METHYL ETHER	0.067 U	67 U	67 U	67 U
TERT-BUTYLBENZENE	0.13 U	130 U	130 U	130 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3900 UR	3900 UR	3900 UR
TETRACHLOROETHENE	0.29 U	290 U	290 U	290 U
TETRAHYDROFURAN	NA	NA	NA	NA
TOLUENE	1	10000	9400	1800 B
TOTAL XYLENES	0.49 J	670 J	630 J	140 U
TRANS-1,2-DICHLOROETHENE	0.67 J	190 U	190 U	190 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	190 U	190 U	190 U
TRICHLOROETHENE	0.17 U	3700 J	820 J	22000
TRICHLOROFLUOROMETHANE	0.21 U	210 U	210 U	210 U
UNKNOWN	NA	NA	NA	NA

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Chemical Results for DPT Groundwater Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	DR-DPT-43B DR-DPT-43B-10 8/20/2013	DR-DPT-43B DR-DPT-43B-15 8/20/2013	DR-DPT-43B DR-DPT-43B-15-D 8/20/2013	DR-DPT-43B DR-DPT-43B-20 8/20/2013
VINYL ACETATE	0.19 UR	190 UR	190 UR	190 UR
VINYL CHLORIDE	6.2	5700	5600	1300
TICOV (UG/L)				
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA

APPENDIX

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-187		DR-SB-188		DR-SB-189	
SAMPLE ID	DR-SB-187-08-10	DR-SB-187-18-20	DR-SB-188-10-12	DR-SB-188-24-25	DR-SB-189-08-10	DR-SB-189-28-30
SAMPLE DATE	20130826	20130826	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
METALS (MG/KG)						
ANTIMONY	0.39 U	0.43 U	0.48 UL	9.7 L	0.71 B	0.34 UL
ARSENIC	3	0.89 J	6	11	5.1	0.55 J
BARIUM	17 J	10 J	34	260	17 J	4.5 J
BERYLLIUM	0.15 J	0.15 J	0.52 J	0.74 J	1.4 L	0.038 UL
CADMIUM	0.036 U	0.04 U	0.89	52	0.16 J	0.031 U
CHROMIUM	9.2	11	44	180	33	2.4
COBALT	2.4	0.54 J	8.1	12	8.3	0.14 U
COPPER	5.3	12	18	250	120	0.65 U
LEAD	5.8	4.5	16	380	21	1.6
MERCURY	0.017 UL	0.02 UL	0.11 J	0.18 J	0.063 J	0.019 U
MOLYBDENUM	0.27 U	0.3 U	0.79 B	5.1 J	0.63 B	0.31 B
NICKEL	2.6 J	0.7 J	14	38	20	0.24 U
SELENIUM	0.46 U	0.5 U	0.56 U	0.7 U	0.43 U	0.39 U
SILVER	0.1 U	0.11 U	0.12 U	2.3	0.096 U	0.087 U
THALLIUM	0.56 U	0.61 U	0.68 U	0.86 U	0.53 U	0.48 U
VANADIUM	19	5.9	32	44	34	4
ZINC	11	2.2 B	63	560	60	5 B
MISCELLANEOUS PARAMETERS (MEQ/100)						
CATION EXCHANGE CAPACITY	NA	NA	28	41	20	37
MISCELLANEOUS PARAMETERS (MG/KG)						
CARBON	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM	0.33 U	0.32 U	NA	NA	NA	NA
NITRATE-N	NA	NA	0.31 U	0.42 U	0.24 U	0.27 U
PHOSPHATE	NA	NA	140	97	21 J	0.38 U
TOTAL INORGANIC CARBON	NA	NA	1000 U	1000 U	5900	1000 U
TOTAL KJELDAHL NITROGEN	NA	NA	1500	1800	480	160
TOTAL ORGANIC CARBON	NA	NA	9000	12000	5300	600 U
MISCELLANEOUS PARAMETERS (S.U.)						
PH	NA	NA	6.61	8.13	7.8	5.13

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-187		DR-SB-188		DR-SB-189	
SAMPLE ID	DR-SB-187-08-10	DR-SB-187-18-20	DR-SB-188-10-12	DR-SB-188-24-25	DR-SB-189-08-10	DR-SB-189-28-30
SAMPLE DATE	20130826	20130826	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
PESTICIDES/PCBS (UG/KG)						
AROCLOR-1016	25 U	25 U	28 U	39 U	22 U	24 U
AROCLOR-1221	19 U	19 U	22 U	30 U	17 U	19 U
AROCLOR-1232	17 U	17 U	19 U	26 U	15 U	16 U
AROCLOR-1242	16 U	16 U	18 U	24 U	14 U	15 U
AROCLOR-1248	20 U	21 U	23 U	32 U	18 U	20 U
AROCLOR-1254	20 U	21 U	27 J	62	18 U	20 U
AROCLOR-1260	20 U	22 J	23 U	32 U	89	20 U
TOTAL AROCLOR	0 U	22	27	62	89	0 U
TOTAL AROCLOR HALFND	68.5	81.5	93.5	153.5	141	67
PETROLEUM HYDROCARBONS (MG/KG)						
TPH (C06-C10)	0.053 U	0.26	0.07 J	14	0.056 J	0.051 U
TPH (C10-C32)	11 U	11 U	13 J	94	130	11 U
SEMIVOLATILES (UG/KG)						
1,1-BIPHENYL	4.2 U	4.2 U	4.8 U	66 U	3.7 U	4.1 U
1,4-DIOXANE	NA	NA	30 U	410 U	23 U	25 U
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U	11 U	13 U	180 U	10 U	11 U
2,4,5-TRICHLOROPHENOL	30 U	30 U	34 U	470 U	26 U	29 U
2,4,6-TRICHLOROPHENOL	11 U	11 U	12 U	170 U	9.4 U	10 U
2,4-DICHLOROPHENOL	24 U	24 U	27 U	380 U	21 U	23 U
2,4-DIMETHYLPHENOL	24 U	24 U	27 U	380 U	21 U	23 U
2,4-DINITROPHENOL	25 U	25 U	29 U	390 U	22 U	24 U
2,4-DINITROTOLUENE	20 U	20 U	23 U	320 U	18 U	20 U
2,6-DINITROTOLUENE	25 U	25 U	29 U	390 U	22 U	24 U
2-CHLORONAPHTHALENE	0.54 U	0.54 U	0.61 U	8.4 U	0.48 U	0.52 U
2-CHLOROPHENOL	9.8 U	9.8 U	11 U	150 U	8.7 U	9.5 U
2-METHYLNAPHTHALENE	0.6 U	0.6 U	0.68 U	220	6 J	0.58 U
2-METHYLPHENOL	13 U	13 U	15 U	210 U	12 U	13 U
2-NITROANILINE	11 U	11 U	12 U	170 U	9.6 U	11 U
2-NITROPHENOL	9.9 U	9.9 U	11 U	160 U	8.8 U	9.6 U
3&4-METHYLPHENOL	24 U	24 U	27 U	380 U	21 U	23 U
3,3'-DICHLOROBENZIDINE	22 U	22 U	25 U	340 U	19 U	21 U
3-NITROANILINE	19 U	19 U	22 U	300 U	17 U	19 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-187		DR-SB-188		DR-SB-189	
SAMPLE ID	DR-SB-187-08-10	DR-SB-187-18-20	DR-SB-188-10-12	DR-SB-188-24-25	DR-SB-189-08-10	DR-SB-189-28-30
SAMPLE DATE	20130826	20130826	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
4,6-DINITRO-2-METHYLPHENOL	11 U	11 U	13 U	170 U	9.7 U	11 U
4-BROMOPHENYL PHENYL ETHER	16 U	16 U	18 U	240 U	14 U	15 U
4-CHLORO-3-METHYLPHENOL	25 U	25 U	29 U	390 U	22 U	24 U
4-CHLOROANILINE	20 U	20 U	23 U	320 U	18 U	20 U
4-CHLOROPHENYL PHENYL ETHER	16 U	16 U	18 U	240 U	14 U	15 U
4-NITROANILINE	31 U	31 U	35 U	490 U	27 U	30 U
4-NITROPHENOL	20 U	20 U	23 U	320 U	18 U	20 U
ACENAPHTHENE	0.91 U	0.91 U	16	480	0.8 U	0.88 U
ACENAPHTHYLENE	0.42 U	0.42 U	0.48 U	6.6 U	0.37 U	0.41 U
ACETOPHENONE	11 U	11 U	13 U	170 U	9.7 U	11 U
ANTHRACENE	0.93 U	0.93 U	22	470	6.3 J	0.9 U
ATRAZINE	11 U	11 U	12 U	170 U	9.6 U	11 U
BAP EQUIVALENT-HALFND	0.77 U	0.77 U	61.857	1363.2	36.404	0.74 U
BAP EQUIVALENT-POS	0.77 U	0.77 U	61.407	1357.2	36.054	0.74 U
BENZALDEHYDE	14 UL	14 UL	16 UJ	230 UJ	13 UJ	14 UJ
BENZO(A)ANTHRACENE	0.75 U	0.75 U	51	1400	27	0.73 U
BENZO(A)PYRENE	0.77 U	0.77 U	47	1000	28	0.74 U
BENZO(B)FLUORANTHENE	0.71 U	0.71 U	65	1600	34	0.68 U
BENZO(G,H,I)PERYLENE	0.42 U	0.42 U	31	530	18	0.41 U
BENZO(K)FLUORANTHENE	0.81 U	0.81 U	26	670	12	0.79 U
BIS(2-CHLOROETHOXY)METHANE	26 U	26 U	30 U	410 U	23 U	25 U
BIS(2-CHLOROETHYL)ETHER	2.4 U	2.4 U	2.7 U	38 U	2.1 U	2.3 U
BIS(2-ETHYLHEXYL)PHTHALATE	23 U	23 U	40 B	360 U	21 B	40 B
BUTYL BENZYL PHTHALATE	12 U	12 U	14 U	190 U	11 U	12 U
CAPROLACTAM	44 U	44 U	50 U	690 U	39 U	43 U
CARBAZOLE	32 U	32 U	37 U	510 U	29 U	31 U
CHRYSENE	1.3 U	1.3 U	47	1500	34	1.3 U
DIBENZO(A,H)ANTHRACENE	0.79 U	0.79 U	0.9 U	12 U	0.7 U	0.76 U
DIBENZOFURAN	0.79 U	0.79 U	8.2 J	220 J	3.6 J	0.76 U
DIETHYL PHTHALATE	19 U	19 U	22 U	300 U	17 U	19 U
DIMETHYL PHTHALATE	20 U	20 U	23 U	320 U	18 U	20 U
DI-N-BUTYL PHTHALATE	18 U	18 U	20 U	280 U	16 U	17 U
DI-N-OCTYL PHTHALATE	9.5 U	9.5 U	11 U	150 U	8.3 U	9.1 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-187		DR-SB-188		DR-SB-189	
SAMPLE ID	DR-SB-187-08-10	DR-SB-187-18-20	DR-SB-188-10-12	DR-SB-188-24-25	DR-SB-189-08-10	DR-SB-189-28-30
SAMPLE DATE	20130826	20130826	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
FLUORANTHENE	0.66 U	0.66 U	120	3100	40	0.64 U
FLUORENE	0.63 U	0.63 U	8.3 J	410	0.56 U	0.61 U
HEXACHLOROBENZENE	2.5 U	2.5 U	2.9 U	39 U	2.2 U	2.4 U
HEXACHLOROBUTADIENE	6.7 U	6.7 U	7.6 U	110 U	5.9 U	6.5 U
HEXACHLOROCYCLOPENTADIENE	9.7 U	9.7 U	11 U	150 U	8.6 U	9.4 U
HEXACHLOROETHANE	11 U	11 U	12 U	170 U	9.5 U	10 U
INDENO(1,2,3-CD)PYRENE	0.42 U	0.42 U	25	490	18	0.41 U
ISOPHORONE	16 U	16 U	18 U	240 U	14 U	15 U
NAPHTHALENE	0.98 U	0.98 U	7 J	390	7.4	0.95 U
NITROBENZENE	2.6 U	2.6 U	3 U	41 U	2.3 U	2.5 U
N-NITROSODIMETHYLAMINE	19 U	19 U	22 U	300 U	17 U	19 U
N-NITROSO-DI-N-PROPYLAMINE	7.5 U	7.5 U	8.6 U	120 U	6.7 U	7.3 U
N-NITROSODIPHENYLAMINE	25 U	25 U	29 U	390 U	22 U	24 U
PENTACHLOROPHENOL	11 U	11 U	12 U	170 U	9.6 U	11 U
PHENANTHRENE	0.87 U	0.87 U	49	2300	19	0.85 U
PHENOL	8.7 U	8.7 U	10 U	140 U	7.7 U	8.5 U
PYRENE	0.53 U	0.53 U	100	2600	55	0.51 U
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)						
1-PROPENE, 2-METHYL-	NA	NA	NA	NA	NA	NA
2-PROPENYL-3-VINYLOXIRANE	NA	NA	NA	NA	5.9 NJ	NA
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	NA	NA	NA	NA	4.1 NJ	NA
BENZENE, 1,3,5-TRIMETHYL-	NA	NA	NA	1400 NJ	NA	NA
BENZENE, 1-ETHYL-2-METHYL-	NA	NA	NA	1200 NJ	NA	NA
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	NA	NA	NA	NA	NA	NA
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	NA	NA	NA	NA	11 NJ	NA
CYCLOHEXANE, PROPYL-	NA	NA	NA	790 NJ	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	740 NJ	NA	NA
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	NA	NA	NA	NA	15 NJ	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
NAPHTHALENE, 1,6,7-TRIMETHYL-	NA	NA	NA	NA	NA	NA
NAPHTHALENE, DECAHYDRO-, TRANS-	NA	NA	NA	870 NJ	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-187		DR-SB-188		DR-SB-189	
SAMPLE ID	DR-SB-187-08-10	DR-SB-187-18-20	DR-SB-188-10-12	DR-SB-188-24-25	DR-SB-189-08-10	DR-SB-189-28-30
SAMPLE DATE	20130826	20130826	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
VOLATILES (UG/KG)						
.ALPHA.-PINENE	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	0.49 U	7.4 U	0.73 U	14 U	0.49 U	8.2 U
1,1,1-TRICHLOROETHANE	0.44 U	17 U	0.66 U	32 U	0.44 U	19 U
1,1,2,2-TETRACHLOROETHANE	0.27 U	7.2 U	0.4 U	13 U	0.27 U	8.1 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1 U	32 U	1.5 U	59 U	1 U	35 U
1,1-DICHLOROETHANE	0.28 U	14 U	0.43 U	26 U	0.28 U	15 U
1,1-DICHLOROETHENE	0.41 U	15 U	0.61 U	27 U	0.41 U	16 U
1,1-DICHLOROPROPENE	0.24 U	8.1 U	0.35 U	15 U	0.24 U	9.1 U
1,2,3-TRICHLOROBENZENE	0.3 U	8.1 U	0.45 U	15 U	0.3 U	9.1 U
1,2,3-TRICHLOROPROPANE	0.71 U	17 U	1.1 U	32 U	0.71 U	19 U
1,2,3-TRIMETHYLBENZENE	1.8 J	0.14 U	0.2 U	110 J	0.13 U	0.15 U
1,2,4-TRICHLOROBENZENE	0.21 U	5.9 U	0.32 U	11 U	0.21 U	10 B
1,2,4-TRIMETHYLBENZENE	1.8 J	4 U	0.77 U	550	0.51 U	5.9 B
1,2-DIBROMO-3-CHLOROPROPANE	1 U	40 U	1.5 U	75 U	1 U	45 U
1,2-DIBROMOETHANE	0.39 U	8.1 U	0.59 U	15 U	0.39 U	9.1 U
1,2-DICHLOROBENZENE	0.28 U	6.9 U	0.43 U	13 U	0.28 U	7.8 U
1,2-DICHLOROETHANE	0.27 U	8.1 U	0.4 U	67 J	0.27 U	9.1 U
1,2-DICHLOROPROPANE	0.54 U	6.6 U	0.82 U	12 U	0.54 U	7.4 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.28 U	3.9 U	0.41 U	7.2 U	0.28 U	4.4 U
1,3-DICHLOROPROPANE	0.27 U	18 U	0.4 U	33 U	0.27 U	20 U
1,4-DICHLOROBENZENE	0.52 U	6.5 U	0.78 U	12 U	0.52 U	7.3 U
2,2-DICHLOROPROPANE	0.74 U	19 U	1.1 U	35 U	0.74 U	21 U
2-BUTANONE	9.7 B	35 U	7.8 J	65 U	1.1 U	39 U
2-CHLOROETHYL VINYL ETHER	1.1 U	35 U	1.7 U	65 U	1.1 U	39 U
2-CHLOROTOLUENE	0.32 U	7.3 U	0.47 U	14 U	0.32 U	8.2 U
2-HEXANONE	0.5 U	16 U	0.74 U	30 U	0.5 U	18 U
4-CHLOROTOLUENE	0.32 U	8 U	0.48 U	15 U	0.32 U	9 U
4-ISOPROPYLTOLUENE	0.2 J	3.9 U	0.25 U	110 J	0.17 U	4.4 U
4-METHYL-2-PENTANONE	0.43 U	39 U	0.64 U	72 U	0.43 U	44 U
ACETONE	110	140 U	37 B	310 B	5 U	150 U
BENZENE	0.87 J	9.7 U	0.27 U	92 J	0.18 U	11 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-187		DR-SB-188		DR-SB-189	
SAMPLE ID	DR-SB-187-08-10	DR-SB-187-18-20	DR-SB-188-10-12	DR-SB-188-24-25	DR-SB-189-08-10	DR-SB-189-28-30
SAMPLE DATE	20130826	20130826	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
BROMOBENZENE	0.26 U	11 U	0.39 U	20 U	0.26 U	12 U
BROMOCHLOROMETHANE	0.56 U	11 U	0.84 U	20 U	0.56 U	12 U
BROMODICHLOROMETHANE	0.22 U	8 U	0.33 U	15 U	0.22 U	9 U
BROMOFORM	0.26 U	15 U	0.39 U	29 U	0.26 U	17 U
BROMOMETHANE	0.43 U	23 U	0.64 U	44 U	0.43 U	26 U
CARBON DISULFIDE	0.35 U	9.7 U	0.52 U	110 J	0.35 U	11 U
CARBON TETRACHLORIDE	0.29 U	5.2 U	0.44 U	9.6 U	0.29 U	5.8 U
CHLOROBENZENE	0.26 U	5.2 U	0.39 U	9.6 U	0.26 U	5.8 U
CHLORODIBROMOMETHANE	0.43 U	9.7 U	0.65 U	18 U	0.43 U	11 U
CHLOROETHANE	0.68 U	49 U	1 U	92 U	0.68 U	55 U
CHLOROFORM	0.23 U	7.1 U	0.34 U	13 U	0.23 U	8 U
CHLOROMETHANE	0.32 U	11 U	0.48 U	21 U	0.32 U	13 U
CIS-1,2-DICHLOROETHENE	0.28 U	290	0.43 U	100 J	1 J	23 J
CIS-1,3-DICHLOROPROPENE	0.27 U	6.4 U	0.4 U	12 U	0.27 U	7.2 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.5 U	11 U	0.74 U	21 U	0.5 U	13 U
DICHLORODIFLUOROMETHANE	0.39 U	13 U	0.59 U	24 U	0.39 U	15 U
DIISOPROPYL ETHER	1.2 U	40 U	1.8 U	75 U	1.2 U	45 U
ETHYL TERT-BUTYL ETHER	NA	NA	0.26 U	0.33 U	0.17 U	0.2 U
ETHYL TERT-BUTYL ETHER	0.17 U	0.18 U	NA	NA	NA	NA
ETHYLBENZENE	0.66 J	4.4 U	0.31 U	540	0.21 U	7.8 B
HEXACHLOROBUTADIENE	0.95 U	11 U	1.4 U	21 U	0.95 U	13 U
ISOPROPYLBENZENE	0.26 J	5.3 U	0.19 U	510	0.13 U	5.9 U
M+P-XYLENES	1.7 J	5 U	1.4 U	3100	0.95 U	23 B
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.34 U	5.7 U	0.51 U	11 U	0.34 U	6.4 U
METHYLENE CHLORIDE	0.53 U	200	0.79 U	120 UR	0.53 U	70 UR
NAPHTHALENE	1.2 B	5.4 U	0.22 U	110 J	0.15 U	7.6 B
N-BUTYLBENZENE	0.47 J	6.5 U	0.27 U	12 U	0.18 U	7.3 U
N-PROPYLBENZENE	0.32 U	11 U	0.47 U	160 J	0.32 U	13 U
O-XYLENE	1.8 J	6.9 U	0.41 U	82 J	0.28 U	7.7 U
SEC-BUTYLBENZENE	0.27 J	3.8 U	0.21 U	48 J	0.14 U	4.3 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-187		DR-SB-188		DR-SB-189	
SAMPLE ID	DR-SB-187-08-10	DR-SB-187-18-20	DR-SB-188-10-12	DR-SB-188-24-25	DR-SB-189-08-10	DR-SB-189-28-30
SAMPLE DATE	20130826	20130826	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
STYRENE	0.12 U	4.5 U	0.18 U	8.4 U	0.12 U	5.1 U
TERT-AMYL METHYL ETHER	NA	NA	0.44 U	0.56 U	0.29 U	0.34 U
TERT-AMYL METHYL ETHER	0.29 U	0.3 U	NA	NA	NA	NA
TERT-BUTYLBENZENE	0.23 U	5.3 U	0.34 U	9.8 U	0.23 U	5.9 U
TERTIARY-BUTYL ALCOHOL	6 UR	190 UR	9 UR	360 UR	6 UR	220 UR
TETRACHLOROETHENE	0.41 U	9.7 U	0.61 U	44 B	0.41 U	30 B
TOLUENE	1.9 J	53 J	0.32 U	190 J	0.21 U	19 B
TOTAL XYLENES	3.5 J	5 U	0.41 U	3200	0.28 U	23 B
TRANS-1,2-DICHLOROETHENE	0.32 U	7.4 U	0.48 U	15 J	0.32 U	8.3 U
TRANS-1,3-DICHLOROPROPENE	0.43 U	16 U	0.64 U	30 U	0.43 U	18 U
TRICHLOROETHENE	0.33 U	3300	0.5 U	46 B	1.2 J	550
TRICHLOROFLUOROMETHANE	0.27 U	13 U	0.4 U	24 U	0.27 U	15 U
UNKNOWN [RT=14.18]	NA	NA	NA	910 NJ	NA	NA
UNKNOWN [RT=14.55]	NA	NA	NA	960 NJ	NA	NA
UNKNOWN [RT=14.62]	NA	NA	NA	780 NJ	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=14.85]	NA	NA	NA	740 NJ	NA	NA
UNKNOWN [RT=3.73]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	1300 NJ	NA	NA
VINYL ACETATE	0.2 UR	19 UR	0.3 UR	35 UR	0.2 UR	21 UR
VINYL CHLORIDE	0.49 J	15 U	0.46 U	83 J	0.31 U	16 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-190			DR-SB-191
SAMPLE ID	DR-SB-190-18-20	DR-SB-190-28-30	DR-SB-190-8-10	DR-SB-191-22-24
SAMPLE DATE	20130823	20130823	20130823	20130823
MATRIX	SO	SO	SO	SO
METALS (MG/KG)				
ANTIMONY	0.6 UL	0.43 UL	0.43 UL	11 L
ARSENIC	10	0.7 J	0.65 J	5.1
BARIUM	25 J	4.1 J	1.6 J	190 J
BERYLLIUM	1.3	0.15 J	0.048 U	0.63
CADMIUM	0.37 J	0.36 J	2	28
CHROMIUM	50 J	5.5 J	85 J	100 J
COBALT	27 J	2 J	0.74 J	7.2 J
COPPER	17	5.4	18	1100
LEAD	16 J	9.2 J	1.1 J	470 J
MERCURY	0.028 J	0.019 U	0.017 U	0.73
MOLYBDENUM	1.3 B	0.45 B	0.3 U	5.5
NICKEL	31 J	2.5 J	0.83 J	38 J
SELENIUM	0.79 J	0.49 U	0.5 U	0.47 J
SILVER	0.15 U	0.11 U	0.11 U	4.5
THALLIUM	0.85 U	0.6 U	0.61 U	0.53 U
VANADIUM	51 J	5.1 J	4.3 J	41 J
ZINC	85 J	17 J	6.1 J	880 J
MISCELLANEOUS PARAMETERS (MEQ/100)				
CATION EXCHANGE CAPACITY	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (MG/KG)				
CARBON	NA	NA	NA	NA
HEXAVALENT CHROMIUM	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA
PHOSPHATE	NA	NA	NA	NA
TOTAL INORGANIC CARBON	NA	NA	NA	NA
TOTAL KJELDAHL NITROGEN	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (S.U.)				
PH	NA	NA	NA	NA

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-190			DR-SB-191
SAMPLE ID	DR-SB-190-18-20	DR-SB-190-28-30	DR-SB-190-8-10	DR-SB-191-22-24
SAMPLE DATE	20130823	20130823	20130823	20130823
MATRIX	SO	SO	SO	SO
PESTICIDES/PCBS (UG/KG)				
AROCLOR-1016	34 U	25 U	26 U	120 U
AROCLOR-1221	26 U	19 U	20 U	94 U
AROCLOR-1232	23 U	17 U	17 U	82 U
AROCLOR-1242	21 U	16 U	16 U	77 U
AROCLOR-1248	28 U	20 U	21 U	100 U
AROCLOR-1254	28 U	20 U	21 U	710
AROCLOR-1260	28 U	20 U	21 U	100 U
TOTAL AROCLOR	0 U	0 U	0 U	710
TOTAL AROCLOR HALFND	94	68.5	71	996.5
PETROLEUM HYDROCARBONS (MG/KG)				
TPH (C06-C10)	0.072 U	0.069 J	0.056 U	0.33
TPH (C10-C32)	15 U	14 J	11 U	430
SEMIVOLATILES (UG/KG)				
1,1-BIPHENYL	5.6 U	7.5 J	4.2 U	120 J
1,4-DIOXANE	35 U	26 U	27 U	250 U
2,2'-OXYBIS(1-CHLOROPROPANE)	15 U	11 U	11 U	110 U
2,4,5-TRICHLOROPHENOL	40 U	30 U	30 U	290 U
2,4,6-TRICHLOROPHENOL	14 U	11 U	11 U	100 U
2,4-DICHLOROPHENOL	32 U	24 U	24 U	230 U
2,4-DIMETHYLPHENOL	32 U	24 U	24 U	230 U
2,4-DINITROPHENOL	34 U	25 U	25 U	240 U
2,4-DINITROTOLUENE	27 U	20 U	21 U	190 U
2,6-DINITROTOLUENE	34 U	25 U	25 U	240 U
2-CHLORONAPHTHALENE	0.72 U	0.54 U	0.54 U	5.2 U
2-CHLOROPHENOL	13 U	9.8 U	9.9 U	94 U
2-METHYLNAPHTHALENE	8.6 J	26	0.61 U	410
2-METHYLPHENOL	18 U	13 U	13 U	130 U
2-NITROANILINE	15 U	11 U	11 U	100 U
2-NITROPHENOL	13 U	9.9 U	10 U	95 U
3&4-METHYLPHENOL	32 U	24 U	24 U	230 U
3,3'-DICHLOROBENZIDINE	29 U	21 U	22 U	210 U
3-NITROANILINE	26 U	19 U	19 U	180 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-190			DR-SB-191
SAMPLE ID	DR-SB-190-18-20	DR-SB-190-28-30	DR-SB-190-8-10	DR-SB-191-22-24
SAMPLE DATE	20130823	20130823	20130823	20130823
MATRIX	SO	SO	SO	SO
4,6-DINITRO-2-METHYLPHENOL	15 U	11 U	11 U	110 U
4-BROMOPHENYL PHENYL ETHER	21 U	15 U	16 U	150 U
4-CHLORO-3-METHYLPHENOL	34 U	25 U	25 U	240 U
4-CHLOROANILINE	27 U	20 U	21 U	190 U
4-CHLOROPHENYL PHENYL ETHER	21 U	15 U	16 U	150 U
4-NITROANILINE	42 U	31 U	31 U	300 U
4-NITROPHENOL	27 U	20 U	21 U	190 U
ACENAPHTHENE	19	35	0.92 U	930
ACENAPHTHYLENE	5.7 J	23	0.42 U	81
ACETOPHENONE	15 U	11 U	11 U	110 U
ANTHRACENE	58	94	0.94 U	1700
ATRAZINE	15 U	11 U	11 U	100 U
BAP EQUIVALENT-HALFND	262.55	423.72	0.77 U	9629.6
BAP EQUIVALENT-POS	262.55	423.72	0.77 U	9629.6
BENZALDEHYDE	19 UL	14 UL	15 UL	140 UL
BENZO(A)ANTHRACENE	220	300	0.76 U	6900
BENZO(A)PYRENE	190	290	0.77 U	6400
BENZO(B)FLUORANTHENE	170	380	0.71 U	9400
BENZO(G,H,I)PERYLENE	90	220	0.42 U	3800
BENZO(K)FLUORANTHENE	64	140	0.82 U	3200
BIS(2-CHLOROETHOXY)METHANE	35 U	26 U	27 U	250 U
BIS(2-CHLOROETHYL)ETHER	3.2 U	2.4 U	2.4 U	23 U
BIS(2-ETHYLHEXYL)PHTHALATE	35 J	36 J	36 J	310 J
BUTYL BENZYL PHTHALATE	16 U	12 U	12 U	110 U
CAPROLACTAM	59 U	44 U	45 U	420 U
CARBAZOLE	43 U	32 U	33 U	990
CHRYSENE	210	320	1.3 U	7600
DIBENZO(A,H)ANTHRACENE	25	46	0.8 U	1200
DIBENZOFURAN	1.1 U	33 J	0.8 U	620
DIETHYL PHTHALATE	26 U	19 U	19 U	180 U
DIMETHYL PHTHALATE	27 U	20 U	21 U	190 U
DI-N-BUTYL PHTHALATE	24 U	18 U	18 U	170 U
DI-N-OCTYL PHTHALATE	13 U	9.4 U	9.6 U	91 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-190			DR-SB-191
SAMPLE ID	DR-SB-190-18-20	DR-SB-190-28-30	DR-SB-190-8-10	DR-SB-191-22-24
SAMPLE DATE	20130823	20130823	20130823	20130823
MATRIX	SO	SO	SO	SO
FLUORANTHENE	250	740	0.67 U	13000
FLUORENE	36	61	0.64 U	990
HEXACHLOROBENZENE	3.4 U	2.5 U	2.5 U	24 U
HEXACHLOROBUTADIENE	9 U	6.7 U	6.8 U	64 U
HEXACHLOROCYCLOPENTADIENE	13 U	9.6 U	9.8 U	93 U
HEXACHLOROETHANE	14 U	11 U	11 U	100 U
INDENO(1,2,3-CD)PYRENE	77	180	0.42 U	3600
ISOPHORONE	21 U	15 U	16 U	150 U
NAPHTHALENE	13	42	0.99 U	680
NITROBENZENE	3.5 U	2.6 U	2.7 U	25 U
N-NITROSODIMETHYLAMINE	26 U	19 U	19 U	180 U
N-NITROSO-DI-N-PROPYLAMINE	10 U	7.5 U	7.6 U	72 U
N-NITROSODIPHENYLAMINE	34 U	25 U	25 U	240 U
PENTACHLOROPHENOL	15 U	11 U	11 U	100 U
PHENANTHRENE	200	300	0.88 U	6900
PHENOL	12 U	8.7 U	12 J	84 U
PYRENE	360	720	0.53 U	10000
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)				
1-PROPENE, 2-METHYL-	NA	NA	NA	NA
2-PROPENYL-3-VINYLOXIRANE	NA	NA	NA	NA
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	NA	NA	NA	NA
BENZENE, 1,3,5-TRIMETHYL-	NA	NA	NA	NA
BENZENE, 1-ETHYL-2-METHYL-	NA	NA	NA	NA
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	NA	NA	NA	7.4 NJ
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	NA	NA	NA	NA
CYCLOHEXANE, PROPYL-	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	4.7 NJ	NA	5.7 NJ
NAPHTHALENE, 1,6,7-TRIMETHYL-	NA	NA	NA	NA
NAPHTHALENE, DECAHYDRO-, TRANS-	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-190			DR-SB-191
SAMPLE ID	DR-SB-190-18-20	DR-SB-190-28-30	DR-SB-190-8-10	DR-SB-191-22-24
SAMPLE DATE	20130823	20130823	20130823	20130823
MATRIX	SO	SO	SO	SO
VOLATILES (UG/KG)				
.ALPHA.-PINENE	NA	NA	NA	19 NJ
1,1,1,2-TETRACHLOROETHANE	0.99 U	1.8 U	0.72 U	0.72 U
1,1,1-TRICHLOROETHANE	0.89 U	1.6 U	0.65 U	0.65 U
1,1,2,2-TETRACHLOROETHANE	0.54 U	0.96 U	0.39 U	0.39 U
1,1,2-TRICHLOROTRIFLUOROETHANE	2.1 U	3.7 U	1.5 U	1.5 U
1,1-DICHLOROETHANE	0.57 U	1 U	0.42 U	0.42 U
1,1-DICHLOROETHENE	0.83 U	1.5 U	0.6 U	0.6 U
1,1-DICHLOROPROPENE	0.48 U	0.85 U	0.35 U	0.35 U
1,2,3-TRICHLOROBENZENE	0.6 U	28 J	0.44 U	0.44 U
1,2,3-TRICHLOROPROPANE	1.4 U	2.5 U	1 U	1 U
1,2,3-TRIMETHYLBENZENE	0.27 U	0.48 U	0.2 U	5.1 J
1,2,4-TRICHLOROBENZENE	1.5 B	220	0.93 B	0.31 U
1,2,4-TRIMETHYLBENZENE	1 U	1.8 U	0.75 U	4.4 J
1,2-DIBROMO-3-CHLOROPROPANE	2.1 U	3.7 U	1.5 U	1.5 U
1,2-DIBROMOETHANE	0.8 U	1.4 U	0.58 U	0.58 U
1,2-DICHLOROBENZENE	0.57 U	1.7 J	0.71 J	0.42 U
1,2-DICHLOROETHANE	0.54 U	1 J	0.39 U	2 J
1,2-DICHLOROPROPANE	1.1 U	2 U	0.8 U	0.8 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	4.7 NJ
1,3-DICHLOROBENZENE	0.56 U	0.99 U	0.5 J	0.4 U
1,3-DICHLOROPROPANE	0.54 U	0.96 U	0.39 U	0.39 U
1,4-DICHLOROBENZENE	1.1 U	1.9 U	3.7 J	0.76 U
2,2-DICHLOROPROPANE	1.5 U	2.7 U	1.1 U	1.1 U
2-BUTANONE	3.1 J	4 U	1.6 U	1.6 U
2-CHLOROETHYL VINYL ETHER	2.2 U	4 U	1.6 U	1.6 U
2-CHLOROTOLUENE	0.64 U	1.1 U	0.46 U	0.46 U
2-HEXANONE	1 U	1.8 U	0.73 U	0.73 U
4-CHLOROTOLUENE	0.65 U	1.2 U	0.47 U	0.47 U
4-ISOPROPYLTOLUENE	0.33 U	0.59 U	0.24 U	2.1 J
4-METHYL-2-PENTANONE	0.86 U	1.5 U	0.63 U	0.62 U
ACETONE	31 B	24 B	16 B	22 B
BENZENE	0.37 U	0.65 U	0.27 U	0.27 U

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Chemical Results for Soil Boring Soil Samples - 2013
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LOCATION	DR-SB-190			DR-SB-191
SAMPLE ID	DR-SB-190-18-20	DR-SB-190-28-30	DR-SB-190-8-10	DR-SB-191-22-24
SAMPLE DATE	20130823	20130823	20130823	20130823
MATRIX	SO	SO	SO	SO
BROMOBENZENE	0.53 U	0.93 U	0.38 U	0.38 U
BROMOCHLOROMETHANE	1.1 U	2 U	0.82 U	0.82 U
BROMODICHLOROMETHANE	0.45 U	0.79 U	0.32 U	0.32 U
BROMOFORM	0.53 U	0.93 U	0.38 U	0.38 U
BROMOMETHANE	0.86 U	1.5 U	0.63 U	0.62 U
CARBON DISULFIDE	0.7 U	1.2 U	1.9 J	2.3 J
CARBON TETRACHLORIDE	0.59 U	1 U	0.43 U	0.43 U
CHLOROBENZENE	0.53 U	0.93 U	0.69 J	0.38 U
CHLORODIBROMOMETHANE	0.88 U	1.6 U	0.64 U	0.63 U
CHLOROETHANE	1.4 U	2.4 U	1 U	0.99 U
CHLOROFORM	0.46 U	0.82 U	0.34 U	0.33 U
CHLOROMETHANE	0.65 U	1.2 U	0.47 U	0.47 U
CIS-1,2-DICHLOROETHENE	0.57 U	14	34	5.5 J
CIS-1,3-DICHLOROPROPENE	0.54 U	0.96 U	0.39 U	0.39 U
CYCLOHEXANE	NA	NA	NA	2 NJ
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA
DIBROMOMETHANE	1 U	1.8 U	0.73 U	0.73 U
DICHLORODIFLUOROMETHANE	0.8 U	1.4 U	0.58 U	0.58 U
DIISOPROPYL ETHER	2.4 U	4.2 U	1.7 U	1.7 U
ETHYL TERT-BUTYL ETHER	0.35 U	0.62 U	0.25 U	0.25 U
ETHYL TERT-BUTYL ETHER	NA	NA	NA	NA
ETHYLBENZENE	0.41 U	0.74 U	0.3 U	1.2 J
HEXACHLOROBUTADIENE	1.9 U	3.4 U	1.4 U	1.4 U
ISOPROPYLBENZENE	0.25 U	0.45 U	0.19 U	0.18 U
M+P-XYLENES	1.9 U	3.4 U	1.4 U	4.3 J
METHYL ACETATE	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.68 U	1.2 U	0.5 U	0.5 U
METHYLENE CHLORIDE	4.7 B	16 J	4 B	3.4 B
NAPHTHALENE	0.3 U	1.3 B	0.95 B	10 B
N-BUTYLBENZENE	0.37 U	0.65 U	0.27 U	0.95 J
N-PROPYLBENZENE	0.64 U	1.1 U	0.46 U	0.46 U
O-XYLENE	0.56 U	0.99 U	0.41 U	5.7 J
SEC-BUTYLBENZENE	0.29 U	0.51 U	0.21 U	0.21 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-190			DR-SB-191
SAMPLE ID	DR-SB-190-18-20	DR-SB-190-28-30	DR-SB-190-8-10	DR-SB-191-22-24
SAMPLE DATE	20130823	20130823	20130823	20130823
MATRIX	SO	SO	SO	SO
STYRENE	0.24 U	0.42 U	0.17 U	0.17 U
TERT-AMYL METHYL ETHER	0.59 U	1 U	0.43 U	0.43 U
TERT-AMYL METHYL ETHER	NA	NA	NA	NA
TERT-BUTYLBENZENE	0.46 U	0.82 U	0.34 U	0.33 U
TERTIARY-BUTYL ALCOHOL	12 UR	22 UR	8.8 UR	8.8 UR
TETRACHLOROETHENE	0.83 U	3.7 J	0.6 U	1.5 J
TOLUENE	0.43 U	2 B	1.6 B	7.8 B
TOTAL XYLENES	0.56 U	0.99 U	0.41 U	10 J
TRANS-1,2-DICHLOROETHENE	0.65 U	1.2 U	0.47 U	0.47 U
TRANS-1,3-DICHLOROPROPENE	0.86 U	1.5 U	0.63 U	0.62 U
TRICHLOROETHENE	0.67 U	220	0.49 U	14
TRICHLOROFLUOROMETHANE	0.54 U	0.96 U	0.39 U	0.39 U
UNKNOWN [RT=14.18]	NA	NA	NA	NA
UNKNOWN [RT=14.55]	NA	NA	NA	NA
UNKNOWN [RT=14.62]	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA
UNKNOWN [RT=14.85]	NA	NA	NA	NA
UNKNOWN [RT=3.73]	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA
VINYL ACETATE	0.4 UR	0.71 UR	0.29 UR	0.29 UR
VINYL CHLORIDE	0.62 U	1.1 U	8.8	4.2 J

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Chemical Results for Soil Boring Soil Samples - 2013
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Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-192		DR-SB-193	
SAMPLE ID	DR-SB-192-16-18	DR-SB-192-22-24	DR-SB-193-08-10	DR-SB-193-26-28
SAMPLE DATE	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO
METALS (MG/KG)				
ANTIMONY	0.39 U	0.4 U	0.52 U	1 B
ARSENIC	1.6	1.2 J	4.6	0.82 J
BARIUM	34	3.1 J	25 J	1.9 J
BERYLLIUM	0.044 UL	0.044 UL	1.5 L	0.045 UL
CADMIUM	0.036 U	0.037 U	0.43 J	0.038 U
CHROMIUM	9.3	4.8	36	2.9
COBALT	0.4 J	0.22 J	14	0.17 U
COPPER	4.5	2.7	18	0.77 U
LEAD	5.1	1.8	14	0.75 J
MERCURY	0.02 U	0.018 U	0.055 J	0.018 U
MOLYBDENUM	0.37 J	0.28 U	1.2 J	0.28 U
NICKEL	0.66 J	0.51 J	24	0.28 U
SELENIUM	0.46 U	0.46 U	0.6 U	0.47 U
SILVER	0.1 U	0.1 U	0.13 U	0.1 U
THALLIUM	0.56 U	0.57 U	0.74 U	0.58 U
VANADIUM	15	4.4	33	5.5
ZINC	3.4 B	16	78	2.4 B
MISCELLANEOUS PARAMETERS (MEQ/100)				
CATION EXCHANGE CAPACITY	23	18	NA	NA
MISCELLANEOUS PARAMETERS (MG/KG)				
CARBON	830 J	600 U	NA	NA
HEXAVALENT CHROMIUM	NA	NA	NA	NA
NITRATE-N	0.28 U	0.58 J	NA	NA
PHOSPHATE	0.49 J	15 J	NA	NA
TOTAL INORGANIC CARBON	1000 U	1000 U	NA	NA
TOTAL KJELDAHL NITROGEN	270	230	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (S.U.)				
PH	5.11	7.56	NA	NA

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-192		DR-SB-193	
SAMPLE ID	DR-SB-192-16-18	DR-SB-192-22-24	DR-SB-193-08-10	DR-SB-193-26-28
SAMPLE DATE	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO
PESTICIDES/PCBS (UG/KG)				
AROCLOR-1016	26 U	25 U	34 U	25 U
AROCLOR-1221	20 U	19 U	26 U	19 U
AROCLOR-1232	17 U	17 U	22 U	17 U
AROCLOR-1242	16 U	16 U	21 U	16 U
AROCLOR-1248	21 U	20 U	27 U	21 U
AROCLOR-1254	21 U	20 U	230	21 U
AROCLOR-1260	21 U	20 U	27 U	21 U
TOTAL AROCLOR	0 U	0 U	230	0 U
TOTAL AROCLOR HALFND	71	68.5	308.5	70
PETROLEUM HYDROCARBONS (MG/KG)				
TPH (C06-C10)	0.055 U	0.051 U	0.073 U	0.45
TPH (C10-C32)	11 UJ	11 UJ	25 J	11 UJ
SEMIVOLATILES (UG/KG)				
1,1-BIPHENYL	4.3 UJ	4.1 U	5.6 U	4.3 U
1,4-DIOXANE	27 UJ	26 U	35 U	27 U
2,2'-OXYBIS(1-CHLOROPROPANE)	12 UJ	11 U	15 U	12 U
2,4,5-TRICHLOROPHENOL	31 UJ	30 U	40 U	31 U
2,4,6-TRICHLOROPHENOL	11 UJ	11 U	14 U	11 U
2,4-DICHLOROPHENOL	25 UJ	24 U	32 U	25 U
2,4-DIMETHYLPHENOL	25 UJ	24 U	32 U	25 U
2,4-DINITROPHENOL	26 UJ	25 U	34 U	26 U
2,4-DINITROTOLUENE	21 UJ	20 U	27 U	21 U
2,6-DINITROTOLUENE	26 UJ	25 U	34 U	26 U
2-CHLORONAPHTHALENE	0.56 UJ	0.53 U	0.72 U	0.56 U
2-CHLOROPHENOL	10 UJ	9.7 U	13 U	10 U
2-METHYLNAPHTHALENE	0.62 UJ	0.59 U	10 J	0.62 U
2-METHYLPHENOL	14 UJ	13 U	18 U	14 U
2-NITROANILINE	11 UJ	11 U	15 U	11 U
2-NITROPHENOL	10 UJ	9.8 U	13 U	10 U
3&4-METHYLPHENOL	25 UJ	24 U	32 U	25 U
3,3'-DICHLOROBENZIDINE	22 UJ	21 U	29 U	22 U
3-NITROANILINE	20 UJ	19 U	26 U	20 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-192		DR-SB-193	
SAMPLE ID	DR-SB-192-16-18	DR-SB-192-22-24	DR-SB-193-08-10	DR-SB-193-26-28
SAMPLE DATE	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO
4,6-DINITRO-2-METHYLPHENOL	11 UJ	11 U	15 U	11 U
4-BROMOPHENYL PHENYL ETHER	16 UJ	15 U	21 U	16 U
4-CHLORO-3-METHYLPHENOL	26 UJ	25 U	34 U	26 U
4-CHLOROANILINE	21 UJ	20 U	27 U	21 U
4-CHLOROPHENYL PHENYL ETHER	16 UJ	15 U	21 U	16 U
4-NITROANILINE	32 UJ	31 U	42 U	32 U
4-NITROPHENOL	21 UJ	20 U	27 U	21 U
ACENAPHTHENE	0.94 UJ	0.9 U	54	0.94 U
ACENAPHTHYLENE	0.43 UJ	0.41 U	0.56 U	0.43 U
ACETOPHENONE	11 UJ	11 U	15 U	11 U
ANTHRACENE	0.97 UJ	0.92 U	140	0.97 U
ATRAZINE	11 UJ	11 U	15 U	11 U
BAP EQUIVALENT-HALFND	0.79 U	0.76 U	372.68	0.79 U
BAP EQUIVALENT-POS	0.79 U	0.76 U	372.13	0.79 U
BENZALDEHYDE	15 UJ	14 UL	19 U	15 U
BENZO(A)ANTHRACENE	0.78 UJ	0.75 U	340	0.78 U
BENZO(A)PYRENE	0.79 UJ	0.76 U	280	0.79 U
BENZO(B)FLUORANTHENE	0.73 UJ	0.7 U	420	0.73 U
BENZO(G,H,I)PERYLENE	0.43 UJ	0.41 U	150	0.43 U
BENZO(K)FLUORANTHENE	0.84 UJ	0.81 U	180	0.84 U
BIS(2-CHLOROETHOXY)METHANE	27 UJ	26 U	35 U	27 U
BIS(2-CHLOROETHYL)ETHER	2.5 UJ	2.4 U	3.2 U	2.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	30 B	37 B	76 J	32 J
BUTYL BENZYL PHTHALATE	12 UJ	12 U	16 U	12 U
CAPROLACTAM	46 UJ	44 U	59 U	46 U
CARBAZOLE	34 UJ	32 U	83	34 U
CHRYSENE	1.4 UJ	1.3 U	330	1.4 U
DIBENZO(A,H)ANTHRACENE	0.82 UJ	0.78 U	1.1 U	0.82 U
DIBENZOFURAN	0.82 UJ	0.78 U	36 J	0.82 U
DIETHYL PHTHALATE	20 UJ	19 U	26 U	20 U
DIMETHYL PHTHALATE	21 UJ	20 U	27 U	21 U
DI-N-BUTYL PHTHALATE	19 UJ	18 U	77 B	34 B
DI-N-OCTYL PHTHALATE	9.8 UJ	9.4 U	13 U	9.8 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-192		DR-SB-193	
SAMPLE ID	DR-SB-192-16-18	DR-SB-192-22-24	DR-SB-193-08-10	DR-SB-193-26-28
SAMPLE DATE	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO
FLUORANTHENE	0.68 UJ	0.65 U	730	5.5 J
FLUORENE	0.66 UJ	0.63 U	56	0.66 U
HEXACHLOROBENZENE	2.6 UJ	2.5 U	3.4 U	2.6 U
HEXACHLOROBUTADIENE	7 UJ	6.6 U	9 U	7 U
HEXACHLOROCYCLOPENTADIENE	10 UJ	9.6 U	13 U	10 U
HEXACHLOROETHANE	11 UJ	11 U	14 U	11 U
INDENO(1,2,3-CD)PYRENE	0.43 UJ	0.41 U	140 J	0.43 U
ISOPHORONE	16 UJ	15 U	21 U	16 U
NAPHTHALENE	1 UJ	0.97 U	31	1 U
NITROBENZENE	2.7 UJ	2.6 U	3.5 U	2.7 U
N-NITROSODIMETHYLAMINE	20 UJ	19 U	26 U	20 U
N-NITROSO-DI-N-PROPYLAMINE	7.8 UJ	7.5 U	10 U	7.8 U
N-NITROSODIPHENYLAMINE	26 UJ	25 U	34 U	26 U
PENTACHLOROPHENOL	11 UJ	11 U	15 U	11 U
PHENANTHRENE	0.91 UJ	0.86 U	560	0.91 U
PHENOL	9.1 UJ	8.6 U	19 J	11 J
PYRENE	0.55 UJ	0.52 U	610	4.9 J
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)				
1-PROPENE, 2-METHYL-	NA	NA	NA	NA
2-PROPENYL-3-VINYLOXIRANE	NA	NA	NA	NA
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	NA	NA	NA	NA
BENZENE, 1,3,5-TRIMETHYL-	NA	NA	NA	NA
BENZENE, 1-ETHYL-2-METHYL-	NA	NA	NA	NA
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	NA	NA	NA	NA
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	NA	NA	NA	NA
CYCLOHEXANE, PROPYL-	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA
NAPHTHALENE, 1,6,7-TRIMETHYL-	NA	NA	NA	NA
NAPHTHALENE, DECAHYDRO-, TRANS-	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-192		DR-SB-193	
SAMPLE ID	DR-SB-192-16-18	DR-SB-192-22-24	DR-SB-193-08-10	DR-SB-193-26-28
SAMPLE DATE	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO
VOLATILES (UG/KG)				
.ALPHA.-PINENE	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	0.6 U	0.48 U	12 U	8.5 U
1,1,1-TRICHLOROETHANE	0.54 U	0.43 U	27 U	20 U
1,1,2,2-TETRACHLOROETHANE	0.33 U	0.26 U	12 U	8.3 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1.3 U	1 U	50 U	36 U
1,1-DICHLOROETHANE	0.35 U	0.28 U	22 U	16 U
1,1-DICHLOROETHENE	0.5 U	0.4 U	23 U	17 U
1,1-DICHLOROPROPENE	0.29 U	0.23 U	13 U	9.3 U
1,2,3-TRICHLOROBENZENE	0.37 U	0.29 U	13 U	9.3 U
1,2,3-TRICHLOROPROPANE	0.87 U	0.7 U	27 U	20 U
1,2,3-TRIMETHYLBENZENE	0.16 U	0.13 U	0.22 U	0.16 U
1,2,4-TRICHLOROBENZENE	0.26 U	0.21 U	9.4 U	6.8 U
1,2,4-TRIMETHYLBENZENE	0.63 U	0.5 U	6.5 U	4.7 U
1,2-DIBROMO-3-CHLOROPROPANE	1.3 U	1 U	65 U	47 U
1,2-DIBROMOETHANE	0.48 U	0.39 U	13 U	9.3 U
1,2-DICHLOROBENZENE	0.35 U	0.28 U	11 U	8 U
1,2-DICHLOROETHANE	0.85 J	0.26 U	13 U	9.3 U
1,2-DICHLOROPROPANE	0.67 U	0.54 U	11 U	7.7 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.34 U	0.27 U	6.2 U	4.5 U
1,3-DICHLOROPROPANE	0.33 U	0.26 U	28 U	21 U
1,4-DICHLOROBENZENE	0.64 U	0.51 U	10 U	7.5 U
2,2-DICHLOROPROPANE	0.91 U	0.73 U	30 U	21 U
2-BUTANONE	1.4 U	1.1 U	56 U	40 U
2-CHLOROETHYL VINYL ETHER	1.4 U	1.1 U	56 U	40 U
2-CHLOROTOLUENE	0.39 U	0.31 U	12 U	8.4 U
2-HEXANONE	0.61 U	0.49 U	26 U	19 U
4-CHLOROTOLUENE	0.4 U	0.32 U	13 U	9.2 U
4-ISOPROPYLTOLUENE	0.2 U	0.16 U	6.2 U	4.5 U
4-METHYL-2-PENTANONE	0.52 U	0.42 U	62 U	45 U
ACETONE	6.1 U	9.9 B	220 U	160 U
BENZENE	0.22 U	0.18 U	16 U	11 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-192		DR-SB-193	
SAMPLE ID	DR-SB-192-16-18	DR-SB-192-22-24	DR-SB-193-08-10	DR-SB-193-26-28
SAMPLE DATE	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO
BROMOBENZENE	0.32 U	0.26 U	17 U	12 U
BROMOCHLOROMETHANE	0.69 U	0.55 U	17 U	12 U
BROMODICHLOROMETHANE	0.27 U	0.22 U	13 U	9.2 U
BROMOFORM	0.32 U	0.26 U	25 U	18 U
BROMOMETHANE	0.52 U	0.42 U	37 U	27 U
CARBON DISULFIDE	0.43 U	0.34 J	16 U	11 U
CARBON TETRACHLORIDE	0.36 U	0.29 U	8.3 U	6 U
CHLOROBENZENE	0.32 U	0.26 U	8.3 U	6 U
CHLORODIBROMOMETHANE	0.53 U	0.43 U	16 U	11 U
CHLOROETHANE	0.83 U	0.67 U	79 U	57 U
CHLOROFORM	0.28 U	0.22 U	11 U	8.2 U
CHLOROMETHANE	0.4 U	0.32 U	18 U	13 U
CIS-1,2-DICHLOROETHENE	23	21	8.9 U	1000
CIS-1,3-DICHLOROPROPENE	0.33 U	0.26 U	10 U	7.4 U
CYCLOHEXANE	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	5.2 R	NA	NA
DIBROMOMETHANE	0.61 U	0.49 U	18 U	13 U
DICHLORODIFLUOROMETHANE	0.48 U	0.39 U	21 U	15 U
DIISOPROPYL ETHER	1.5 U	1.2 U	65 U	47 U
ETHYL TERT-BUTYL ETHER	0.21 U	0.17 U	0.28 U	0.21 U
ETHYL TERT-BUTYL ETHER	NA	NA	NA	NA
ETHYLBENZENE	0.25 U	0.2 U	7 U	5 U
HEXACHLOROBUTADIENE	1.2 U	0.93 U	18 U	13 U
ISOPROPYLBENZENE	0.15 U	0.12 U	8.4 U	6.1 U
M+P-XYLENES	1.2 U	0.93 U	8 U	5.8 U
METHYL ACETATE	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.42 U	0.33 U	9.2 U	6.6 U
METHYLENE CHLORIDE	0.65 U	2.6 B	100 U	72 U
NAPHTHALENE	0.18 U	0.15 U	8.7 U	6.3 U
N-BUTYLBENZENE	0.22 U	0.18 U	10 U	7.5 U
N-PROPYLBENZENE	0.39 U	0.31 U	18 U	13 U
O-XYLENE	0.34 U	0.27 U	11 U	7.9 U
SEC-BUTYLBENZENE	0.17 U	0.14 U	6.1 U	4.4 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-192		DR-SB-193	
SAMPLE ID	DR-SB-192-16-18	DR-SB-192-22-24	DR-SB-193-08-10	DR-SB-193-26-28
SAMPLE DATE	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO
STYRENE	0.15 U	0.12 U	7.2 U	5.2 U
TERT-AMYL METHYL ETHER	0.36 U	0.29 U	0.48 U	0.35 U
TERT-AMYL METHYL ETHER	NA	NA	NA	NA
TERT-BUTYLBENZENE	0.28 U	0.22 U	8.4 U	6.1 U
TERTIARY-BUTYL ALCOHOL	7.4 UR	5.9 UR	310 UR	220 UR
TETRACHLOROETHENE	0.59 J	0.49 J	16 U	11 U
TOLUENE	0.26 U	0.21 U	22 U	16 U
TOTAL XYLENES	0.34 U	0.27 U	8 U	5.8 U
TRANS-1,2-DICHLOROETHENE	0.4 U	0.32 U	12 U	8.6 U
TRANS-1,3-DICHLOROPROPENE	0.52 U	0.42 U	26 U	19 U
TRICHLOROETHENE	75	4.7	630	1000
TRICHLOROFLUOROMETHANE	0.33 U	0.26 U	21 U	15 U
UNKNOWN [RT=14.18]	NA	NA	NA	NA
UNKNOWN [RT=14.55]	NA	NA	NA	NA
UNKNOWN [RT=14.62]	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA
UNKNOWN [RT=14.85]	NA	NA	NA	NA
UNKNOWN [RT=3.73]	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA
VINYL ACETATE	0.24 UR	0.19 UR	30 UR	21 UR
VINYL CHLORIDE	1.6 J	0.5 J	23 U	30 J

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-194		DR-SB-195	
SAMPLE ID	DR-SB-194-13-15	DR-SB-194-26-28	DR-SB-195-04-06	DR-SB-195-14-16
SAMPLE DATE	20130903	20130903	20130903	20130903
MATRIX	SO	SO	SO	SO
METALS (MG/KG)				
ANTIMONY	0.41 UL	0.43 UL	0.46 B	0.38 UL
ARSENIC	1.4 J	1.9	4	1.8
BARIUM	9.4 J	10 J	19 J	5.3 J
BERYLLIUM	0.046 UJ	0.048 UJ	0.97	0.042 UJ
CADMIUM	0.038 UJ	0.04 J	2.3 J	0.035 UJ
CHROMIUM	5.7 J	13 J	23 J	4.8 J
COBALT	0.59 J	0.78 J	12	0.15 U
COPPER	3.2	5.5	10	1.1 J
LEAD	6.4 J	5.3 J	12 J	2.2 J
MERCURY	0.018 U	0.022 U	0.023 J	0.018 U
MOLYBDENUM	0.29 U	0.77 B	0.89 B	0.38 B
NICKEL	3 J	2.1 J	16 J	0.29 J
SELENIUM	0.48 U	0.5 U	0.5 U	0.44 U
SILVER	0.12 J	0.17 J	0.11 U	0.097 U
THALLIUM	0.58 U	0.61 U	0.61 U	0.53 U
VANADIUM	82	13	20	13
ZINC	19 J	38 J	61 J	1.8 B
MISCELLANEOUS PARAMETERS (MEQ/100)				
CATION EXCHANGE CAPACITY	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (MG/KG)				
CARBON	NA	NA	NA	NA
HEXAVALENT CHROMIUM	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA
PHOSPHATE	NA	NA	NA	NA
TOTAL INORGANIC CARBON	NA	NA	NA	NA
TOTAL KJELDAHL NITROGEN	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (S.U.)				
PH	NA	NA	NA	NA

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-194		DR-SB-195	
SAMPLE ID	DR-SB-194-13-15	DR-SB-194-26-28	DR-SB-195-04-06	DR-SB-195-14-16
SAMPLE DATE	20130903	20130903	20130903	20130903
MATRIX	SO	SO	SO	SO
PESTICIDES/PCBS (UG/KG)				
AROCLOR-1016	25 U	28 U	25 U	25 U
AROCLOR-1221	19 U	21 U	19 U	19 U
AROCLOR-1232	17 U	19 U	17 U	17 U
AROCLOR-1242	15 U	17 U	16 U	16 U
AROCLOR-1248	20 U	23 U	20 U	21 U
AROCLOR-1254	52	44	20 U	21 U
AROCLOR-1260	20 U	23 U	20 U	21 U
TOTAL AROCLOR	52	44	0 U	0 U
TOTAL AROCLOR HALFND	110	109.5	68.5	70
PETROLEUM HYDROCARBONS (MG/KG)				
TPH (C06-C10)	230	35	0.19	0.081 J
TPH (C10-C32)	11 J	14 J	11 UJ	11 UJ
SEMIVOLATILES (UG/KG)				
1,1-BIPHENYL	4.1 U	4.7 U	4.1 U	4.2 U
1,4-DIOXANE	NA	NA	NA	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U	13 U	11 U	11 U
2,4,5-TRICHLOROPHENOL	29 U	34 U	29 U	30 U
2,4,6-TRICHLOROPHENOL	10 U	12 U	10 U	11 U
2,4-DICHLOROPHENOL	23 U	27 U	24 U	24 U
2,4-DIMETHYLPHENOL	23 U	27 U	24 U	24 U
2,4-DINITROPHENOL	24 U	28 U	25 U	25 U
2,4-DINITROTOLUENE	20 U	23 U	20 U	20 U
2,6-DINITROTOLUENE	24 U	28 U	25 U	25 U
2-CHLORONAPHTHALENE	0.52 U	0.6 U	0.53 U	0.54 U
2-CHLOROPHENOL	9.6 U	11 U	9.7 U	9.8 U
2-METHYLNAPHTHALENE	0.58 U	0.67 U	0.59 U	0.6 U
2-METHYLPHENOL	13 U	15 U	13 U	13 U
2-NITROANILINE	11 U	12 U	11 U	11 U
2-NITROPHENOL	9.7 U	11 U	9.8 U	10 U
3&4-METHYLPHENOL	23 U	27 U	24 U	24 U
3,3'-DICHLOROBENZIDINE	21 U	24 U	21 U	22 U
3-NITROANILINE	19 U	21 U	19 U	19 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-194		DR-SB-195	
SAMPLE ID	DR-SB-194-13-15	DR-SB-194-26-28	DR-SB-195-04-06	DR-SB-195-14-16
SAMPLE DATE	20130903	20130903	20130903	20130903
MATRIX	SO	SO	SO	SO
4,6-DINITRO-2-METHYLPHENOL	11 U	12 U	11 U	11 U
4-BROMOPHENYL PHENYL ETHER	15 U	17 U	15 U	16 U
4-CHLORO-3-METHYLPHENOL	24 U	28 U	25 U	25 U
4-CHLOROANILINE	20 U	23 U	20 U	20 U
4-CHLOROPHENYL PHENYL ETHER	15 U	17 U	15 U	16 U
4-NITROANILINE	30 U	35 U	31 U	31 U
4-NITROPHENOL	20 U	23 U	20 U	20 U
ACENAPHTHENE	0.89 U	1 U	0.9 U	0.91 U
ACENAPHTHYLENE	0.41 U	0.47 U	0.41 U	0.42 U
ACETOPHENONE	11 U	12 U	11 U	11 U
ANTHRACENE	5.6 J	6.1 J	0.92 U	0.94 U
ATRAZINE	11 U	12 U	11 U	11 U
BAP EQUIVALENT-HALFND	44.543	26.161	0.75 U	0.77 U
BAP EQUIVALENT-POS	44.158	25.716	0.75 U	0.77 U
BENZALDEHYDE	14 U	16 U	14 U	14 U
BENZO(A)ANTHRACENE	34	23	0.74 U	0.76 U
BENZO(A)PYRENE	35	19	0.75 U	0.77 U
BENZO(B)FLUORANTHENE	46	33	0.7 U	0.71 U
BENZO(G,H,I)PERYLENE	18	11	0.41 U	0.42 U
BENZO(K)FLUORANTHENE	22	15	0.8 U	0.82 U
BIS(2-CHLOROETHOXY)METHANE	26 U	30 U	26 U	26 U
BIS(2-CHLOROETHYL)ETHER	2.3 U	2.7 U	2.4 U	2.4 U
BIS(2-ETHYLHEXYL)PHTHALATE	51 J	110	32 J	23 U
BUTYL BENZYL PHTHALATE	12 U	13 U	12 U	12 U
CAPROLACTAM	43 U	50 U	44 U	44 U
CARBAZOLE	31 U	36 U	32 U	32 U
CHRYSENE	38	26	1.3 U	1.3 U
DIBENZO(A,H)ANTHRACENE	0.77 U	0.89 U	0.78 U	0.79 U
DIBENZOFURAN	0.77 U	0.89 U	0.78 U	0.79 U
DIETHYL PHTHALATE	19 U	21 U	19 U	19 U
DIMETHYL PHTHALATE	20 U	23 U	20 U	20 U
DI-N-BUTYL PHTHALATE	17 B	54 B	32 B	22 B
DI-N-OCTYL PHTHALATE	9.2 U	11 U	9.3 U	9.5 U

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-194		DR-SB-195	
SAMPLE ID	DR-SB-194-13-15	DR-SB-194-26-28	DR-SB-195-04-06	DR-SB-195-14-16
SAMPLE DATE	20130903	20130903	20130903	20130903
MATRIX	SO	SO	SO	SO
FLUORANTHENE	54	41	4 J	0.66 U
FLUORENE	0.62 U	0.71 U	0.62 U	0.64 U
HEXACHLOROBENZENE	2.4 U	2.8 U	2.5 U	2.5 U
HEXACHLOROBUTADIENE	6.5 U	7.5 U	6.6 U	6.7 U
HEXACHLOROCYCLOPENTADIENE	9.4 U	11 U	9.5 U	9.7 U
HEXACHLOROETHANE	10 U	12 U	11 U	11 U
INDENO(1,2,3-CD)PYRENE	9 J	9.4 J	0.41 U	0.42 U
ISOPHORONE	15 U	17 U	15 U	16 U
NAPHTHALENE	0.96 U	1.1 U	0.97 U	0.98 U
NITROBENZENE	2.6 U	3 U	2.6 U	2.6 U
N-NITROSODIMETHYLAMINE	19 U	21 U	19 U	19 U
N-NITROSO-DI-N-PROPYLAMINE	7.3 U	8.5 U	7.4 U	7.6 U
N-NITROSODIPHENYLAMINE	24 U	28 U	25 U	25 U
PENTACHLOROPHENOL	11 U	12 U	11 U	11 U
PHENANTHRENE	20	24	0.86 U	0.88 U
PHENOL	8.5 U	21 J	8.6 U	8.8 U
PYRENE	50	37	0.52 U	0.53 U
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)				
1-PROPENE, 2-METHYL-	NA	NA	NA	NA
2-PROPENYL-3-VINYLOXIRANE	NA	NA	NA	NA
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	NA	NA	NA	NA
BENZENE, 1,3,5-TRIMETHYL-	NA	NA	NA	NA
BENZENE, 1-ETHYL-2-METHYL-	NA	NA	NA	NA
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	NA	NA	NA	NA
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	NA	NA	NA	NA
CYCLOHEXANE, PROPYL-	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA
NAPHTHALENE, 1,6,7-TRIMETHYL-	NA	NA	NA	NA
NAPHTHALENE, DECAHYDRO-, TRANS-	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA

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Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-194		DR-SB-195	
SAMPLE ID	DR-SB-194-13-15	DR-SB-194-26-28	DR-SB-195-04-06	DR-SB-195-14-16
SAMPLE DATE	20130903	20130903	20130903	20130903
MATRIX	SO	SO	SO	SO
VOLATILES (UG/KG)				
.ALPHA.-PINENE	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	8.9 U	9.9 U	11 U	0.58 U
1,1,1-TRICHLOROETHANE	21 U	23 U	25 U	0.52 U
1,1,2,2-TETRACHLOROETHANE	8.7 U	9.7 U	11 U	0.32 U
1,1,2-TRICHLOROTRIFLUOROETHANE	38 U	42 U	47 U	1.2 U
1,1-DICHLOROETHANE	17 U	18 U	20 U	0.34 U
1,1-DICHLOROETHENE	18 U	20 U	22 U	0.48 U
1,1-DICHLOROPROPENE	9.8 U	11 U	12 U	0.28 U
1,2,3-TRICHLOROBENZENE	9.8 U	11 U	12 U	0.35 U
1,2,3-TRICHLOROPROPANE	21 U	23 U	25 U	0.84 U
1,2,3-TRIMETHYLBENZENE	0.17 U	0.18 U	0.2 U	0.16 U
1,2,4-TRICHLOROBENZENE	7.1 U	7.9 U	8.8 U	0.38 B
1,2,4-TRIMETHYLBENZENE	4.9 U	32 J	14 J	0.61 U
1,2-DIBROMO-3-CHLOROPROPANE	49 U	54 U	60 U	1.2 U
1,2-DIBROMOETHANE	9.8 U	11 U	12 U	0.47 U
1,2-DICHLOROBENZENE	8.4 U	9.4 U	10 U	0.34 U
1,2-DICHLOROETHANE	9.8 U	11 U	12 U	0.32 U
1,2-DICHLOROPROPANE	8 U	8.9 U	9.9 U	0.64 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA
1,3-DICHLOROBENZENE	4.7 U	5.2 U	5.8 U	0.33 U
1,3-DICHLOROPROPANE	22 U	24 U	26 U	0.32 U
1,4-DICHLOROBENZENE	7.8 U	8.7 U	9.6 U	0.62 U
2,2-DICHLOROPROPANE	22 U	25 U	28 U	0.88 U
2-BUTANONE	42 U	47 U	52 U	1.3 U
2-CHLOROETHYL VINYL ETHER	42 U	47 U	52 U	1.3 U
2-CHLOROTOLUENE	8.8 U	9.8 U	11 U	0.37 U
2-HEXANONE	20 U	22 U	24 U	0.59 U
4-CHLOROTOLUENE	9.7 U	11 U	12 U	0.38 U
4-ISOPROPYLTOLUENE	4.7 U	12 J	5.8 U	0.2 U
4-METHYL-2-PENTANONE	47 U	52 U	58 U	0.5 U
ACETONE	170 U	180 U	200 U	5.9 U
BENZENE	12 U	13 U	14 U	0.21 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-194		DR-SB-195	
SAMPLE ID	DR-SB-194-13-15	DR-SB-194-26-28	DR-SB-195-04-06	DR-SB-195-14-16
SAMPLE DATE	20130903	20130903	20130903	20130903
MATRIX	SO	SO	SO	SO
BROMOBENZENE	13 U	14 U	16 U	0.31 U
BROMOCHLOROMETHANE	13 U	14 U	16 U	0.66 U
BROMODICHLOROMETHANE	9.7 U	11 U	12 U	0.26 U
BROMOFORM	19 U	21 U	23 U	0.31 U
BROMOMETHANE	28 U	32 U	35 U	0.5 U
CARBON DISULFIDE	12 U	13 U	14 U	0.41 U
CARBON TETRACHLORIDE	6.3 U	7 U	7.7 U	0.34 U
CHLOROBENZENE	6.3 U	7 U	7.7 U	0.31 U
CHLORODIBROMOMETHANE	12 U	13 U	14 U	0.51 U
CHLOROETHANE	60 U	66 U	73 U	0.8 U
CHLOROFORM	8.6 U	9.6 U	11 U	0.27 U
CHLOROMETHANE	14 U	15 U	17 U	0.38 U
CIS-1,2-DICHLOROETHENE	7600	3800	880	30
CIS-1,3-DICHLOROPROPENE	7.7 U	8.6 U	9.5 U	0.32 U
CYCLOHEXANE	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA
DIBROMOMETHANE	14 U	15 U	17 U	0.59 U
DICHLORODIFLUOROMETHANE	16 U	17 U	19 U	0.47 U
DIISOPROPYL ETHER	49 U	54 U	60 U	1.4 U
ETHYL TERT-BUTYL ETHER	0.22 U	0.24 U	0.26 U	0.21 U
ETHYL TERT-BUTYL ETHER	NA	NA	NA	NA
ETHYLBENZENE	5.3 U	5.9 U	6.5 U	0.24 U
HEXACHLOROBUTADIENE	14 U	15 U	17 U	1.1 U
ISOPROPYLBENZENE	6.4 U	7.1 U	7.8 U	0.15 U
M+P-XYLENES	6.1 U	6.7 U	7.5 U	1.1 U
METHYL ACETATE	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	6.9 U	7.7 U	8.5 U	0.4 U
METHYLENE CHLORIDE	75 U	84 U	93 U	0.62 U
NAPHTHALENE	16 J	12 J	63 J	0.18 U
N-BUTYLBENZENE	7.8 U	71 J	54 J	0.21 U
N-PROPYLBENZENE	14 U	29 J	17 U	0.37 U
O-XYLENE	8.3 U	9.2 U	10 U	0.33 U
SEC-BUTYLBENZENE	4.6 U	22 J	5.6 U	0.17 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-194		DR-SB-195	
SAMPLE ID	DR-SB-194-13-15	DR-SB-194-26-28	DR-SB-195-04-06	DR-SB-195-14-16
SAMPLE DATE	20130903	20130903	20130903	20130903
MATRIX	SO	SO	SO	SO
STYRENE	5.5 U	6.1 U	6.7 U	0.14 U
TERT-AMYL METHYL ETHER	0.36 U	0.4 U	0.44 U	0.34 U
TERT-AMYL METHYL ETHER	NA	NA	NA	NA
TERT-BUTYLBENZENE	6.4 U	7.1 U	7.8 U	0.27 U
TERTIARY-BUTYL ALCOHOL	230 UR	260 UR	290 UR	7.1 UR
TETRACHLOROETHENE	12 U	13 U	45 J	0.48 U
TOLUENE	17 U	18 U	20 U	0.25 U
TOTAL XYLENES	6.1 U	6.7 U	7.5 U	0.33 U
TRANS-1,2-DICHLOROETHENE	33 J	36 J	140 J	1.9 J
TRANS-1,3-DICHLOROPROPENE	20 U	22 U	24 U	0.5 U
TRICHLOROETHENE	170 J	200 J	2300	3.4 J
TRICHLOROFLUOROMETHANE	16 U	17 U	19 U	0.32 U
UNKNOWN [RT=14.18]	NA	NA	NA	NA
UNKNOWN [RT=14.55]	NA	NA	NA	NA
UNKNOWN [RT=14.62]	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA
UNKNOWN [RT=14.85]	NA	NA	NA	NA
UNKNOWN [RT=3.73]	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA
VINYL ACETATE	22 UR	25 UR	28 UR	0.23 UR
VINYL CHLORIDE	200 J	220 J	22 U	0.6 J

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-196		DR-SB-46D		
SAMPLE ID	DR-SB-196-02-04	DR-SB-196-26-28	DR-SB-46D-4-5	DR-SB-46D-48-49	DR-SB-46D-56-57
SAMPLE DATE	20130903	20130903	20130827	20130827	20130827
MATRIX	SO	SO	SO	SO	SO
METALS (MG/KG)					
ANTIMONY	0.87 B	0.52 B	0.41 U	0.42 U	0.42 U
ARSENIC	9.8	3.9	4	2.3	0.63 J
BARIUM	40	2.8 J	27	6.8 J	0.7 J
BERYLLIUM	0.31 J	0.047 UJ	0.54	0.046 U	0.046 U
CADMIUM	0.31 J	0.039 U	0.12 J	0.039 U	0.039 U
CHROMIUM	42 K	5.4 K	17	6.1	1.4
COBALT	5.6 J	0.17 UJ	4.5	2	0.19 J
COPPER	18	2.1 J	13	1.9 J	3.4
LEAD	22 J	0.87 J	11	1.6	0.53 J
MERCURY	0.044 J	0.017 U	0.21 L	0.015 UL	0.016 UL
MOLYBDENUM	1.7 B	0.66 B	0.28 U	0.29 U	0.29 U
NICKEL	11	0.29 U	9.3	1.1 J	0.29 U
SELENIUM	0.62 U	0.49 U	0.47 U	0.49 U	0.49 U
SILVER	0.15 J	0.11 U	0.11 U	0.11 U	0.11 U
THALLIUM	0.76 U	0.6 U	0.58 U	0.59 U	0.59 U
VANADIUM	69 K	20 K	25	9.1	4.1
ZINC	48 J	1.2 J	27	2.8 B	1.1 B
MISCELLANEOUS PARAMETERS (MEQ/100)					
CATION EXCHANGE CAPACITY	50	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (MG/KG)					
CARBON	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA
NITRATE-N	1.8 J	NA	NA	NA	NA
PHOSPHATE	16 J	NA	NA	NA	NA
TOTAL INORGANIC CARBON	1000 U	NA	NA	NA	NA
TOTAL KJELDAHL NITROGEN	1900	NA	NA	NA	NA
TOTAL ORGANIC CARBON	15000	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (S.U.)					
PH	3.7	NA	NA	NA	NA

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-196		DR-SB-46D		
SAMPLE ID	DR-SB-196-02-04	DR-SB-196-26-28	DR-SB-46D-4-5	DR-SB-46D-48-49	DR-SB-46D-56-57
SAMPLE DATE	20130903	20130903	20130827	20130827	20130827
MATRIX	SO	SO	SO	SO	SO
PESTICIDES/PCBS (UG/KG)					
AROCLOR-1016	32 U	26 U	24 U	23 U	26 U
AROCLOR-1221	24 U	20 U	18 U	18 U	19 U
AROCLOR-1232	21 U	17 U	16 U	16 U	17 U
AROCLOR-1242	20 U	16 U	15 U	14 U	16 U
AROCLOR-1248	26 U	21 U	20 U	19 U	21 U
AROCLOR-1254	26 U	21 U	20 U	19 U	21 U
AROCLOR-1260	26 U	21 U	20 U	19 U	21 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U
TOTAL AROCLOR HALFND	87.5	71	66.5	64	70.5
PETROLEUM HYDROCARBONS (MG/KG)					
TPH (C06-C10)	0.069 U	0.056 U	0.053 U	0.051 U	0.055 U
TPH (C10-C32)	14 UJ	12 UJ	26	11 U	11 U
SEMIVOLATILES (UG/KG)					
1,1-BIPHENYL	5.2 U	4.3 U	4 U	3.9 UJ	4.3 U
1,4-DIOXANE	NA	NA	25 U	25 UJ	27 U
2,2'-OXYBIS(1-CHLOROPROPANE)	14 U	12 U	11 U	11 UJ	12 U
2,4,5-TRICHLOROPHENOL	37 U	31 U	29 U	28 UJ	31 U
2,4,6-TRICHLOROPHENOL	13 U	11 U	10 U	10 UJ	11 U
2,4-DICHLOROPHENOL	30 U	25 U	23 U	23 UJ	25 U
2,4-DIMETHYLPHENOL	30 U	25 U	23 U	23 UJ	25 U
2,4-DINITROPHENOL	31 U	26 U	24 U	24 UJ	26 U
2,4-DINITROTOLUENE	25 U	21 U	20 U	19 UJ	21 U
2,6-DINITROTOLUENE	31 U	26 U	24 U	24 UJ	26 U
2-CHLORONAPHTHALENE	0.67 U	0.56 U	0.52 U	0.51 UJ	0.56 U
2-CHLOROPHENOL	12 U	10 U	9.5 U	9.2 UJ	10 U
2-METHYLNAPHTHALENE	0.74 U	0.62 U	14	0.56 UJ	0.62 U
2-METHYLPHENOL	16 U	14 U	13 U	12 UJ	14 U
2-NITROANILINE	13 U	11 U	10 U	10 UJ	11 U
2-NITROPHENOL	12 U	10 U	9.6 U	9.4 UJ	10 U
3&4-METHYLPHENOL	30 U	25 U	23 U	23 UJ	25 U
3,3'-DICHLOROBENZIDINE	27 U	22 U	21 U	20 UJ	22 U
3-NITROANILINE	24 U	20 U	18 U	18 UJ	20 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-196		DR-SB-46D		
SAMPLE ID	DR-SB-196-02-04	DR-SB-196-26-28	DR-SB-46D-4-5	DR-SB-46D-48-49	DR-SB-46D-56-57
SAMPLE DATE	20130903	20130903	20130827	20130827	20130827
MATRIX	SO	SO	SO	SO	SO
4,6-DINITRO-2-METHYLPHENOL	14 U	11 U	11 U	10 UJ	11 U
4-BROMOPHENYL PHENYL ETHER	19 U	16 U	15 U	15 UJ	16 U
4-CHLORO-3-METHYLPHENOL	31 U	26 U	24 U	24 UJ	26 U
4-CHLOROANILINE	25 U	21 U	20 U	19 UJ	21 U
4-CHLOROPHENYL PHENYL ETHER	19 U	16 U	15 U	15 UJ	16 U
4-NITROANILINE	38 U	32 U	30 U	29 UJ	32 U
4-NITROPHENOL	25 U	21 U	20 U	19 UJ	21 U
ACENAPHTHENE	1.1 U	0.94 U	0.88 U	0.86 UJ	0.94 U
ACENAPHTHYLENE	0.52 U	0.43 U	4.4 J	0.39 UJ	0.43 U
ACETOPHENONE	14 U	11 U	11 U	10 UJ	11 U
ANTHRACENE	1.2 U	0.97 U	8.2	0.88 UJ	0.96 U
ATRAZINE	13 U	11 U	10 U	10 UJ	11 U
BAP EQUIVALENT-HALFND	18.135	0.79 U	63.02	0.72 U	0.79 U
BAP EQUIVALENT-POS	17.614	0.79 U	63.02	0.72 U	0.79 U
BENZALDEHYDE	18 U	15 U	14 UL	14 UJ	15 UL
BENZO(A)ANTHRACENE	13	0.78 U	32	0.71 UJ	0.78 U
BENZO(A)PYRENE	14	0.79 U	42	0.72 UJ	0.79 U
BENZO(B)FLUORANTHENE	23	0.73 U	55	0.66 UJ	0.73 U
BENZO(G,H,I)PERYLENE	0.52 U	0.43 U	39	0.39 UJ	0.43 U
BENZO(K)FLUORANTHENE	1 U	0.84 U	18	0.77 UJ	0.84 U
BIS(2-CHLOROETHOXY)METHANE	33 U	27 U	25 U	25 UJ	27 U
BIS(2-CHLOROETHYL)ETHER	3 U	2.5 U	2.3 U	2.3 UJ	2.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	43 J	24 U	22 U	21 UJ	26 J
BUTYL BENZYL PHTHALATE	15 U	12 U	12 U	11 UJ	12 U
CAPROLACTAM	55 U	46 U	43 U	42 UJ	46 U
CARBAZOLE	40 U	33 U	31 U	30 UJ	33 U
CHRYSENE	14	1.4 U	40	1.2 UJ	1.4 U
DIBENZO(A,H)ANTHRACENE	0.98 U	0.82 U	8.9	0.74 UJ	0.82 U
DIBENZOFURAN	0.98 U	0.82 U	4.1 J	0.74 UJ	0.82 U
DIETHYL PHTHALATE	24 U	20 U	18 U	18 UJ	20 U
DIMETHYL PHTHALATE	25 U	21 U	20 U	19 UJ	21 U
DI-N-BUTYL PHTHALATE	25 B	26 B	17 U	17 UJ	19 U
DI-N-OCTYL PHTHALATE	12 U	9.8 U	9.1 U	8.9 UJ	9.8 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-196		DR-SB-46D		
SAMPLE ID	DR-SB-196-02-04	DR-SB-196-26-28	DR-SB-46D-4-5	DR-SB-46D-48-49	DR-SB-46D-56-57
SAMPLE DATE	20130903	20130903	20130827	20130827	20130827
MATRIX	SO	SO	SO	SO	SO
FLUORANTHENE	17	0.68 U	58	0.62 UJ	0.68 U
FLUORENE	0.78 U	0.66 U	0.61 U	0.6 UJ	0.65 U
HEXACHLOROBENZENE	3.1 U	2.6 U	2.4 U	2.4 UJ	2.6 U
HEXACHLOROBUTADIENE	8.3 U	6.9 U	6.5 U	6.3 UJ	6.9 U
HEXACHLOROCYCLOPENTADIENE	12 U	10 U	9.3 U	9.1 UJ	10 U
HEXACHLOROETHANE	13 U	11 U	10 U	10 UJ	11 U
INDENO(1,2,3-CD)PYRENE	0.52 U	0.43 U	32	0.39 UJ	0.43 U
ISOPHORONE	19 U	16 U	15 U	15 UJ	16 U
NAPHTHALENE	5.7 J	1 U	8.6	0.92 UJ	1 U
NITROBENZENE	3.3 U	2.7 U	2.5 U	2.5 UJ	2.7 U
N-NITROSODIMETHYLAMINE	24 U	20 U	18 U	18 UJ	20 U
N-NITROSO-DI-N-PROPYLAMINE	9.3 U	7.8 U	7.3 U	7.1 UJ	7.8 U
N-NITROSODIPHENYLAMINE	31 U	26 U	24 U	24 UJ	26 U
PENTACHLOROPHENOL	13 U	11 U	10 U	10 UJ	11 U
PHENANTHRENE	8.5 J	0.9 U	31	0.82 UJ	0.9 U
PHENOL	11 U	16 J	8.4 U	8.2 UJ	9 U
PYRENE	18	0.54 U	57	0.5 UJ	0.54 U
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)					
1-PROPENE, 2-METHYL-	NA	NA	NA	NA	NA
2-PROPENYL-3-VINYLOXIRANE	NA	NA	NA	NA	NA
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	NA	NA	NA	NA	NA
BENZENE, 1,3,5-TRIMETHYL-	NA	NA	NA	NA	NA
BENZENE, 1-ETHYL-2-METHYL-	NA	NA	NA	NA	NA
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	NA	NA	NA	NA	NA
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	NA	NA	NA	NA	NA
CYCLOHEXANE, PROPYL-	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA
NAPHTHALENE, 1,6,7-TRIMETHYL-	NA	NA	NA	NA	NA
NAPHTHALENE, DECAHYDRO-, TRANS-	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-196		DR-SB-46D		
SAMPLE ID	DR-SB-196-02-04	DR-SB-196-26-28	DR-SB-46D-4-5	DR-SB-46D-48-49	DR-SB-46D-56-57
SAMPLE DATE	20130903	20130903	20130827	20130827	20130827
MATRIX	SO	SO	SO	SO	SO
VOLATILES (UG/KG)					
.ALPHA.-PINENE	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	0.81 U	0.65 U	0.63 U	0.61 U	0.83 U
1,1,1-TRICHLOROETHANE	0.73 U	0.59 U	0.57 U	0.55 U	0.75 U
1,1,2,2-TETRACHLOROETHANE	0.45 U	0.36 U	0.35 U	0.33 U	0.46 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1.7 U	1.4 U	1.3 U	1.3 U	1.7 U
1,1-DICHLOROETHANE	0.47 U	0.38 U	0.37 U	0.35 U	0.48 U
1,1-DICHLOROETHENE	0.68 U	0.54 U	0.53 U	0.51 U	0.7 U
1,1-DICHLOROPROPENE	0.39 U	0.31 U	0.3 U	0.3 U	0.4 U
1,2,3-TRICHLOROBENZENE	0.5 U	0.4 U	0.39 U	0.37 U	0.51 U
1,2,3-TRICHLOROPROPANE	1.2 U	0.94 U	0.91 U	0.89 U	1.2 U
1,2,3-TRIMETHYLBENZENE	0.22 U	0.18 U	0.17 U	0.17 U	0.23 U
1,2,4-TRICHLOROBENZENE	0.35 U	0.28 U	0.27 U	0.27 U	0.36 U
1,2,4-TRIMETHYLBENZENE	0.85 U	0.68 U	0.66 U	0.64 U	0.87 U
1,2-DIBROMO-3-CHLOROPROPANE	1.7 U	1.4 U	1.3 U	1.3 U	1.7 U
1,2-DIBROMOETHANE	0.66 U	0.52 U	0.51 U	0.49 U	0.67 U
1,2-DICHLOROBENZENE	0.47 U	0.38 U	0.37 U	0.35 U	0.48 U
1,2-DICHLOROETHANE	0.45 U	0.36 U	0.35 U	0.33 U	0.46 U
1,2-DICHLOROPROPANE	0.9 U	0.72 U	0.7 U	0.68 U	0.93 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.46 U	0.37 U	0.36 U	0.34 U	0.47 U
1,3-DICHLOROPROPANE	0.45 U	0.36 U	0.35 U	0.33 U	0.46 U
1,4-DICHLOROBENZENE	0.87 U	0.69 U	0.67 U	0.65 U	0.89 U
2,2-DICHLOROPROPANE	1.2 U	0.98 U	0.95 U	0.93 U	1.3 U
2-BUTANONE	1.8 U	1.5 U	9.5 J	3.6 J	2.2 J
2-CHLOROETHYL VINYL ETHER	1.8 U	1.5 U	1.4 U	1.4 U	1.9 U
2-CHLOROTOLUENE	0.52 U	0.42 U	0.41 U	0.39 U	0.54 U
2-HEXANONE	0.83 U	0.66 U	0.64 U	0.62 U	0.85 U
4-CHLOROTOLUENE	0.54 U	0.43 U	0.42 U	0.4 U	0.55 U
4-ISOPROPYLTOLUENE	0.28 U	0.22 U	0.21 U	0.21 U	0.28 U
4-METHYL-2-PENTANONE	0.71 U	0.57 U	0.55 U	0.53 U	0.73 U
ACETONE	8.3 U	6.6 U	130	48	40
BENZENE	0.3 U	0.24 U	0.23 U	0.23 U	0.31 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-196		DR-SB-46D		
SAMPLE ID	DR-SB-196-02-04	DR-SB-196-26-28	DR-SB-46D-4-5	DR-SB-46D-48-49	DR-SB-46D-56-57
SAMPLE DATE	20130903	20130903	20130827	20130827	20130827
MATRIX	SO	SO	SO	SO	SO
BROMOBENZENE	0.43 U	0.35 U	0.34 U	0.32 U	0.44 U
BROMOCHLOROMETHANE	0.93 U	0.74 U	0.72 U	0.7 U	0.96 U
BROMODICHLOROMETHANE	0.37 U	0.29 U	0.28 U	0.28 U	0.38 U
BROMOFORM	0.43 U	0.35 U	0.34 U	0.32 U	0.44 U
BROMOMETHANE	0.71 U	0.57 U	0.55 U	0.53 U	0.73 U
CARBON DISULFIDE	0.58 U	0.46 U	0.45 U	0.43 U	0.59 U
CARBON TETRACHLORIDE	0.48 U	0.39 U	0.38 U	0.36 U	0.5 U
CHLOROBENZENE	0.43 U	0.35 U	0.34 U	0.32 U	0.44 U
CHLORODIBROMOMETHANE	0.72 U	0.58 U	0.56 U	0.54 U	0.74 U
CHLOROETHANE	1.1 U	0.9 U	0.87 U	0.85 U	1.2 U
CHLOROFORM	0.38 U	0.3 U	0.29 U	0.29 U	0.39 U
CHLOROMETHANE	0.54 U	0.43 U	0.42 U	0.4 U	0.55 U
CIS-1,2-DICHLOROETHENE	0.47 U	11	0.37 U	0.35 U	0.48 U
CIS-1,3-DICHLOROPROPENE	0.45 U	0.36 U	0.35 U	0.33 U	0.46 U
CYCLOHEXANE	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.83 U	0.66 U	0.64 U	0.62 U	0.85 U
DICHLORODIFLUOROMETHANE	0.66 U	0.52 U	0.51 U	0.49 U	0.67 U
DIISOPROPYL ETHER	2 U	1.6 U	1.5 U	1.5 U	2 U
ETHYL TERT-BUTYL ETHER	0.29 U	0.23 U	0.22 U	0.22 U	0.3 U
ETHYL TERT-BUTYL ETHER	NA	NA	NA	NA	NA
ETHYLBENZENE	0.34 U	0.27 U	0.26 U	0.26 U	0.35 U
HEXACHLOROBUTADIENE	1.6 U	1.3 U	1.2 U	1.2 U	1.6 U
ISOPROPYLBENZENE	0.21 U	0.17 U	0.16 U	0.16 U	0.22 U
M+P-XYLENES	1.6 U	1.3 U	1.2 U	1.2 U	1.6 U
METHYL ACETATE	NA	NA	NA	1.6 NJ	NA
METHYL TERT-BUTYL ETHER	0.56 U	0.45 U	0.44 U	0.42 U	0.58 U
METHYLENE CHLORIDE	0.88 U	0.7 U	0.68 U	0.66 U	0.9 U
NAPHTHALENE	0.25 U	0.2 U	0.19 U	0.19 U	0.26 U
N-BUTYLBENZENE	0.3 U	0.24 U	0.23 U	0.23 U	0.31 U
N-PROPYLBENZENE	0.52 U	0.42 U	0.41 U	0.39 U	0.54 U
O-XYLENE	0.46 U	0.37 U	0.36 U	0.34 U	0.47 U
SEC-BUTYLBENZENE	0.24 U	0.19 U	0.18 U	0.18 U	0.24 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-196		DR-SB-46D		
SAMPLE ID	DR-SB-196-02-04	DR-SB-196-26-28	DR-SB-46D-4-5	DR-SB-46D-48-49	DR-SB-46D-56-57
SAMPLE DATE	20130903	20130903	20130827	20130827	20130827
MATRIX	SO	SO	SO	SO	SO
STYRENE	0.2 U	0.16 U	0.15 U	0.15 U	0.2 U
TERT-AMYL METHYL ETHER	0.48 U	0.39 U	0.38 U	0.36 U	0.5 U
TERT-AMYL METHYL ETHER	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	0.38 U	0.3 U	0.29 U	0.29 U	0.39 U
TERTIARY-BUTYL ALCOHOL	10 UR	8 UR	7.7 UR	7.5 UR	10 UR
TETRACHLOROETHENE	0.68 U	0.54 U	0.53 U	0.51 U	0.7 U
TOLUENE	0.35 U	0.28 U	0.27 U	0.27 U	0.36 U
TOTAL XYLENES	0.46 U	0.37 U	0.36 U	0.34 U	0.47 U
TRANS-1,2-DICHLOROETHENE	0.54 U	0.43 U	0.42 U	0.4 U	0.55 U
TRANS-1,3-DICHLOROPROPENE	0.71 U	0.57 U	0.55 U	0.53 U	0.73 U
TRICHLOROETHENE	1.6 J	17	0.43 U	3.7 J	0.57 U
TRICHLOROFLUOROMETHANE	0.45 U	0.36 U	0.35 U	0.33 U	0.46 U
UNKNOWN [RT=14.18]	NA	NA	NA	NA	NA
UNKNOWN [RT=14.55]	NA	NA	NA	NA	NA
UNKNOWN [RT=14.62]	NA	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA	NA
UNKNOWN [RT=14.85]	NA	NA	NA	NA	NA
UNKNOWN [RT=3.73]	NA	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA	NA
VINYL ACETATE	0.33 UR	0.26 UR	0.25 UR	0.25 UR	0.34 UR
VINYL CHLORIDE	0.51 U	0.41 U	0.4 U	0.38 U	0.52 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-46I	DR-SB-46S	DR-SB-47D		DR-SB-47S	
SAMPLE ID	DR-SB-46I-39-40	DR-SB-46S-19-20	DR-SB-47D-29-31	DR-SB-47D-49-51	DR-SB-47S/I-24-26	DR-SB-47S/I-30-32
SAMPLE DATE	20130828	20130828	20130829	20130829	20130829	20130829
MATRIX	SO	SO	SO	SO	SO	SO
METALS (MG/KG)						
ANTIMONY	0.55 B	0.58 B	0.46 U	0.43 U	0.43 U	0.43 U
ARSENIC	2.1	21	1.2 J	2.5	0.69 J	6.9
BARIUM	0.45 J	6.4 J	1.2 J	1.6 J	2.2 J	1.4 J
BERYLLIUM	0.045 U	0.065 J	0.051 UL	0.047 UL	0.047 UL	0.047 UL
CADMIUM	0.038 U	0.041 U	0.043 U	0.04 U	0.068 J	0.039 U
CHROMIUM	11	31	2.5	3.6	4.2	5.5
COBALT	0.38 J	0.18 U	0.19 J	0.58 J	0.37 J	1.3
COPPER	7.7	16	1.6 J	0.81 U	1.5 J	8.7
LEAD	0.2 U	4.9	0.43 J	0.83 J	0.82 J	0.55 J
MERCURY	0.019 UL	0.068 J	0.019 U	0.02 U	0.02 U	0.019 U
MOLYBDENUM	0.34 B	0.88 J	0.32 U	0.3 U	0.3 U	0.67 B
NICKEL	0.33 J	0.3 U	0.32 U	0.3 U	0.3 U	1.2 J
SELENIUM	0.47 U	0.53 J	0.54 U	0.49 U	0.49 U	0.49 U
SILVER	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U
THALLIUM	0.57 U	0.62 U	0.66 U	0.6 U	0.6 U	0.6 U
VANADIUM	13	130	7.5	9.9	8	13
ZINC	2.1 B	2.6 B	1.3 J	1.3 J	1.8 J	7.5
MISCELLANEOUS PARAMETERS (MEQ/100)						
CATION EXCHANGE CAPACITY	NA	NA	NA	NA	NA	18
MISCELLANEOUS PARAMETERS (MG/KG)						
CARBON	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM	NA	NA	0.33 U	0.32 U	0.33 U	0.57 J
NITRATE-N	NA	NA	NA	NA	NA	0.28 U
PHOSPHATE	NA	NA	NA	NA	NA	54
TOTAL INORGANIC CARBON	NA	NA	NA	NA	NA	1000 U
TOTAL KJELDAHL NITROGEN	NA	NA	NA	NA	NA	110 B
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	600 U
MISCELLANEOUS PARAMETERS (S.U.)						
PH	NA	NA	NA	NA	NA	5.28

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-46I	DR-SB-46S	DR-SB-47D		DR-SB-47S	
SAMPLE ID	DR-SB-46I-39-40	DR-SB-46S-19-20	DR-SB-47D-29-31	DR-SB-47D-49-51	DR-SB-47S/I-24-26	DR-SB-47S/I-30-32
SAMPLE DATE	20130828	20130828	20130829	20130829	20130829	20130829
MATRIX	SO	SO	SO	SO	SO	SO
PESTICIDES/PCBS (UG/KG)						
AROCLOR-1016	25 U	25 U	26 U	25 U	130 U	26 U
AROCLOR-1221	19 U	19 U	20 U	19 U	100 U	20 U
AROCLOR-1232	16 U	16 U	18 U	17 U	87 U	17 U
AROCLOR-1242	15 U	15 U	16 U	16 U	81 U	16 U
AROCLOR-1248	20 U	20 U	21 U	20 U	110 U	21 U
AROCLOR-1254	20 U	20 U	21 U	20 U	110 U	21 U
AROCLOR-1260	20 U	20 U	21 U	20 U	110 U	21 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U
TOTAL AROCLOR HALFND	67.5	67.5	71.5	68.5	364	71
PETROLEUM HYDROCARBONS (MG/KG)						
TPH (C06-C10)	0.054 U	0.051 U	0.14	0.052 U	0.056 U	0.057 U
TPH (C10-C32)	11 U	11 U	11 U	11 U	12 U	11 U
SEMIVOLATILES (UG/KG)						
1,1-BIPHENYL	4.1 U	4.1 U	4.3 U	4.1 U	4.4 U	4.2 U
1,4-DIOXANE	26 U	26 U	NA	NA	NA	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U	11 U	12 U	11 U	12 U	12 U
2,4,5-TRICHLOROPHENOL	29 U	29 U	31 U	30 U	31 U	30 U
2,4,6-TRICHLOROPHENOL	10 U	10 U	11 U	11 U	11 U	11 U
2,4-DICHLOROPHENOL	23 U	23 U	25 U	24 U	25 U	24 U
2,4-DIMETHYLPHENOL	23 U	23 U	25 U	24 U	25 U	24 U
2,4-DINITROPHENOL	25 U	25 U	26 U	25 U	26 U	25 U
2,4-DINITROTOLUENE	20 U	20 U	21 U	20 U	21 U	21 U
2,6-DINITROTOLUENE	25 U	25 U	26 U	25 U	26 U	25 U
2-CHLORONAPHTHALENE	0.53 U	0.53 U	0.56 U	0.53 U	0.56 U	0.55 U
2-CHLOROPHENOL	9.6 U	9.6 U	10 U	9.7 U	10 U	9.9 U
2-METHYLNAPHTHALENE	0.58 U	0.58 U	0.62 U	0.59 U	0.63 U	0.61 U
2-METHYLPHENOL	13 U	13 U	14 U	13 U	14 U	13 U
2-NITROANILINE	11 U	11 U	11 U	11 U	11 U	11 U
2-NITROPHENOL	9.7 U	9.7 U	10 U	9.8 U	10 U	10 U
3&4-METHYLPHENOL	23 U	23 U	25 U	24 U	25 U	24 U
3,3'-DICHLOROBENZIDINE	21 U	21 U	22 U	21 U	23 U	22 U
3-NITROANILINE	19 U	19 U	20 U	19 U	20 U	19 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-46I	DR-SB-46S	DR-SB-47D		DR-SB-47S	
SAMPLE ID	DR-SB-46I-39-40	DR-SB-46S-19-20	DR-SB-47D-29-31	DR-SB-47D-49-51	DR-SB-47S/I-24-26	DR-SB-47S/I-30-32
SAMPLE DATE	20130828	20130828	20130829	20130829	20130829	20130829
MATRIX	SO	SO	SO	SO	SO	SO
4,6-DINITRO-2-METHYLPHENOL	11 U	11 U	11 U	11 U	12 U	11 U
4-BROMOPHENYL PHENYL ETHER	15 U	15 U	16 U	15 U	16 U	16 U
4-CHLORO-3-METHYLPHENOL	25 U	25 U	26 U	25 U	26 U	25 U
4-CHLOROANILINE	20 U	20 U	21 U	20 U	21 U	21 U
4-CHLOROPHENYL PHENYL ETHER	15 U	15 U	16 U	15 U	16 U	16 U
4-NITROANILINE	30 U	30 U	32 U	31 U	33 U	32 U
4-NITROPHENOL	20 U	20 U	21 U	20 U	21 U	21 U
ACENAPHTHENE	0.89 U	0.89 U	0.94 U	0.9 U	0.95 U	0.92 U
ACENAPHTHYLENE	0.41 U	0.41 U	0.43 U	0.41 U	0.44 U	0.42 U
ACETOPHENONE	11 U	11 U	11 U	11 U	12 U	11 U
ANTHRACENE	0.91 U	0.91 U	0.97 U	0.92 U	0.98 U	0.95 U
ATRAZINE	11 U	11 U	11 U	11 U	11 U	11 U
BAP EQUIVALENT-HALFND	0.75 U	0.75 U	0.8 U	0.76 U	0.8 U	0.78 U
BAP EQUIVALENT-POS	0.75 U	0.75 U	0.8 U	0.76 U	0.8 U	0.78 U
BENZALDEHYDE	14 UL	14 UL	15 U	14 U	15 U	15 U
BENZO(A)ANTHRACENE	0.74 U	0.74 U	0.78 U	0.75 U	0.79 U	0.76 U
BENZO(A)PYRENE	0.75 U	0.75 U	0.8 U	0.76 U	0.8 U	0.78 U
BENZO(B)FLUORANTHENE	0.69 U	0.69 U	0.73 U	0.7 U	0.74 U	0.72 U
BENZO(G,H,I)PERYLENE	0.41 U	0.41 U	0.43 U	0.41 U	0.44 U	0.42 U
BENZO(K)FLUORANTHENE	0.79 U	0.79 U	0.85 U	0.81 U	0.85 U	0.82 U
BIS(2-CHLOROETHOXY)METHANE	26 U	26 U	27 U	26 U	28 U	27 U
BIS(2-CHLOROETHYL)ETHER	2.3 U	2.3 U	2.5 U	2.4 U	2.5 U	2.4 U
BIS(2-ETHYLHEXYL)PHTHALATE	41 B	32 B	24 U	23 U	26 J	23 U
BUTYL BENZYL PHTHALATE	12 U	12 U	12 U	12 U	13 U	12 U
CAPROLACTAM	43 U	43 U	46 U	44 U	46 U	45 U
CARBAZOLE	32 U	32 U	34 U	32 U	34 U	33 U
CHRYSENE	1.3 U	1.3 U	1.4 U	1.3 U	1.4 U	1.3 U
DIBENZO(A,H)ANTHRACENE	0.77 U	0.77 U	0.82 U	0.78 U	0.83 U	0.8 U
DIBENZOFURAN	0.77 U	0.77 U	0.82 U	0.78 U	0.83 U	0.8 U
DIETHYL PHTHALATE	23 B	19 U	20 U	19 U	20 U	19 U
DIMETHYL PHTHALATE	20 U	20 U	21 U	20 U	21 U	21 U
DI-N-BUTYL PHTHALATE	20 B	18 U	27 B	20 B	36 B	31 B
DI-N-OCTYL PHTHALATE	9.2 U	9.2 U	9.8 U	9.4 U	9.9 U	9.6 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-46I	DR-SB-46S	DR-SB-47D		DR-SB-47S	
SAMPLE ID	DR-SB-46I-39-40	DR-SB-46S-19-20	DR-SB-47D-29-31	DR-SB-47D-49-51	DR-SB-47S/I-24-26	DR-SB-47S/I-30-32
SAMPLE DATE	20130828	20130828	20130829	20130829	20130829	20130829
MATRIX	SO	SO	SO	SO	SO	SO
FLUORANTHENE	0.64 U	0.64 U	0.68 U	0.65 U	0.69 U	0.67 U
FLUORENE	0.62 U	0.62 U	0.66 U	0.63 U	0.66 U	0.64 U
HEXACHLOROBENZENE	2.5 U	2.5 U	2.6 U	2.5 U	2.6 U	2.5 U
HEXACHLOROBUTADIENE	6.5 U	6.5 U	7 U	6.6 U	7 U	6.8 U
HEXACHLOROCYCLOPENTADIENE	9.5 U	9.5 U	10 U	9.6 U	10 U	9.8 U
HEXACHLOROETHANE	11 U	11 U	11 U	11 U	11 U	11 U
INDENO(1,2,3-CD)PYRENE	0.41 U	0.41 U	0.43 U	0.41 U	0.44 U	0.42 U
ISOPHORONE	15 U	15 U	16 U	15 U	16 U	16 U
NAPHTHALENE	0.96 U	0.96 U	1 U	0.97 U	1 U	0.99 U
NITROBENZENE	2.6 U	2.6 U	2.7 U	2.6 U	2.8 U	2.7 U
N-NITROSODIMETHYLAMINE	19 U	19 U	20 U	19 U	20 U	19 U
N-NITROSO-DI-N-PROPYLAMINE	7.4 U	7.4 U	7.8 U	7.5 U	7.9 U	7.6 U
N-NITROSODIPHENYLAMINE	25 U	25 U	26 U	25 U	26 U	25 U
PENTACHLOROPHENOL	11 U	11 U	11 U	11 U	11 U	11 U
PHENANTHRENE	0.85 U	0.85 U	0.91 U	0.87 U	0.91 U	0.89 U
PHENOL	8.5 U	8.5 U	9.1 U	8.7 U	12 J	10 J
PYRENE	0.51 U	0.51 U	0.55 U	0.52 U	0.55 U	0.53 U
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)						
1-PROPENE, 2-METHYL-	NA	NA	NA	NA	NA	NA
2-PROPENYL-3-VINYLOXIRANE	NA	NA	NA	NA	NA	NA
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	NA	NA	NA	NA	NA	NA
BENZENE, 1,3,5-TRIMETHYL-	NA	NA	NA	NA	NA	NA
BENZENE, 1-ETHYL-2-METHYL-	NA	NA	NA	NA	NA	NA
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	NA	NA	NA	NA	NA	NA
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	NA	NA	NA	NA	NA	NA
CYCLOHEXANE, PROPYL-	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA	NA
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
NAPHTHALENE, 1,6,7-TRIMETHYL-	NA	NA	NA	NA	NA	NA
NAPHTHALENE, DECAHYDRO-, TRANS-	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-46I	DR-SB-46S	DR-SB-47D		DR-SB-47S	
SAMPLE ID	DR-SB-46I-39-40	DR-SB-46S-19-20	DR-SB-47D-29-31	DR-SB-47D-49-51	DR-SB-47S/I-24-26	DR-SB-47S/I-30-32
SAMPLE DATE	20130828	20130828	20130829	20130829	20130829	20130829
MATRIX	SO	SO	SO	SO	SO	SO
VOLATILES (UG/KG)						
.ALPHA.-PINENE	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	0.57 U	0.55 U	9.6 U	0.51 U	9 U	0.7 U
1,1,1-TRICHLOROETHANE	0.51 U	0.5 U	22 U	0.46 U	21 U	0.63 U
1,1,2,2-TETRACHLOROETHANE	0.31 U	0.3 U	9.4 U	0.28 U	8.8 U	0.38 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1.2 U	1.2 U	41 U	1.1 U	39 U	1.5 U
1,1-DICHLOROETHANE	0.33 U	0.32 U	18 U	0.29 U	17 U	0.41 U
1,1-DICHLOROETHENE	0.48 U	0.46 U	19 U	0.42 U	18 U	0.59 U
1,1-DICHLOROPROPENE	0.28 U	0.27 U	11 U	0.24 U	9.9 U	0.34 U
1,2,3-TRICHLOROBENZENE	0.35 U	0.34 U	11 U	0.31 U	9.9 U	0.43 U
1,2,3-TRICHLOROPROPANE	0.83 U	0.8 U	22 U	0.73 U	21 U	1 U
1,2,3-TRIMETHYLBENZENE	0.16 U	0.15 U	0.18 U	0.14 U	0.17 U	0.19 U
1,2,4-TRICHLOROBENZENE	0.25 U	0.24 U	17 B	0.22 U	20 B	0.31 U
1,2,4-TRIMETHYLBENZENE	0.6 U	0.58 U	5.3 U	0.53 U	4.9 U	0.73 U
1,2-DIBROMO-3-CHLOROPROPANE	1.2 U	1.2 U	53 U	1.1 U	49 U	1.5 U
1,2-DIBROMOETHANE	0.46 U	0.44 U	11 U	0.41 U	9.9 U	0.57 U
1,2-DICHLOROBENZENE	0.33 U	0.32 U	9 U	0.29 U	8.5 U	0.41 U
1,2-DICHLOROETHANE	2.9 J	0.3 U	15 J	0.28 U	14 J	0.38 U
1,2-DICHLOROPROPANE	0.63 U	0.61 U	8.6 U	0.56 U	8.1 U	0.78 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.32 U	0.31 U	5.1 U	0.29 U	4.7 U	0.4 U
1,3-DICHLOROPROPANE	0.31 U	0.3 U	23 U	0.28 U	22 U	0.38 U
1,4-DICHLOROBENZENE	0.61 U	0.58 U	8.4 U	0.54 U	7.9 U	0.75 U
2,2-DICHLOROPROPANE	0.86 U	0.83 U	24 U	0.77 U	23 U	1.1 U
2-BUTANONE	1.3 U	1.9 J	45 U	1.1 U	43 U	1.6 U
2-CHLOROETHYL VINYL ETHER	1.3 U	1.2 U	45 U	1.1 U	43 U	1.6 U
2-CHLOROTOLUENE	0.37 U	0.35 U	9.5 U	0.33 U	8.9 U	0.45 U
2-HEXANONE	0.58 U	0.56 U	21 U	0.51 U	20 U	0.71 U
4-CHLOROTOLUENE	0.38 U	0.36 U	10 U	0.33 U	9.8 U	0.46 U
4-ISOPROPYLTOLUENE	0.19 U	0.19 U	5.1 U	0.17 U	4.7 U	0.24 U
4-METHYL-2-PENTANONE	0.5 U	0.48 U	51 U	0.44 U	47 U	0.61 U
ACETONE	8.2 B	30 B	180 U	5.1 U	170 U	15 J
BENZENE	0.21 U	0.2 U	13 U	0.19 U	12 U	0.26 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-46I	DR-SB-46S	DR-SB-47D		DR-SB-47S	
SAMPLE ID	DR-SB-46I-39-40	DR-SB-46S-19-20	DR-SB-47D-29-31	DR-SB-47D-49-51	DR-SB-47S/I-24-26	DR-SB-47S/I-30-32
SAMPLE DATE	20130828	20130828	20130829	20130829	20130829	20130829
MATRIX	SO	SO	SO	SO	SO	SO
BROMOBENZENE	0.3 U	0.29 U	14 U	0.27 U	13 U	0.37 U
BROMOCHLOROMETHANE	0.65 U	0.63 U	14 U	0.58 U	13 U	0.8 U
BROMODICHLOROMETHANE	0.26 U	0.25 U	10 U	0.23 U	9.8 U	0.32 U
BROMOFORM	0.3 U	0.29 U	20 U	0.27 U	19 U	0.37 U
BROMOMETHANE	0.5 U	0.48 U	31 U	0.44 U	29 U	0.61 U
CARBON DISULFIDE	0.4 U	0.39 U	13 U	0.36 U	12 U	0.5 U
CARBON TETRACHLORIDE	0.34 U	0.33 U	6.7 U	0.3 U	6.3 U	0.42 U
CHLOROBENZENE	7.1	0.29 U	6.7 U	0.27 U	6.3 U	0.37 U
CHLORODIBROMOMETHANE	0.51 U	0.49 U	13 U	0.45 U	12 U	0.62 U
CHLOROETHANE	0.79 U	0.76 U	64 U	0.7 U	60 U	0.97 U
CHLOROFORM	0.27 U	0.26 U	13 J	1.8 J	8.7 U	0.33 U
CHLOROMETHANE	0.38 U	0.36 U	15 U	0.33 U	14 U	0.46 U
CIS-1,2-DICHLOROETHENE	21	0.32 U	58 J	1.7 J	83 J	0.41 U
CIS-1,3-DICHLOROPROPENE	0.31 U	0.3 U	8.3 U	0.28 U	7.8 U	0.38 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.58 U	0.56 U	15 U	0.51 U	14 U	0.71 U
DICHLORODIFLUOROMETHANE	0.46 U	0.44 U	17 U	0.41 U	16 U	0.57 U
DIISOPROPYL ETHER	1.4 U	1.3 U	53 U	1.2 U	49 U	1.7 U
ETHYL TERT-BUTYL ETHER	0.2 U	0.19 U	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	NA	NA	0.23 U	0.18 U	0.22 U	0.25 U
ETHYLBENZENE	0.24 U	0.23 U	5.7 U	0.21 U	5.3 U	0.29 U
HEXACHLOROBUTADIENE	1.1 U	1.1 U	15 U	0.98 U	14 U	1.4 U
ISOPROPYLBENZENE	0.15 U	0.14 U	6.8 U	0.13 U	6.4 U	0.18 U
M+P-XYLENES	1.1 U	1.1 U	6.5 U	0.98 U	6.1 U	1.4 U
METHYL ACETATE	NA	2.2 NJ	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.4 U	0.38 U	7.5 U	0.35 U	7 U	0.49 U
METHYLENE CHLORIDE	0.62 U	0.59 U	81 UR	0.55 U	76 U	0.76 U
NAPHTHALENE	0.17 U	0.17 U	8.4 B	0.15 U	6.6 U	0.21 U
N-BUTYLBENZENE	0.21 U	0.2 U	8.4 U	0.19 U	7.9 U	0.26 U
N-PROPYLBENZENE	0.37 U	0.35 U	15 U	0.33 U	14 U	0.45 U
O-XYLENE	0.32 U	0.31 U	8.9 U	0.29 U	8.4 U	0.4 U
SEC-BUTYLBENZENE	0.17 U	0.16 U	4.9 U	0.15 U	4.6 U	0.2 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-46I	DR-SB-46S	DR-SB-47D		DR-SB-47S	
SAMPLE ID	DR-SB-46I-39-40	DR-SB-46S-19-20	DR-SB-47D-29-31	DR-SB-47D-49-51	DR-SB-47S/I-24-26	DR-SB-47S/I-30-32
SAMPLE DATE	20130828	20130828	20130829	20130829	20130829	20130829
MATRIX	SO	SO	SO	SO	SO	SO
STYRENE	0.14 U	0.13 U	5.9 U	0.12 U	5.5 U	0.17 U
TERT-AMYL METHYL ETHER	0.34 U	0.33 U	NA	NA	NA	NA
TERT-AMYL METHYL ETHER	NA	NA	0.39 U	0.3 U	0.37 U	0.42 U
TERT-BUTYLBENZENE	0.27 U	0.26 U	6.8 U	0.24 U	6.4 U	0.33 U
TERTIARY-BUTYL ALCOHOL	7 UR	6.7 UR	250 UR	6.2 UR	240 UR	8.6 UR
TETRACHLOROETHENE	0.48 U	0.46 U	13 U	0.42 U	12 U	0.59 U
TOLUENE	0.25 U	0.24 U	18 U	0.58 J	17 U	0.31 U
TOTAL XYLENES	0.32 U	0.31 U	6.5 U	0.29 U	6.1 U	0.4 U
TRANS-1,2-DICHLOROETHENE	0.38 U	0.36 U	9.7 U	0.33 U	9.1 U	0.46 U
TRANS-1,3-DICHLOROPROPENE	0.5 U	0.48 U	21 U	0.44 U	20 U	0.61 U
TRICHLOROETHENE	31	0.37 U	840	22	1100	0.47 U
TRICHLOROFLUOROMETHANE	0.31 U	0.3 U	17 U	0.28 U	16 U	0.38 U
UNKNOWN [RT=14.18]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=14.55]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=14.62]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=14.85]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=3.73]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA	NA	NA
VINYL ACETATE	0.23 UR	0.22 UR	24 UR	0.2 UR	23 UR	0.28 UR
VINYL CHLORIDE	9.9	0.35 U	24 J	0.32 U	30 J	0.44 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-SB-48D				
SAMPLE ID	DR-SB-48D-19-21	DR-SB-48D-24-26	DR-SB-48D-28-31	DR-SB-48D-34-36	DR-SB-48D-40-42
SAMPLE DATE	20130904	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO	SO
METALS (MG/KG)					
ANTIMONY	0.42 UL	0.43 UL	0.44 UL	0.43 UL	0.36 UL
ARSENIC	0.93 J	0.8 J	0.56 J	1.1 J	11
BARIUM	2.1 J	4.2 J	0.79 J	3.3 J	1.8 J
BERYLLIUM	0.047 U	0.047 U	0.048 U	0.048 U	0.039 U
CADMIUM	0.4 J	0.3 J	0.069 J	0.28 J	0.033 U
CHROMIUM	34	5.5	1.8	4.3	20
COBALT	2.9	0.62 J	0.19 J	0.72 J	0.26 J
COPPER	3.1	1.1 J	1.8 J	1.8 J	3.3
LEAD	1.1	2.1	0.5 J	1.5	2.6
MERCURY	0.021 U	0.016 U	0.017 U	0.016 U	0.018 U
MOLYBDENUM	0.29 U	0.29 U	0.3 U	0.3 U	0.25 J
NICKEL	0.99 J	0.29 J	0.3 U	0.36 J	0.25 U
SELENIUM	0.49 U	0.49 U	0.51 U	0.5 U	0.41 U
SILVER	0.11 U	0.11 U	0.11 U	0.11 U	0.091 U
THALLIUM	0.6 U	0.6 U	0.62 U	0.61 U	0.5 U
VANADIUM	5.4	8.8	4.3	9.5	20
ZINC	10 B	2 B	4.1 B	2.3 B	3.4 B
MISCELLANEOUS PARAMETERS (MEQ/100)					
CATION EXCHANGE CAPACITY	NA	33	NA	NA	14
MISCELLANEOUS PARAMETERS (MG/KG)					
CARBON	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA
NITRATE-N	NA	0.27 U	NA	NA	0.27 U
PHOSPHATE	NA	0.34 U	NA	NA	34 J
TOTAL INORGANIC CARBON	NA	1000 U	NA	NA	1000 U
TOTAL KJELDAHL NITROGEN	NA	250	NA	NA	130 J
TOTAL ORGANIC CARBON	NA	600 U	NA	NA	600 U
MISCELLANEOUS PARAMETERS (S.U.)					
PH	NA	5.04	NA	NA	4.56

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-48D				
SAMPLE ID	DR-SB-48D-19-21	DR-SB-48D-24-26	DR-SB-48D-28-31	DR-SB-48D-34-36	DR-SB-48D-40-42
SAMPLE DATE	20130904	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO	SO
PESTICIDES/PCBS (UG/KG)					
AROCLOR-1016	26 U	25 U	25 U	26 U	25 U
AROCLOR-1221	20 U	19 U	19 U	19 U	19 U
AROCLOR-1232	18 U	16 U	17 U	17 U	17 U
AROCLOR-1242	16 U	15 U	16 U	16 U	16 U
AROCLOR-1248	21 U	20 U	20 U	21 U	20 U
AROCLOR-1254	21 U	20 U	20 U	21 U	20 U
AROCLOR-1260	21 U	20 U	20 U	21 U	20 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U
TOTAL AROCLOR HALFND	71.5	67.5	68.5	70.5	68.5
PETROLEUM HYDROCARBONS (MG/KG)					
TPH (C06-C10)	0.83	0.053 U	0.052 U	0.079 J	0.054 U
TPH (C10-C32)	12 U	11 U	11 U	11 U	11 U
SEMIVOLATILES (UG/KG)					
1,1-BIPHENYL	4.4 U	4.1 U	4.1 U	4.2 U	4.2 U
1,4-DIOXANE	28 U	26 U	26 U	26 U	26 U
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U	11 U	11 U	11 U	11 U
2,4,5-TRICHLOROPHENOL	32 U	29 U	29 U	30 U	30 U
2,4,6-TRICHLOROPHENOL	11 U	10 U	10 U	11 U	11 U
2,4-DICHLOROPHENOL	25 U	23 U	24 U	24 U	24 U
2,4-DIMETHYLPHENOL	25 U	23 U	24 U	24 U	24 U
2,4-DINITROPHENOL	27 U	25 U	25 U	25 U	25 U
2,4-DINITROTOLUENE	22 U	20 U	20 U	20 U	20 U
2,6-DINITROTOLUENE	27 U	25 U	25 U	25 U	25 U
2-CHLORONAPHTHALENE	0.57 U	0.53 U	0.53 U	0.54 U	0.54 U
2-CHLOROPHENOL	10 U	9.6 U	9.6 U	9.8 U	9.8 U
2-METHYLNAPHTHALENE	5.3 J	0.59 U	0.59 U	0.6 U	0.6 U
2-METHYLPHENOL	14 U	13 U	13 U	13 U	13 U
2-NITROANILINE	12 U	11 U	11 U	11 U	11 U
2-NITROPHENOL	11 U	9.7 U	9.8 U	9.9 U	9.9 U
3&4-METHYLPHENOL	25 U	23 U	24 U	24 U	24 U
3,3'-DICHLOROBENZIDINE	23 U	21 U	21 U	21 U	22 U
3-NITROANILINE	20 U	19 U	19 U	19 U	19 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-48D				
SAMPLE ID	DR-SB-48D-19-21	DR-SB-48D-24-26	DR-SB-48D-28-31	DR-SB-48D-34-36	DR-SB-48D-40-42
SAMPLE DATE	20130904	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO	SO
4,6-DINITRO-2-METHYLPHENOL	12 U	11 U	11 U	11 U	11 U
4-BROMOPHENYL PHENYL ETHER	16 U	15 U	15 U	15 U	16 U
4-CHLORO-3-METHYLPHENOL	27 U	25 U	25 U	25 U	25 U
4-CHLOROANILINE	22 U	20 U	20 U	20 U	20 U
4-CHLOROPHENYL PHENYL ETHER	16 U	15 U	15 U	15 U	16 U
4-NITROANILINE	33 U	30 U	31 U	31 U	31 U
4-NITROPHENOL	22 U	20 U	20 U	20 U	20 U
ACENAPHTHENE	8.1 J	0.89 U	0.89 U	0.91 U	0.91 U
ACENAPHTHYLENE	0.44 U	0.41 U	0.41 U	0.42 U	0.42 U
ACETOPHENONE	12 U	11 U	11 U	11 U	11 U
ANTHRACENE	14	0.91 U	0.92 U	0.93 U	0.93 U
ATRAZINE	12 U	11 U	11 U	11 U	11 U
BAP EQUIVALENT-HALFND	32.1513	0.75 U	0.75 U	0.76 U	0.77 U
BAP EQUIVALENT-POS	31.727	0.75 U	0.75 U	0.76 U	0.77 U
BENZALDEHYDE	15 UJ	14 UJ	14 UJ	14 UJ	14 UJ
BENZO(A)ANTHRACENE	30	0.74 U	0.74 U	0.75 U	0.75 U
BENZO(A)PYRENE	24	0.75 U	0.75 U	0.76 U	0.77 U
BENZO(B)FLUORANTHENE	36	0.69 U	0.69 U	0.7 U	0.71 U
BENZO(G,H,I)PERYLENE	13	0.41 U	0.41 U	0.42 U	0.42 U
BENZO(K)FLUORANTHENE	0.86 U	0.8 U	0.8 U	0.81 U	0.81 U
BIS(2-CHLOROETHOXY)METHANE	28 U	26 U	26 U	26 U	26 U
BIS(2-CHLOROETHYL)ETHER	2.5 U	2.3 U	2.4 U	2.4 U	2.4 U
BIS(2-ETHYLHEXYL)PHTHALATE	50 B	28 B	22 U	23 U	32 B
BUTYL BENZYL PHTHALATE	13 U	12 U	12 U	12 U	12 U
CAPROLACTAM	47 U	43 U	44 U	44 U	44 U
CARBAZOLE	34 U	32 U	32 U	32 U	32 U
CHRYSENE	27	1.3 U	1.3 U	1.3 U	1.3 U
DIBENZO(A,H)ANTHRACENE	0.84 U	0.77 U	0.78 U	0.79 U	0.79 U
DIBENZOFURAN	7 J	0.77 U	0.78 U	0.79 U	0.79 U
DIETHYL PHTHALATE	20 U	19 U	19 U	19 U	19 U
DIMETHYL PHTHALATE	22 U	20 U	20 U	20 U	20 U
DI-N-BUTYL PHTHALATE	19 U	18 U	18 U	18 U	18 U
DI-N-OCTYL PHTHALATE	10 U	9.2 U	9.3 U	9.4 U	9.4 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-48D				
SAMPLE ID	DR-SB-48D-19-21	DR-SB-48D-24-26	DR-SB-48D-28-31	DR-SB-48D-34-36	DR-SB-48D-40-42
SAMPLE DATE	20130904	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO	SO
FLUORANTHENE	62	0.64 U	0.65 U	10	0.66 U
FLUORENE	9.9	0.62 U	0.62 U	0.63 U	0.63 U
HEXACHLOROBENZENE	2.7 U	2.5 U	2.5 U	2.5 U	2.5 U
HEXACHLOROBUTADIENE	7.1 U	6.6 U	6.6 U	6.7 U	6.7 U
HEXACHLOROCYCLOPENTADIENE	10 U	9.5 U	9.5 U	9.6 U	9.7 U
HEXACHLOROETHANE	11 U	11 U	11 U	11 U	11 U
INDENO(1,2,3-CD)PYRENE	11	0.41 U	0.41 U	0.42 U	0.42 U
ISOPHORONE	16 U	15 U	15 U	15 U	16 U
NAPHTHALENE	6.2 J	0.96 U	0.96 U	0.98 U	0.98 U
NITROBENZENE	2.8 U	2.6 U	2.6 U	2.6 U	2.6 U
N-NITROSODIMETHYLAMINE	20 U	19 U	19 U	19 U	19 U
N-NITROSO-DI-N-PROPYLAMINE	8 U	7.4 U	7.4 U	7.5 U	7.5 U
N-NITROSODIPHENYLAMINE	27 U	25 U	25 U	25 U	25 U
PENTACHLOROPHENOL	12 U	11 U	11 U	11 U	11 U
PHENANTHRENE	55	0.85 U	0.86 U	0.87 U	0.87 U
PHENOL	9.3 U	8.5 U	8.6 U	8.7 U	8.7 U
PYRENE	52	0.52 U	0.52 U	8.6	0.53 U
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)					
1-PROPENE, 2-METHYL-	NA	NA	NA	NA	NA
2-PROPENYL-3-VINYLOXIRANE	NA	NA	NA	NA	NA
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	NA	NA	NA	NA	NA
BENZENE, 1,3,5-TRIMETHYL-	NA	NA	NA	NA	NA
BENZENE, 1-ETHYL-2-METHYL-	NA	NA	NA	NA	NA
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	NA	NA	NA	NA	NA
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	NA	NA	NA	NA	NA
CYCLOHEXANE, PROPYL-	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA
NAPHTHALENE, 1,6,7-TRIMETHYL-	NA	470 NJ	NA	NA	NA
NAPHTHALENE, DECAHYDRO-, TRANS-	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	6.7 R	NA	NA

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-48D				
SAMPLE ID	DR-SB-48D-19-21	DR-SB-48D-24-26	DR-SB-48D-28-31	DR-SB-48D-34-36	DR-SB-48D-40-42
SAMPLE DATE	20130904	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO	SO
VOLATILES (UG/KG)					
.ALPHA.-PINENE	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	9.6 U	8.1 U	0.64 U	9.3 U	0.72 U
1,1,1-TRICHLOROETHANE	22 U	19 U	0.58 U	21 U	0.65 U
1,1,2,2-TETRACHLOROETHANE	9.4 U	7.9 U	0.35 U	9.1 U	0.39 U
1,1,2-TRICHLOROTRIFLUOROETHANE	41 U	35 U	1.3 U	40 U	1.5 U
1,1-DICHLOROETHANE	18 U	15 U	0.37 U	17 U	0.42 U
1,1-DICHLOROETHENE	19 U	16 U	0.69 J	18 U	0.6 U
1,1-DICHLOROPROPENE	11 U	8.9 U	0.31 U	10 U	0.35 U
1,2,3-TRICHLOROBENZENE	11 U	9.4 J	3.8 J	10 U	0.44 U
1,2,3-TRICHLOROPROPANE	22 U	19 U	0.93 U	21 U	1 U
1,2,3-TRIMETHYLBENZENE	0.18 U	0.15 U	0.18 U	0.17 U	0.2 U
1,2,4-TRICHLOROBENZENE	7.7 U	30 J	19	29 J	0.31 U
1,2,4-TRIMETHYLBENZENE	5.3 U	4.4 U	0.67 U	5.1 U	0.75 U
1,2-DIBROMO-3-CHLOROPROPANE	53 U	44 U	1.3 U	51 U	1.5 U
1,2-DIBROMOETHANE	11 U	8.9 U	0.52 U	10 U	0.58 U
1,2-DICHLOROBENZENE	9.1 U	7.6 U	0.37 U	8.8 U	0.42 U
1,2-DICHLOROETHANE	11 U	8.9 U	3.9 J	10 U	0.47 J
1,2-DICHLOROPROPANE	8.7 U	7.3 U	0.71 U	8.4 U	0.8 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	5.1 U	5.7 J	0.36 U	4.9 U	0.41 U
1,3-DICHLOROPROPANE	23 U	19 U	0.35 U	23 U	0.39 U
1,4-DICHLOROBENZENE	8.5 U	8.4 J	0.68 U	8.2 U	0.76 U
2,2-DICHLOROPROPANE	24 U	20 U	0.97 U	24 U	1.1 U
2-BUTANONE	46 U	38 U	1.4 U	44 U	1.6 U
2-CHLOROETHYL VINYL ETHER	46 U	38 U	1.4 U	44 U	1.6 U
2-CHLOROTOLUENE	9.5 U	8 U	0.41 U	9.2 U	0.46 U
2-HEXANONE	21 U	18 U	0.65 U	20 U	0.73 U
4-CHLOROTOLUENE	10 U	8.8 U	0.42 U	10 U	0.47 U
4-ISOPROPYLTOLUENE	5.1 U	4.3 U	0.22 U	4.9 U	0.24 U
4-METHYL-2-PENTANONE	51 U	43 U	0.56 U	49 U	0.63 U
ACETONE	180 U	150 U	200 J	170 U	58 B
BENZENE	13 U	11 U	0.24 U	12 U	0.27 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-48D				
SAMPLE ID	DR-SB-48D-19-21	DR-SB-48D-24-26	DR-SB-48D-28-31	DR-SB-48D-34-36	DR-SB-48D-40-42
SAMPLE DATE	20130904	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO	SO
BROMOBENZENE	14 U	12 U	0.34 U	13 U	0.38 U
BROMOCHLOROMETHANE	14 U	12 U	0.73 U	13 U	0.82 U
BROMODICHLOROMETHANE	10 U	8.8 U	0.29 U	10 U	0.32 U
BROMOFORM	20 U	17 U	0.34 U	19 U	0.38 U
BROMOMETHANE	31 U	26 U	0.56 U	30 U	0.63 U
CARBON DISULFIDE	13 U	11 U	0.45 U	12 U	0.51 U
CARBON TETRACHLORIDE	6.8 U	5.7 U	0.38 U	6.5 U	0.43 U
CHLOROBENZENE	6.8 U	5.7 U	0.34 U	6.5 U	0.38 U
CHLORODIBROMOMETHANE	13 U	11 U	0.57 U	12 U	0.64 U
CHLOROETHANE	65 U	54 U	0.89 U	62 U	1 U
CHLOROFORM	9.3 U	13 J	1.7 J	9 U	0.34 U
CHLOROMETHANE	15 U	12 U	0.42 U	14 U	0.47 U
CIS-1,2-DICHLOROETHENE	3400	71 J	50	80 J	11
CIS-1,3-DICHLOROPROPENE	8.4 U	7 U	0.35 U	8.1 U	0.39 U
CYCLOHEXANE	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA
DIBROMOMETHANE	15 U	12 U	0.65 U	14 U	0.73 U
DICHLORODIFLUOROMETHANE	17 U	14 U	0.52 U	16 U	0.58 U
DIISOPROPYL ETHER	53 U	44 U	1.5 U	51 U	1.7 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.19 U	0.23 U	0.23 U	0.25 U
ETHYL TERT-BUTYL ETHER	NA	NA	NA	NA	NA
ETHYLBENZENE	5.7 U	4.8 U	0.27 U	5.5 U	0.3 U
HEXACHLOROBUTADIENE	15 U	12 U	1.2 U	14 U	1.4 U
ISOPROPYLBENZENE	6.9 U	5.8 U	0.17 U	6.6 U	0.19 U
M+P-XYLENES	6.6 U	5.5 J	1.2 U	6.3 U	1.4 U
METHYL ACETATE	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	7.5 U	6.3 U	0.44 U	7.3 U	0.5 U
METHYLENE CHLORIDE	82 U	68 U	0.69 U	79 U	0.78 U
NAPHTHALENE	7.4 J	15 J	0.38 B	6.9 U	0.22 U
N-BUTYLBENZENE	8.5 U	7.1 U	0.24 U	8.2 U	0.27 U
N-PROPYLBENZENE	15 U	12 U	0.41 U	14 U	0.46 U
O-XYLENE	9 U	7.5 U	0.36 U	8.7 U	0.41 U
SEC-BUTYLBENZENE	5 U	4.2 U	0.19 U	4.8 U	0.21 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-48D				
SAMPLE ID	DR-SB-48D-19-21	DR-SB-48D-24-26	DR-SB-48D-28-31	DR-SB-48D-34-36	DR-SB-48D-40-42
SAMPLE DATE	20130904	20130904	20130904	20130904	20130904
MATRIX	SO	SO	SO	SO	SO
STYRENE	5.9 U	5 U	0.15 U	5.7 U	0.17 U
TERT-AMYL METHYL ETHER	0.39 U	0.33 U	0.38 U	0.38 U	0.43 U
TERT-AMYL METHYL ETHER	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	6.9 U	5.8 U	0.3 U	6.6 U	0.34 U
TERTIARY-BUTYL ALCOHOL	250 UR	210 UR	16 J	250 UR	8.8 UR
TETRACHLOROETHENE	13 U	11 U	1.5 J	12 U	0.6 U
TOLUENE	18 U	15 U	0.28 U	17 U	0.31 U
TOTAL XYLENES	6.6 U	5.5 J	0.36 U	6.3 U	0.41 U
TRANS-1,2-DICHLOROETHENE	9.7 U	8.1 U	0.42 U	9.4 U	0.47 U
TRANS-1,3-DICHLOROPROPENE	21 U	18 U	0.56 U	20 U	0.63 U
TRICHLOROETHENE	170 J	610	150 J	1200	27
TRICHLOROFLUOROMETHANE	17 U	14 U	0.35 U	16 U	0.39 U
UNKNOWN [RT=14.18]	NA	NA	NA	NA	NA
UNKNOWN [RT=14.55]	NA	NA	NA	NA	NA
UNKNOWN [RT=14.62]	NA	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	680 NJ	NA	NA	NA
UNKNOWN [RT=14.85]	NA	NA	NA	NA	NA
UNKNOWN [RT=3.73]	NA	270 NJ	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA	NA
VINYL ACETATE	24 UR	20 UR	0.26 UR	24 UR	0.29 UR
VINYL CHLORIDE	340	16 U	5.9	18 U	1.8 J

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-49D					
SAMPLE ID	DR-SB-49D-19-21	DR-SB-49D-24-26	DR-SB-49D-29-31	DR-SB-49D-36-39	DR-SB-49D-44-46	DR-SB-49D-54-56
SAMPLE DATE	20130905	20130905	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
METALS (MG/KG)						
ANTIMONY	NA	NA	NA	NA	NA	NA
ARSENIC	NA	NA	NA	NA	NA	NA
BARIUM	NA	NA	NA	NA	NA	NA
BERYLLIUM	NA	NA	NA	NA	NA	NA
CADMIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	NA	NA
COBALT	NA	NA	NA	NA	NA	NA
COPPER	NA	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	NA	NA
MERCURY	NA	NA	NA	NA	NA	NA
MOLYBDENUM	NA	NA	NA	NA	NA	NA
NICKEL	NA	NA	NA	NA	NA	NA
SELENIUM	NA	NA	NA	NA	NA	NA
SILVER	NA	NA	NA	NA	NA	NA
THALLIUM	NA	NA	NA	NA	NA	NA
VANADIUM	NA	NA	NA	NA	NA	NA
ZINC	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (MEQ/100)						
CATION EXCHANGE CAPACITY	NA	NA	11	NA	NA	2.4
MISCELLANEOUS PARAMETERS (MG/KG)						
CARBON	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	0.26 U	NA	NA	0.27 U
PHOSPHATE	NA	NA	0.37 UR	NA	NA	0.33 UR
TOTAL INORGANIC CARBON	NA	NA	1000 U	NA	NA	1000 U
TOTAL KJELDAHL NITROGEN	NA	NA	63 J	NA	NA	67 J
TOTAL ORGANIC CARBON	NA	NA	600 U	NA	NA	600 U
MISCELLANEOUS PARAMETERS (S.U.)						
PH	NA	NA	5.52	NA	NA	4.57

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-49D					
SAMPLE ID	DR-SB-49D-19-21	DR-SB-49D-24-26	DR-SB-49D-29-31	DR-SB-49D-36-39	DR-SB-49D-44-46	DR-SB-49D-54-56
SAMPLE DATE	20130905	20130905	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
PESTICIDES/PCBS (UG/KG)						
AROCLOR-1016	26 U	25 U	25 U	26 U	26 U	25 U
AROCLOR-1221	20 U	19 U	19 U	19 U	20 U	19 U
AROCLOR-1232	17 U	17 U	17 U	17 U	17 U	17 U
AROCLOR-1242	16 U	16 U	16 U	16 U	16 U	16 U
AROCLOR-1248	21 U	21 U	20 U	21 U	21 U	20 U
AROCLOR-1254	21 U	21 U	20 U	21 U	21 U	20 U
AROCLOR-1260	21 U	21 U	20 U	21 U	21 U	20 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U
TOTAL AROCLOR HALFND	71	70	68.5	70.5	71	68.5
PETROLEUM HYDROCARBONS (MG/KG)						
TPH (C06-C10)	0.055 U	0.055 U	0.052 U	0.055 U	0.053 J	0.078 J
TPH (C10-C32)	11 U	11 U	11 U	11 U	11 U	11 U
SEMIVOLATILES (UG/KG)						
1,1-BIPHENYL	4.3 U	4.2 U	4.1 U	4.2 U	4.3 U	4.2 U
1,4-DIOXANE	27 U	27 U	26 U	27 U	27 U	26 U
2,2'-OXYBIS(1-CHLOROPROPANE)	12 U	11 U	11 U	11 U	12 U	11 U
2,4,5-TRICHLOROPHENOL	31 U	30 U	29 U	30 U	30 U	30 U
2,4,6-TRICHLOROPHENOL	11 U	11 U	10 U	11 U	11 U	11 U
2,4-DICHLOROPHENOL	25 U	24 U	24 U	24 U	24 U	24 U
2,4-DIMETHYLPHENOL	25 U	24 U	24 U	24 U	24 U	24 U
2,4-DINITROPHENOL	26 U	25 U	25 U	25 U	26 U	25 U
2,4-DINITROTOLUENE	21 U	20 U	20 U	21 U	21 U	20 U
2,6-DINITROTOLUENE	26 U	25 U	25 U	25 U	26 U	25 U
2-CHLORONAPHTHALENE	0.55 U	0.54 U	0.53 U	0.54 U	0.55 U	0.54 U
2-CHLOROPHENOL	10 U	9.9 U	9.7 U	9.9 U	10 U	9.8 U
2-METHYLNAPHTHALENE	0.62 U	0.6 U	0.59 U	0.6 U	0.61 U	0.6 U
2-METHYLPHENOL	14 U	13 U	13 U	13 U	13 U	13 U
2-NITROANILINE	11 U	11 U	11 U	11 U	11 U	11 U
2-NITROPHENOL	10 U	10 U	9.8 U	10 U	10 U	9.9 U
3&4-METHYLPHENOL	25 U	24 U	24 U	24 U	24 U	24 U
3,3'-DICHLOROBENZIDINE	22 U	22 U	21 U	22 U	22 U	22 U
3-NITROANILINE	20 U	19 U	19 U	19 U	19 U	19 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-49D					
SAMPLE ID	DR-SB-49D-19-21	DR-SB-49D-24-26	DR-SB-49D-29-31	DR-SB-49D-36-39	DR-SB-49D-44-46	DR-SB-49D-54-56
SAMPLE DATE	20130905	20130905	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
4,6-DINITRO-2-METHYLPHENOL	11 U	11 U	11 U	11 U	11 U	11 U
4-BROMOPHENYL PHENYL ETHER	16 U	16 U	15 U	16 U	16 U	16 U
4-CHLORO-3-METHYLPHENOL	26 U	25 U	25 U	25 U	26 U	25 U
4-CHLOROANILINE	21 U	20 U	20 U	21 U	21 U	20 U
4-CHLOROPHENYL PHENYL ETHER	16 U	16 U	15 U	16 U	16 U	16 U
4-NITROANILINE	32 U	31 U	31 U	31 U	32 U	31 U
4-NITROPHENOL	21 U	20 U	20 U	21 U	21 U	20 U
ACENAPHTHENE	0.93 U	0.92 U	0.9 U	0.92 U	0.92 U	0.91 U
ACENAPHTHYLENE	0.43 U	0.42 U	0.41 U	0.42 U	0.43 U	0.42 U
ACETOPHENONE	11 U	11 U	11 U	11 U	11 U	11 U
ANTHRACENE	0.96 U	0.94 U	0.92 U	0.94 U	0.95 U	0.93 U
ATRAZINE	11 U	11 U	11 U	11 U	11 U	11 U
BAP EQUIVALENT-HALFND	0.79 U	0.77 U	0.75 U	0.77 U	0.78 U	0.77 U
BAP EQUIVALENT-POS	0.79 U	0.77 U	0.75 U	0.77 U	0.78 U	0.77 U
BENZALDEHYDE	15 UL	14 UL	14 UL	14 UL	15 UL	14 UL
BENZO(A)ANTHRACENE	0.78 U	0.76 U	0.74 U	0.76 U	0.77 U	0.75 U
BENZO(A)PYRENE	0.79 U	0.77 U	0.75 U	0.77 U	0.78 U	0.77 U
BENZO(B)FLUORANTHENE	0.73 U	0.71 U	0.7 U	0.71 U	0.72 U	0.71 U
BENZO(G,H,I)PERYLENE	0.43 U	0.42 U	0.41 U	0.42 U	0.43 U	0.42 U
BENZO(K)FLUORANTHENE	0.84 U	0.82 U	0.8 U	0.82 U	0.83 U	0.81 U
BIS(2-CHLOROETHOXY)METHANE	27 U	27 U	26 U	27 U	27 U	26 U
BIS(2-CHLOROETHYL)ETHER	2.5 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
BIS(2-ETHYLHEXYL)PHTHALATE	26 B	30 B	22 U	35 B	65 B	26 B
BUTYL BENZYL PHTHALATE	12 U	12 U	12 U	12 U	12 U	12 U
CAPROLACTAM	46 U	45 U	44 U	45 U	45 U	44 U
CARBAZOLE	33 U	33 U	32 U	33 U	33 U	32 U
CHRYSENE	1.4 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
DIBENZO(A,H)ANTHRACENE	0.81 U	0.8 U	0.78 U	0.8 U	0.8 U	0.79 U
DIBENZOFURAN	0.81 U	0.8 U	0.78 U	0.8 U	0.8 U	0.79 U
DIETHYL PHTHALATE	20 U	19 U	19 U	19 U	19 U	19 U
DIMETHYL PHTHALATE	21 U	20 U	20 U	21 U	21 U	20 U
DI-N-BUTYL PHTHALATE	18 U	18 U	18 U	18 U	18 U	18 U
DI-N-OCTYL PHTHALATE	9.7 U	9.5 U	9.3 U	9.5 U	9.6 U	9.5 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-49D					
SAMPLE ID	DR-SB-49D-19-21	DR-SB-49D-24-26	DR-SB-49D-29-31	DR-SB-49D-36-39	DR-SB-49D-44-46	DR-SB-49D-54-56
SAMPLE DATE	20130905	20130905	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
FLUORANTHENE	7.3 J	0.66 U	0.65 U	0.66 U	0.67 U	0.66 U
FLUORENE	0.65 U	0.64 U	0.63 U	0.64 U	0.64 U	0.64 U
HEXACHLOROBENZENE	2.6 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U
HEXACHLOROBUTADIENE	6.9 U	6.7 U	6.6 U	6.8 U	6.8 U	6.7 U
HEXACHLOROCYCLOPENTADIENE	10 U	9.8 U	9.6 UR	9.8 U	9.8 U	9.7 U
HEXACHLOROETHANE	11 U	11 U	11 U	11 U	11 U	11 U
INDENO(1,2,3-CD)PYRENE	0.43 U	0.42 U	0.41 U	0.42 U	0.43 U	0.42 U
ISOPHORONE	16 U	16 U	15 U	16 U	16 U	16 U
NAPHTHALENE	1 U	0.99 U	0.97 U	0.99 U	1 U	0.98 U
NITROBENZENE	2.7 U	2.7 U	2.6 U	2.7 U	2.7 U	2.6 U
N-NITROSODIMETHYLAMINE	20 U	19 U	19 U	19 U	19 U	19 U
N-NITROSO-DI-N-PROPYLAMINE	7.8 U	7.6 U	7.4 U	7.6 U	7.7 U	7.5 U
N-NITROSODIPHENYLAMINE	26 U	25 U	25 U	25 U	26 U	25 U
PENTACHLOROPHENOL	11 U	11 U	11 U	11 U	11 U	11 U
PHENANTHRENE	0.9 U	0.88 U	0.86 U	0.88 U	0.89 U	0.87 U
PHENOL	9 U	8.8 U	8.6 U	8.8 U	8.9 U	8.7 U
PYRENE	6.3 J	0.53 U	0.52 U	0.53 U	0.53 U	0.53 U
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)						
1-PROPENE, 2-METHYL-	NA	NA	NA	NA	NA	NA
2-PROPENYL-3-VINYLOXIRANE	NA	NA	NA	NA	NA	NA
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	NA	NA	NA	NA	NA	NA
BENZENE, 1,3,5-TRIMETHYL-	NA	NA	NA	NA	NA	NA
BENZENE, 1-ETHYL-2-METHYL-	NA	NA	NA	NA	NA	NA
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	NA	NA	NA	NA	NA	NA
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	NA	NA	NA	NA	NA	NA
CYCLOHEXANE, PROPYL-	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA	NA
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
NAPHTHALENE, 1,6,7-TRIMETHYL-	NA	NA	NA	NA	NA	NA
NAPHTHALENE, DECAHYDRO-, TRANS-	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-49D					
SAMPLE ID	DR-SB-49D-19-21	DR-SB-49D-24-26	DR-SB-49D-29-31	DR-SB-49D-36-39	DR-SB-49D-44-46	DR-SB-49D-54-56
SAMPLE DATE	20130905	20130905	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
VOLATILES (UG/KG)						
.ALPHA.-PINENE	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	0.68 U	0.65 U	0.7 U	13 U	10 U	0.69 U
1,1,1-TRICHLOROETHANE	0.61 U	0.59 U	0.63 U	30 U	24 U	4.2 J
1,1,2,2-TETRACHLOROETHANE	0.37 U	0.36 U	0.38 U	13 U	10 U	0.38 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1.4 U	1.4 U	1.5 U	55 U	44 U	1.4 U
1,1-DICHLOROETHANE	0.39 U	0.38 U	0.4 U	24 U	19 U	1.6 J
1,1-DICHLOROETHENE	0.57 U	0.55 U	0.58 U	26 U	20 J	4.2 J
1,1-DICHLOROPROPENE	0.33 UL	0.31 UL	0.34 UL	14 U	11 U	0.33 UL
1,2,3-TRICHLOROBENZENE	0.42 U	0.4 U	0.43 U	14 U	11 U	0.42 U
1,2,3-TRICHLOROPROPANE	0.99 U	0.94 U	1 U	30 U	24 U	1 U
1,2,3-TRIMETHYLBENZENE	0.19 U	0.18 U	0.19 U	0.24 U	0.19 U	0.19 U
1,2,4-TRICHLOROBENZENE	0.3 U	0.28 U	0.3 U	10 U	8.5 B	0.74 J
1,2,4-TRIMETHYLBENZENE	0.71 U	0.68 U	0.73 U	9.3 B	5.6 U	0.72 U
1,2-DIBROMO-3-CHLOROPROPANE	1.4 U	1.4 U	1.5 U	71 U	56 U	1.4 U
1,2-DIBROMOETHANE	0.55 U	0.52 U	0.56 U	14 U	11 U	0.56 U
1,2-DICHLOROBENZENE	0.39 U	0.38 U	0.4 U	12 U	9.7 U	0.4 U
1,2-DICHLOROETHANE	0.37 U	0.7 J	0.38 U	14 U	11 U	0.81 J
1,2-DICHLOROPROPANE	0.76 U	0.72 U	0.77 U	12 U	9.3 U	0.77 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.38 U	0.37 U	0.39 U	6.8 U	5.4 U	0.39 U
1,3-DICHLOROPROPANE	0.37 U	0.36 U	0.38 U	31 U	25 U	0.38 U
1,4-DICHLOROBENZENE	0.72 U	0.69 U	0.74 U	11 U	9 U	0.74 U
2,2-DICHLOROPROPANE	1 U	0.99 U	1.1 U	33 U	26 U	1 U
2-BUTANONE	1.5 U	1.5 U	1.6 U	61 U	49 U	1.6 U
2-CHLOROETHYL VINYL ETHER	1.5 U	1.5 U	1.6 U	61 U	49 U	1.6 U
2-CHLOROTOLUENE	0.44 U	0.42 U	0.45 U	13 U	10 U	0.45 U
2-HEXANONE	0.69 U	0.66 U	0.71 U	28 U	23 U	0.7 U
4-CHLOROTOLUENE	0.45 U	0.43 U	0.46 U	14 U	11 U	0.46 U
4-ISOPROPYLTOLUENE	0.23 U	0.22 U	0.24 U	6.8 U	5.4 U	0.23 U
4-METHYL-2-PENTANONE	0.59 U	0.57 U	0.61 U	68 U	54 U	0.6 U
ACETONE	22 K	38 K	57 K	240 U	190 U	67 K
BENZENE	0.25 U	0.24 U	0.26 U	17 U	14 U	0.26 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-49D					
SAMPLE ID	DR-SB-49D-19-21	DR-SB-49D-24-26	DR-SB-49D-29-31	DR-SB-49D-36-39	DR-SB-49D-44-46	DR-SB-49D-54-56
SAMPLE DATE	20130905	20130905	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
BROMOBENZENE	0.36 U	0.35 U	0.37 U	18 U	15 U	0.37 U
BROMOCHLOROMETHANE	0.78 U	0.74 U	0.8 U	18 U	15 U	0.79 U
BROMODICHLOROMETHANE	0.31 U	0.29 U	0.31 U	14 U	11 U	0.31 U
BROMOFORM	0.36 U	0.35 U	0.37 U	27 U	21 U	0.37 U
BROMOMETHANE	0.59 U	0.57 U	0.61 U	41 U	33 U	0.6 U
CARBON DISULFIDE	0.48 U	0.46 U	0.73 J	17 U	14 U	0.49 U
CARBON TETRACHLORIDE	0.41 U	0.39 U	0.42 U	9.1 U	7.2 U	0.41 U
CHLOROBENZENE	0.36 U	0.4 J	0.37 U	9.1 U	7.2 U	0.37 U
CHLORODIBROMOMETHANE	0.6 U	0.58 U	0.62 U	17 U	14 U	0.61 U
CHLOROETHANE	0.94 U	0.9 U	0.97 U	87 U	69 U	0.96 U
CHLOROFORM	0.32 U	0.3 U	0.33 U	13 U	9.9 U	0.32 U
CHLOROMETHANE	0.45 U	0.43 U	0.46 U	20 U	16 U	0.46 U
CIS-1,2-DICHLOROETHENE	3.9 J	16	5.1 J	78 J	140 J	160
CIS-1,3-DICHLOROPROPENE	0.37 U	0.36 U	0.38 U	11 U	8.9 U	0.38 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.69 U	0.66 U	0.71 U	20 U	16 U	0.7 U
DICHLORODIFLUOROMETHANE	0.55 U	0.52 U	0.56 U	23 U	18 U	0.56 U
DIISOPROPYL ETHER	1.6 U	1.6 U	1.7 U	71 U	56 U	1.7 U
ETHYL TERT-BUTYL ETHER	0.24 U	0.23 U	0.25 U	0.31 U	0.25 U	0.25 U
ETHYL TERT-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	0.28 U	0.27 U	0.29 U	16 B	6.6 B	0.29 U
HEXACHLOROBUTADIENE	1.3 U	1.3 U	1.3 U	20 U	16 U	1.3 U
ISOPROPYLBENZENE	0.18 U	0.17 U	0.18 U	9.2 U	7.3 U	0.18 U
M+P-XYLENES	1.3 U	1.3 U	1.3 U	43 B	19 B	1.3 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.47 U	0.45 U	0.48 U	10 U	8 U	0.48 U
METHYLENE CHLORIDE	0.73 U	0.7 U	0.75 U	110 UR	87 UR	0.75 U
NAPHTHALENE	0.21 U	0.2 U	0.21 U	9.5 U	8.4 B	0.21 U
N-BUTYLBENZENE	0.25 U	0.24 U	0.26 U	11 U	9 U	0.26 U
N-PROPYLBENZENE	0.44 U	0.42 U	0.45 U	20 U	16 U	0.45 U
O-XYLENE	0.38 U	0.37 U	0.39 U	12 U	9.6 U	0.39 U
SEC-BUTYLBENZENE	0.2 U	0.19 U	0.2 U	6.7 U	5.3 U	0.2 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-49D					
SAMPLE ID	DR-SB-49D-19-21	DR-SB-49D-24-26	DR-SB-49D-29-31	DR-SB-49D-36-39	DR-SB-49D-44-46	DR-SB-49D-54-56
SAMPLE DATE	20130905	20130905	20130905	20130905	20130905	20130905
MATRIX	SO	SO	SO	SO	SO	SO
STYRENE	0.16 U	0.16 U	0.17 U	8 U	6.3 U	0.17 U
TERT-AMYL METHYL ETHER	0.41 U	0.39 U	0.42 U	0.53 U	0.42 U	0.41 U
TERT-AMYL METHYL ETHER	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	0.32 U	0.3 U	0.33 U	9.2 U	7.3 U	0.32 U
TERTIARY-BUTYL ALCOHOL	8.3 UR	8 UR	8.5 UR	340 UR	270 UR	8.5 UR
TETRACHLOROETHENE	0.57 U	0.55 U	0.58 U	44 B	25 B	0.58 U
TOLUENE	0.3 U	0.28 U	0.3 U	24 B	22 B	0.8 J
TOTAL XYLENES	0.38 U	0.37 U	0.39 U	43 B	19 B	0.39 U
TRANS-1,2-DICHLOROETHENE	0.45 U	0.43 U	0.46 U	13 U	10 U	2.8 J
TRANS-1,3-DICHLOROPROPENE	0.59 U	0.57 U	0.61 U	28 U	23 U	0.6 U
TRICHLOROETHENE	7.3	35	3.6 J	480	1600	81
TRICHLOROFLUOROMETHANE	0.37 U	0.36 U	0.38 U	23 U	18 U	0.38 U
UNKNOWN [RT=14.18]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=14.55]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=14.62]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=14.85]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=3.73]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA	NA	NA
VINYL ACETATE	0.27 UR	0.26 UR	0.28 UR	33 UR	26 UR	0.28 UR
VINYL CHLORIDE	0.43 U	3.9 J	2.2 J	26 U	20 U	13

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-50D					DR-SI
SAMPLE ID	DR-SB-50D-18-20	DR-SB-50D-29-31	DR-SB-50D-34-36	DR-SB-50D-42-44	DR-SB-50D-52-54	DR-SB-51D-14-16
SAMPLE DATE	20130909	20130909	20130909	20130909	20130909	20130910
MATRIX	SO	SO	SO	SO	SO	SO
METALS (MG/KG)						
ANTIMONY	0.45 UL	0.48 UL	0.46 UL	0.44 UL	0.38 UL	NA
ARSENIC	1.6 J	0.41 J	0.37 J	0.81 J	3.1 K	NA
BARIUM	9.7 J	1.5 J	2 J	0.87 J	1.9 J	NA
BERYLLIUM	0.1 J	0.053 U	0.05 U	0.048 U	0.042 U	NA
CADMIUM	0.041 U	0.045 U	0.042 U	0.04 U	0.035 U	NA
CHROMIUM	21	2.1	2.6	2.1	8.3	NA
COBALT	1.1	0.2 U	0.19 U	0.18 U	0.53 J	NA
COPPER	18	0.92 U	0.88 J	1.6 J	3.9 K	NA
LEAD	3.3	0.55 J	0.8 J	0.21 U	0.78 J	NA
MERCURY	0.016 U	0.02 U	0.017 U	0.017 U	0.018 U	NA
MOLYBDENUM	2.7 J	0.34 U	0.32 U	0.3 U	0.33 B	NA
NICKEL	2.1 J	0.34 U	0.32 U	0.3 U	0.27 U	NA
SELENIUM	0.51 UL	0.56 UL	0.53 UL	0.5 UL	0.44 UL	NA
SILVER	0.11 U	0.12 U	0.12 U	0.11 U	0.099 U	NA
THALLIUM	0.63 U	0.68 U	0.64 U	0.62 U	0.54 U	NA
VANADIUM	9.1	2.7	5.5	1.7	8.1	NA
ZINC	6.7 B	1.2 U	1.2 U	1.1 U	0.99 U	NA
MISCELLANEOUS PARAMETERS (MEQ/100)						
CATION EXCHANGE CAPACITY	27	NA	NA	NA	8.2	23
MISCELLANEOUS PARAMETERS (MG/KG)						
CARBON	NA	NA	NA	NA	NA	NA
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	NA
NITRATE-N	1.3 J	NA	NA	NA	0.27 U	0.28 U
PHOSPHATE	0.76 J	NA	NA	NA	0.33 U	48
TOTAL INORGANIC CARBON	1000 U	NA	NA	NA	1000 U	1000 U
TOTAL KJELDAHL NITROGEN	430	NA	NA	NA	67 B	70 B
TOTAL ORGANIC CARBON	600 U	NA	NA	NA	600 U	600 U
MISCELLANEOUS PARAMETERS (S.U.)						
PH	4.88	NA	NA	NA	4.8	4.15

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-50D					DR-SI
SAMPLE ID	DR-SB-50D-18-20	DR-SB-50D-29-31	DR-SB-50D-34-36	DR-SB-50D-42-44	DR-SB-50D-52-54	DR-SB-51D-14-16
SAMPLE DATE	20130909	20130909	20130909	20130909	20130909	20130910
MATRIX	SO	SO	SO	SO	SO	SO
PESTICIDES/PCBS (UG/KG)						
AROCLOR-1016	25 U	28 U	27 U	27 U	25 U	26 U
AROCLOR-1221	19 U	21 U	20 U	20 U	19 U	20 U
AROCLOR-1232	16 U	19 U	18 U	18 U	17 U	17 U
AROCLOR-1242	15 U	17 U	17 U	17 U	15 U	16 U
AROCLOR-1248	20 U	22 U	22 U	22 U	20 U	21 U
AROCLOR-1254	20 U	22 U	22 U	22 U	20 U	21 U
AROCLOR-1260	20 U	22 U	22 U	22 U	20 U	21 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U
TOTAL AROCLOR HALFND	67.5	75.5	74	74	68	71
PETROLEUM HYDROCARBONS (MG/KG)						
TPH (C06-C10)	0.053 U	0.06 U	0.06 J	0.056 U	0.052 U	0.14
TPH (C10-C32)	11 U	12 U	12 U	12 U	11 U	12 UJ
SEMIVOLATILES (UG/KG)						
1,1-BIPHENYL	4.1 U	4.5 U	4.4 U	4.4 U	4 U	4.3 UL
1,4-DIOXANE	26 U	28 U	28 U	28 U	25 U	27 U
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U	12 U	12 U	12 U	11 U	12 U
2,4,5-TRICHLOROPHENOL	29 U	32 U	31 U	31 U	29 U	31 U
2,4,6-TRICHLOROPHENOL	10 U	12 U	11 U	11 U	10 U	11 U
2,4-DICHLOROPHENOL	23 U	26 U	25 U	25 U	23 U	24 U
2,4-DIMETHYLPHENOL	23 U	26 U	25 U	25 U	23 U	24 U
2,4-DINITROPHENOL	25 U	27 U	26 U	26 U	24 U	26 U
2,4-DINITROTOLUENE	20 U	22 U	21 U	21 U	20 U	21 U
2,6-DINITROTOLUENE	25 U	27 U	26 U	26 U	24 U	26 UL
2-CHLORONAPHTHALENE	0.53 U	0.58 U	0.57 U	0.57 U	0.52 U	0.55 UL
2-CHLOROPHENOL	9.6 U	11 U	10 U	10 U	9.5 U	10 U
2-METHYLNAPHTHALENE	0.59 U	0.65 U	0.63 U	0.63 U	0.58 U	0.61 U
2-METHYLPHENOL	13 U	14 U	14 U	14 U	13 U	13 U
2-NITROANILINE	11 U	12 U	11 U	11 U	11 U	11 UL
2-NITROPHENOL	9.7 U	11 U	10 U	10 U	9.6 U	10 U
3&4-METHYLPHENOL	23 U	26 U	25 U	25 U	23 U	24 U
3,3'-DICHLOROBENZIDINE	21 U	23 U	23 U	23 U	21 U	22 U
3-NITROANILINE	19 U	21 U	20 U	20 U	19 U	20 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-50D					DR-SI
SAMPLE ID	DR-SB-50D-18-20	DR-SB-50D-29-31	DR-SB-50D-34-36	DR-SB-50D-42-44	DR-SB-50D-52-54	DR-SB-51D-14-16
SAMPLE DATE	20130909	20130909	20130909	20130909	20130909	20130910
MATRIX	SO	SO	SO	SO	SO	SO
4,6-DINITRO-2-METHYLPHENOL	11 U	12 U	12 U	12 U	11 U	11 U
4-BROMOPHENYL PHENYL ETHER	15 U	17 U	16 U	16 U	15 U	16 UL
4-CHLORO-3-METHYLPHENOL	25 U	27 U	26 U	26 U	24 U	26 U
4-CHLOROANILINE	20 U	22 U	21 U	21 U	20 U	21 U
4-CHLOROPHENYL PHENYL ETHER	15 U	17 U	16 U	16 U	15 U	16 UL
4-NITROANILINE	30 U	34 U	33 U	33 U	30 U	32 U
4-NITROPHENOL	20 U	22 U	21 U	21 U	20 U	21 U
ACENAPHTHENE	0.89 U	0.98 U	0.96 U	0.96 U	0.88 U	0.93 U
ACENAPHTHYLENE	0.41 U	0.45 U	0.44 U	0.44 U	0.4 U	0.43 U
ACETOPHENONE	11 U	12 U	12 U	12 U	11 U	11 UL
ANTHRACENE	0.91 U	1 U	0.98 U	0.98 U	0.9 U	0.95 U
ATRAZINE	11 U	12 U	11 U	11 U	11 U	11 UL
BAP EQUIVALENT-HALFND	1.38215	0.83 U	0.81 U	0.81 U	0.74 U	0.78 U
BAP EQUIVALENT-POS	0.56	0.83 U	0.81 U	0.81 U	0.74 U	0.78 U
BENZALDEHYDE	14 U	16 U	15 U	15 U	14 U	15 U
BENZO(A)ANTHRACENE	0.74 U	0.82 U	0.79 U	0.79 U	0.73 U	0.77 U
BENZO(A)PYRENE	0.75 U	0.83 U	0.81 U	0.81 U	0.74 U	0.78 U
BENZO(B)FLUORANTHENE	5.6 J	0.76 U	0.74 U	0.74 U	0.68 U	0.72 U
BENZO(G,H,I)PERYLENE	0.41 U	0.45 U	0.44 U	0.44 U	0.4 U	0.43 U
BENZO(K)FLUORANTHENE	0.8 U	0.88 U	0.86 U	0.86 U	0.79 U	0.83 U
BIS(2-CHLOROETHOXY)METHANE	26 U	28 U	28 U	28 U	25 U	27 U
BIS(2-CHLOROETHYL)ETHER	2.3 U	2.6 U	2.5 U	2.5 U	2.3 U	2.4 U
BIS(2-ETHYLHEXYL)PHTHALATE	31 J	44 J	24 U	50 J	36 J	40 J
BUTYL BENZYL PHTHALATE	12 U	13 U	13 U	13 U	12 U	12 UL
CAPROLACTAM	43 U	48 U	47 U	47 U	43 U	45 U
CARBAZOLE	32 U	35 U	34 U	34 U	31 U	33 U
CHRYSENE	1.3 U	1.4 U	1.4 U	1.4 U	1.3 U	1.3 U
DIBENZO(A,H)ANTHRACENE	0.77 U	0.85 U	0.83 U	0.83 U	0.76 U	0.81 U
DIBENZOFURAN	0.77 U	0.85 U	0.83 U	0.83 U	0.76 U	0.81 UL
DIETHYL PHTHALATE	19 U	21 U	20 U	20 U	19 U	20 UL
DIMETHYL PHTHALATE	20 U	22 U	21 U	21 U	20 U	21 UL
DI-N-BUTYL PHTHALATE	18 U	19 U	19 U	19 U	17 U	18 UL
DI-N-OCTYL PHTHALATE	9.2 U	10 U	9.9 U	9.9 U	9.1 U	9.7 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-50D					DR-SI
SAMPLE ID	DR-SB-50D-18-20	DR-SB-50D-29-31	DR-SB-50D-34-36	DR-SB-50D-42-44	DR-SB-50D-52-54	DR-SB-51D-14-16
SAMPLE DATE	20130909	20130909	20130909	20130909	20130909	20130910
MATRIX	SO	SO	SO	SO	SO	SO
FLUORANTHENE	6.2 J	0.71 U	0.69 U	0.69 U	0.64 U	0.67 U
FLUORENE	0.62 U	0.69 U	0.67 U	0.67 U	0.61 U	0.65 U
HEXACHLOROBENZENE	2.5 U	2.7 U	2.6 U	2.6 U	2.4 U	2.6 UL
HEXACHLOROBUTADIENE	6.6 U	7.3 U	7 U	7 U	6.5 U	6.9 UL
HEXACHLOROCYCLOPENTADIENE	9.5 U	10 U	10 U	10 U	9.4 U	9.9 U
HEXACHLOROETHANE	11 U	12 U	11 U	11 U	10 U	11 UL
INDENO(1,2,3-CD)PYRENE	0.41 U	0.45 U	0.44 U	0.44 U	0.4 U	0.43 U
ISOPHORONE	15 U	17 U	16 U	16 U	15 U	16 UL
NAPHTHALENE	0.96 U	1.1 U	1 U	1 U	0.95 U	1 U
NITROBENZENE	2.6 U	2.8 U	2.8 U	2.8 U	2.5 U	2.7 U
N-NITROSODIMETHYLAMINE	19 U	21 U	20 U	20 U	19 U	20 U
N-NITROSO-DI-N-PROPYLAMINE	7.4 U	8.2 U	7.9 U	7.9 U	7.3 U	7.7 U
N-NITROSODIPHENYLAMINE	25 U	27 U	26 U	26 U	24 U	26 U
PENTACHLOROPHENOL	11 U	12 U	11 U	11 U	11 U	11 U
PHENANTHRENE	0.85 U	0.95 U	0.92 U	0.92 U	0.84 U	0.89 U
PHENOL	8.5 U	9.5 U	9.2 U	9.2 U	8.4 U	8.9 U
PYRENE	4.3 J	0.57 U	0.55 U	0.55 U	0.51 U	0.54 U
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)						
1-PROPENE, 2-METHYL-	7.1 NJ	NA	NA	NA	NA	NA
2-PROPENYL-3-VINYLOXIRANE	NA	NA	NA	NA	NA	NA
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	NA	NA	NA	NA	NA	NA
BENZENE, 1,3,5-TRIMETHYL-	NA	NA	NA	NA	NA	NA
BENZENE, 1-ETHYL-2-METHYL-	NA	NA	NA	NA	NA	NA
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	NA	NA	NA	NA	NA	NA
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	NA	NA	NA	NA	NA	NA
CYCLOHEXANE, PROPYL-	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA	NA
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	NA	NA	NA	NA	NA	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
NAPHTHALENE, 1,6,7-TRIMETHYL-	NA	NA	NA	NA	NA	NA
NAPHTHALENE, DECAHYDRO-, TRANS-	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-50D					DR-SI
SAMPLE ID	DR-SB-50D-18-20	DR-SB-50D-29-31	DR-SB-50D-34-36	DR-SB-50D-42-44	DR-SB-50D-52-54	DR-SB-51D-14-16
SAMPLE DATE	20130909	20130909	20130909	20130909	20130909	20130910
MATRIX	SO	SO	SO	SO	SO	SO
VOLATILES (UG/KG)						
.ALPHA.-PINENE	NA	NA	NA	NA	NA	NA
1,1,1,2-TETRACHLOROETHANE	0.62 UL	0.64 UL	0.66 UL	0.71 UL	0.63 UL	9.1 U
1,1,1-TRICHLOROETHANE	0.56 UL	0.58 UL	0.6 UL	0.64 UL	0.57 UL	21 U
1,1,2,2-TETRACHLOROETHANE	0.34 UL	0.35 UL	0.36 UL	0.39 UL	0.35 UL	8.9 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1.3 UL	1.4 UL	1.4 UL	1.5 UL	1.3 UL	39 U
1,1-DICHLOROETHANE	0.36 UL	0.37 UL	0.38 UL	0.41 UL	0.37 UL	17 U
1,1-DICHLOROETHENE	0.52 UL	0.54 UL	0.55 UL	0.6 UL	0.53 UL	18 U
1,1-DICHLOROPROPENE	0.3 UL	0.31 UL	0.32 UL	0.34 UL	0.3 UL	10 U
1,2,3-TRICHLOROBENZENE	0.38 UL	0.4 UL	0.4 UL	0.44 UL	0.39 UL	10 U
1,2,3-TRICHLOROPROPANE	0.9 UL	0.94 UL	0.96 UL	1 UL	0.91 UL	21 U
1,2,3-TRIMETHYLBENZENE	0.17 UL	0.18 UL	0.18 UL	0.2 UL	0.17 UL	0.17 U
1,2,4-TRICHLOROBENZENE	0.27 UL	0.28 UL	0.29 UL	0.31 UL	0.27 UL	7.3 U
1,2,4-TRIMETHYLBENZENE	0.65 UL	0.68 UL	0.69 UL	0.75 UL	0.66 UL	5 U
1,2-DIBROMO-3-CHLOROPROPANE	1.3 UL	1.4 UL	1.4 UL	1.5 UL	1.3 UL	50 U
1,2-DIBROMOETHANE	0.5 UL	0.52 UL	0.53 UL	0.57 UL	0.51 UL	10 U
1,2-DICHLOROBENZENE	0.36 UL	0.37 UL	0.38 UL	0.41 UL	0.37 UL	8.6 U
1,2-DICHLOROETHANE	0.34 UL	0.35 UL	0.36 J	0.39 UL	0.35 UL	10 U
1,2-DICHLOROPROPANE	0.69 UL	0.72 UL	0.73 UL	0.79 UL	0.7 UL	8.2 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.35 UL	0.36 UL	0.37 UL	0.4 UL	0.36 UL	4.8 U
1,3-DICHLOROPROPANE	0.34 UL	0.35 UL	0.36 UL	0.39 UL	0.35 UL	22 U
1,4-DICHLOROBENZENE	0.66 UL	0.69 UL	0.7 UL	0.76 UL	0.67 UL	8 U
2,2-DICHLOROPROPANE	0.94 UL	0.98 UL	1 UL	1.1 UL	0.95 UL	23 U
2-BUTANONE	24 L	1.5 UL	1.5 UL	1.6 UL	1.4 UL	43 U
2-CHLOROETHYL VINYL ETHER	1.4 UL	1.5 UL	1.5 UL	1.6 UL	1.4 UL	43 U
2-CHLOROTOLUENE	0.4 UL	0.42 UL	0.43 UL	0.46 UL	0.41 UL	9 U
2-HEXANONE	0.63 UL	0.65 UL	0.67 UL	0.72 UL	0.64 UL	20 U
4-CHLOROTOLUENE	0.41 UL	0.43 UL	0.44 UL	0.47 UL	0.42 UL	9.9 U
4-ISOPROPYLTOLUENE	0.21 UL	0.22 UL	0.22 UL	0.24 UL	0.21 UL	4.8 U
4-METHYL-2-PENTANONE	0.54 UL	0.56 UL	0.57 UL	0.62 UL	0.55 UL	48 U
ACETONE	180 L	76 L	26 L	16 J	53 L	170 U
BENZENE	0.55 J	0.24 UL	0.24 UL	0.26 UL	0.23 UL	12 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-50D					DR-SI
SAMPLE ID	DR-SB-50D-18-20	DR-SB-50D-29-31	DR-SB-50D-34-36	DR-SB-50D-42-44	DR-SB-50D-52-54	DR-SB-51D-14-16
SAMPLE DATE	20130909	20130909	20130909	20130909	20130909	20130910
MATRIX	SO	SO	SO	SO	SO	SO
BROMOBENZENE	0.33 UL	0.34 UL	0.35 UL	0.38 UL	0.33 UL	13 U
BROMOCHLOROMETHANE	0.71 UL	0.74 UL	0.75 UL	0.82 UL	0.72 UL	13 U
BROMODICHLOROMETHANE	0.28 UL	0.29 UL	0.3 UL	0.32 UL	0.28 UL	9.9 U
BROMOFORM	0.33 UL	0.34 UL	0.35 UL	0.38 UL	0.33 UL	19 U
BROMOMETHANE	0.54 UL	0.56 UL	0.57 UL	0.62 UL	0.55 UL	29 U
CARBON DISULFIDE	0.67 J	0.46 UL	0.47 UL	0.51 UL	0.45 UL	12 U
CARBON TETRACHLORIDE	0.37 UL	0.38 UL	0.39 UL	0.43 UL	0.38 UL	6.4 U
CHLOROBENZENE	0.33 UL	0.34 UL	0.35 UL	0.38 UL	0.33 UL	6.4 U
CHLORODIBROMOMETHANE	0.55 UL	0.57 UL	0.58 UL	0.63 UL	0.56 UL	12 U
CHLOROETHANE	0.86 UL	0.89 UL	0.91 UL	0.99 UL	0.87 UL	61 U
CHLOROFORM	0.29 UL	0.3 UL	0.31 UL	0.79 J	0.29 UL	8.8 U
CHLOROMETHANE	0.41 UL	0.43 UL	0.44 UL	0.47 UL	0.42 UL	14 U
CIS-1,2-DICHLOROETHENE	1.3 J	7.3 L	6.6 L	0.68 J	0.94 J	390
CIS-1,3-DICHLOROPROPENE	0.34 UL	0.35 UL	0.36 UL	0.39 UL	0.35 UL	7.9 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.63 UL	0.65 UL	0.67 UL	0.72 UL	0.64 UL	14 U
DICHLORODIFLUOROMETHANE	0.5 UL	0.52 UL	0.53 UL	0.57 UL	0.51 UL	16 U
DIISOPROPYL ETHER	1.5 UL	1.6 UL	1.6 UL	1.7 UL	1.5 UL	50 U
ETHYL TERT-BUTYL ETHER	0.22 UL	0.23 UL	0.23 UL	0.25 UL	0.22 UL	0.22 U
ETHYL TERT-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	0.26 UL	0.27 UL	0.28 UL	0.3 UL	0.26 UL	5.4 U
HEXACHLOROBUTADIENE	1.2 UL	1.2 UL	1.3 UL	1.4 UL	1.2 UL	14 U
ISOPROPYLBENZENE	0.16 UL	0.17 UL	0.17 UL	0.18 UL	0.16 UL	6.5 U
M+P-XYLENES	1.2 UL	1.2 UL	1.3 UL	1.4 UL	1.2 UL	6.2 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.43 UL	0.45 UL	0.46 UL	0.49 UL	0.44 UL	7.1 U
METHYLENE CHLORIDE	0.67 UL	0.7 UL	0.71 UL	0.77 UL	0.68 UL	77 U
NAPHTHALENE	0.19 UL	0.2 UL	0.2 UL	0.22 UL	0.19 UL	6.7 U
N-BUTYLBENZENE	0.23 UL	0.24 UL	0.24 UL	0.26 UL	0.23 UL	8 U
N-PROPYLBENZENE	0.4 UL	0.42 UL	0.43 UL	0.46 UL	0.41 UL	14 U
O-XYLENE	0.35 UL	0.36 UL	0.37 UL	0.4 UL	0.36 UL	8.5 U
SEC-BUTYLBENZENE	0.18 UL	0.19 UL	0.19 UL	0.21 UL	0.18 UL	4.7 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	DR-SB-50D					DR-SI
SAMPLE ID	DR-SB-50D-18-20	DR-SB-50D-29-31	DR-SB-50D-34-36	DR-SB-50D-42-44	DR-SB-50D-52-54	DR-SB-51D-14-16
SAMPLE DATE	20130909	20130909	20130909	20130909	20130909	20130910
MATRIX	SO	SO	SO	SO	SO	SO
STYRENE	0.15 UL	0.16 UL	0.16 UL	0.17 UL	0.15 UL	5.6 U
TERT-AMYL METHYL ETHER	0.37 UL	0.38 UL	0.39 UL	0.43 UL	0.38 UL	0.37 U
TERT-AMYL METHYL ETHER	NA	NA	NA	NA	NA	NA
TERT-BUTYLBENZENE	0.29 UL	0.3 UL	0.31 UL	0.33 UL	0.29 UL	6.5 U
TERTIARY-BUTYL ALCOHOL	7.6 UR	7.9 UR	8.1 UR	8.7 UR	7.7 UR	240 UR
TETRACHLOROETHENE	0.52 UL	0.54 UL	1.1 J	0.6 UL	0.53 UL	19 B
TOLUENE	0.54 J	0.28 UL	0.29 UL	0.31 UL	0.27 UL	17 U
TOTAL XYLENES	0.35 UL	0.36 UL	0.37 UL	0.4 UL	0.36 UL	6.2 U
TRANS-1,2-DICHLOROETHENE	0.41 UL	0.43 UL	0.44 UL	0.47 UL	0.42 UL	9.2 U
TRANS-1,3-DICHLOROPROPENE	0.54 UL	0.56 UL	0.57 UL	0.62 UL	0.55 UL	20 U
TRICHLOROETHENE	0.69 J	30 L	190 L	0.83 J	1.8 J	960
TRICHLOROFLUOROMETHANE	0.34 UL	0.35 UL	0.56 J	0.39 UL	0.35 UL	16 U
UNKNOWN [RT=14.18]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=14.55]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=14.62]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=14.85]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=3.73]	NA	NA	NA	NA	NA	NA
UNKNOWN [RT=3.90]	NA	NA	NA	NA	NA	NA
VINYL ACETATE	0.25 UR	0.26 UR	0.27 UR	0.29 UR	0.25 UR	23 UR
VINYL CHLORIDE	0.39 UL	0.52 J	0.41 UL	0.45 UL	0.4 UL	18 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	B-51D
SAMPLE ID	DR-SB-51D-34-36
SAMPLE DATE	20130910
MATRIX	SO
METALS (MG/KG)	
ANTIMONY	NA
ARSENIC	NA
BARIUM	NA
BERYLLIUM	NA
CADMIUM	NA
CHROMIUM	NA
COBALT	NA
COPPER	NA
LEAD	NA
MERCURY	NA
MOLYBDENUM	NA
NICKEL	NA
SELENIUM	NA
SILVER	NA
THALLIUM	NA
VANADIUM	NA
ZINC	NA
MISCELLANEOUS PARAMETERS (MEQ/100)	
CATION EXCHANGE CAPACITY	NA
MISCELLANEOUS PARAMETERS (MG/KG)	
CARBON	NA
HEXAVALENT CHROMIUM	NA
NITRATE-N	NA
PHOSPHATE	NA
TOTAL INORGANIC CARBON	NA
TOTAL KJELDAHL NITROGEN	NA
TOTAL ORGANIC CARBON	NA
MISCELLANEOUS PARAMETERS (S.U.)	
PH	NA

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	B-51D
SAMPLE ID	DR-SB-51D-34-36
SAMPLE DATE	20130910
MATRIX	SO
PESTICIDES/PCBS (UG/KG)	
AROCLOR-1016	25 U
AROCLOR-1221	19 U
AROCLOR-1232	17 U
AROCLOR-1242	16 U
AROCLOR-1248	20 U
AROCLOR-1254	20 U
AROCLOR-1260	20 U
TOTAL AROCLOR	0 U
TOTAL AROCLOR HALFND	68.5
PETROLEUM HYDROCARBONS (MG/KG)	
TPH (C06-C10)	0.054 U
TPH (C10-C32)	11 UJ
SEMIVOLATILES (UG/KG)	
1,1-BIPHENYL	4.2 U
1,4-DIOXANE	26 U
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U
2,4,5-TRICHLOROPHENOL	30 U
2,4,6-TRICHLOROPHENOL	11 U
2,4-DICHLOROPHENOL	24 U
2,4-DIMETHYLPHENOL	24 U
2,4-DINITROPHENOL	25 U
2,4-DINITROTOLUENE	20 U
2,6-DINITROTOLUENE	25 U
2-CHLORONAPHTHALENE	0.54 U
2-CHLOROPHENOL	9.8 U
2-METHYLNAPHTHALENE	0.6 U
2-METHYLPHENOL	13 U
2-NITROANILINE	11 U
2-NITROPHENOL	9.9 U
3&4-METHYLPHENOL	24 U
3,3'-DICHLOROBENZIDINE	22 U
3-NITROANILINE	19 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	B-51D
SAMPLE ID	DR-SB-51D-34-36
SAMPLE DATE	20130910
MATRIX	SO
4,6-DINITRO-2-METHYLPHENOL	11 U
4-BROMOPHENYL PHENYL ETHER	16 U
4-CHLORO-3-METHYLPHENOL	25 U
4-CHLOROANILINE	20 U
4-CHLOROPHENYL PHENYL ETHER	16 U
4-NITROANILINE	31 U
4-NITROPHENOL	20 U
ACENAPHTHENE	0.91 U
ACENAPHTHYLENE	0.42 U
ACETOPHENONE	11 U
ANTHRACENE	0.93 U
ATRAZINE	11 U
BAP EQUIVALENT-HALFND	0.77 U
BAP EQUIVALENT-POS	0.77 U
BENZALDEHYDE	14 UL
BENZO(A)ANTHRACENE	0.75 U
BENZO(A)PYRENE	0.77 U
BENZO(B)FLUORANTHENE	0.71 U
BENZO(G,H,I)PERYLENE	0.42 U
BENZO(K)FLUORANTHENE	0.81 U
BIS(2-CHLOROETHOXY)METHANE	26 U
BIS(2-CHLOROETHYL)ETHER	2.4 U
BIS(2-ETHYLHEXYL)PHTHALATE	23 U
BUTYL BENZYL PHTHALATE	12 U
CAPROLACTAM	44 U
CARBAZOLE	32 U
CHRYSENE	1.3 U
DIBENZO(A,H)ANTHRACENE	0.79 U
DIBENZOFURAN	0.79 U
DIETHYL PHTHALATE	19 U
DIMETHYL PHTHALATE	20 U
DI-N-BUTYL PHTHALATE	18 U
DI-N-OCTYL PHTHALATE	9.5 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	B-51D
SAMPLE ID	DR-SB-51D-34-36
SAMPLE DATE	20130910
MATRIX	SO
FLUORANTHENE	0.66 U
FLUORENE	0.63 U
HEXACHLOROBENZENE	2.5 U
HEXACHLOROBUTADIENE	6.7 U
HEXACHLOROCYCLOPENTADIENE	9.7 U
HEXACHLOROETHANE	11 U
INDENO(1,2,3-CD)PYRENE	0.42 U
ISOPHORONE	16 U
NAPHTHALENE	0.98 U
NITROBENZENE	2.6 U
N-NITROSODIMETHYLAMINE	19 U
N-NITROSO-DI-N-PROPYLAMINE	7.5 U
N-NITROSODIPHENYLAMINE	25 U
PENTACHLOROPHENOL	11 U
PHENANTHRENE	0.87 U
PHENOL	8.7 U
PYRENE	0.53 U
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/KG)	
1-PROPENE, 2-METHYL-	NA
2-PROPENYL-3-VINYLOXIRANE	NA
BENZENE, 1-(1,1-DIMETHYLETHYL)-4-ETHOXY-	NA
BENZENE, 1,3,5-TRIMETHYL-	NA
BENZENE, 1-ETHYL-2-METHYL-	NA
BICYCLO[2.2.1]HEPTAN-2-ONE, 1,3,3-TRIMET	NA
CYCLOHEXANE, 1,1,3,5-TETRAMETHYL-, CIS-	NA
CYCLOHEXANE, PROPYL-	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL	NA
METHYLCYCLOHEXANE	NA
NAPHTHALENE, 1,6,7-TRIMETHYL-	NA
NAPHTHALENE, DECAHYDRO-, TRANS-	NA
SILANOL, TRIMETHYL-	NA

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	B-51D
SAMPLE ID	DR-SB-51D-34-36
SAMPLE DATE	20130910
MATRIX	SO
VOLATILES (UG/KG)	
.ALPHA.-PINENE	NA
1,1,1,2-TETRACHLOROETHANE	0.67 U
1,1,1-TRICHLOROETHANE	0.6 U
1,1,2,2-TETRACHLOROETHANE	0.36 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1.4 U
1,1-DICHLOROETHANE	0.39 U
1,1-DICHLOROETHENE	0.56 U
1,1-DICHLOROPROPENE	0.32 U
1,2,3-TRICHLOROBENZENE	0.41 U
1,2,3-TRICHLOROPROPANE	0.97 U
1,2,3-TRIMETHYLBENZENE	0.18 U
1,2,4-TRICHLOROBENZENE	0.29 U
1,2,4-TRIMETHYLBENZENE	0.7 U
1,2-DIBROMO-3-CHLOROPROPANE	1.4 U
1,2-DIBROMOETHANE	0.54 U
1,2-DICHLOROBENZENE	0.39 U
1,2-DICHLOROETHANE	0.36 U
1,2-DICHLOROPROPANE	0.74 U
1,3,5-TRIMETHYLBENZENE	NA
1,3-DICHLOROBENZENE	0.38 U
1,3-DICHLOROPROPANE	0.36 U
1,4-DICHLOROBENZENE	0.71 U
2,2-DICHLOROPROPANE	1 U
2-BUTANONE	1.9 J
2-CHLOROETHYL VINYL ETHER	1.5 U
2-CHLOROTOLUENE	0.43 U
2-HEXANONE	0.68 U
4-CHLOROTOLUENE	0.44 U
4-ISOPROPYLTOLUENE	0.23 U
4-METHYL-2-PENTANONE	0.58 U
ACETONE	40 B
BENZENE	0.25 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	B-51D
SAMPLE ID	DR-SB-51D-34-36
SAMPLE DATE	20130910
MATRIX	SO
BROMOBENZENE	0.35 U
BROMOCHLOROMETHANE	0.76 U
BROMODICHLOROMETHANE	0.3 U
BROMOFORM	0.35 U
BROMOMETHANE	0.58 U
CARBON DISULFIDE	0.47 U
CARBON TETRACHLORIDE	0.4 U
CHLOROBENZENE	0.35 U
CHLORODIBROMOMETHANE	0.59 U
CHLOROETHANE	0.92 U
CHLOROFORM	2.9 J
CHLOROMETHANE	0.44 U
CIS-1,2-DICHLOROETHENE	0.84 J
CIS-1,3-DICHLOROPROPENE	0.36 U
CYCLOHEXANE	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	NA
DIBROMOMETHANE	0.68 U
DICHLORODIFLUOROMETHANE	0.54 U
DIISOPROPYL ETHER	1.6 U
ETHYL TERT-BUTYL ETHER	0.24 U
ETHYL TERT-BUTYL ETHER	NA
ETHYLBENZENE	0.28 U
HEXACHLOROBUTADIENE	1.3 U
ISOPROPYLBENZENE	0.17 U
M+P-XYLENES	1.3 U
METHYL ACETATE	NA
METHYL TERT-BUTYL ETHER	0.46 U
METHYLENE CHLORIDE	0.72 U
NAPHTHALENE	0.2 U
N-BUTYLBENZENE	0.25 U
N-PROPYLBENZENE	0.43 U
O-XYLENE	0.38 U
SEC-BUTYLBENZENE	0.19 U

Table D-5-1

Chemical Results for Soil Boring Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	B-51D
SAMPLE ID	DR-SB-51D-34-36
SAMPLE DATE	20130910
MATRIX	SO
STYRENE	0.16 U
TERT-AMYL METHYL ETHER	0.4 U
TERT-AMYL METHYL ETHER	NA
TERT-BUTYLBENZENE	0.31 U
TERTIARY-BUTYL ALCOHOL	8.2 UR
TETRACHLOROETHENE	0.56 U
TOLUENE	0.52 B
TOTAL XYLENES	0.38 U
TRANS-1,2-DICHLOROETHENE	0.44 U
TRANS-1,3-DICHLOROPROPENE	0.58 U
TRICHLOROETHENE	1.2 J
TRICHLOROFLUOROMETHANE	0.36 U
UNKNOWN [RT=14.18]	NA
UNKNOWN [RT=14.55]	NA
UNKNOWN [RT=14.62]	NA
UNKNOWN [RT=3.90]	NA
UNKNOWN [RT=14.85]	NA
UNKNOWN [RT=3.73]	NA
UNKNOWN [RT=3.90]	NA
VINYL ACETATE	0.27 UR
VINYL CHLORIDE	0.42 U

B - Result considered to be from laboratory blank contamination based on USEPA 5 times
J - Positive result is considered estimated as a result of technical
L - result is biased low. Actual result n
MG/KG - milligrams per kilogram (i.e
MEQ/100 - I
MSA - Mart
NA - not ana
SB - soil bor
SO - soil
S.U. - standa
TPH - total petroleum hy
U - Not detected at the detection limit shown left o
UG/KG - micrograms per kilogram (i.e
UJ -The analyte was not detected. However, the quantitation or detection limit may be inaccurate or imprecise.

UR - The result is considered qualitatively or quantitatively unreliable.

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-A-76	DR-A-76	DR-A-77	DR-A-77	DR-A-78	DR-A-78	DR-A-79
SAMPLE ID	DR-TP-A76-10	DR-TP-A76-11	DR-TP-A77-14	DR-TP-A77-C	DR-TP-A78-05	DR-TP-A78-C	DR-TP-A79-04
SAMPLE DATE	8/12/2013	8/12/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013
METALS (MG/KG)							
ANTIMONY	1.3 B	2 B	NA	4.2	NA	0.66 B	NA
ARSENIC	5.8	7.2	NA	4.6	NA	1.3 J	NA
BARIUM	42 K	45 K	NA	92	NA	8.8 J	NA
BERYLLIUM	0.77	1.3	NA	0.49 J	NA	0.11 J	NA
CADMIUM	20 K	3.6 K	NA	4.3	NA	0.035 U	NA
CHROMIUM	270 J	100 J	NA	85	NA	11	NA
COBALT	7.5	6.8	NA	6.3	NA	0.98	NA
COPPER	46 L	35 L	NA	190	NA	3.6	NA
LEAD	45 J	86 J	NA	320	NA	45	NA
MERCURY	0.079 J	0.056 J	NA	0.11 J	NA	0.016 U	NA
MOLYBDENUM	3.1 J	0.82 J	NA	1.6 J	NA	0.26 U	NA
NICKEL	18	20	NA	16	NA	2 J	NA
SELENIUM	0.51 U	0.53 U	NA	0.48 U	NA	0.44 U	NA
SILVER	0.62 J	1.5 K	NA	2.9	NA	0.098 U	NA
THALLIUM	0.63 U	0.64 U	NA	0.58 U	NA	0.54 U	NA
VANADIUM	38	82	NA	26	NA	13	NA
ZINC	280	180	NA	400	NA	16	NA
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	370 J	1100 J	NA	4.8 U	NA	4 U	NA
1,4-DIOXANE	260 U	1400 U	NA	93 J	NA	25 U	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	110 U	610 U	NA	13 U	NA	11 U	NA
2,4,5-TRICHLOROPHENOL	300 U	1600 U	NA	34 U	NA	29 U	NA
2,4,6-TRICHLOROPHENOL	110 U	570 U	NA	12 U	NA	10 U	NA
2,4-DICHLOROPHENOL	240 U	1300 U	NA	28 U	NA	23 U	NA
2,4-DIMETHYLPHENOL	240 U	1300 U	NA	28 U	NA	23 U	NA
2,4-DINITROPHENOL	250 U	1300 U	NA	29 U	NA	24 U	NA
2,4-DINITROTOLUENE	200 U	1100 U	NA	23 U	NA	20 U	NA
2,6-DINITROTOLUENE	250 U	1300 U	NA	29 U	NA	24 U	NA
2-CHLORONAPHTHALENE	5.3 U	29 U	NA	0.62 U	NA	0.52 U	NA
2-CHLOROPHENOL	97 U	520 U	NA	11 U	NA	9.5 U	NA
2-METHYLNAPHTHALENE	1300	1500	NA	78	NA	0.58 U	NA
2-METHYLPHENOL	130 U	700 U	NA	15 U	NA	13 U	NA
2-NITROANILINE	110 U	580 U	NA	13 U	NA	11 U	NA
2-NITROPHENOL	98 U	530 U	NA	11 U	NA	9.6 U	NA
3&4-METHYLPHENOL	240 U	1300 U	NA	34 J	NA	23 U	NA
3,3'-DICHLOROBENZIDINE	210 U	1100 U	NA	25 U	NA	21 U	NA
3-NITROANILINE	190 U	1000 U	NA	22 U	NA	18 U	NA
4,6-DINITRO-2-METHYLPHENOL	110 U	590 U	NA	13 U	NA	11 U	NA
4-BROMOPHENYL PHENYL ETHER	150 U	830 U	NA	18 U	NA	15 U	NA
4-CHLORO-3-METHYLPHENOL	250 U	1300 U	NA	29 U	NA	24 U	NA
4-CHLOROANILINE	200 U	1100 U	NA	23 U	NA	20 U	NA
4-CHLOROPHENYL PHENYL ETHER	150 U	830 U	NA	18 U	NA	15 U	NA
4-NITROANILINE	310 U	1700 U	NA	36 U	NA	30 U	NA

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-A-76	DR-A-76	DR-A-77	DR-A-77	DR-A-78	DR-A-78	DR-A-79
SAMPLE ID	DR-TP-A76-10	DR-TP-A76-11	DR-TP-A77-14	DR-TP-A77-C	DR-TP-A78-05	DR-TP-A78-C	DR-TP-A79-04
SAMPLE DATE	8/12/2013	8/12/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013
4-NITROPHENOL	200 U	1100 U	NA	23 U	NA	20 U	NA
ACENAPHTHENE	920	6700	NA	240	NA	47	NA
ACENAPHTHYLENE	630	3400	NA	0.48 U	NA	0.40 U	NA
ACETOPHENONE	110 U	590 U	NA	40 J	NA	11 U	NA
ANTHRACENE	1400	15000	NA	200	NA	0.90 U	NA
ATRAZINE	110 U	580 U	NA	13 U	NA	11 U	NA
BAP EQUIVALENT-HALFND	3585.2	34124	NA	996.47	NA	97.23	NA
BAP EQUIVALENT-POS	3585.2	34124	NA	996.47	NA	96.85	NA
BENZALDEHYDE	140 UL	770 UL	NA	17 U	NA	14 U	NA
BENZO(A)ANTHRACENE	3100	27000	NA	810	NA	110	NA
BENZO(A)PYRENE	2400	24000	NA	640	NA	73	NA
BENZO(B)FLUORANTHENE	3500	28000	NA	1100	NA	93	NA
BENZO(G,H,I)PERYLENE	1400	12000	NA	450	NA	41	NA
BENZO(K)FLUORANTHENE	1200	10000	NA	360	NA	42	NA
BIS(2-CHLOROETHOXY)METHANE	260 U	1400 U	NA	30 U	NA	25 U	NA
BIS(2-CHLOROETHYL)ETHER	24 U	130 U	NA	2.8 U	NA	2.3 U	NA
BIS(2-ETHYLHEXYL)PHTHALATE	710 J	1200 U	NA	140 B	NA	22 U	NA
BUTYL BENZYL PHTHALATE	120 U	640 U	NA	14 U	NA	12 U	NA
CAPROLACTAM	440 U	2400 U	NA	51 U	NA	43 U	NA
CARBAZOLE	1500	5500	NA	110	NA	31 U	NA
CHRYSENE	3200	24000	NA	870	NA	130	NA
DIBENZO(A,H)ANTHRACENE	380	3300	NA	120	NA	0.76 U	NA
DIBENZOFURAN	1200	12000	NA	170	NA	0.76 U	NA
DIETHYL PHTHALATE	190 U	1000 U	NA	22 U	NA	18 U	NA
DIMETHYL PHTHALATE	200 U	1100 U	NA	23 U	NA	20 U	NA
DI-N-BUTYL PHTHALATE	180 U	960 U	NA	43 B	NA	26 B	NA
DI-N-OCTYL PHTHALATE	93 U	500 U	NA	11 U	NA	9.1 U	NA
FLUORANTHENE	8000	59000	NA	1700	NA	320	NA
FLUORENE	1600	8200	NA	88	NA	75	NA
HEXACHLOROBENZENE	25 U	130 U	NA	2.9 U	NA	2.4 U	NA
HEXACHLOROBUTADIENE	66 U	360 U	NA	7.7 U	NA	6.5 U	NA
HEXACHLOROCYCLOPENTADIENE	96 U	520 U	NA	11 U	NA	9.4 U	NA
HEXACHLOROETHANE	110 U	570 U	NA	12 U	NA	10 U	NA
INDENO(1,2,3-CD)PYRENE	1300	12000	NA	410	NA	30	NA
ISOPHORONE	150 U	830 U	NA	18 U	NA	15 U	NA
NAPHTHALENE	6300	7400	NA	100	NA	0.95 U	NA
NITROBENZENE	26 U	140 U	NA	3 U	NA	2.5 U	NA
N-NITROSODIMETHYLAMINE	190 U	1000 U	NA	22 U	NA	18 U	NA
N-NITROSO-DI-N-PROPYLAMINE	75 U	400 U	NA	8.7 U	NA	7.3 U	NA
N-NITROSODIPHENYLAMINE	250 U	1300 U	NA	29 U	NA	24 U	NA
PENTACHLOROPHENOL	110 U	580 U	NA	13 U	NA	11 U	NA
PHENANTHRENE	6000	42000	NA	670	NA	0.84 U	NA
PHENOL	86 U	470 U	NA	10 U	NA	8.4 U	NA
PYRENE	6300	48000	NA	1500	NA	290	NA

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-A-76	DR-A-76	DR-A-77	DR-A-77	DR-A-78	DR-A-78	DR-A-79
SAMPLE ID	DR-TP-A76-10	DR-TP-A76-11	DR-TP-A77-14	DR-TP-A77-C	DR-TP-A78-05	DR-TP-A78-C	DR-TP-A79-04
SAMPLE DATE	8/12/2013	8/12/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013
VOLATILES (UG/KG)							
1,1,1,2-TETRACHLOROETHANE	9.7 U	9.6 U	8 U	NA	8.4 U	NA	17 U
1,1,1-TRICHLOROETHANE	22 U	22 U	18 U	NA	19 U	NA	39 U
1,1,2,2-TETRACHLOROETHANE	9.5 U	9.4 U	7.8 U	NA	8.2 U	NA	16 U
1,1,2-TRICHLOROTRIFLUOROETHANE	42 U	41 U	34 U	NA	36 U	NA	72 U
1,1-DICHLOROETHANE	18 U	18 U	15 U	NA	16 U	NA	31 U
1,1-DICHLOROETHENE	19 U	19 U	16 U	NA	17 U	NA	33 U
1,1-DICHLOROPROPENE	11 U	11 U	8.8 U	NA	9.2 U	NA	18 U
1,2,3-TRICHLOROBENZENE	11 U	11 U	8.8 U	NA	9.2 U	NA	18 U
1,2,3-TRICHLOROPROPANE	22 U	22 U	18 U	NA	19 U	NA	39 U
1,2,3-TRIMETHYLBENZENE	160 J	19 J	140 J	NA	0.16 U	NA	0.31 U
1,2,4-TRICHLOROBENZENE	27 B	7.7 U	6.4 U	NA	6.7 U	NA	13 U
1,2,4-TRIMETHYLBENZENE	31 J	54 J	26 J	NA	4.6 U	NA	9.2 U
1,2-DIBROMO-3-CHLOROPROPANE	53 U	53 U	44 U	NA	46 U	NA	92 U
1,2-DIBROMOETHANE	11 U	11 U	8.8 U	NA	9.2 U	NA	18 U
1,2-DICHLOROBENZENE	780	50 J	7.6 U	NA	7.9 U	NA	16 U
1,2-DICHLOROETHANE	64 J	170 J	52 J	NA	9.2 U	NA	18 U
1,2-DICHLOROPROPANE	8.7 U	8.7 U	7.2 U	NA	7.5 U	NA	15 U
1,3-DICHLOROBENZENE	22 J	5.1 U	4.2 U	NA	4.4 U	NA	8.8 U
1,3-DICHLOROPROPANE	23 U	23 U	19 U	NA	20 U	NA	40 U
1,4-DICHLOROBENZENE	79 J	8.5 U	7 U	NA	7.3 U	NA	15 U
2,2-DICHLOROPROPANE	25 U	24 U	20 U	NA	21 U	NA	42 U
2-BUTANONE	46 U	45 U	38 U	NA	39 U	NA	79 U
2-CHLOROETHYL VINYL ETHER	46 U	45 U	38 U	NA	39 U	NA	79 U
2-CHLOROTOLUENE	9.6 U	9.5 U	7.9 U	NA	8.3 U	NA	17 U
2-HEXANONE	21 U	21 U	18 U	NA	18 U	NA	37 U
4-CHLOROTOLUENE	11 U	10 U	8.7 U	NA	9.1 U	NA	18 U
4-ISOPROPYLTOLUENE	8 J	7.5 J	25 J	NA	4.4 U	NA	8.8 U
4-METHYL-2-PENTANONE	51 U	51 U	42 U	NA	44 U	NA	88 U
ACETONE	180 U	180 U	150 U	NA	160 U	NA	310 U
BENZENE	13 J	37 J	11 U	NA	11 U	NA	22 U
BROMOBENZENE	14 U	14 U	11 U	NA	12 U	NA	24 U
BROMOCHLOROMETHANE	14 U	14 U	11 U	NA	12 U	NA	24 U
BROMODICHLOROMETHANE	11 U	10 U	8.7 U	NA	9.1 U	NA	18 U
BROMOFORM	20 U	20 U	17 U	NA	17 U	NA	35 U
BROMOMETHANE	31 UJ	31 UJ	25 U	NA	27 U	NA	53 U
CARBON DISULFIDE	54 B	95 B	35 B	NA	19 B	NA	22 U
CARBON TETRACHLORIDE	6.8 U	6.8 U	5.6 U	NA	5.9 U	NA	12 U
CHLOROBENZENE	22 J	6.8 U	5.6 U	NA	5.9 U	NA	12 J
CHLORODIBROMOMETHANE	13 U	13 U	11 U	NA	11 U	NA	22 U
CHLOROETHANE	65 U	64 U	54 U	NA	56 U	NA	110 U
CHLOROFORM	9.4 U	9.3 U	7.7 U	NA	8.1 U	NA	16 U
CHLOROMETHANE	15 U	15 U	12 U	NA	13 U	NA	26 U
CIS-1,2-DICHLOROETHENE	7.4 U	220 J	86 J	NA	6.3 U	NA	330 J

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-A-76	DR-A-76	DR-A-77	DR-A-77	DR-A-78	DR-A-78	DR-A-79
SAMPLE ID	DR-TP-A76-10	DR-TP-A76-11	DR-TP-A77-14	DR-TP-A77-C	DR-TP-A78-05	DR-TP-A78-C	DR-TP-A79-04
SAMPLE DATE	8/12/2013	8/12/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013
CIS-1,3-DICHLOROPROPENE	8.4 U	8.3 U	6.9 U	NA	7.3 U	NA	14 U
DIBROMOMETHANE	15 U	15 U	12 U	NA	13 U	NA	26 U
DICHLORODIFLUOROMETHANE	17 U	17 U	14 U	NA	15 U	NA	29 U
DIISOPROPYL ETHER	53 U	53 U	44 U	NA	46 U	NA	92 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.23 U	0.19 U	NA	0.20 U	NA	0.40 U
ETHYLBENZENE	130 J	73 J	110 J	NA	5 U	NA	9.9 U
HEXACHLOROBUTADIENE	15 U	15 U	12 U	NA	13 U	NA	26 U
ISOPROPYLBENZENE	26 J	16 J	59 J	NA	6 U	NA	12 U
M+P-XYLENES	49 J	55 J	92 J	NA	5.7 U	NA	11 U
METHYL TERT-BUTYL ETHER	7.6 U	7.5 U	6.2 U	NA	6.5 U	NA	13 U
METHYLENE CHLORIDE	82 U	81 U	68 U	NA	71 U	NA	200 B
NAPHTHALENE	1700	820	38 J	NA	36 J	NA	35 J
N-BUTYLBENZENE	38 J	27 J	110 J	NA	7.3 U	NA	15 U
N-PROPYLBENZENE	39 J	39 J	12 U	NA	13 U	NA	26 U
O-XYLENE	39 J	23 J	59 J	NA	7.8 U	NA	16 U
SEC-BUTYLBENZENE	28 J	14 J	110 J	NA	4.3 U	NA	8.6 U
STYRENE	6 U	5.9 U	4.9 U	NA	5.1 U	NA	10 U
TERT-AMYL METHYL ETHER	0.39 U	0.39 U	0.33 U	NA	0.34 U	NA	0.68 U
TERT-BUTYLBENZENE	6.9 U	10 J	5.7 U	NA	160 J	NA	12 U
TERTIARY-BUTYL ALCOHOL	260 UR	250 UR	210 UR	NA	220 UR	NA	440 UR
TETRACHLOROETHENE	13 U	13 U	11 U	NA	11 U	NA	310 J
TOLUENE	90 B	150 B	90 B	NA	39 B	NA	78 B
TOTAL XYLENES	88 J	78 J	150 J	NA	5.7 U	NA	11 U
TRANS-1,2-DICHLOROETHENE	9.8 U	49 J	8.1 U	NA	8.4 U	NA	85 J
TRANS-1,3-DICHLOROPROPENE	21 U	21 U	18 U	NA	18 U	NA	37 U
TRICHLOROETHENE	18 J	35 J	130 J	NA	8.9 U	NA	13000
TRICHLOROFLUOROMETHANE	17 UJ	17 UJ	14 U	NA	15 U	NA	29 U
VINYL ACETATE	25 UR	24 UR	20 UR	NA	21 UR	NA	42 UR
VINYL CHLORIDE	19 U	340	140 J	NA	17 U	NA	33 U
TICOV (UG/KG)							
UNDECANE	NA	NA	970 NJ	NA	NA	NA	NA

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-A-76	DR-A-76	DR-A-77	DR-A-77	DR-A-78	DR-A-78	DR-A-79
SAMPLE ID	DR-TP-A76-10	DR-TP-A76-11	DR-TP-A77-14	DR-TP-A77-C	DR-TP-A78-05	DR-TP-A78-C	DR-TP-A79-04
SAMPLE DATE	8/12/2013	8/12/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013
PESTICIDES/PCBS (UG/KG)							
AROCLOR-1016	24 U	140 UJ	NA	29 U	NA	24 U	NA
AROCLOR-1221	19 U	100 UJ	NA	22 U	NA	18 U	NA
AROCLOR-1232	16 U	90 UJ	NA	19 U	NA	16 U	NA
AROCLOR-1242	15 U	84 UJ	NA	18 U	NA	15 U	NA
AROCLOR-1248	20 U	110 UJ	NA	23 U	NA	20 U	NA
AROCLOR-1254	20 U	110 UJ	NA	190	NA	20 U	NA
AROCLOR-1260	39 J	110 UJ	NA	23 U	NA	20 U	NA
TOTAL AROCLOR	39	0 U	NA	190	NA	0 U	NA
TOTAL AROCLOR HALFND	96	372	NA	257	NA	66.5	NA
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C06-C10)	5.6	0.34	NA	7.9	NA	6.6	NA
TPH (C10-C32)	1200	630	NA	1100	NA	550	NA

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-A-79	DR-A-80	DR-A-80	DR-A-81	DR-A-81	DR-A-82	DR-A-82
SAMPLE ID	DR-TP-A79-C	DR-TP-A80-03	DR-TP-A80-11	DR-TP-A81-07	DR-TP-A81-C	DR-TP-A82-03	DR-TP-A82-03A
SAMPLE DATE	8/13/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/12/2013	8/12/2013
METALS (MG/KG)							
ANTIMONY	35	2.6 J	0.42 UL	NA	1.6 B	0.44 B	0.67 UL
ARSENIC	5.5	6	6.8	NA	4.7	5.1	7.5
BARIUM	260	27 K	22 K	NA	62 K	73 K	31 J
BERYLLIUM	1.2	0.66	1.1	NA	0.55	1.2	1.3
CADMIUM	26	1.3 J	6.9 J	NA	0.73 J	1.6 K	2 K
CHROMIUM	430	360 J	62	NA	38	42	49
COBALT	16	8.2	16	NA	4.2	9.8	18
COPPER	1200	160 J	22 J	NA	110 J	37 L	18 L
LEAD	1500	240 J	26 J	NA	64 J	55 J	20 J
MERCURY	0.68	0.67	0.052 J	NA	0.95	0.17	0.066 J
MOLYBDENUM	9.1	16	0.87 J	NA	0.60 J	0.68 J	0.83 J
NICKEL	81	240	26	NA	9.1	39	28
SELENIUM	0.65 J	0.60 J	0.49 U	NA	0.44 U	0.56 J	0.78 U
SILVER	32	0.47 J	0.11 U	NA	0.93 J	0.39 J	0.17 U
THALLIUM	0.57 U	0.55 U	0.59 U	NA	0.53 U	0.57 U	0.95 U
VANADIUM	34	22	32	NA	29	36	35
ZINC	2000	240 J	150 J	NA	190 J	120	110
SEMIVOLATILES (UG/KG)							
1,1-BIPHENYL	44 U	77 U	6.4 J	NA	21 J	26 U	6.7 U
1,4-DIOXANE	280 U	490 U	31 U	NA	130 U	160 U	42 U
2,2'-OXYBIS(1-CHLOROPROPANE)	120 U	210 U	14 U	NA	56 U	70 U	18 U
2,4,5-TRICHLOROPHENOL	310 U	550 U	36 U	NA	150 U	180 U	48 U
2,4,6-TRICHLOROPHENOL	110 U	200 U	13 U	NA	53 U	65 U	17 U
2,4-DICHLOROPHENOL	250 U	440 U	29 U	NA	120 U	150 U	38 U
2,4-DIMETHYLPHENOL	250 U	440 U	29 U	NA	120 U	150 U	38 U
2,4-DINITROPHENOL	260 U	460 U	30 U	NA	120 U	150 U	40 U
2,4-DINITROTOLUENE	210 U	370 U	24 U	NA	100 U	130 U	33 U
2,6-DINITROTOLUENE	260 U	460 U	30 U	NA	120 U	150 U	40 U
2-CHLORONAPHTHALENE	5.6 U	9.9 U	0.64 U	NA	2.7 U	3.3 U	0.86 U
2-CHLOROPHENOL	100 U	180 U	12 U	NA	49 U	60 U	16 U
2-METHYLNAPHTHALENE	62 J	11 U	18	NA	46	56	0.96 U
2-METHYLPHENOL	140 U	240 U	16 U	NA	65 U	81 U	21 U
2-NITROANILINE	110 U	200 U	13 U	NA	54 U	67 U	17 U
2-NITROPHENOL	100 U	180 U	12 U	NA	49 U	61 U	16 U
3&4-METHYLPHENOL	250 U	440 U	29 U	NA	120 U	150 U	38 U
3,3'-DICHLOROBENZIDINE	230 U	400 U	26 U	NA	110 U	130 U	35 U
3-NITROANILINE	200 U	350 U	23 U	NA	95 U	120 U	31 U
4,6-DINITRO-2-METHYLPHENOL	120 U	200 U	13 U	NA	55 U	68 U	18 U
4-BROMOPHENYL PHENYL ETHER	160 U	290 U	19 U	NA	77 U	96 U	25 U
4-CHLORO-3-METHYLPHENOL	260 U	460 U	30 U	NA	120 U	150 U	40 U
4-CHLOROANILINE	210 U	370 U	24 U	NA	100 U	130 U	33 U
4-CHLOROPHENYL PHENYL ETHER	160 U	290 U	19 U	NA	77 U	96 U	25 U
4-NITROANILINE	330 U	570 U	37 U	NA	150 U	190 U	50 U

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-A-79	DR-A-80	DR-A-80	DR-A-81	DR-A-81	DR-A-82	DR-A-82
SAMPLE ID	DR-TP-A79-C	DR-TP-A80-03	DR-TP-A80-11	DR-TP-A81-07	DR-TP-A81-C	DR-TP-A82-03	DR-TP-A82-03A
SAMPLE DATE	8/13/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/12/2013	8/12/2013
4-NITROPHENOL	210 U	370 U	24 U	NA	100 U	130 U	33 U
ACENAPHTHENE	290	17 U	28	NA	310	150	1.5 U
ACENAPHTHYLENE	89	7.7 U	0.50 U	NA	2.1 U	53	0.67 U
ACETOPHENONE	120 U	200 U	13 U	NA	55 U	68 U	18 U
ANTHRACENE	700	17 U	11	NA	1100	640	1.5 U
ATRAZINE	110 U	200 U	13 U	NA	54 U	67 U	17 U
BAP EQUIVALENT-HALFND	13442.5	285.245	17.61785	NA	4303.3	4760.4	19.871
BAP EQUIVALENT-POS	13442.5	277.36	17.118	NA	4303.3	4760.4	19.221
BENZALDEHYDE	150 U	260 U	17 U	NA	71 U	88 UL	23 UL
BENZO(A)ANTHRACENE	6800	210	14	NA	3500	3300	15
BENZO(A)PYRENE	9600	220	14	NA	3100	3100	15
BENZO(B)FLUORANTHENE	14000	350	17	NA	4400	4800	18
BENZO(G,H,I)PERYLENE	4200	120 J	0.50 U	NA	990	2400	10 J
BENZO(K)FLUORANTHENE	3500	110 J	0.97 U	NA	1200	1700	6.7 J
BIS(2-CHLOROETHOXY)METHANE	280 U	490 U	31 U	NA	130 U	160 U	42 U
BIS(2-CHLOROETHYL)ETHER	25 U	44 U	2.9 U	NA	12 U	15 U	3.8 U
BIS(2-ETHYLHEXYL)PHTHALATE	1500 B	420 U	31 B	NA	110 U	230 J	39 J
BUTYL BENZYL PHTHALATE	130 U	220 U	14 U	NA	59 U	74 U	19 U
CAPROLACTAM	460 U	820 U	53 U	NA	220 U	270 U	71 U
CARBAZOLE	380 J	600 U	38 U	NA	700	280 J	52 U
CHRYSENE	7500	260	18	NA	3300	3400	14
DIBENZO(A,H)ANTHRACENE	1300	15 U	0.94 U	NA	300 J	620	1.3 U
DIBENZOFURAN	130 J	15 U	15 J	NA	200 J	130 J	1.3 U
DIETHYL PHTHALATE	200 U	350 U	23 U	NA	95 U	120 U	31 U
DIMETHYL PHTHALATE	210 U	370 U	24 U	NA	100 U	130 U	33 U
DI-N-BUTYL PHTHALATE	190 U	330 U	21 U	NA	89 U	110 U	29 U
DI-N-OCTYL PHTHALATE	99 U	170 U	11 U	NA	47 U	58 U	15 U
FLUORANTHENE	6700	360	39	NA	7100	4700	26
FLUORENE	190	12 U	51	NA	450	130	1 U
HEXACHLOROBENZENE	26 U	46 U	3 U	NA	12 U	15 U	4 U
HEXACHLOROBUTADIENE	70 U	120 U	8 U	NA	33 U	41 U	11 U
HEXACHLOROCYCLOPENTADIENE	100 U	180 U	12 U	NA	48 U	60 U	16 U
HEXACHLOROETHANE	110 U	200 U	13 U	NA	53 U	66 U	17 U
INDENO(1,2,3-CD)PYRENE	4200	7.7 U	0.50 U	NA	980	2100	8.4 J
ISOPHORONE	160 U	290 U	19 U	NA	77 U	96 U	25 U
NAPHTHALENE	200	18 U	43	NA	85	100	11 J
NITROBENZENE	28 U	49 U	3.1 U	NA	13 U	16 U	4.2 U
N-NITROSODIMETHYLAMINE	200 U	350 U	23 U	NA	95 U	120 U	31 U
N-NITROSO-DI-N-PROPYLAMINE	79 U	140 U	9 U	NA	37 U	46 U	12 U
N-NITROSODIPHENYLAMINE	260 U	460 U	30 U	NA	120 U	150 U	40 U
PENTACHLOROPHENOL	110 U	200 U	13 U	NA	54 U	67 U	17 U
PHENANTHRENE	2700	16 U	25	NA	4800	2400	16
PHENOL	92 U	160 U	10 U	NA	43 U	54 U	14 U
PYRENE	6300	380	38	NA	5900	4300	26

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-A-79	DR-A-80	DR-A-80	DR-A-81	DR-A-81	DR-A-82	DR-A-82
SAMPLE ID	DR-TP-A79-C	DR-TP-A80-03	DR-TP-A80-11	DR-TP-A81-07	DR-TP-A81-C	DR-TP-A82-03	DR-TP-A82-03A
SAMPLE DATE	8/13/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/12/2013	8/12/2013
VOLATILES (UG/KG)							
1,1,1,2-TETRACHLOROETHANE	NA	0.78 U	0.76 U	0.69 U	NA	0.56 U	1.2 U
1,1,1-TRICHLOROETHANE	NA	0.71 U	0.69 U	0.62 U	NA	0.51 U	1.1 U
1,1,2,2-TETRACHLOROETHANE	NA	0.43 U	0.42 U	0.38 U	NA	0.31 U	0.68 U
1,1,2-TRICHLOROTRIFLUOROETHANE	NA	1.6 U	1.6 U	1.4 U	NA	1.2 U	2.6 U
1,1-DICHLOROETHANE	NA	0.46 U	0.44 U	0.40 U	NA	0.33 U	0.72 U
1,1-DICHLOROETHENE	NA	0.66 U	0.64 U	0.58 U	NA	0.47 U	1 U
1,1-DICHLOROPROPENE	NA	0.38 U	0.37 U	0.33 U	NA	0.27 U	0.60 U
1,2,3-TRICHLOROBENZENE	NA	0.48 U	0.47 U	0.42 U	NA	0.34 U	0.76 U
1,2,3-TRICHLOROPROPANE	NA	1.1 U	1.1 U	1 U	NA	0.81 U	1.8 U
1,2,3-TRIMETHYLBENZENE	NA	0.21 U	0.21 U	0.19 U	NA	0.15 U	0.34 U
1,2,4-TRICHLOROBENZENE	NA	0.34 U	0.33 U	0.30 U	NA	0.24 U	0.54 U
1,2,4-TRIMETHYLBENZENE	NA	0.82 U	0.80 U	0.72 U	NA	0.59 U	1.3 U
1,2-DIBROMO-3-CHLOROPROPANE	NA	1.6 U	1.6 U	1.4 U	NA	1.2 U	2.6 U
1,2-DIBROMOETHANE	NA	0.63 U	0.62 U	0.56 U	NA	0.45 U	1 U
1,2-DICHLOROBENZENE	NA	0.46 U	0.44 U	0.40 U	NA	0.33 U	0.72 U
1,2-DICHLOROETHANE	NA	0.43 U	0.42 U	0.38 U	NA	0.31 U	0.68 U
1,2-DICHLOROPROPANE	NA	0.87 U	0.85 U	0.77 U	NA	0.62 U	1.4 U
1,3-DICHLOROBENZENE	NA	0.44 U	0.43 U	0.39 U	NA	0.32 U	0.70 U
1,3-DICHLOROPROPANE	NA	0.43 U	0.42 U	0.38 U	NA	0.31 U	0.68 U
1,4-DICHLOROBENZENE	NA	0.83 U	0.81 U	0.73 U	NA	0.60 U	1.3 U
2,2-DICHLOROPROPANE	NA	1.2 U	1.2 U	1 U	NA	0.85 U	1.9 U
2-BUTANONE	NA	2.1 J	28	31	NA	2.8 J	19 J
2-CHLOROETHYL VINYL ETHER	NA	1.8 U	1.7 U	1.6 U	NA	1.3 U	2.8 U
2-CHLOROTOLUENE	NA	0.51 U	0.49 U	0.45 U	NA	0.36 U	0.80 U
2-HEXANONE	NA	0.80 U	0.78 U	0.70 U	NA	0.57 U	1.3 U
4-CHLOROTOLUENE	NA	0.52 U	0.51 U	0.46 U	NA	0.37 U	0.82 U
4-ISOPROPYLTOLUENE	NA	0.27 U	0.26 U	0.23 U	NA	0.19 U	0.42 U
4-METHYL-2-PENTANONE	NA	0.68 U	0.67 U	0.60 U	NA	0.49 U	1.1 U
ACETONE	NA	37 B	170	120	NA	26	160
BENZENE	NA	0.29 U	0.28 U	0.26 U	NA	0.21 U	0.46 U
BROMOBENZENE	NA	0.42 U	0.41 U	0.37 U	NA	0.30 U	0.66 U
BROMOCHLOROMETHANE	NA	0.90 U	0.87 U	0.79 U	NA	0.64 U	1.4 U
BROMODICHLOROMETHANE	NA	0.35 U	0.34 U	0.31 U	NA	0.25 U	0.56 U
BROMOFORM	NA	0.42 U	0.41 U	0.37 U	NA	0.30 U	0.66 U
BROMOMETHANE	NA	0.68 U	0.67 U	0.60 U	NA	0.49 U	1.1 U
CARBON DISULFIDE	NA	0.56 U	1.9 J	0.76 J	NA	0.40 U	1.2 J
CARBON TETRACHLORIDE	NA	0.47 U	0.46 U	0.41 U	NA	0.33 U	0.74 U
CHLOROBENZENE	NA	0.42 U	0.41 U	0.37 U	NA	0.30 U	0.66 U
CHLORODIBROMOMETHANE	NA	0.70 U	0.68 U	0.61 U	NA	0.50 U	1.1 U
CHLOROETHANE	NA	1.1 U	1.1 U	0.96 U	NA	0.78 U	1.7 U
CHLOROFORM	NA	0.37 U	0.36 U	0.32 U	NA	0.26 U	0.58 U
CHLOROMETHANE	NA	0.52 U	0.51 U	0.46 U	NA	0.37 U	0.82 U
CIS-1,2-DICHLOROETHENE	NA	0.46 U	7	0.40 U	NA	0.33 U	0.72 U

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-A-79	DR-A-80	DR-A-80	DR-A-81	DR-A-81	DR-A-82	DR-A-82
SAMPLE ID	DR-TP-A79-C	DR-TP-A80-03	DR-TP-A80-11	DR-TP-A81-07	DR-TP-A81-C	DR-TP-A82-03	DR-TP-A82-03A
SAMPLE DATE	8/13/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/12/2013	8/12/2013
CIS-1,3-DICHLOROPROPENE	NA	0.43 U	0.42 U	0.38 U	NA	0.31 U	0.68 U
DIBROMOMETHANE	NA	0.80 U	0.78 U	0.70 U	NA	0.57 U	1.3 U
DICHLORODIFLUOROMETHANE	NA	0.63 U	0.62 U	0.56 U	NA	0.45 U	1 U
DIISOPROPYL ETHER	NA	1.9 U	1.8 U	1.7 U	NA	1.4 U	3 U
ETHYL TERT-BUTYL ETHER	NA	0.28 U	0.27 U	0.24 U	NA	0.20 U	0.44 U
ETHYLBENZENE	NA	0.33 U	0.32 U	0.29 U	NA	0.24 U	0.52 U
HEXACHLOROBUTADIENE	NA	1.5 U	1.5 U	1.3 U	NA	1.1 U	2.4 U
ISOPROPYLBENZENE	NA	0.20 U	0.20 U	0.18 U	NA	0.14 U	0.32 U
M+P-XYLENES	NA	1.5 U	1.5 U	1.3 U	NA	1.1 U	2.4 U
METHYL TERT-BUTYL ETHER	NA	0.54 U	0.53 U	0.48 U	NA	0.39 U	0.86 U
METHYLENE CHLORIDE	NA	0.85 U	0.83 U	0.75 U	NA	0.61 U	2.5 B
NAPHTHALENE	NA	0.24 U	0.23 U	0.21 U	NA	0.28 B	0.38 U
N-BUTYLBENZENE	NA	0.29 U	0.28 U	0.26 U	NA	0.21 U	0.46 U
N-PROPYLBENZENE	NA	0.51 U	0.49 U	0.45 U	NA	0.36 U	0.80 U
O-XYLENE	NA	0.44 U	0.43 U	0.39 U	NA	0.32 U	0.70 U
SEC-BUTYLBENZENE	NA	0.23 U	0.22 U	0.20 U	NA	0.16 U	0.36 U
STYRENE	NA	0.19 U	0.18 U	0.17 U	NA	0.14 U	0.30 U
TERT-AMYL METHYL ETHER	NA	0.47 U	0.46 U	0.41 U	NA	0.33 U	0.74 U
TERT-BUTYLBENZENE	NA	0.37 U	0.36 U	0.32 U	NA	0.26 U	0.58 U
TERTIARY-BUTYL ALCOHOL	NA	9.6 UR	9.4 UR	8.5 UR	NA	6.9 UR	15 UR
TETRACHLOROETHENE	NA	11	0.64 U	0.58 U	NA	0.47 U	1 U
TOLUENE	NA	0.34 U	0.58 B	0.52 B	NA	0.24 U	0.54 U
TOTAL XYLENES	NA	0.44 U	0.43 U	0.39 U	NA	0.32 U	0.70 U
TRANS-1,2-DICHLOROETHENE	NA	0.52 U	0.55 J	0.46 U	NA	0.37 U	0.82 U
TRANS-1,3-DICHLOROPROPENE	NA	0.68 U	0.67 U	0.60 U	NA	0.49 U	1.1 U
TRICHLOROETHENE	NA	0.53 U	2.8 J	0.47 U	NA	0.38 U	0.84 U
TRICHLOROFLUOROMETHANE	NA	0.43 U	0.42 U	0.38 U	NA	0.31 U	0.68 U
VINYL ACETATE	NA	0.32 UR	0.31 UR	0.28 UR	NA	0.23 UR	0.50 UR
VINYL CHLORIDE	NA	0.49 U	1.8 J	0.43 U	NA	0.35 U	2.9 J
TICOV (UG/KG)							
UNDECANE	NA	NA	NA	NA	NA	NA	NA

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	DR-A-79	DR-A-80	DR-A-80	DR-A-81	DR-A-81	DR-A-82	DR-A-82
SAMPLE ID	DR-TP-A79-C	DR-TP-A80-03	DR-TP-A80-11	DR-TP-A81-07	DR-TP-A81-C	DR-TP-A82-03	DR-TP-A82-03A
SAMPLE DATE	8/13/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/12/2013	8/12/2013
PESTICIDES/PCBS (UG/KG)							
AROCLOR-1016	130 U	230000 U	30 U	NA	25 U	120 U	40 U
AROCLOR-1221	100 U	180000 U	23 U	NA	19 U	89 U	31 U
AROCLOR-1232	87 U	150000 U	20 U	NA	17 U	78 U	27 U
AROCLOR-1242	160 J	4100000	18 U	NA	15 U	72 U	25 U
AROCLOR-1248	110 U	190000 U	24 U	NA	20 U	370	32 U
AROCLOR-1254	330 J	190000 U	24 U	NA	82	95 U	32 U
AROCLOR-1260	110 U	190000 U	24 U	NA	20 U	150 J	32 U
TOTAL AROCLOR	490	4100000	0 U	NA	82	520	0 U
TOTAL AROCLOR HALFND	758.5	4665000	81.5	NA	140	747	109.5
PETROLEUM HYDROCARBONS (MG/KG)							
TPH (C06-C10)	0.085 J	0.05 U	0.065 U	NA	0.055 U	0.049 U	0.09 U
TPH (C10-C32)	190	910	34	NA	270	930	18 UJ

Table D-5-2

Chemical Results for Test Pit Soil Samples - 2013
Dump Road Area
Lockheed Martin, Martin State Airport, Middle River, Maryland

B - Result considered to be from laboratory blank contamination based on USEPA 5 times or 10 times rule.
C= composite
J - Positive result is considered estimated as a result of technical noncompliance.
K - result is biased high. Actual result may be lower.
L - result is biased low. Actual result may be higher.
MG/KG - milligrams per kilogram (i.e., parts per million)
MSA - Martin State Airport
NA - not analyzed
PCBs - polychlorinated biphenyls
TP - test pit
TPH - total petroleum hydrocarbon
U - Not detected at the detection limit shown left of the letter.
UG/KG - micrograms per kilogram (i.e., parts per billion)
UJ -The analyte was not detected. However, the quantitation or detection limit may be inaccurate or imprecise.
UR - The result is considered qualitatively or quantitatively unreliable.
USEPA - United States Environmental Protection Agency

Tetra Tech, Inc. **INTERNAL CORRESPONDENCE**

TO: **A. APANAVAGE** **DATE:** **NOVEMBER 21, 2013**

FROM: **MICHELLE L. ALLEN** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC & INORGANIC DATA VALIDATION – VOC/SVOC/PCB/DRO/GRO/ TOTAL AND DISSOLVED METALS**
LOCKHEED MARTIN CORPORATION (LMC) – MARTIN STATE AIRPORT (MSA)
DUMP ROAD SOURCE AREAS
SDG 240-30344-1

SAMPLES: 5/Aqueous/VOC

MSA-MW46D-101613	MSA-MW46I-101613	MSA-MW46S-101613
MSA-MW47S-101613	TB-101613	

4/Aqueous/SVOC/DRO/GRO/Total & Dissolved Metals

MSA-MW46D-101613	MSA-MW46I-101613	MSA-MW46S-101613
MSA-MW47S-101613		

Overview

The sample set for LMC-MSA Dump Road source areas, SDG 240-30344-1 consisted of four (4) aqueous environmental samples and one (1) trip blank. All five (5) aqueous samples were analyzed for volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), diesel range organics (DRO), gasoline range organics (GRO), and total and dissolved metals, with the exception of the trip blank which was analyzed for VOC only. No field duplicate sample pair was included in this SDG.

The samples were collected by Tetra Tech, Inc. on October 16, 2013 and analyzed by TestAmerica, Inc. All analyses were conducted in accordance with SW-846 Methods 8260C, 8270C, 8015B, 6010C, and 7470A analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method/calibration blanks, Interference Check Sample (ICS), surrogate spike recoveries, blank spike results, matrix spike/matrix spike duplicate results, laboratory duplicate results, internal standard areas and recoveries, ICP serial dilution results, chromatographic resolution, compound identification, tentatively identified compounds, compound quantitation, and detection limits. Areas of concern are listed below.

Major

- The initial and continuing calibrations performed on instrument A3UX15 in the VOC fraction had Relative Response Factors (RRFs) for tert-butyl alcohol and vinyl acetate below the 0.050 minimum response criterion. All samples were affected with the exception of sample MSA-MW46S-101613. The non-detected results reported for these compounds in the affected samples were qualified as rejected, (UR).

- The initial calibration performed on instrument A3UX17 in the VOC fraction had a RRF for tert-butyl alcohol below the 0.050 minimum response criterion. Sample MSA-MW46S-101613 was affected. The non-detected result reported for this compound in the affected sample was qualified

as rejected, (UR).

Minor

- The following contaminants were detected in the laboratory method, trip blank, and calibration blanks at the following maximum concentrations:

Compound/Analyte	Maximum Concentration (µg/L)	Action Level (µg/L)
Methylene Chloride [1]	1.12	11.2
Chloroform [2]	0.58	2.9
Bis(2-ethylhexyl)phthalate [3]	0.235	2.35
Di-n-butylphthalate [3]	0.758	7.58
Barium [4]	1.17	5.85
Zinc [4]	8.97	44.85
Antimony [5]	1.96	9.8

1 Maximum concentration detected in the laboratory method blank, MB240-107712/5, affecting the samples associated with analytical batch #240-107712-5.
2 Maximum concentration detected in the trip blank, TB-101613.
3 Maximum concentration detected in the laboratory method blank, MB240-106515/16-A, affecting all samples.
4 Maximum concentration detected in the laboratory preparation blank, MB240-106546/1-A, affecting all total and dissolved metal samples.
5 Maximum concentration detected in the continuing calibration blank, CCB 240-98850/20, affecting the solid samples.

An action level of 10X the maximum concentration for the common laboratory contaminants, methylene chloride, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate, and an action level of 5X the maximum concentration for the remaining contaminants were used to evaluate for blank contamination. Sample aliquot and dilution factor, if applicable, were taken into consideration when evaluating for blank contamination. The detected results for the compounds/analytes below the established action levels were qualified as non-detected, (B).

- The Contract Required Quantitation Limit (CRQL) samples analyzed on 10/29/13 had Percent Recoveries (%Rs) for antimony, arsenic, copper, chromium, lead, thallium, and molybdenum greater than 110% quality control limit affecting the total and dissolved metal samples. The detected results for arsenic, chromium, copper, and molybdenum reported below 2X the Reporting Limit (RL) were qualified as estimated, (J), due to conflicting directional bias. The detected result for copper in total metal sample MSA-MW46S-101613 was qualified as biased high, (K).

- The CRQL samples analyzed on 06/05/12 had %Rs for vanadium less than the 90% quality control limit affecting the total and dissolved metal samples. The detected result for vanadium in dissolved sample MSA-MW46S-101613 reported below 2X the RL was qualified as estimated, (J), due to conflicting directional bias. The non-detected results reported for vanadium in the total and dissolved metals analyses were qualified as biased low, (UL).

- The Tentatively Identified Compounds (TICs) trimethylsilanol and dimethyl(1,1,2-trimethylpropyl)silanol were detected in samples MSA-MW46I-101613 and MSA-MW46S-101613, respectively. These TICs are considered column bleed from the GCMS instrument. The results were qualified as rejected, (R).

- Detected results reported below the RL limit but above the Method Detection Limit (MDL) were qualified as estimated, (J).

Notes

The trip blank, TB-101613, was mislabeled on the sample Chain of Custody (COC) form as TB-061713. The data validator manually corrected the COC and corrected the identification in the database.

The VOC continuing calibration performed on 10/29/13 @ 10:12 on instrument A3UX15 had a Percent Difference (%D) which exceeded the 20% quality control limit but was less than 50% for 1,2,4-trichlorobenzene. No validation action was necessary because no detected results were reported for this compound in the affected samples.

The VOC continuing calibration performed on 10/30/13 @ 10:36 on instrument A3UX15 had %Ds for tert-butyl alcohol, 2-hexanone, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene which exceeded 20% but were less than 50%. No validation action was necessary because no detected results were reported for these compounds in the affected samples.

The VOC initial calibration verification performed on 10/29/13 @ 22:29 on instrument A3UX17 had %Ds for dichlorodifluoromethane and 1,2,3-trichlorobenzene which exceeded 20% but were less than 50%. No validation action was necessary because no detected results were reported for these compounds in the affected sample.

The Continuing Calibration Verification (CCV) sample 10/29/13 @ 14:09 had a %R for thallium greater than 110%. All total and dissolved metal samples were affected. No action was taken because thallium was not detected in the affected samples.

The VOC blank spike sample associated with analytical batch #240-107534 had %Rs for 2-hexanone, trans-1,3-dichloropropene, and vinyl chloride above the upper quality control limits affecting samples MSA-MW46D-101613 and TB-101613. No action was taken because these compounds were not detected in the affected samples.

The VOC blank spike sample associated with analytical batch #240-107712 had %Rs for 1,3-dichloropropane, 2-hexanone, 4-chlorotoluene, sec-butylbenzene, and trans-1,3-dichloropropene above the upper quality control limits affecting samples MSA-MW46I-101613 and MSA-MW47S-101613. No action was taken because these compounds were not detected in the affected samples.

The VOC blank spike sample associated with analytical batch #240-107637 had a %R for 1,1-dichloropropene above the upper quality control limit affecting sample MSA-MW46S-101613. No action was taken because this compound was not detected in the affected sample.

The VOC Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses had %Rs outside quality control limits. No action was taken because the parent samples in these fractions were not samples of interest.

The following samples were diluted prior to analysis in the fraction below:

Sample	Fraction	Dilution
MSA-MW46I-101613	VOC	6.67X
MSA-MW47S-101613	VOC	55.56X
	SVOC	2X

The RLs of the non-detected results were elevated.

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: Initial and/or continuing calibration RRFs for tert-butyl alcohol and vinyl acetate were below the quality control criterion resulting in the rejection of the non-detected results. VOC continuing calibration %Ds exceeded 20% but were less than 50%. A CCV %R for thallium exceeded 110%. Some CRQL %Rs were outside the 90-110% quality control limits. Several contaminants were detected in the laboratory method and/or calibration blanks. Blank spike %Rs were noncompliant in the VOC fraction.

Other Factors Affecting Data Quality: Some samples required dilutions. Chloroform was detected in the trip blank. Column bleed was detected as TICs. Results below the RL were estimated.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994), Region III modifications to U.S. EPA National Functional Guidelines for Inorganic Data Validation (April 1993), and SW-846 Methods 8260C, 8270C, 8015B, 6010C, and 7470A analytical and reporting protocols. The text of this report has been formulated to address only those areas affecting data quality.

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Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	MSA-MW46D-101613			MSA-MW46I-101613			MSA-MW46S-101613			MSA-MW47S-101613		
SDG: 240-30344-1	LAB_ID	240-30344-3			240-30344-2			240-30344-1			240-30344-5		
FRACTION: OV	SAMP_DATE	10/16/2013			10/16/2013			10/16/2013			10/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		1.5	U		0.23	U		13	U	
1,1,1-TRICHLOROETHANE		0.22	U		1.5	U		0.22	U		12	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		1.2	U		0.18	U		10	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		1.9	U		0.28	U		16	U	
1,1-DICHLOROETHANE		0.15	U		1	U		1.2			8.3	U	
1,1-DICHLOROETHENE		0.19	U		1.8	J	P	0.19	U		11	U	
1,1-DICHLOROPROPENE		0.13	U		0.87	U		0.13	U		7.2	U	
1,2,3-TRICHLOROBENZENE		0.17	U		1.1	U		0.17	U		9.4	U	
1,2,3-TRICHLOROPROPANE		0.43	U		2.9	U		0.43	U		24	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.039	U		0.0059	U		0.33	U	
1,2,4-TRICHLOROBENZENE		0.15	U		1	U		0.15	U		8.3	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.8	U		0.12	U		6.7	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		4.5	U		0.67	U		37	U	
1,2-DIBROMOETHANE		0.24	U		1.6	U		0.24	U		13	U	
1,2-DICHLOROBENZENE		0.13	U		0.87	U		0.13	U		7.2	U	
1,2-DICHLOROETHANE		0.22	U		10			0.53	J	P	27	J	P
1,2-DICHLOROPROPANE		0.18	U		1.2	U		0.18	U		10	U	
1,3-DICHLOROBENZENE		0.14	U		0.93	U		0.14	U		7.8	U	
1,3-DICHLOROPROPANE		0.16	U		1.1	U		0.16	U		8.9	U	
1,4-DICHLOROBENZENE		0.13	U		0.87	U		0.13	U		7.2	U	
2,2-DICHLOROPROPANE		0.13	U		0.87	U		0.13	U		7.2	U	
2-BUTANONE		0.57	U		3.8	U		0.57	U		32	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		6.6	U		0.99	U		55	U	
2-CHLOROTOLUENE		0.11	U		0.73	U		0.11	U		6.1	U	
2-HEXANONE		0.41	U		2.7	U		0.41	U		23	U	
4-CHLOROTOLUENE		0.18	U		1.2	U		0.18	U		10	U	
4-ISOPROPYLTOLUENE		0.12	U		0.8	U		0.12	U		6.7	U	
4-METHYL-2-PENTANONE		0.32	U		2.1	U		0.32	U		18	U	
ACETONE		1.1	U		7.3	U		6.2	J	P	61	U	
BENZENE		0.22	J	P	1.9	J	P	0.13	U		7.2	U	
BROMOBENZENE		0.13	U		0.87	U		0.13	U		7.2	U	
BROMOCHLOROMETHANE		0.29	U		1.9	U		0.29	U		16	U	
BROMODICHLOROMETHANE		0.15	U		1	U		0.15	U		8.3	U	
BROMOFORM		0.64	U		4.3	U		0.64	U		36	U	
BROMOMETHANE		0.41	U		2.7	U		0.41	U		23	U	

PROJ_NO: 04882	NSAMPLE	TB-101613
SDG: 240-30344-1	LAB_ID	240-30344-4
FRACTION: OV	SAMP_DATE	10/16/2013
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U	
1,1-DICHLOROETHANE	0.15	U	
1,1-DICHLOROETHENE	0.19	U	
1,1-DICHLOROPROPENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U	
1,2-DIBROMOETHANE	0.24	U	
1,2-DICHLOROBENZENE	0.13	U	
1,2-DICHLOROETHANE	0.22	U	
1,2-DICHLOROPROPANE	0.18	U	
1,3-DICHLOROBENZENE	0.14	U	
1,3-DICHLOROPROPANE	0.16	U	
1,4-DICHLOROBENZENE	0.13	U	
2,2-DICHLOROPROPANE	0.13	U	
2-BUTANONE	0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U	
2-CHLOROTOLUENE	0.11	U	
2-HEXANONE	0.41	U	
4-CHLOROTOLUENE	0.18	U	
4-ISOPROPYLTOLUENE	0.12	U	
4-METHYL-2-PENTANONE	0.32	U	
ACETONE	1.1	U	
BENZENE	0.13	U	
BROMOBENZENE	0.13	U	
BROMOCHLOROMETHANE	0.29	U	
BROMODICHLOROMETHANE	0.15	U	
BROMOFORM	0.64	U	
BROMOMETHANE	0.41	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW46D-101613			MSA-MW46I-101613			MSA-MW46S-101613			MSA-MW47S-101613		
SDG: 240-30344-1	LAB_ID	240-30344-3			240-30344-2			240-30344-1			240-30344-5		
FRACTION: OV	SAMP_DATE	10/16/2013			10/16/2013			10/16/2013			10/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1.2			0.87	U		0.42	J	P	7.2	U	
CARBON TETRACHLORIDE		0.13	U		0.87	U		0.13	U		7.2	U	
CHLOROBENZENE		0.52	J	P	25			0.2	J	P	20	J	P
CHLORODIBROMOMETHANE		0.18	U		1.2	U		0.18	U		10	U	
CHLOROETHANE		0.29	U		1.9	U		0.29	U		16	U	
CHLOROFORM		4.7			1.8	B	B	2	B	B	14	B	B
CHLOROMETHANE		0.3	U		2	U		0.3	U		17	U	
CIS-1,2-DICHLOROETHENE		3.5			81			2.1			230		
CIS-1,3-DICHLOROPROPENE		0.14	U		0.93	U		0.14	U		7.8	U	
DIBROMOMETHANE		0.28	U		1.9	U		0.28	U		16	U	
DICHLORODIFLUOROMETHANE		0.31	U		2.1	U		0.31	U		17	U	
DIISOPROPYL ETHER		1.5	U		10	U		1.5	U		83	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.73	U		0.11	U		6.1	U	
ETHYLBENZENE		0.17	U		1.1	U		0.17	U		9.4	U	
HEXACHLOROBUTADIENE		0.3	U		2	U		0.3	U		17	U	
ISOPROPYLBENZENE		0.13	U		0.87	U		0.13	U		7.2	U	
M+P-XYLENES		0.24	U		1.6	U		0.24	U		13	U	
METHYL TERT-BUTYL ETHER		0.17	U		1.1	U		0.17	U		9.4	U	
METHYLENE CHLORIDE		0.33	U		4	B	A	0.33	U		79	B	A
NAPHTHALENE		0.24	U		1.6	U		0.24	U		13	U	
N-BUTYLBENZENE		0.12	U		0.8	U		0.12	U		6.7	U	
N-PROPYLBENZENE		0.14	U		0.93	U		0.14	U		7.8	U	
O-XYLENE		0.14	U		0.93	U		0.14	U		7.8	U	
SEC-BUTYLBENZENE		0.13	U		0.87	U		0.13	U		7.2	U	
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)								2.6	R	Z2			
SILANOL, TRIMETHYL-					7.6	R	Z2						
STYRENE		0.11	U		0.73	U		0.11	U		6.1	U	
TERT-AMYL METHYL ETHER		0.067	U		0.45	U		0.067	U		3.7	U	
TERT-BUTYLBENZENE		0.13	U		0.87	U		0.13	U		7.2	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	26	UR	C	3.9	UR	C	220	UR	C
TETRACHLOROETHENE		0.29	U		1.9	U		0.29	U		16	U	
TOLUENE		0.13	U		0.87	U		0.33	J	P	7.2	U	
TOTAL XYLENES		0.14	U		0.93	U		0.14	U		7.8	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		1.3	U		0.19	U		11	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		1.3	U		0.19	U		11	U	

PROJ_NO: 04882	NSAMPLE	TB-101613		
SDG: 240-30344-1	LAB_ID	240-30344-4		
FRACTION: OV	SAMP_DATE	10/16/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U	
CARBON TETRACHLORIDE		0.13	U	
CHLOROBENZENE		0.15	U	
CHLORODIBROMOMETHANE		0.18	U	
CHLOROETHANE		0.29	U	
CHLOROFORM		0.58	J	P
CHLOROMETHANE		0.3	U	
CIS-1,2-DICHLOROETHENE		0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U	
DIBROMOMETHANE		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U	
DIISOPROPYL ETHER		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U	
ETHYLBENZENE		0.17	U	
HEXACHLOROBUTADIENE		0.3	U	
ISOPROPYLBENZENE		0.13	U	
M+P-XYLENES		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U	
METHYLENE CHLORIDE		0.33	U	
NAPHTHALENE		0.24	U	
N-BUTYLBENZENE		0.12	U	
N-PROPYLBENZENE		0.14	U	
O-XYLENE		0.14	U	
SEC-BUTYLBENZENE		0.13	U	
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)				
SILANOL, TRIMETHYL-				
STYRENE		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U	
TERT-BUTYLBENZENE		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C
TETRACHLOROETHENE		0.29	U	
TOLUENE		0.13	U	
TOTAL XYLENES		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW46D-101613			MSA-MW46I-101613			MSA-MW46S-101613			MSA-MW47S-101613		
SDG: 240-30344-1	LAB_ID	240-30344-3			240-30344-2			240-30344-1			240-30344-5		
FRACTION: OV	SAMP_DATE	10/16/2013			10/16/2013			10/16/2013			10/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROETHENE		12			150			4.5			1500		
TRICHLOROFLUOROMETHANE		0.21	U		1.4	U		0.21	U		12	U	
VINYL ACETATE		0.19	UR	C	1.3	UR	C	0.19	U		11	UR	C
VINYL CHLORIDE		0.22	U		85			0.87	J	P	250		

PROJ_NO: 04882	NSAMPLE	TB-101613		
SDG: 240-30344-1	LAB_ID	240-30344-4		
FRACTION: OV	SAMP_DATE	10/16/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
TRICHLOROETHENE		0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U	
VINYL ACETATE		0.19	UR	C
VINYL CHLORIDE		0.22	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW46D-101613			MSA-MW46I-101613			MSA-MW46S-101613			MSA-MW47S-101613		
SDG: 240-30344-1	LAB_ID	240-30344-3			240-30344-2			240-30344-1			240-30344-5		
FRACTION: OS	SAMP_DATE	10/16/2013			10/16/2013			10/16/2013			10/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		0.13	U		0.13	U		0.14	U		0.27	U	
1,4-DIOXANE		0.48	U		21			5			73		
2,2'-OXYBIS(1-CHLOROPROPANE)		0.39	U		0.4	U		0.43	U		0.82	U	
2,4,5-TRICHLOROPHENOL		0.29	U		0.3	U		0.32	U		0.62	U	
2,4,6-TRICHLOROPHENOL		0.24	U		0.24	U		0.26	U		0.49	U	
2,4-DICHLOROPHENOL		0.19	U		0.19	U		0.2	U		0.39	U	
2,4-DIMETHYLPHENOL		0.25	U		0.25	U		0.27	U		0.52	U	
2,4-DINITROPHENOL		0.31	U		0.32	U		0.34	U		0.66	U	
2,4-DINITROTOLUENE		0.25	U		0.25	U		0.27	U		0.52	U	
2,6-DINITROTOLUENE		0.78	U		0.8	U		0.85	U		1.6	U	
2-CHLORONAPHTHALENE		0.098	U		0.1	U		0.11	U		0.21	U	
2-CHLOROPHENOL		0.28	U		0.29	U		0.31	U		0.6	U	
2-METHYLNAPHTHALENE		0.089	U		0.09	U		0.096	U		0.19	U	
2-METHYLPHENOL		0.17	U		0.17	U		0.18	U		0.35	U	
2-NITROANILINE		0.21	U		0.21	U		0.22	U		0.43	U	
2-NITROPHENOL		0.27	U		0.28	U		0.3	U		0.58	U	
3&4-METHYLPHENOL		0.78	U		0.8	U		0.85	U		1.6	U	
3,3'-DICHLOROBENZIDINE		0.36	U		0.37	U		0.39	U		0.76	U	
3-NITROANILINE		0.27	U		0.28	U		0.3	U		0.58	U	
4,6-DINITRO-2-METHYLPHENOL		2.4	U		2.4	U		2.6	U		4.9	U	
4-BROMOPHENYL PHENYL ETHER		0.22	U		0.22	U		0.23	U		0.45	U	
4-CHLORO-3-METHYLPHENOL		0.21	U		0.21	U		0.22	U		0.43	U	
4-CHLOROANILINE		0.21	U		0.21	U		0.22	U		0.43	U	
4-CHLOROPHENYL PHENYL ETHER		0.29	U		0.3	U		0.32	U		0.62	U	
4-NITROANILINE		0.22	U		0.22	U		0.23	U		0.45	U	
4-NITROPHENOL		0.28	U		0.29	U		0.31	U		0.6	U	
ACENAPHTHENE		0.043	U		0.044	U		0.047	U		0.091	U	
ACENAPHTHYLENE		0.047	U		0.048	U		0.051	U		0.099	U	
ACETOPHENONE		0.33	U		0.34	U		0.41	J	P	0.7	U	
ANTHRACENE		0.086	U		0.088	U		0.094	U		0.18	U	
ATRAZINE		0.33	U		0.34	U		0.36	U		0.7	U	
BENZALDEHYDE		0.38	U		0.39	U		0.41	U		0.8	U	
BENZO(A)ANTHRACENE		0.029	U		0.03	U		0.031	U		0.061	U	
BENZO(A)PYRENE		0.05	U		0.051	U		0.055	U		0.11	U	
BENZO(B)FLUORANTHENE		0.039	U		0.039	U		0.042	U		0.081	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW46D-101613			MSA-MW46I-101613			MSA-MW46S-101613			MSA-MW47S-101613		
SDG: 240-30344-1	LAB_ID	240-30344-3			240-30344-2			240-30344-1			240-30344-5		
FRACTION: OS	SAMP_DATE	10/16/2013			10/16/2013			10/16/2013			10/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		0.045	U		0.046	U		0.049	U		0.096	U	
BENZO(K)FLUORANTHENE		0.044	U		0.045	U		0.048	U		0.092	U	
BIS(2-CHLOROETHOXY)METHANE		0.31	U		0.32	U		0.34	U		0.66	U	
BIS(2-CHLOROETHYL)ETHER		0.098	U		0.1	U		0.11	U		0.21	U	
BIS(2-ETHYLHEXYL)PHTHALATE		0.51	B	A	0.29	B	A	0.57	B	A	0.45	U	
BUTYL BENZYL PHTHALATE		0.25	U		0.26	U		0.28	U		0.54	U	
CAPROLACTAM		0.2	U		0.2	U		0.21	U		0.41	U	
CARBAZOLE		0.27	U		0.28	U		0.3	U		0.58	U	
CHRYSENE		0.049	U		0.05	U		0.053	U		0.1	U	
DIBENZO(A,H)ANTHRACENE		0.044	U		0.045	U		0.047	U		0.092	U	
DIBENZOFURAN		0.02	U		0.02	U		0.021	U		0.041	U	
DIETHYL PHTHALATE		0.59	U		0.6	U		0.64	U		1.2	U	
DIMETHYL PHTHALATE		0.28	U		0.29	U		0.31	U		0.6	U	
DI-N-BUTYL PHTHALATE		0.86	B	A	0.67	U		0.79	B	A	1.4	U	
DI-N-OCTYL PHTHALATE		0.23	U		0.23	U		0.24	U		0.47	U	
FLUORANTHENE		0.044	U		0.045	U		0.047	U		0.092	U	
FLUORENE		0.04	U		0.041	U		0.043	U		0.084	U	
HEXACHLOROBENZENE		0.084	U		0.085	U		0.091	U		0.18	U	
HEXACHLOROBUTADIENE		0.26	U		0.27	U		0.29	U		0.56	U	
HEXACHLOROCYCLOPENTADIENE		0.24	U		0.24	U		0.26	U		0.49	U	
HEXACHLOROETHANE		0.19	U		0.19	U		0.2	U		0.39	U	
INDENO(1,2,3-CD)PYRENE		0.042	U		0.043	U		0.046	U		0.089	U	
ISOPHORONE		0.26	U		0.27	U		0.29	U		0.56	U	
NAPHTHALENE		0.061	U		0.063	U		0.067	U		0.13	U	
NITROBENZENE		0.039	U		0.04	U		0.043	U		0.082	U	
N-NITROSODIMETHYLAMINE		0.3	U		0.31	U		0.33	U		0.64	U	
N-NITROSO-DI-N-PROPYLAMINE		0.24	U		0.24	U		0.26	U		0.49	U	
N-NITROSODIPHENYLAMINE		0.3	U		0.31	U		0.33	U		0.64	U	
PENTACHLOROPHENOL		0.26	U		0.27	U		0.29	U		0.56	U	
PHENANTHRENE		0.061	U		0.062	U		0.066	U		0.13	U	
PHENOL		0.59	U		0.6	U		0.64	U		1.2	U	
PYRENE		0.041	U		0.042	U		0.045	U		0.087	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW46D-101613			MSA-MW46I-101613			MSA-MW46S-101613			MSA-MW47S-101613		
SDG: 240-30344-1	LAB_ID	240-30344-3			240-30344-2			240-30344-1			240-30344-5		
FRACTION: PET	SAMP_DATE	10/16/2013			10/16/2013			10/16/2013			10/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		36	J	P	160			31	J	P	670		
TPH (C10-C32)		1200			240	U		1300			370	J	P

PROJ_NO: 04882	NSAMPLE	MSA-MW46D-101613			MSA-MW46I-101613			MSA-MW46S-101613			MSA-MW47S-101613		
SDG: 240-30344-1	LAB_ID	240-30344-3			240-30344-2			240-30344-1			240-30344-5		
FRACTION: M	SAMP_DATE	10/16/2013			10/16/2013			10/16/2013			10/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.8	U		1.8	U		1.8	U		1.8	U	
ARSENIC		3.2	U		4.1	J	CP	8.1	J	CP	12	J	CP
BARIUM		39	J	P	26	J	P	73	J	P	49	J	P
BERYLLIUM		0.46	U		0.46	U		0.46	U		0.46	U	
CADMIUM		0.66	U		0.66	U		0.66	U		5.4		
CHROMIUM		2.2	U		2.2	U		4.5	J	CP	5.1	J	CP
COBALT		4.4	J	P	80			74			130		
COPPER		4.5	U		4.5	U		25	K	C	4.5	U	
LEAD		1.9	U		1.9	U		1.9	U		1.9	U	
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.4	J	CP	1.3	J	CP	3.3	J	CP	1.3	U	
NICKEL		3.6	J	P	40			78			47		
SELENIUM		4.1	U		4.1	U		4.1	U		4.1	U	
SILVER		2.2	U		2.2	U		2.2	U		2.2	U	
THALLIUM		4.7	U		4.7	U		4.7	U		4.7	U	
VANADIUM		0.64	UL	C	0.64	UL	C	0.64	UL	C	0.64	UL	C
ZINC		8.6	B	A	29	B	A	97			63		

PROJ_NO: 04882	NSAMPLE	MSA-MW46D-101613			MSA-MW46I-101613			MSA-MW46S-101613			MSA-MW47S-101613		
SDG: 240-30344-1	LAB_ID	240-30344-3			240-30344-2			240-30344-1			240-30344-5		
FRACTION: MF	SAMP_DATE	10/16/2013			10/16/2013			10/16/2013			10/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		2.4	B	A	2.4	B	A	1.8	U		1.8	U	
ARSENIC		3.8	J	CP	3.2	U		6.6	J	CP	12	J	CP
BARIUM		38	J	P	26	J	P	72	J	P	50	J	P
BERYLLIUM		0.46	U		0.46	U		0.46	U		0.46	U	
CADMIUM		0.66	U		0.66	U		0.66	U		0.66	U	
CHROMIUM		2.2	U		2.2	U		3.7	J	CP	4.4	J	CP
COBALT		3.5	J	P	81			72			130		
COPPER		4.5	U		4.5	U		4.5	U		4.5	U	
LEAD		1.9	U		1.9	U		1.9	U		1.9	U	
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.3	U		1.3	U		3	J	CP	1.3	U	
NICKEL		4.3	J	P	44			78			47		
SELENIUM		4.1	U		4.1	U		4.1	U		4.1	U	
SILVER		2.2	U		2.2	U		2.2	U		2.2	U	
THALLIUM		4.7	U		4.7	U		4.7	U		4.7	U	
VANADIUM		0.64	UL	C	0.64	UL	C	1.8	J	CP	0.64	UL	C
ZINC		5	U		24	B	A	56	B	A	52	B	A

Appendix B

Results as Reported by the Laboratory

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46D-101613 Lab Sample ID: 240-30344-3

Matrix: Water Lab File ID: UXC6377.D

Analysis Method: 8260B Date Collected: 10/16/2013 13:20

Sample wt/vol: 5(mL) Date Analyzed: 10/29/2013 18:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U *	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	0.22	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.2		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	0.52	J	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46D-101613 Lab Sample ID: 240-30344-3

Matrix: Water Lab File ID: UXC6377.D

Analysis Method: 8260B Date Collected: 10/16/2013 13:20

Sample wt/vol: 5(mL) Date Analyzed: 10/29/2013 18:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	4.7		1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	3.5		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.19
79-01-6	Trichloroethene	12		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U *	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46D-101613 Lab Sample ID: 240-30344-3

Matrix: Water Lab File ID: UXC6377.D

Analysis Method: 8260B Date Collected: 10/16/2013 13:20

Sample wt/vol: 5(mL) Date Analyzed: 10/29/2013 18:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	105		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46D-101613 | Lab Sample ID: 240-30344-3

Matrix: Water | Lab File ID: UXC6377.D

Analysis Method: 8260B | Date Collected: 10/16/2013 13:20

Sample wt/vol: 5(mL) | Date Analyzed: 10/29/2013 18:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107534 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46I-101613 | Lab Sample ID: 240-30344-2

Matrix: Water | Lab File ID: UXC6419.D

Analysis Method: 8260B | Date Collected: 10/16/2013 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 12:52

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107712 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	6.7	U	6.7	1.5
71-55-6	1,1,1-Trichloroethane	6.7	U	6.7	1.5
79-34-5	1,1,2,2-Tetrachloroethane	6.7	U	6.7	1.2
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	6.7	U	6.7	1.9
75-34-3	1,1-Dichloroethane	6.7	U	6.7	1.0
75-35-4	1,1-Dichloroethene	1.8	J	6.7	1.3
563-58-6	1,1-Dichloropropene	6.7	U	6.7	0.87
87-61-6	1,2,3-Trichlorobenzene	6.7	U	6.7	1.1
96-18-4	1,2,3-Trichloropropane	6.7	U	6.7	2.9
526-73-8	1,2,3-Trimethylbenzene	33	U	33	0.039
120-82-1	1,2,4-Trichlorobenzene	6.7	U	6.7	1.0
95-63-6	1,2,4-Trimethylbenzene	6.7	U	6.7	0.80
96-12-8	1,2-Dibromo-3-Chloropropane	13	U	13	4.5
95-50-1	1,2-Dichlorobenzene	6.7	U	6.7	0.87
107-06-2	1,2-Dichloroethane	10		6.7	1.5
78-87-5	1,2-Dichloropropane	6.7	U	6.7	1.2
541-73-1	1,3-Dichlorobenzene	6.7	U	6.7	0.93
142-28-9	1,3-Dichloropropane	6.7	U *	6.7	1.1
106-46-7	1,4-Dichlorobenzene	6.7	U	6.7	0.87
594-20-7	2,2-Dichloropropane	6.7	U	6.7	0.87
110-75-8	2-Chloroethyl vinyl ether	67	U	67	6.6
95-49-8	2-Chlorotoluene	6.7	U	6.7	0.73
591-78-6	2-Hexanone	67	U *	67	2.7
108-86-1	Bromobenzene	6.7	U	6.7	0.87
74-97-5	Bromochloromethane	6.7	U	6.7	1.9
106-43-4	4-Chlorotoluene	6.7	U *	6.7	1.2
99-87-6	p-Isopropyltoluene	6.7	U	6.7	0.80
67-64-1	Acetone	67	U	67	7.3
71-43-2	Benzene	1.9	J	6.7	0.87
75-25-2	Bromoform	6.7	U	6.7	4.3
74-83-9	Bromomethane	6.7	U	6.7	2.7
75-15-0	Carbon disulfide	6.7	U	6.7	0.87
56-23-5	Carbon tetrachloride	6.7	U	6.7	0.87
108-90-7	Chlorobenzene	25		6.7	1.0
75-00-3	Chloroethane	6.7	U	6.7	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46I-101613 | Lab Sample ID: 240-30344-2

Matrix: Water | Lab File ID: UXC6419.D

Analysis Method: 8260B | Date Collected: 10/16/2013 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 12:52

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107712 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.8	J	6.7	1.1
74-87-3	Chloromethane	6.7	U	6.7	2.0
156-59-2	cis-1,2-Dichloroethene	81		6.7	1.1
10061-01-5	cis-1,3-Dichloropropene	6.7	U	6.7	0.93
87-68-3	Hexachlorobutadiene	6.7	U	6.7	2.0
74-95-3	Dibromomethane	6.7	U	6.7	1.9
75-27-4	Bromodichloromethane	6.7	U	6.7	1.0
75-71-8	Dichlorodifluoromethane	6.7	U	6.7	2.1
100-41-4	Ethylbenzene	6.7	U	6.7	1.1
106-93-4	1,2-Dibromoethane	6.7	U	6.7	1.6
108-20-3	Diisopropyl ether	67	U	67	10
91-20-3	Naphthalene	6.7	U	6.7	1.6
179601-23-1	m-Xylene & p-Xylene	13	U	13	1.6
104-51-8	n-Butylbenzene	6.7	U	6.7	0.80
98-82-8	Isopropylbenzene	6.7	U	6.7	0.87
103-65-1	n-Propylbenzene	6.7	U	6.7	0.93
78-93-3	2-Butanone	67	U	67	3.8
108-10-1	4-Methyl-2-pentanone	67	U	67	2.1
135-98-8	sec-Butylbenzene	6.7	U *	6.7	0.87
1634-04-4	Methyl tert-butyl ether	6.7	U	6.7	1.1
994-05-8	Tert-amyl-methyl ether (TAME)	33	U	33	0.45
75-09-2	Methylene Chloride	4.0	J B	6.7	2.2
95-47-6	o-Xylene	6.7	U	6.7	0.93
100-42-5	Styrene	6.7	U	6.7	0.73
637-92-3	Ethyl-t-butyl ether (ETBE)	33	U	33	0.73
98-06-6	tert-Butylbenzene	6.7	U	6.7	0.87
127-18-4	Tetrachloroethene	6.7	U	6.7	1.9
108-88-3	Toluene	6.7	U	6.7	0.87
156-60-5	trans-1,2-Dichloroethene	6.7	U	6.7	1.3
10061-02-6	trans-1,3-Dichloropropene	6.7	U *	6.7	1.3
79-01-6	Trichloroethene	150		6.7	1.1
75-69-4	Trichlorofluoromethane	6.7	U	6.7	1.4
108-05-4	Vinyl acetate	13	U	13	1.3
75-01-4	Vinyl chloride	85		6.7	1.5
75-65-0	tert-Butyl alcohol	330	U	330	26
1330-20-7	Xylenes, Total	13	U	13	0.93

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46I-101613 Lab Sample ID: 240-30344-2

Matrix: Water Lab File ID: UXC6419.D

Analysis Method: 8260B Date Collected: 10/16/2013 12:05

Sample wt/vol: 5(mL) Date Analyzed: 10/30/2013 12:52

Soil Aliquot Vol: Dilution Factor: 6.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107712 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	6.7	U	6.7	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	97		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46I-101613 | Lab Sample ID: 240-30344-2

Matrix: Water | Lab File ID: UXC6419.D

Analysis Method: 8260B | Date Collected: 10/16/2013 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 12:52

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107712 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 7.6

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.18	7.6	T J N

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46S-101613 | Lab Sample ID: 240-30344-1

Matrix: Water | Lab File ID: UXR9277.D

Analysis Method: 8260B | Date Collected: 10/16/2013 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 01:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107637 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.2		1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U *	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.53	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	6.2	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.42	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	0.20	J	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46S-101613 | Lab Sample ID: 240-30344-1

Matrix: Water | Lab File ID: UXR9277.D

Analysis Method: 8260B | Date Collected: 10/16/2013 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 01:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107637 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	2.0		1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	2.1		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.33	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	4.5		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.87	J	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46S-101613 Lab Sample ID: 240-30344-1

Matrix: Water Lab File ID: UXR9277.D

Analysis Method: 8260B Date Collected: 10/16/2013 09:50

Sample wt/vol: 5(mL) Date Analyzed: 10/30/2013 01:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107637 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	105		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46S-101613 Lab Sample ID: 240-30344-1

Matrix: Water Lab File ID: UXR9277.D

Analysis Method: 8260B Date Collected: 10/16/2013 09:50

Sample wt/vol: 5(mL) Date Analyzed: 10/30/2013 01:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107637 Units: ug/L

Number TICs Found: 1 TIC Result Total: 2.6

CAS NO.	COMPOUND NAME	RT	RESULT	Q
55644-10-5	Silanol, dimethyl(1,1,2-trimethylpropyl)	4.68	2.6	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW47S-101613 | Lab Sample ID: 240-30344-5

Matrix: Water | Lab File ID: UXC6420.D

Analysis Method: 8260B | Date Collected: 10/16/2013 14:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 13:14

Soil Aliquot Vol: | Dilution Factor: 55.56

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107712 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	56	U	56	13
71-55-6	1,1,1-Trichloroethane	56	U	56	12
79-34-5	1,1,2,2-Tetrachloroethane	56	U	56	10
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	56	U	56	16
75-34-3	1,1-Dichloroethane	56	U	56	8.3
75-35-4	1,1-Dichloroethene	56	U	56	11
563-58-6	1,1-Dichloropropene	56	U	56	7.2
87-61-6	1,2,3-Trichlorobenzene	56	U	56	9.4
96-18-4	1,2,3-Trichloropropane	56	U	56	24
526-73-8	1,2,3-Trimethylbenzene	280	U	280	0.33
120-82-1	1,2,4-Trichlorobenzene	56	U	56	8.3
95-63-6	1,2,4-Trimethylbenzene	56	U	56	6.7
96-12-8	1,2-Dibromo-3-Chloropropane	110	U	110	37
95-50-1	1,2-Dichlorobenzene	56	U	56	7.2
107-06-2	1,2-Dichloroethane	27	J	56	12
78-87-5	1,2-Dichloropropane	56	U	56	10
541-73-1	1,3-Dichlorobenzene	56	U	56	7.8
142-28-9	1,3-Dichloropropane	56	U *	56	8.9
106-46-7	1,4-Dichlorobenzene	56	U	56	7.2
594-20-7	2,2-Dichloropropane	56	U	56	7.2
110-75-8	2-Chloroethyl vinyl ether	560	U	560	55
95-49-8	2-Chlorotoluene	56	U	56	6.1
591-78-6	2-Hexanone	560	U *	560	23
108-86-1	Bromobenzene	56	U	56	7.2
74-97-5	Bromochloromethane	56	U	56	16
106-43-4	4-Chlorotoluene	56	U *	56	10
99-87-6	p-Isopropyltoluene	56	U	56	6.7
67-64-1	Acetone	560	U	560	61
71-43-2	Benzene	56	U	56	7.2
75-25-2	Bromoform	56	U	56	36
74-83-9	Bromomethane	56	U	56	23
75-15-0	Carbon disulfide	56	U	56	7.2
56-23-5	Carbon tetrachloride	56	U	56	7.2
108-90-7	Chlorobenzene	20	J	56	8.3
75-00-3	Chloroethane	56	U	56	16

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW47S-101613 | Lab Sample ID: 240-30344-5

Matrix: Water | Lab File ID: UXC6420.D

Analysis Method: 8260B | Date Collected: 10/16/2013 14:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 13:14

Soil Aliquot Vol: | Dilution Factor: 55.56

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107712 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	14	J	56	8.9
74-87-3	Chloromethane	56	U	56	17
156-59-2	cis-1,2-Dichloroethene	230		56	9.4
10061-01-5	cis-1,3-Dichloropropene	56	U	56	7.8
87-68-3	Hexachlorobutadiene	56	U	56	17
74-95-3	Dibromomethane	56	U	56	16
75-27-4	Bromodichloromethane	56	U	56	8.3
75-71-8	Dichlorodifluoromethane	56	U	56	17
100-41-4	Ethylbenzene	56	U	56	9.4
106-93-4	1,2-Dibromoethane	56	U	56	13
108-20-3	Diisopropyl ether	560	U	560	83
91-20-3	Naphthalene	56	U	56	13
179601-23-1	m-Xylene & p-Xylene	110	U	110	13
104-51-8	n-Butylbenzene	56	U	56	6.7
98-82-8	Isopropylbenzene	56	U	56	7.2
103-65-1	n-Propylbenzene	56	U	56	7.8
78-93-3	2-Butanone	560	U	560	32
108-10-1	4-Methyl-2-pentanone	560	U	560	18
135-98-8	sec-Butylbenzene	56	U *	56	7.2
1634-04-4	Methyl tert-butyl ether	56	U	56	9.4
994-05-8	Tert-amyl-methyl ether (TAME)	280	U	280	3.7
75-09-2	Methylene Chloride	79	B	56	18
95-47-6	o-Xylene	56	U	56	7.8
100-42-5	Styrene	56	U	56	6.1
637-92-3	Ethyl-t-butyl ether (ETBE)	280	U	280	6.1
98-06-6	tert-Butylbenzene	56	U	56	7.2
127-18-4	Tetrachloroethene	56	U	56	16
108-88-3	Toluene	56	U	56	7.2
156-60-5	trans-1,2-Dichloroethene	56	U	56	11
10061-02-6	trans-1,3-Dichloropropene	56	U *	56	11
79-01-6	Trichloroethene	1500		56	9.4
75-69-4	Trichlorofluoromethane	56	U	56	12
108-05-4	Vinyl acetate	110	U	110	11
75-01-4	Vinyl chloride	250		56	12
75-65-0	tert-Butyl alcohol	2800	U	2800	220
1330-20-7	Xylenes, Total	110	U	110	7.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW47S-101613 | Lab Sample ID: 240-30344-5

Matrix: Water | Lab File ID: UXC6420.D

Analysis Method: 8260B | Date Collected: 10/16/2013 14:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 13:14

Soil Aliquot Vol: | Dilution Factor: 55.56

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107712 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	56	U	56	10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	106		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW47S-101613 Lab Sample ID: 240-30344-5

Matrix: Water Lab File ID: UXC6420.D

Analysis Method: 8260B Date Collected: 10/16/2013 14:45

Sample wt/vol: 5(mL) Date Analyzed: 10/30/2013 13:14

Soil Aliquot Vol: Dilution Factor: 55.56

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107712 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: TB-061713 Lab Sample ID: 240-30344-4

Matrix: Water Lab File ID: UXC6378.D

Analysis Method: 8260B Date Collected: 10/16/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 10/29/2013 19:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U *	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: TB-061713 | Lab Sample ID: 240-30344-4

Matrix: Water | Lab File ID: UXC6378.D

Analysis Method: 8260B | Date Collected: 10/16/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/29/2013 19:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107534 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.58	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U *	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: TB-061713 | Lab Sample ID: 240-30344-4

Matrix: Water | Lab File ID: UXC6378.D

Analysis Method: 8260B | Date Collected: 10/16/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/29/2013 19:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107534 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	104		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: TB-061713 | Lab Sample ID: 240-30344-4

Matrix: Water | Lab File ID: UXC6378.D

Analysis Method: 8260B | Date Collected: 10/16/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/29/2013 19:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107534 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46D-101613 | Lab Sample ID: 240-30344-3

Matrix: Water | Lab File ID: 31029018.D

Analysis Method: 8270D | Date Collected: 10/16/2013 13:20

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 1020(mL) | Date Analyzed: 10/29/2013 16:52

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	0.98	U	0.98	0.13
123-91-1	1,4-Dioxane	0.98	U	0.98	0.48
88-06-2	2,4,6-Trichlorophenol	4.9	U	4.9	0.24
95-95-4	2,4,5-Trichlorophenol	4.9	U	4.9	0.29
120-83-2	2,4-Dichlorophenol	2.0	U	2.0	0.19
105-67-9	2,4-Dimethylphenol	2.0	U	2.0	0.25
51-28-5	2,4-Dinitrophenol	4.9	U	4.9	0.31
121-14-2	2,4-Dinitrotoluene	4.9	U	4.9	0.25
91-58-7	2-Chloronaphthalene	0.98	U	0.98	0.098
95-57-8	2-Chlorophenol	0.98	U	0.98	0.28
91-57-6	2-Methylnaphthalene	0.20	U	0.20	0.089
95-48-7	2-Methylphenol	0.98	U	0.98	0.17
88-74-4	2-Nitroaniline	2.0	U	2.0	0.21
88-75-5	2-Nitrophenol	2.0	U	2.0	0.27
15831-10-4	3 & 4 Methylphenol	2.0	U	2.0	0.78
91-94-1	3,3'-Dichlorobenzidine	4.9	U	4.9	0.36
99-09-2	3-Nitroaniline	2.0	U	2.0	0.27
534-52-1	4,6-Dinitro-2-methylphenol	4.9	U	4.9	2.4
101-55-3	4-Bromophenyl phenyl ether	2.0	U	2.0	0.22
59-50-7	4-Chloro-3-methylphenol	2.0	U	2.0	0.21
106-47-8	4-Chloroaniline	2.0	U	2.0	0.21
7005-72-3	4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29
100-01-6	4-Nitroaniline	2.0	U	2.0	0.22
83-32-9	Acenaphthene	0.20	U	0.20	0.043
208-96-8	Acenaphthylene	0.20	U	0.20	0.047
98-86-2	Acetophenone	0.98	U	0.98	0.33
120-12-7	Anthracene	0.20	U	0.20	0.086
1912-24-9	Atrazine	0.98	U	0.98	0.33
100-52-7	Benzaldehyde	0.98	U	0.98	0.38
56-55-3	Benzo[a]anthracene	0.20	U	0.20	0.029
50-32-8	Benzo[a]pyrene	0.20	U	0.20	0.050
205-99-2	Benzo[b]fluoranthene	0.20	U	0.20	0.039
191-24-2	Benzo[g,h,i]perylene	0.20	U	0.20	0.045
207-08-9	Benzo[k]fluoranthene	0.20	U	0.20	0.044

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46D-101613 | Lab Sample ID: 240-30344-3

Matrix: Water | Lab File ID: 31029018.D

Analysis Method: 8270D | Date Collected: 10/16/2013 13:20

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 1020(mL) | Date Analyzed: 10/29/2013 16:52

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	0.98	U	0.98	0.31
111-44-4	Bis(2-chloroethyl)ether	0.98	U	0.98	0.098
117-81-7	Bis(2-ethylhexyl) phthalate	0.51	J B	2.0	0.22
85-68-7	Butyl benzyl phthalate	2.0	U	2.0	0.25
105-60-2	Caprolactam	4.9	U	4.9	0.20
86-74-8	Carbazole	0.98	U	0.98	0.27
218-01-9	Chrysene	0.20	U	0.20	0.049
84-74-2	Di-n-butyl phthalate	0.86	J B	2.0	0.66
117-84-0	Di-n-octyl phthalate	2.0	U	2.0	0.23
53-70-3	Dibenzo(a,h)anthracene	0.20	U	0.20	0.044
132-64-9	Dibenzofuran	0.98	U	0.98	0.020
84-66-2	Diethyl phthalate	2.0	U	2.0	0.59
131-11-3	Dimethyl phthalate	2.0	U	2.0	0.28
206-44-0	Fluoranthene	0.20	U	0.20	0.044
86-73-7	Fluorene	0.20	U	0.20	0.040
118-74-1	Hexachlorobenzene	0.20	U	0.20	0.084
87-68-3	Hexachlorobutadiene	0.98	U	0.98	0.26
77-47-4	Hexachlorocyclopentadiene	9.8	U	9.8	0.24
67-72-1	Hexachloroethane	0.98	U	0.98	0.19
193-39-5	Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.042
78-59-1	Isophorone	0.98	U	0.98	0.26
621-64-7	N-Nitrosodi-n-propylamine	0.98	U	0.98	0.24
62-75-9	N-Nitrosodimethylamine	0.98	U	0.98	0.30
86-30-6	N-Nitrosodiphenylamine	0.98	U	0.98	0.30
91-20-3	Naphthalene	0.20	U	0.20	0.061
98-95-3	Nitrobenzene	0.98	U	0.98	0.039
87-86-5	Pentachlorophenol	4.9	U	4.9	0.26
85-01-8	Phenanthrene	0.20	U	0.20	0.061
108-95-2	Phenol	0.98	U	0.98	0.59
129-00-0	Pyrene	0.20	U	0.20	0.041
108-60-1	2,2'-oxybis[1-chloropropane]	0.98	U	0.98	0.39
606-20-2	2,6-Dinitrotoluene	4.9	U	4.9	0.78
100-02-7	4-Nitrophenol	4.9	U	4.9	0.28

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46D-101613 | Lab Sample ID: 240-30344-3

Matrix: Water | Lab File ID: 31029018.D

Analysis Method: 8270D | Date Collected: 10/16/2013 13:20

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 1020(mL) | Date Analyzed: 10/29/2013 16:52

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	83		24-110
4165-62-2	Phenol-d5 (Surr)	68		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	59		21-110
367-12-4	2-Fluorophenol (Surr)	64		10-110
321-60-8	2-Fluorobiphenyl (Surr)	66		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	90		21-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46I-101613 | Lab Sample ID: 240-30344-2

Matrix: Water | Lab File ID: 31029013.D

Analysis Method: 8270D | Date Collected: 10/16/2013 12:05

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/29/2013 14:46

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.0	U	1.0	0.13
123-91-1	1,4-Dioxane	21		1.0	0.49
88-06-2	2,4,6-Trichlorophenol	5.0	U	5.0	0.24
95-95-4	2,4,5-Trichlorophenol	5.0	U	5.0	0.30
120-83-2	2,4-Dichlorophenol	2.0	U	2.0	0.19
105-67-9	2,4-Dimethylphenol	2.0	U	2.0	0.25
51-28-5	2,4-Dinitrophenol	5.0	U	5.0	0.32
121-14-2	2,4-Dinitrotoluene	5.0	U	5.0	0.25
91-58-7	2-Chloronaphthalene	1.0	U	1.0	0.10
95-57-8	2-Chlorophenol	1.0	U	1.0	0.29
91-57-6	2-Methylnaphthalene	0.20	U	0.20	0.090
95-48-7	2-Methylphenol	1.0	U	1.0	0.17
88-74-4	2-Nitroaniline	2.0	U	2.0	0.21
88-75-5	2-Nitrophenol	2.0	U	2.0	0.28
15831-10-4	3 & 4 Methylphenol	2.0	U	2.0	0.80
91-94-1	3,3'-Dichlorobenzidine	5.0	U	5.0	0.37
99-09-2	3-Nitroaniline	2.0	U	2.0	0.28
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	5.0	2.4
101-55-3	4-Bromophenyl phenyl ether	2.0	U	2.0	0.22
59-50-7	4-Chloro-3-methylphenol	2.0	U	2.0	0.21
106-47-8	4-Chloroaniline	2.0	U	2.0	0.21
7005-72-3	4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30
100-01-6	4-Nitroaniline	2.0	U	2.0	0.22
83-32-9	Acenaphthene	0.20	U	0.20	0.044
208-96-8	Acenaphthylene	0.20	U	0.20	0.048
98-86-2	Acetophenone	1.0	U	1.0	0.34
120-12-7	Anthracene	0.20	U	0.20	0.088
1912-24-9	Atrazine	1.0	U	1.0	0.34
100-52-7	Benzaldehyde	1.0	U	1.0	0.39
56-55-3	Benzo[a]anthracene	0.20	U	0.20	0.030
50-32-8	Benzo[a]pyrene	0.20	U	0.20	0.051
205-99-2	Benzo[b]fluoranthene	0.20	U	0.20	0.039
191-24-2	Benzo[g,h,i]perylene	0.20	U	0.20	0.046
207-08-9	Benzo[k]fluoranthene	0.20	U	0.20	0.045

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46I-101613 | Lab Sample ID: 240-30344-2

Matrix: Water | Lab File ID: 31029013.D

Analysis Method: 8270D | Date Collected: 10/16/2013 12:05

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/29/2013 14:46

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.0	U	1.0	0.32
111-44-4	Bis(2-chloroethyl)ether	1.0	U	1.0	0.10
117-81-7	Bis(2-ethylhexyl) phthalate	0.29	J B	2.0	0.22
85-68-7	Butyl benzyl phthalate	2.0	U	2.0	0.26
105-60-2	Caprolactam	5.0	U	5.0	0.20
86-74-8	Carbazole	1.0	U	1.0	0.28
218-01-9	Chrysene	0.20	U	0.20	0.050
84-74-2	Di-n-butyl phthalate	2.0	U	2.0	0.67
117-84-0	Di-n-octyl phthalate	2.0	U	2.0	0.23
53-70-3	Dibenzo(a,h)anthracene	0.20	U	0.20	0.045
132-64-9	Dibenzofuran	1.0	U	1.0	0.020
84-66-2	Diethyl phthalate	2.0	U	2.0	0.60
131-11-3	Dimethyl phthalate	2.0	U	2.0	0.29
206-44-0	Fluoranthene	0.20	U	0.20	0.045
86-73-7	Fluorene	0.20	U	0.20	0.041
118-74-1	Hexachlorobenzene	0.20	U	0.20	0.085
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.27
77-47-4	Hexachlorocyclopentadiene	10	U	10	0.24
67-72-1	Hexachloroethane	1.0	U	1.0	0.19
193-39-5	Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.043
78-59-1	Isophorone	1.0	U	1.0	0.27
621-64-7	N-Nitrosodi-n-propylamine	1.0	U	1.0	0.24
62-75-9	N-Nitrosodimethylamine	1.0	U	1.0	0.31
86-30-6	N-Nitrosodiphenylamine	1.0	U	1.0	0.31
91-20-3	Naphthalene	0.20	U	0.20	0.063
98-95-3	Nitrobenzene	1.0	U	1.0	0.040
87-86-5	Pentachlorophenol	5.0	U	5.0	0.27
85-01-8	Phenanthrene	0.20	U	0.20	0.062
108-95-2	Phenol	1.0	U	1.0	0.60
129-00-0	Pyrene	0.20	U	0.20	0.042
108-60-1	2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.40
606-20-2	2,6-Dinitrotoluene	5.0	U	5.0	0.80
100-02-7	4-Nitrophenol	5.0	U	5.0	0.29

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46I-101613 | Lab Sample ID: 240-30344-2

Matrix: Water | Lab File ID: 31029013.D

Analysis Method: 8270D | Date Collected: 10/16/2013 12:05

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/29/2013 14:46

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	83		24-110
4165-62-2	Phenol-d5 (Surr)	69		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	64		21-110
367-12-4	2-Fluorophenol (Surr)	66		10-110
321-60-8	2-Fluorobiphenyl (Surr)	68		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	86		21-110

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46S-101613 | Lab Sample ID: 240-30344-1

Matrix: Water | Lab File ID: 31029017.D

Analysis Method: 8270D | Date Collected: 10/16/2013 09:50

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 940(mL) | Date Analyzed: 10/29/2013 16:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.1	U	1.1	0.14
123-91-1	1,4-Dioxane	5.0		1.1	0.52
88-06-2	2,4,6-Trichlorophenol	5.3	U	5.3	0.26
95-95-4	2,4,5-Trichlorophenol	5.3	U	5.3	0.32
120-83-2	2,4-Dichlorophenol	2.1	U	2.1	0.20
105-67-9	2,4-Dimethylphenol	2.1	U	2.1	0.27
51-28-5	2,4-Dinitrophenol	5.3	U	5.3	0.34
121-14-2	2,4-Dinitrotoluene	5.3	U	5.3	0.27
91-58-7	2-Chloronaphthalene	1.1	U	1.1	0.11
95-57-8	2-Chlorophenol	1.1	U	1.1	0.31
91-57-6	2-Methylnaphthalene	0.21	U	0.21	0.096
95-48-7	2-Methylphenol	1.1	U	1.1	0.18
88-74-4	2-Nitroaniline	2.1	U	2.1	0.22
88-75-5	2-Nitrophenol	2.1	U	2.1	0.30
15831-10-4	3 & 4 Methylphenol	2.1	U	2.1	0.85
91-94-1	3,3'-Dichlorobenzidine	5.3	U	5.3	0.39
99-09-2	3-Nitroaniline	2.1	U	2.1	0.30
534-52-1	4,6-Dinitro-2-methylphenol	5.3	U	5.3	2.6
101-55-3	4-Bromophenyl phenyl ether	2.1	U	2.1	0.23
59-50-7	4-Chloro-3-methylphenol	2.1	U	2.1	0.22
106-47-8	4-Chloroaniline	2.1	U	2.1	0.22
7005-72-3	4-Chlorophenyl phenyl ether	2.1	U	2.1	0.32
100-01-6	4-Nitroaniline	2.1	U	2.1	0.23
83-32-9	Acenaphthene	0.21	U	0.21	0.047
208-96-8	Acenaphthylene	0.21	U	0.21	0.051
98-86-2	Acetophenone	0.41	J	1.1	0.36
120-12-7	Anthracene	0.21	U	0.21	0.094
1912-24-9	Atrazine	1.1	U	1.1	0.36
100-52-7	Benzaldehyde	1.1	U	1.1	0.41
56-55-3	Benzo[a]anthracene	0.21	U	0.21	0.031
50-32-8	Benzo[a]pyrene	0.21	U	0.21	0.055
205-99-2	Benzo[b]fluoranthene	0.21	U	0.21	0.042
191-24-2	Benzo[g,h,i]perylene	0.21	U	0.21	0.049
207-08-9	Benzo[k]fluoranthene	0.21	U	0.21	0.048

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46S-101613 | Lab Sample ID: 240-30344-1

Matrix: Water | Lab File ID: 31029017.D

Analysis Method: 8270D | Date Collected: 10/16/2013 09:50

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 940(mL) | Date Analyzed: 10/29/2013 16:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.1	U	1.1	0.34
111-44-4	Bis(2-chloroethyl)ether	1.1	U	1.1	0.11
117-81-7	Bis(2-ethylhexyl) phthalate	0.57	J B	2.1	0.23
85-68-7	Butyl benzyl phthalate	2.1	U	2.1	0.28
105-60-2	Caprolactam	5.3	U	5.3	0.21
86-74-8	Carbazole	1.1	U	1.1	0.30
218-01-9	Chrysene	0.21	U	0.21	0.053
84-74-2	Di-n-butyl phthalate	0.79	J B	2.1	0.71
117-84-0	Di-n-octyl phthalate	2.1	U	2.1	0.24
53-70-3	Dibenzo(a,h)anthracene	0.21	U	0.21	0.047
132-64-9	Dibenzofuran	1.1	U	1.1	0.021
84-66-2	Diethyl phthalate	2.1	U	2.1	0.64
131-11-3	Dimethyl phthalate	2.1	U	2.1	0.31
206-44-0	Fluoranthene	0.21	U	0.21	0.047
86-73-7	Fluorene	0.21	U	0.21	0.043
118-74-1	Hexachlorobenzene	0.21	U	0.21	0.091
87-68-3	Hexachlorobutadiene	1.1	U	1.1	0.29
77-47-4	Hexachlorocyclopentadiene	11	U	11	0.26
67-72-1	Hexachloroethane	1.1	U	1.1	0.20
193-39-5	Indeno[1,2,3-cd]pyrene	0.21	U	0.21	0.046
78-59-1	Isophorone	1.1	U	1.1	0.29
621-64-7	N-Nitrosodi-n-propylamine	1.1	U	1.1	0.26
62-75-9	N-Nitrosodimethylamine	1.1	U	1.1	0.33
86-30-6	N-Nitrosodiphenylamine	1.1	U	1.1	0.33
91-20-3	Naphthalene	0.21	U	0.21	0.067
98-95-3	Nitrobenzene	1.1	U	1.1	0.043
87-86-5	Pentachlorophenol	5.3	U	5.3	0.29
85-01-8	Phenanthrene	0.21	U	0.21	0.066
108-95-2	Phenol	1.1	U	1.1	0.64
129-00-0	Pyrene	0.21	U	0.21	0.045
108-60-1	2,2'-oxybis[1-chloropropane]	1.1	U	1.1	0.43
606-20-2	2,6-Dinitrotoluene	5.3	U	5.3	0.85
100-02-7	4-Nitrophenol	5.3	U	5.3	0.31

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46S-101613 Lab Sample ID: 240-30344-1

Matrix: Water Lab File ID: 31029017.D

Analysis Method: 8270D Date Collected: 10/16/2013 09:50

Extract. Method: 3520C Date Extracted: 10/22/2013 08:31

Sample wt/vol: 940(mL) Date Analyzed: 10/29/2013 16:27

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	77		24-110
4165-62-2	Phenol-d5 (Surr)	71		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	65		21-110
367-12-4	2-Fluorophenol (Surr)	66		10-110
321-60-8	2-Fluorobiphenyl (Surr)	69		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	87		21-110

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW47S-101613 | Lab Sample ID: 240-30344-5

Matrix: Water | Lab File ID: 31029016.D

Analysis Method: 8270D | Date Collected: 10/16/2013 14:45

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 970(mL) | Date Analyzed: 10/29/2013 16:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 2

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	2.1	U	2.1	0.27
123-91-1	1,4-Dioxane	73		2.1	1.0
88-06-2	2,4,6-Trichlorophenol	10	U	10	0.49
95-95-4	2,4,5-Trichlorophenol	10	U	10	0.62
120-83-2	2,4-Dichlorophenol	4.1	U	4.1	0.39
105-67-9	2,4-Dimethylphenol	4.1	U	4.1	0.52
51-28-5	2,4-Dinitrophenol	10	U	10	0.66
121-14-2	2,4-Dinitrotoluene	10	U	10	0.52
91-58-7	2-Chloronaphthalene	2.1	U	2.1	0.21
95-57-8	2-Chlorophenol	2.1	U	2.1	0.60
91-57-6	2-Methylnaphthalene	0.41	U	0.41	0.19
95-48-7	2-Methylphenol	2.1	U	2.1	0.35
88-74-4	2-Nitroaniline	4.1	U	4.1	0.43
88-75-5	2-Nitrophenol	4.1	U	4.1	0.58
15831-10-4	3 & 4 Methylphenol	4.1	U	4.1	1.6
91-94-1	3,3'-Dichlorobenzidine	10	U	10	0.76
99-09-2	3-Nitroaniline	4.1	U	4.1	0.58
534-52-1	4,6-Dinitro-2-methylphenol	10	U	10	4.9
101-55-3	4-Bromophenyl phenyl ether	4.1	U	4.1	0.45
59-50-7	4-Chloro-3-methylphenol	4.1	U	4.1	0.43
106-47-8	4-Chloroaniline	4.1	U	4.1	0.43
7005-72-3	4-Chlorophenyl phenyl ether	4.1	U	4.1	0.62
100-01-6	4-Nitroaniline	4.1	U	4.1	0.45
83-32-9	Acenaphthene	0.41	U	0.41	0.091
208-96-8	Acenaphthylene	0.41	U	0.41	0.099
98-86-2	Acetophenone	2.1	U	2.1	0.70
120-12-7	Anthracene	0.41	U	0.41	0.18
1912-24-9	Atrazine	2.1	U	2.1	0.70
100-52-7	Benzaldehyde	2.1	U	2.1	0.80
56-55-3	Benzo[a]anthracene	0.41	U	0.41	0.061
50-32-8	Benzo[a]pyrene	0.41	U	0.41	0.11
205-99-2	Benzo[b]fluoranthene	0.41	U	0.41	0.081
191-24-2	Benzo[g,h,i]perylene	0.41	U	0.41	0.096
207-08-9	Benzo[k]fluoranthene	0.41	U	0.41	0.092

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW47S-101613 | Lab Sample ID: 240-30344-5

Matrix: Water | Lab File ID: 31029016.D

Analysis Method: 8270D | Date Collected: 10/16/2013 14:45

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 970(mL) | Date Analyzed: 10/29/2013 16:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 2

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	2.1	U	2.1	0.66
111-44-4	Bis(2-chloroethyl)ether	2.1	U	2.1	0.21
117-81-7	Bis(2-ethylhexyl) phthalate	4.1	U	4.1	0.45
85-68-7	Butyl benzyl phthalate	4.1	U	4.1	0.54
105-60-2	Caprolactam	10	U	10	0.41
86-74-8	Carbazole	2.1	U	2.1	0.58
218-01-9	Chrysene	0.41	U	0.41	0.10
84-74-2	Di-n-butyl phthalate	4.1	U	4.1	1.4
117-84-0	Di-n-octyl phthalate	4.1	U	4.1	0.47
53-70-3	Dibenzo(a,h)anthracene	0.41	U	0.41	0.092
132-64-9	Dibenzofuran	2.1	U	2.1	0.041
84-66-2	Diethyl phthalate	4.1	U	4.1	1.2
131-11-3	Dimethyl phthalate	4.1	U	4.1	0.60
206-44-0	Fluoranthene	0.41	U	0.41	0.092
86-73-7	Fluorene	0.41	U	0.41	0.084
118-74-1	Hexachlorobenzene	0.41	U	0.41	0.18
87-68-3	Hexachlorobutadiene	2.1	U	2.1	0.56
77-47-4	Hexachlorocyclopentadiene	21	U	21	0.49
67-72-1	Hexachloroethane	2.1	U	2.1	0.39
193-39-5	Indeno[1,2,3-cd]pyrene	0.41	U	0.41	0.089
78-59-1	Isophorone	2.1	U	2.1	0.56
621-64-7	N-Nitrosodi-n-propylamine	2.1	U	2.1	0.49
62-75-9	N-Nitrosodimethylamine	2.1	U	2.1	0.64
86-30-6	N-Nitrosodiphenylamine	2.1	U	2.1	0.64
91-20-3	Naphthalene	0.41	U	0.41	0.13
98-95-3	Nitrobenzene	2.1	U	2.1	0.082
87-86-5	Pentachlorophenol	10	U	10	0.56
85-01-8	Phenanthrene	0.41	U	0.41	0.13
108-95-2	Phenol	2.1	U	2.1	1.2
129-00-0	Pyrene	0.41	U	0.41	0.087
108-60-1	2,2'-oxybis[1-chloropropane]	2.1	U	2.1	0.82
606-20-2	2,6-Dinitrotoluene	10	U	10	1.6
100-02-7	4-Nitrophenol	10	U	10	0.60

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW47S-101613 | Lab Sample ID: 240-30344-5

Matrix: Water | Lab File ID: 31029016.D

Analysis Method: 8270D | Date Collected: 10/16/2013 14:45

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 970(mL) | Date Analyzed: 10/29/2013 16:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 2

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	74		24-110
4165-62-2	Phenol-d5 (Surr)	63		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	55		21-110
367-12-4	2-Fluorophenol (Surr)	54		10-110
321-60-8	2-Fluorobiphenyl (Surr)	65		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	85		21-110

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46D-101613 | Lab Sample ID: 240-30344-3

Matrix: Water | Lab File ID: YF101821.D

Analysis Method: 8015C | Date Collected: 10/16/2013 13:20

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2013 03:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 106236 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	36	J	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	82		40-133

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46I-101613 Lab Sample ID: 240-30344-2

Matrix: Water Lab File ID: YF101820.D

Analysis Method: 8015C Date Collected: 10/16/2013 12:05

Sample wt/vol: 5(mL) Date Analyzed: 10/19/2013 03:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 106236 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	160		100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	76		40-133

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46S-101613 | Lab Sample ID: 240-30344-1

Matrix: Water | Lab File ID: YF101819.D

Analysis Method: 8015C | Date Collected: 10/16/2013 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2013 02:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 106236 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	31	J	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	83		40-133

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW47S-101613 Lab Sample ID: 240-30344-5

Matrix: Water Lab File ID: YF101822.D

Analysis Method: 8015C Date Collected: 10/16/2013 14:45

Sample wt/vol: 5(mL) Date Analyzed: 10/19/2013 04:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 106236 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	670		100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	94		40-133

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46D-101613 | Lab Sample ID: 240-30344-3

Matrix: Water | Lab File ID: P5F22017.D

Analysis Method: 8015C | Date Collected: 10/16/2013 13:20

Extraction Method: 3520C | Date Extracted: 10/18/2013 08:21

Sample wt/vol: 1050(mL) | Date Analyzed: 10/23/2013 02:15

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: | ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 106668 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	1200		480	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	41		20-120

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46I-101613 | Lab Sample ID: 240-30344-2

Matrix: Water | Lab File ID: P5F22016.D

Analysis Method: 8015C | Date Collected: 10/16/2013 12:05

Extraction Method: 3520C | Date Extracted: 10/18/2013 08:21

Sample wt/vol: 1000(mL) | Date Analyzed: 10/23/2013 01:44

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 106668 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	500	U	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	48		20-120

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW46S-101613 Lab Sample ID: 240-30344-1

Matrix: Water Lab File ID: P5F22015.D

Analysis Method: 8015C Date Collected: 10/16/2013 09:50

Extraction Method: 3520C Date Extracted: 10/18/2013 08:21

Sample wt/vol: 960(mL) Date Analyzed: 10/23/2013 01:14

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 106668 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	1300		520	250

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	48		20-120

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: MSA-MW47S-101613 | Lab Sample ID: 240-30344-5

Matrix: Water | Lab File ID: P5F22018.D

Analysis Method: 8015C | Date Collected: 10/16/2013 14:45

Extraction Method: 3520C | Date Extracted: 10/18/2013 08:21

Sample wt/vol: 990(mL) | Date Analyzed: 10/23/2013 02:45

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: | ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 106668 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	370	J	510	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	43		20-120

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MSA-MW46D-101613 Lab Sample ID: 240-30344-3

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 13:20

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MSA-MW46D-101613 Lab Sample ID: 240-30344-3

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 13:20

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	10	10	2.2	ug/L	U		1	6010C
7440-38-2	Arsenic	15	15	3.2	ug/L	U		1	6010C
7440-41-7	Beryllium	5.0	5.0	0.46	ug/L	U		1	6010C
7440-43-9	Cadmium	5.0	5.0	0.66	ug/L	U		1	6010C
7440-39-3	Barium	39	200	0.67	ug/L	J	B	1	6010C
7440-50-8	Copper	25	25	4.5	ug/L	U		1	6010C
7440-47-3	Chromium	10	10	2.2	ug/L	U		1	6010C
7440-02-0	Nickel	3.6	40	3.2	ug/L	J		1	6010C
7439-92-1	Lead	10	10	1.9	ug/L	U		1	6010C
7440-36-0	Antimony	20	20	1.8	ug/L	U		1	6010C
7440-48-4	Cobalt	4.4	10	1.7	ug/L	J		1	6010C
7782-49-2	Selenium	20	20	4.1	ug/L	U		1	6010C
7440-28-0	Thallium	20	20	4.7	ug/L	U	^	1	6010C
7440-66-6	Zinc	8.6	50	5.0	ug/L	J	B	1	6010C
7439-98-7	Molybdenum	1.4	40	1.3	ug/L	J		1	6010C
7440-62-2	Vanadium	10	10	0.64	ug/L	U		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-MW46D-101613 Lab Sample ID: 240-30344-3

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 13:20

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	10	10	2.2	ug/L	U		1	6010C
7440-38-2	Arsenic	3.8	15	3.2	ug/L	J		1	6010C
7440-41-7	Beryllium	5.0	5.0	0.46	ug/L	U		1	6010C
7440-43-9	Cadmium	5.0	5.0	0.66	ug/L	U		1	6010C
7440-39-3	Barium	38	200	0.67	ug/L	J	B	1	6010C
7440-50-8	Copper	25	25	4.5	ug/L	U		1	6010C
7440-47-3	Chromium	10	10	2.2	ug/L	U		1	6010C
7440-02-0	Nickel	4.3	40	3.2	ug/L	J		1	6010C
7439-92-1	Lead	10	10	1.9	ug/L	U		1	6010C
7440-36-0	Antimony	2.4	20	1.8	ug/L	J		1	6010C
7440-48-4	Cobalt	3.5	10	1.7	ug/L	J		1	6010C
7782-49-2	Selenium	20	20	4.1	ug/L	U		1	6010C
7440-28-0	Thallium	20	20	4.7	ug/L	U	^	1	6010C
7440-66-6	Zinc	50	50	5.0	ug/L	U		1	6010C
7439-98-7	Molybdenum	40	40	1.3	ug/L	U		1	6010C
7440-62-2	Vanadium	10	10	0.64	ug/L	U		1	6010C
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MSA-MW46I-101613 Lab Sample ID: 240-30344-2

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 12:05

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MSA-MW46I-101613 Lab Sample ID: 240-30344-2

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 12:05

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	10	10	2.2	ug/L	U		1	6010C
7440-38-2	Arsenic	4.1	15	3.2	ug/L	J		1	6010C
7440-41-7	Beryllium	5.0	5.0	0.46	ug/L	U		1	6010C
7440-43-9	Cadmium	5.0	5.0	0.66	ug/L	U		1	6010C
7440-39-3	Barium	26	200	0.67	ug/L	J	B	1	6010C
7440-50-8	Copper	25	25	4.5	ug/L	U		1	6010C
7440-47-3	Chromium	10	10	2.2	ug/L	U		1	6010C
7440-02-0	Nickel	40	40	3.2	ug/L			1	6010C
7439-92-1	Lead	10	10	1.9	ug/L	U		1	6010C
7440-36-0	Antimony	20	20	1.8	ug/L	U		1	6010C
7440-48-4	Cobalt	80	10	1.7	ug/L			1	6010C
7782-49-2	Selenium	20	20	4.1	ug/L	U		1	6010C
7440-28-0	Thallium	20	20	4.7	ug/L	U		1	6010C
7440-66-6	Zinc	29	50	5.0	ug/L	J	B	1	6010C
7439-98-7	Molybdenum	1.3	40	1.3	ug/L	J		1	6010C
7440-62-2	Vanadium	10	10	0.64	ug/L	U		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-MW46I-101613 Lab Sample ID: 240-30344-2

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 12:05

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	10	10	2.2	ug/L	U		1	6010C
7440-38-2	Arsenic	15	15	3.2	ug/L	U		1	6010C
7440-41-7	Beryllium	5.0	5.0	0.46	ug/L	U		1	6010C
7440-43-9	Cadmium	5.0	5.0	0.66	ug/L	U		1	6010C
7440-39-3	Barium	26	200	0.67	ug/L	J	B	1	6010C
7440-50-8	Copper	25	25	4.5	ug/L	U		1	6010C
7440-47-3	Chromium	10	10	2.2	ug/L	U		1	6010C
7440-02-0	Nickel	44	40	3.2	ug/L			1	6010C
7439-92-1	Lead	10	10	1.9	ug/L	U		1	6010C
7440-36-0	Antimony	2.4	20	1.8	ug/L	J		1	6010C
7440-48-4	Cobalt	81	10	1.7	ug/L			1	6010C
7782-49-2	Selenium	20	20	4.1	ug/L	U		1	6010C
7440-28-0	Thallium	20	20	4.7	ug/L	U	^	1	6010C
7440-66-6	Zinc	24	50	5.0	ug/L	J	B	1	6010C
7439-98-7	Molybdenum	40	40	1.3	ug/L	U		1	6010C
7440-62-2	Vanadium	10	10	0.64	ug/L	U		1	6010C
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MSA-MW46S-101613 Lab Sample ID: 240-30344-1

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 09:50

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MSA-MW46S-101613 Lab Sample ID: 240-30344-1

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 09:50

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	10	10	2.2	ug/L	U		1	6010C
7440-38-2	Arsenic	8.1	15	3.2	ug/L	J		1	6010C
7440-41-7	Beryllium	5.0	5.0	0.46	ug/L	U		1	6010C
7440-43-9	Cadmium	5.0	5.0	0.66	ug/L	U		1	6010C
7440-39-3	Barium	73	200	0.67	ug/L	J	B	1	6010C
7440-50-8	Copper	25	25	4.5	ug/L			1	6010C
7440-47-3	Chromium	4.5	10	2.2	ug/L	J		1	6010C
7440-02-0	Nickel	78	40	3.2	ug/L			1	6010C
7439-92-1	Lead	10	10	1.9	ug/L	U		1	6010C
7440-36-0	Antimony	20	20	1.8	ug/L	U		1	6010C
7440-48-4	Cobalt	74	10	1.7	ug/L			1	6010C
7782-49-2	Selenium	20	20	4.1	ug/L	U		1	6010C
7440-28-0	Thallium	20	20	4.7	ug/L	U	^	1	6010C
7440-66-6	Zinc	97	50	5.0	ug/L		B	1	6010C
7439-98-7	Molybdenum	3.3	40	1.3	ug/L	J		1	6010C
7440-62-2	Vanadium	10	10	0.64	ug/L	U		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-MW46S-101613 Lab Sample ID: 240-30344-1

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 09:50

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	10	10	2.2	ug/L	U		1	6010C
7440-38-2	Arsenic	6.6	15	3.2	ug/L	J		1	6010C
7440-41-7	Beryllium	5.0	5.0	0.46	ug/L	U		1	6010C
7440-43-9	Cadmium	5.0	5.0	0.66	ug/L	U		1	6010C
7440-39-3	Barium	72	200	0.67	ug/L	J	B	1	6010C
7440-50-8	Copper	25	25	4.5	ug/L	U		1	6010C
7440-47-3	Chromium	3.7	10	2.2	ug/L	J		1	6010C
7440-02-0	Nickel	78	40	3.2	ug/L			1	6010C
7439-92-1	Lead	10	10	1.9	ug/L	U		1	6010C
7440-36-0	Antimony	20	20	1.8	ug/L	U		1	6010C
7440-48-4	Cobalt	72	10	1.7	ug/L			1	6010C
7782-49-2	Selenium	20	20	4.1	ug/L	U		1	6010C
7440-28-0	Thallium	20	20	4.7	ug/L	U	^	1	6010C
7440-66-6	Zinc	56	50	5.0	ug/L		B	1	6010C
7439-98-7	Molybdenum	3.0	40	1.3	ug/L	J		1	6010C
7440-62-2	Vanadium	1.8	10	0.64	ug/L	J		1	6010C
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MSA-MW47S-101613 Lab Sample ID: 240-30344-5

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 14:45

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MSA-MW47S-101613 Lab Sample ID: 240-30344-5

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 14:45

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	10	10	2.2	ug/L	U		1	6010C
7440-38-2	Arsenic	12	15	3.2	ug/L	J		1	6010C
7440-41-7	Beryllium	5.0	5.0	0.46	ug/L	U		1	6010C
7440-43-9	Cadmium	5.4	5.0	0.66	ug/L			1	6010C
7440-39-3	Barium	49	200	0.67	ug/L	J	B	1	6010C
7440-50-8	Copper	25	25	4.5	ug/L	U		1	6010C
7440-47-3	Chromium	5.1	10	2.2	ug/L	J		1	6010C
7440-02-0	Nickel	47	40	3.2	ug/L			1	6010C
7439-92-1	Lead	10	10	1.9	ug/L	U		1	6010C
7440-36-0	Antimony	20	20	1.8	ug/L	U		1	6010C
7440-48-4	Cobalt	130	10	1.7	ug/L			1	6010C
7782-49-2	Selenium	20	20	4.1	ug/L	U		1	6010C
7440-28-0	Thallium	20	20	4.7	ug/L	U	^	1	6010C
7440-66-6	Zinc	63	50	5.0	ug/L		B	1	6010C
7439-98-7	Molybdenum	40	40	1.3	ug/L	U		1	6010C
7440-62-2	Vanadium	10	10	0.64	ug/L	U		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-MW47S-101613 Lab Sample ID: 240-30344-5

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG ID.:

Matrix: Water Date Sampled: 10/16/2013 14:45

Reporting Basis: WET Date Received: 10/17/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	10	10	2.2	ug/L	U		1	6010C
7440-38-2	Arsenic	12	15	3.2	ug/L	J		1	6010C
7440-41-7	Beryllium	5.0	5.0	0.46	ug/L	U		1	6010C
7440-43-9	Cadmium	5.0	5.0	0.66	ug/L	U		1	6010C
7440-39-3	Barium	50	200	0.67	ug/L	J	B	1	6010C
7440-50-8	Copper	25	25	4.5	ug/L	U		1	6010C
7440-47-3	Chromium	4.4	10	2.2	ug/L	J		1	6010C
7440-02-0	Nickel	47	40	3.2	ug/L			1	6010C
7439-92-1	Lead	10	10	1.9	ug/L	U		1	6010C
7440-36-0	Antimony	20	20	1.8	ug/L	U		1	6010C
7440-48-4	Cobalt	130	10	1.7	ug/L			1	6010C
7782-49-2	Selenium	20	20	4.1	ug/L	U		1	6010C
7440-28-0	Thallium	20	20	4.7	ug/L	U	^	1	6010C
7440-66-6	Zinc	52	50	5.0	ug/L		B	1	6010C
7439-98-7	Molybdenum	40	40	1.3	ug/L	U		1	6010C
7440-62-2	Vanadium	10	10	0.64	ug/L	U		1	6010C
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

Appendix C

Support Documentation

LMC - MARTIN STATE AIRPORT
SDG 240-30344-1

SAMPLE IDENTIFICATION	MSA-MW47S-101613
COMPOUND	TRICHLOROETHENE
COMPOUND AREA	1359980
INTERNAL STANDARD AMOUNT (ng)	50
VOLUME WATER PURGED (ml)	5
DILUTION FACTOR	55.56
INTERNAL STANDARD AREA	1364550
AVERAGE RRF	0.3779
ml to µl	1000
ng to µg	1000
	1465.3 µg/L

1359980 x 50ng x 55.56 x 1000ml X 1µg /1364550 x 0.3779 x 5ml x 1L x 1000ng

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A3UX15\20131030-25120.b\UXC6420.D		
Lims ID:	240-30344-B-5	Client ID:	MSA-MW47S-101613
Inject. Date:	30-Oct-2013 13:14:30	Dil. Factor:	55.5600
Sample Type:	Client		RRF = 0.3779
Sample ID:	240-0025120-008		
Misc. Info.:	C31030A,8260LLUX15,,43582		
Operator:	043582	Instrument ID:	A3UX15
Purge Vol:	5.000 mL	ALS Bottle#:	8
Lims Batch ID:	107712	Lims Sample ID:	8
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A3UX15\20131030-25120.b\8260_15.m		
Last Update:	31-Oct-2013 11:05:27	Calib Date:	23-Sep-2013 23:38:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A3UX15\20130923-23770.b\UXC5118.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK006		
First Level Reviewer: evansle		Date:	30-Oct-2013 13:36:43

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.209	5.209	0.0	99	1364550	10.0	
* 2 Chlorobenzene-d5	117	7.889	7.889	0.0	84	933834	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.119	10.119	0.0	93	482303	10.0	
$ 5 Dibromofluoromethane (Surr)	113	4.640	4.640	0.0	62	415163	9.41	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.925	4.925	0.0	0	441518	10.1	
$ 7 Toluene-d8 (Surr)	98	6.585	6.585	0.0	93	1264875	8.22	
$ 131 4-Bromofluorobenzene (Surr)	95	8.992	8.992	0.0	95	407137	7.64	
12 Dichlorodifluoromethane	85		1.379					
13 Chloromethane	50		1.510					
14 Vinyl chloride	62	1.616	1.616	0.0	83	276470	4.49	
15 Bromomethane	94		1.913					
16 Chloroethane	64		1.996					
18 Trichlorofluoromethane	101		2.233					
21 1,1-Dichloroethene	96	2.707	2.707	0.0	82	7531	0.1383	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.719					
22 Acetone	43		2.755					
26 Carbon disulfide	76		2.897					
30 Methylene Chloride	84	3.134	3.134	0.0	92	140632	1.42	
31 2-Methyl-2-propanol	59		3.241					
34 Methyl tert-butyl ether	73		3.371					
33 trans-1,2-Dichloroethene	96		3.371					
36 1,1-Dichloroethane	63		3.739					
37 Vinyl acetate	86		3.786					
38 Isopropyl ether	87		3.798					
40 Tert-butyl ethyl ether	59		4.107					
42 cis-1,2-Dichloroethene	96	4.237	4.237	0.0	68	254796	4.20	
43 2,2-Dichloropropane	77		4.237					
41 2-Butanone (MEK)	43		4.249					
47 Chlorobromomethane	128		4.439					
49 Chloroform	83	4.510	4.510	0.0	90	22269	0.2449	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
50 1,1,1-Trichloroethane	97		4.664					
52 1,1-Dichloropropene	75		4.794					
53 Carbon tetrachloride	117		4.806					
55 Benzene	78	4.984	4.984	0.0	51	23472	0.1190	
56 1,2-Dichloroethane	62	4.996	4.996	0.0	71	27194	0.4941	
57 Tert-amyl methyl ether	73		5.067					
60 Trichloroethene	130	5.530	5.530	0.0	95	1359980	26.4	
62 1,2-Dichloropropane	63		5.719					
65 Dibromomethane	93		5.826					
67 Dichlorobromomethane	83		5.957					
69 2-Chloroethyl vinyl ether	63		6.206					
70 cis-1,3-Dichloropropene	75		6.336					
71 4-Methyl-2-pentanone (MIBK)	43		6.478					
72 Toluene	91		6.644					
73 trans-1,3-Dichloropropene	75		6.834					
77 Tetrachloroethene	164	7.130	7.131	-0.001	69	7218	0.1824	
76 1,3-Dichloropropane	76		7.154					
78 2-Hexanone	43		7.214					
79 Chlorodibromomethane	129		7.356					
123 Ethylene Dibromide	107		7.463					
82 Chlorobenzene	112	7.913	7.913	0.0	75	43211	0.3661	
83 1,1,1,2-Tetrachloroethane	131		7.984					
84 Ethylbenzene	106		8.008					
10 m-Xylene & p-Xylene	91		8.115					
85 o-Xylene	106		8.494					
86 Styrene	104		8.506					
87 Bromoform	173		8.696					
88 Isopropylbenzene	105		8.850					
90 1,1,2,2-Tetrachloroethane	83		9.135					
91 Bromobenzene	156		9.147					
92 1,2,3-Trichloropropane	110		9.182					
94 N-Propylbenzene	120		9.241					
95 2-Chlorotoluene	126		9.324					
104 4-Chlorotoluene	91		9.431					
97 tert-Butylbenzene	119		9.728					
98 1,2,4-Trimethylbenzene	105		9.775					
99 sec-Butylbenzene	105		9.941					
100 1,3-Dichlorobenzene	146		10.060					
101 4-Isopropyltoluene	119		10.083					
102 1,4-Dichlorobenzene	146		10.143					
103 1,2,3-Trimethylbenzene	105		10.190					
105 n-Butylbenzene	91		10.487					
106 1,2-Dichlorobenzene	146		10.510					
107 1,2-Dibromo-3-Chloropropane	157		11.281					
109 1,2,4-Trichlorobenzene	180		12.099					
110 Hexachlorobutadiene	225		12.265					
111 Naphthalene	128		12.348					
112 1,2,3-Trichlorobenzene	180		12.586					
S 114 Xylenes, Total	106		16.530					

MARTIN STATE AIRPORT
SDG 240-30344-1

SAMPLE IDENTIFICATION	MSA-MW47S-101613
COMPOUND	1,4-DIOXANE
COMPOUND AREA	264594
INTERNAL STANDARD AMOUNT (ng)	4
DILUTION FACTOR	2
INTERNAL STANDARD AREA	119358
AVERAGE RRF	0.4985
SAMPLE VOLUME (L)	0.97
VOLUME EXTRACT (µl)	2000
VOLUME INJECTED (µl)	1
ng to µg	1000
CONCENTRATION =	73.35 µg/L

264594 x 4ng x 2000µl x 1µg x 2/(119358 x 0.4985 x 0.97L x 1µl x 1000ng)

Report Date: 30-Oct-2013 08:52:56 Chrom Revision: 2.1 01-Aug-2013 12:45:24

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A4HP7\20131029-25074.b\31029016.D		
Lims ID:	240-30344-I-5-A	Client ID:	MSA-MW47S-101613
Inject. Date:	29-Oct-2013 16:01:30	Dil. Factor:	2.0000
Sample Type:	Client		
Sample ID:	240-0025074-016		
Misc. Info.:	240-30344-I-5-A		
Operator:	001710	Instrument ID:	A4HP7
Injection Vol:	1.0 ul	ALS Bottle#:	16
Lims Batch ID:	107533	Lims Sample ID:	16
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A4HP7\20131029-25074.b\8270_hp7.m		
Last Update:	30-Oct-2013 08:52:36	Calib Date:	21-Oct-2013 18:37:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A4HP7\20131021-24769.b\31021010.D		
Limit Group:	MSS 8270D ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	5% phenyl	Column Dia:	0.18 mm
Process Host:	XAWRK048		

First Level Reviewer: gruberj Date: 30-Oct-2013 08:43:10

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.333	6.333	0.0	95	119358	4.00	
* 2 Naphthalene-d8	136	7.451	7.451	0.0	99	485161	4.00	
* 3 Acenaphthene-d10	164	8.948	8.948	0.0	93	292725	4.00	
* 4 Phenanthrene-d10	188	10.211	10.211	0.0	97	561641	4.00	
* 5 Chrysene-d12	240	12.960	12.965	-0.005	93	673702	4.00	
* 6 Perylene-d12	264	15.201	15.201	0.0	99	630687	4.00	
$ 7 2-Fluorophenol	112	5.092	5.092	0.0	90	95603	2.71	
$ 8 Phenol-d5	99	5.964	5.964	0.0	87	145477	3.16	
$ 9 Nitrobenzene-d5	82	6.814	6.814	0.0	90	141869	2.75	
$ 10 2-Fluorobiphenyl (Surr)	172	8.349	8.349	0.0	99	273645	3.26	
$ 11 2,4,6-Tribromophenol	330	9.612	9.612	0.0	91	46369	4.26	
$ 12 Terphenyl-d14	244	11.623	11.623	0.0	98	391505	3.70	
24 1,4-Dioxane	88	2.845	2.840	0.005	93	264594	17.8	M
25 N-Nitrosodimethylamine	74		3.402					
40 Benzaldehyde	77		5.937					
41 Phenol	94		5.980					
44 Bis(2-chloroethyl)ether	93		6.071					
46 2-Chlorophenol	128		6.146					
51 2-Methylphenol	108		6.520					
52 2,2'-oxybis[1-chloropropane]	45		6.552					
191 3 & 4 Methylphenol	108		6.648					
56 N-Nitrosodi-n-propylamine	70		6.665					
57 Acetophenone	105		6.675					
60 Hexachloroethane	117		6.793					
61 Nitrobenzene	77		6.830					
63 Isophorone	82		7.034					
65 2-Nitrophenol	139		7.108					
64 2,4-Dimethylphenol	107		7.114					
68 Bis(2-chloroethoxy)methane	93		7.194					
71 2,4-Dichlorophenol	162		7.312					

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\YPID\20131018-24738.b\YF101822.D		
Lims ID:	240-30344-D-5	Client ID:	MSA-MW47S-101613
Inject. Date:	19-Oct-2013 04:18:22	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0024738-022		
Misc. Info.:			
Operator:	402582	Instrument ID:	YPID
Purge Vol:	5.000 mL	ALS Bottle#:	1
Lims Batch ID:	106236	Lims Sample ID:	22
Method:	\\Ncchrom\ChromData\YPID\20131018-24738.b\Y80158021.m		
Last Update:	21-Oct-2013 08:45:13	Calib Date:	05-Oct-2013 00:21:38
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\YPID\20131004-24232.b\YF100409.D		
Limit Group:	GCV 8015C GRO ICAL		
Integrator:	Falcon		
Column Type:		Column Dia:	
Process Host:	XAWRK014		

CF = 193630.342

Compound	RT	EXP RT	DLT RT	Response	On-Col Amt ug/l	Flags
$ 16 Trifluorotoluene (Surr)	9.684	9.688	-0.004	1871144	9.41	
A 5 C6-C10	11.904	4.793 - 19.015		132795765	668.6	

$\frac{132795765}{193630.342} = 668.6 \text{ ug/L}$

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A2HP5F\20131022-24847.b\P5F22015.D		
Lims ID:	240-30344-J-1-A	Client ID:	MSA-MW46S-101613
Inject. Date:	23-Oct-2013 01:14:37	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0024847-015		
Misc. Info.:			
Operator:	402582	Instrument ID:	A2HP5F
Injection Vol:	1.0 ul	ALS Bottle#:	15
Lims Batch ID:	106668	Lims Sample ID:	15
Detector:	GC FID1A		
Method:	\\Ncchrom\ChromData\A2HP5F\20131022-24847.b\TPH5F.m		
Last Update:	23-Oct-2013 08:27:06	Calib Date:	14-Oct-2013 19:38:03
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A2HP5F\20131014-24537.b\P5F01408.D		
Limit Group:	GC 8015C TPH ICAL		
Integrator:	Falcon		
Column Type:		Column Dia:	
Process Host:	XAWRK022		

CF = 243560

First Level Reviewer: shockr Date: 23-Oct-2013 08:26:32

RT	EXP RT	DLT RT	Response	On-Col Amt ng/ul	Flags
$ 8 n-Nonane					
4.481	4.474	0.007	11878117	48.2	
A 15 Diesel					
9.503	5.391 - 13.614		47389310	194.6	
A 17 C10-C32					
10.095	5.391 - 14.799		61702758	253.3	

$$\frac{61702758\ ng/ul}{243560} \times \frac{5ml}{960ml} \times \frac{1mg}{1000ng} \times \frac{1000000\ ul}{1L}$$

$$= 1319\ mg/L$$

MSA- MW475-101613

Sample Name: 240-30344-g-5-a Acquired: 10/29/2013 13:40:46 Type: Unk
Method: Standard Method + IEC Checks(v283) Mode: CONC Corr. Factor: 1.000000
User: Roger Method: 6010B/6010C Method: 200.7 :
Comment:

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.30207**	**377.32**	**12.437**	**414.57**	**49.343**	**.20719**	**181530.**
Stddev	.65071	45.96	.303	.30	.310	.11967	70.
%RSD	215.41	12.181	2.4382	.07141	.62838	57.759	.03875
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5.442**	**129.03**	**5.1136**	**2.8442**	**17250.**	**14601.**	**.35487**
Stddev	.055	.34	.2958	.3842	20.	57.	.98083
%RSD	1.006	.26728	5.7847	13.507	.11856	.38723	276.39
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2175
IS Ref	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**87228.**	**5382.1**	**1.0972**	**118990.**	**47.044**	**.42745**	**-2.220**
Stddev	272.	25.4	.2679	144.	.379	1.3787	.462
%RSD	.31192	.47171	24.415	.12112	.80638	322.55	20.79
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: 240-30344-g-5-a Acquired: 10/29/2013 13:40:46 Type: Unk
Method: Standard Method + IEC Checks(v283) Mode: CONC Corr. Factor: 1.000000
User: Roger Method: 6010B/6010C Method: 200.7 :
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.4080**	**.80135**	**3.2602**	**3.6945**	**-3.7309**	**62.748**	**7665.2**
Stddev	1.3608	.55470	.0395	1.6578	3.5631	.185	35.0
%RSD	96.652	69.221	1.2127	44.871	95.502	.29520	.45640
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	**826.97**
Stddev	3.67
%RSD	.44407
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4787.5**	**3992.4**	**53998.**	**3724.3**
Stddev	10.1	7.7	354.	19.2
%RSD	.21030	.19298	.65483	.51441
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.311%	103.11%	103.98%	105.00%
Range				

North Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

2.6, 2.2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 10/16/2013	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No. 112I004882
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 3 DAY			
(301) 528-3000 FAX	☒ 2 weeks			SDG No.
Project Name: ~~MSA Surface Water Sampling~~ Dump RD GW	☐ 1 week			
Site: ~~MSA Frog Mortar Creek~~ Dump Road MSA	☐ 2 days			Sampler: S. Cameron
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Total Metals	Dissolved Metals	TPH-GRO	TPH-DRO	SVOCs and 1,4-Dioxane	Alkalinity, Anions, and TDS	Ammonia	Dissolved Organic Carbon	Metals (6010B, ICP)	Dissolved Gasses	Sample Specific Notes:
MSA-MW46S-101613	10/16/13	0950	GW	AQ	11		3	1	1	2	2	2						
MSA-MW46I-101613	10/16/13	1205	GW	AQ	11		3	1	1	2	2	2						
MSA-MW46D-101613	10/16/13	1320	GW	AQ	11		3	1	1	2	2	2						
TB-~~061715~~ 101613	--	--	TB	AQ	2		2											
MSA-MW47S-101613	10/16/13	1445	GW	AQ	11		3	1	1	2	2	2						
MW 11/21/13																		

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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

	Company:	Date/Time:		Company:	Date/Time:
Relinquished by:	Tetra Tech	10/16/13-1600	Received by: Paul Mylard	TestAmerica	10/16/13 1600
Relinquished by: Paul Mylard	TestAmerica	10/16/13/1700	Received by:	TAC	10/17/13 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 30344
Canton Facility

Client TETRA TECH Site Name _____ Cooler unpacked by:

Cooler Received on 10-17-13 Opened on 10-17-13

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF +2 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 4	(CF +1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☒ See Multiple Cooler Form
IR GUN# 5	(CF +2 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes (No) NA pH Strip Lot# HC376062
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) MW465 2X500ml were further preserved in the laboratory.
Time preserved: 1450 10/17/13 Preservative(s) added/Lot number(s): NITRIC 111030

TestAmerica Multiple Cooler Receipt Form/Narrative — Login # : _____
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
241-497	8	2.6	2.6	ICE
client cooler	8	2.2	2.2	ICE

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
MSA-MW46S-101613	240-30344-F-1	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-MW46S-101613	240-30344-G-1	Plastic 500ml - with Nitric Acid	<2		
MSA-MW46I-101613	240-30344-F-2	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-MW46I-101613	240-30344-G-2	Plastic 500ml - with Nitric Acid	<2		
MSA-MW46D-101613	240-30344-F-3	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-MW46D-101613	240-30344-G-3	Plastic 500ml - with Nitric Acid	<2		
MSA-MW47S-101613	240-30344-F-5	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-MW47S-101613	240-30344-G-5	Plastic 500ml - with Nitric Acid	<2		

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: DUMP ROAD MSA

Report Number: 240-30344-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 10/17/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 2.2 and 2.6 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-MW46S-101613 (240-30344-1), MSA-MW46I-101613 (240-30344-2), MSA-MW46D-101613 (240-30344-3), TB-061713 (240-30344-4) and MSA-MW47S-101613 (240-30344-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/29/2013 and 10/30/2013.

Methylene Chloride was detected in method blank MB 240-107712/5 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

2-Hexanone, trans-1,3-Dichloropropene and Vinyl chloride failed the recovery criteria high for LCS 240-107534/4. 1,1-Dichloropropene failed the recovery criteria high for LCS 240-107637/15. 1,3-Dichloropropane, 2-Hexanone, 4-Chlorotoluene, sec-Butylbenzene and trans-1,3-Dichloropropene failed the recovery criteria high for LCS 240-107712/4.

Samples MSA-MW46I-101613 (240-30344-2)[6.67X] and MSA-MW47S-101613 (240-30344-5)[55.56X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 107534 recovered outside control limits for the following analytes: 2-Hexanone, Vinyl Chloride, trans-1,3-Dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 107712 recovered outside control limits for the following analytes: 2-Hexanone, sec-Butylbenzene, trans-1,3-Dichloropropene, 1,3-Dichloropropane, 4-Chlorotoluene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS)for batch 107637 recovered outside control limits for the following analytes: 1,1-Dichloropropene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

No MS/MSD in batch 107534 due to incorrect sample dilution.

There was an MS/MSD analyzed in batch 107637 but could not be reported because the associated sample needed reanalyzed in a different batch.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Samples MSA-MW46S-101613 (240-30344-1), MSA-MW46I-101613 (240-30344-2), MSA-MW46D-101613 (240-30344-3) and MSA-MW47S-101613 (240-30344-5) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 10/22/2013 and analyzed on 10/29/2013.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Bis(2-ethylhexyl) phthalate and Di-n-butyl phthalate were detected in method blank MB 240-106515/16-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Sample MSA-MW47S-101613 (240-30344-5)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 106515, 3520C, 8270D.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)
Samples MSA-MW46S-101613 (240-30344-1), MSA-MW46I-101613 (240-30344-2), MSA-MW46D-101613 (240-30344-3) and MSA-MW47S-101613 (240-30344-5) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 10/19/2013.

An MS/MSD was analyzed with batch 106236, but could not be reported with samples: MSA-MW46D-101613 (240-30344-3), MSA-MW46I-101613 (240-30344-2), MSA-MW46S-101613 (240-30344-1), MSA-MW47S-101613 (240-30344-5).

No other difficulties were encountered during the gasoline analysis. All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)
Samples MSA-MW46S-101613 (240-30344-1), MSA-MW46I-101613 (240-30344-2), MSA-MW46D-101613 (240-30344-3) and MSA-MW47S-101613 (240-30344-5) were analyzed for diesel range organics (DRO) in accordance with EPA-SW-846 Method 8015C - DRO. The samples were prepared on 10/18/2013 and analyzed on 10/23/2013.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 106111, 8015.

No other difficulties were encountered during the DRO analysis. All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP)
Samples MSA-MW46S-101613 (240-30344-1), MSA-MW46I-101613 (240-30344-2), MSA-MW46D-101613 (240-30344-3) and MSA-MW47S-101613 (240-30344-5) were analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 10/22/2013 and analyzed on 10/29/2013.

The continuing calibration verification (CCV) for Thallium associated with batch 107650 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. MSA-MW46D-101613 (240-30344-3), MSA-MW46I-101613 (240-30344-2), MSA-MW46S-101613 (240-30344-1), MSA-MW47S-101613 (240-30344-5).

No other difficulties were encountered during the metals analysis. All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICP)
Samples MSA-MW46S-101613 (240-30344-1), MSA-MW46I-101613 (240-30344-2), MSA-MW46D-101613 (240-30344-3) and MSA-MW47S-101613 (240-30344-5) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 10/22/2013 and analyzed on 10/29/2013.

Barium and Zinc were detected in method blank MB 240-106546/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The continuing calibration verification (CCV) for Thallium associated with batch 107650 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. MSA-MW46D-101613 (240-30344-3), MSA-MW46I-101613 (240-30344-2), MSA-MW46S-101613 (240-30344-1), MSA-MW47S-101613 (240-30344-5).

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Samples MSA-MW46S-101613 (240-30344-1), MSA-MW46I-101613 (240-30344-2), MSA-MW46D-101613 (240-30344-3) and MSA-MW47S-101613 (240-30344-5) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/22/2013 and analyzed on 10/24/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples MSA-MW46S-101613 (240-30344-1), MSA-MW46I-101613 (240-30344-2), MSA-MW46D-101613 (240-30344-3) and MSA-MW47S-101613 (240-30344-5) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/22/2013 and analyzed on 10/24/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-30344-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-30344-1	MSA-MW46S-101613	Water	10/16/2013 0950	10/17/2013 0930
240-30344-2	MSA-MW46I-101613	Water	10/16/2013 1205	10/17/2013 0930
240-30344-3	MSA-MW46D-101613	Water	10/16/2013 1320	10/17/2013 0930
240-30344-4	TB-061713	Water	10/16/2013 0000	10/17/2013 0930
240-30344-5	MSA-MW47S-101613	Water	10/16/2013 1445	10/17/2013 0930

METHOD SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-30344-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B
Semivolatile Organic Compounds (GC/MS)	TAL CAN	SW846 8270D	
Liquid-Liquid Extraction (Continuous)	TAL CAN		SW846 3520C
Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	TAL CAN	SW846 8015C	
Purge and Trap	TAL CAN		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL CAN	SW846 8015C	
Liquid-Liquid Extraction (Continuous)	TAL CAN		SW846 3520C
Metals (ICP)	TAL CAN	SW846 6010C	
Preparation, Total Recoverable or Dissolved Metals	TAL CAN		SW846 3005A
Metals (ICP)	TAL CAN	SW846 6010C	
Preparation, Total Recoverable or Dissolved Metals	TAL CAN		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Mercury (CVAA)	TAL CAN	SW846 7470A	
Preparation, Mercury	TAL CAN		SW846 7470A
Mercury (CVAA)	TAL CAN	SW846 7470A	
Preparation, Mercury	TAL CAN		SW846 7470A
Sample Filtration, Field			FIELD_FLTRD

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc. Job Number: 240-30344-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD exceeds the control limits
	F	MS/MSD Recovery and/or RPD exceeds the control limits
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC VOA		
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc. Job Number: 240-30344-1

Lab Section	Qualifier	Description
Metals		
	B	Compound was found in the blank and sample.
	^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Client: Tetra Tech, Inc.

Job Number: 240-30344-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:240-107534					
LCS 240-107534/4	Lab Control Sample	T	Water	8260B	
MB 240-107534/5	Method Blank	T	Water	8260B	
240-30344-3	MSA-MW46D-101613	T	Water	8260B	
240-30344-4	TB-061713	T	Water	8260B	
Analysis Batch:240-107637					
LCS 240-107637/15	Lab Control Sample	T	Water	8260B	
MB 240-107637/17	Method Blank	T	Water	8260B	
240-30344-1	MSA-MW46S-101613	T	Water	8260B	
Analysis Batch:240-107712					
LCS 240-107712/4	Lab Control Sample	T	Water	8260B	
MB 240-107712/5	Method Blank	T	Water	8260B	
240-30344-2	MSA-MW46I-101613	T	Water	8260B	
240-30344-5	MSA-MW47S-101613	T	Water	8260B	
240-30386-B-4 MS	Matrix Spike	T	Water	8260B	
240-30386-B-4 MSD	Matrix Spike Duplicate	T	Water	8260B	

Report Basis
T = Total

GC/MS Semi VOA					
Prep Batch: 240-106515					
LCS 240-106515/17-A	Lab Control Sample	T	Water	3520C	
MB 240-106515/16-A	Method Blank	T	Water	3520C	
240-30344-1	MSA-MW46S-101613	T	Water	3520C	
240-30344-2	MSA-MW46I-101613	T	Water	3520C	
240-30344-3	MSA-MW46D-101613	T	Water	3520C	
240-30344-5	MSA-MW47S-101613	T	Water	3520C	
Analysis Batch:240-107533					
LCS 240-106515/17-A	Lab Control Sample	T	Water	8270D	240-106515
MB 240-106515/16-A	Method Blank	T	Water	8270D	240-106515
240-30344-1	MSA-MW46S-101613	T	Water	8270D	240-106515
240-30344-2	MSA-MW46I-101613	T	Water	8270D	240-106515
240-30344-3	MSA-MW46D-101613	T	Water	8270D	240-106515
240-30344-5	MSA-MW47S-101613	T	Water	8270D	240-106515

Report Basis
T = Total

Client: Tetra Tech, Inc.

Job Number: 240-30344-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC VOA					
Analysis Batch:240-106236					
LCS 240-106236/6	Lab Control Sample	T	Water	8015C	
MB 240-106236/5	Method Blank	T	Water	8015C	
240-30344-1	MSA-MW46S-101613	T	Water	8015C	
240-30344-2	MSA-MW46I-101613	T	Water	8015C	
240-30344-3	MSA-MW46D-101613	T	Water	8015C	
240-30344-5	MSA-MW47S-101613	T	Water	8015C	

Report Basis
T = Total

GC Semi VOA					
Prep Batch: 240-106111					
LCS 240-106111/13-A	Lab Control Sample	T	Water	3520C	
MB 240-106111/12-A	Method Blank	T	Water	3520C	
240-30344-1	MSA-MW46S-101613	T	Water	3520C	
240-30344-2	MSA-MW46I-101613	T	Water	3520C	
240-30344-3	MSA-MW46D-101613	T	Water	3520C	
240-30344-5	MSA-MW47S-101613	T	Water	3520C	
Analysis Batch:240-106668					
LCS 240-106111/13-A	Lab Control Sample	T	Water	8015C	240-106111
MB 240-106111/12-A	Method Blank	T	Water	8015C	240-106111
240-30344-1	MSA-MW46S-101613	T	Water	8015C	240-106111
240-30344-2	MSA-MW46I-101613	T	Water	8015C	240-106111
240-30344-3	MSA-MW46D-101613	T	Water	8015C	240-106111
240-30344-5	MSA-MW47S-101613	T	Water	8015C	240-106111

Report Basis
T = Total

Client: Tetra Tech, Inc.

Job Number: 240-30344-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 240-106546					
LCS 240-106546/2-A	Lab Control Sample	R	Water	3005A	
MB 240-106546/1-A	Method Blank	R	Water	3005A	
240-30344-1	MSA-MW46S-101613	D	Water	3005A	
240-30344-1	MSA-MW46S-101613	R	Water	3005A	
240-30344-2	MSA-MW46I-101613	D	Water	3005A	
240-30344-2	MSA-MW46I-101613	R	Water	3005A	
240-30344-2DU	Duplicate	R	Water	3005A	
240-30344-2MS	Matrix Spike	R	Water	3005A	
240-30344-3	MSA-MW46D-101613	D	Water	3005A	
240-30344-3	MSA-MW46D-101613	R	Water	3005A	
240-30344-5	MSA-MW47S-101613	D	Water	3005A	
240-30344-5	MSA-MW47S-101613	R	Water	3005A	
Prep Batch: 240-106547					
LCS 240-106547/2-A	Lab Control Sample	T	Water	7470A	
MB 240-106547/1-A	Method Blank	T	Water	7470A	
240-30344-1	MSA-MW46S-101613	D	Water	7470A	
240-30344-1	MSA-MW46S-101613	T	Water	7470A	
240-30344-2	MSA-MW46I-101613	D	Water	7470A	
240-30344-2	MSA-MW46I-101613	T	Water	7470A	
240-30344-2DU	Duplicate	T	Water	7470A	
240-30344-2MS	Matrix Spike	T	Water	7470A	
240-30344-3	MSA-MW46D-101613	D	Water	7470A	
240-30344-3	MSA-MW46D-101613	T	Water	7470A	
240-30344-5	MSA-MW47S-101613	D	Water	7470A	
240-30344-5	MSA-MW47S-101613	T	Water	7470A	
Analysis Batch:240-107013					
LCS 240-106547/2-A	Lab Control Sample	T	Water	7470A	240-106547
MB 240-106547/1-A	Method Blank	T	Water	7470A	240-106547
240-30344-1	MSA-MW46S-101613	D	Water	7470A	240-106547
240-30344-1	MSA-MW46S-101613	T	Water	7470A	240-106547
240-30344-2	MSA-MW46I-101613	D	Water	7470A	240-106547
240-30344-2	MSA-MW46I-101613	T	Water	7470A	240-106547
240-30344-2DU	Duplicate	T	Water	7470A	240-106547
240-30344-2MS	Matrix Spike	T	Water	7470A	240-106547
240-30344-3	MSA-MW46D-101613	D	Water	7470A	240-106547
240-30344-3	MSA-MW46D-101613	T	Water	7470A	240-106547
240-30344-5	MSA-MW47S-101613	D	Water	7470A	240-106547
240-30344-5	MSA-MW47S-101613	T	Water	7470A	240-106547

Client: Tetra Tech, Inc.

Job Number: 240-30344-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:240-107650					
LCS 240-106546/2-A	Lab Control Sample	R	Water	6010C	240-106546
MB 240-106546/1-A	Method Blank	R	Water	6010C	240-106546
240-30344-1	MSA-MW46S-101613	D	Water	6010C	240-106546
240-30344-1	MSA-MW46S-101613	R	Water	6010C	240-106546
240-30344-2	MSA-MW46I-101613	D	Water	6010C	240-106546
240-30344-2	MSA-MW46I-101613	R	Water	6010C	240-106546
240-30344-2DU	Duplicate	R	Water	6010C	240-106546
240-30344-2MS	Matrix Spike	R	Water	6010C	240-106546
240-30344-3	MSA-MW46D-101613	D	Water	6010C	240-106546
240-30344-3	MSA-MW46D-101613	R	Water	6010C	240-106546
240-30344-5	MSA-MW47S-101613	D	Water	6010C	240-106546
240-30344-5	MSA-MW47S-101613	R	Water	6010C	240-106546

Report Basis

D = Dissolved

R = Total Recoverable

T = Total

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MSA-MW46S-101613	240-30344-1	105	107	90	85
MSA-MW46I-101613	240-30344-2	97	110	92	80
MSA-MW46D-101613	240-30344-3	105	102	91	85
TB-061713	240-30344-4	104	105	93	86
MSA-MW47S-101613	240-30344-5	106	114	92	86
	MB 240-107534/5	99	101	90	82
	MB 240-107637/17	96	102	89	80
	MB 240-107712/5	102	112	90	84
	LCS 240-107534/4	93	93	107	102
	LCS 240-107637/15	90	89	94	99
	LCS 240-107712/4	90	94	102	102
	240-30386-B-4 MS	93	99	105	100
	240-30386-B-4 MSD	91	96	104	99

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Sample No.: STD8260 240-98656/4 Date Analyzed: 08/22/2013 17:32

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC4300.D Heated Purge: (Y/N) N

Calibration ID: 17022

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1751146	5.21	1161548	7.89	800526	10.12
UPPER LIMIT		3502292	5.71	2323096	8.39	1601052	10.62
LOWER LIMIT		875573	4.71	580774	7.39	400263	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-98656/20		1748692	5.21	1103221	7.89	799466	10.12
CCVIS 240-107534/2		1647501	5.21	1041023	7.89	721944	10.12
CCVIS 240-107712/2		1634652	5.21	1067797	7.89	714325	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Sample No.: CCVIS 240-107534/2 Date Analyzed: 10/29/2013 10:12

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC6354.D Heated Purge: (Y/N) N

Calibration ID: 17662

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1647501	5.21	1041023	7.89	721944	10.12
UPPER LIMIT		3295002	5.71	2082046	8.39	1443888	10.62
LOWER LIMIT		823751	4.71	520512	7.39	360972	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-107534/4		1739218	5.21	1128598	7.89	756968	10.12
CCV 240-107534/3		1734039	5.21	1137821	7.89	621012	10.12
MB 240-107534/5		1458919	5.21	979393	7.89	538864	10.12
240-30344-3	MSA-MW46D-101613	1495572	5.21	1016774	7.89	581829	10.12
240-30344-4	TB-061713	1457683	5.21	985575	7.89	543918	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Sample No.: CCVIS 240-107712/2 Date Analyzed: 10/30/2013 10:36

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC6413.D Heated Purge: (Y/N) N

Calibration ID: 17662

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1634652	5.21	1067797	7.89	714325	10.12
UPPER LIMIT		3269304	5.71	2135594	8.39	1428650	10.62
LOWER LIMIT		817326	4.71	533899	7.39	357163	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-107712/4		1741075	5.21	1105520	7.89	732679	10.12
CCV 240-107712/3		1585073	5.21	1059167	7.89	585620	10.12
MB 240-107712/5		1366380	5.21	919528	7.89	513233	10.12
240-30344-2	MSA-MW46I-101613	1520976	5.21	1025972	7.89	523801	10.12
240-30344-5	MSA-MW47S-101613	1364550	5.21	933834	7.89	482303	10.12
240-30386-B-4 MS		1669261	5.21	1007897	7.89	679003	10.12
240-30386-B-4 MSD		1760072	5.21	1077002	7.89	709575	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Sample No.: STD8260 240-107637/4 Date Analyzed: 10/29/2013 18:46

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR9258.D Heated Purge: (Y/N) N

Calibration ID: 18554

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1675919	5.76	1284306	8.48	699810	10.72
UPPER LIMIT		3351838	6.26	2568612	8.98	1399620	11.22
LOWER LIMIT		837960	5.26	642153	7.98	349905	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-107637/14		1584705	5.76	1171955	8.48	673454	10.72
LCS 240-107637/15		1614319	5.76	1200412	8.48	682063	10.72
MB 240-107637/17		1394807	5.76	1071426	8.48	465201	10.72
240-30344-1	MSA-MW46S-101613	1243288	5.76	963900	8.48	432300	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab File ID: BFB208A.D BFB Injection Date: 08/22/2013

Instrument ID: A3UX15 BFB Injection Time: 14:12

Analysis Batch No.: 98656

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	48.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.3	(0.3)1
174	50.0 - 120.00 % of mass 95	97.8	
175	5.0 - 9.0 % of mass 174	5.8	(5.9)1
176	95.0 - 101.0 % of mass 174	93.9	(96.1)1
177	5.0 - 9.0 % of mass 176	5.9	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-98656/2	UXC4298.D	08/22/2013	16:48
	STD8260 240-98656/3	UXC4299.D	08/22/2013	17:10
	STD8260 240-98656/4	UXC4300.D	08/22/2013	17:32
	STD8260 240-98656/5	UXC4301.D	08/22/2013	17:55
	STD8260 240-98656/6	UXC4302.D	08/22/2013	18:17
	STD8260 240-98656/7	UXC4303.D	08/22/2013	18:39
	STD 240-98656/8	UXC4304.D	08/22/2013	19:01
	STD 240-98656/9	UXC4305.D	08/22/2013	19:23
	STD 240-98656/10	UXC4306.D	08/22/2013	19:46
	STD 240-98656/11	UXC4307.D	08/22/2013	20:08
	STD 240-98656/12	UXC4308.D	08/22/2013	20:30
	STD 240-98656/13	UXC4309.D	08/22/2013	20:52
	ICV 240-98656/20	UXC4316.D	08/22/2013	23:29

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-98656/7	UXC4303.D
Level 2	STD8260 240-98656/6	UXC4302.D
Level 3	STD8260 240-98656/5	UXC4301.D
Level 4	STD8260 240-98656/4	UXC4300.D
Level 5	STD8260 240-98656/3	UXC4299.D
Level 6	STD8260 240-98656/2	UXC4298.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.4086 0.3921	0.3945	0.3636	0.4031	0.4141	Ave		0.3960				4.5		15.0			
Chloromethane	0.5219 0.4026	0.5299	0.4360	0.4576	0.4543	Ave		0.4670			0.1000	11.0		15.0			
Vinyl chloride	0.4826 0.4161	0.4955	0.4244	0.4441	0.4452	Ave		0.4513				7.0		15.0			
Bromomethane	0.2825 0.1848	0.2719	0.2220	0.2251	0.2207	Ave		0.2345				15.0		15.0			
Chloroethane	0.3072 0.2073	0.2964	0.2445	0.2489	0.2377	Ave		0.2570				15.0		15.0			
Trichlorofluoromethane	0.5068 0.4575	0.4705	0.4276	0.4729	0.4813	Ave		0.4695				5.6		15.0			
Acrolein	0.0311 0.0337	0.0359	0.0330	0.0358	0.0359	Ave		0.0342				5.7		15.0			
1,1-Dichloroethene	0.4321 0.3704	0.4167	0.3738	0.3995	0.4015	Ave		0.3990				6.0		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.3407 0.3025	0.3508	0.2971	0.3203	0.3342	Ave		0.3243				6.6		15.0			
Acetone	0.1195 0.0720	0.1006	0.0781	0.0812	0.0731	Lin1	0.1037	0.0712							0.9990		0.9900
Iodomethane	0.7327 0.6374	0.6949	0.6512	0.6854	0.6906	Ave		0.6820				5.0		15.0			
Carbon disulfide	1.3512 1.1983	1.3360	1.1843	1.2682	1.2832	Ave		1.2702				5.4		15.0			
Acetonitrile	0.0212 0.0274	0.0241	0.0238	0.0269	0.0271	Ave		0.0251				9.9		15.0			
Methyl acetate	0.1978 0.1740	0.1942	0.1756	0.1861	0.1882	Ave		0.1860				5.2		15.0			
Methylene Chloride	0.8395 0.4010	0.6441	0.4784	0.4677	0.4417	Lin1	0.4609	0.4014							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0109 0.0150	0.0126	0.0145	0.0155	0.0164	Ave		0.0141				14.0		15.0			
Acrylonitrile	0.0870 0.0932	0.0941	0.0865	0.0976	0.0962	Ave		0.0924				5.0		15.0			
Methyl tert-butyl ether	0.8438 0.8198	0.8751	0.8092	0.8445	0.8674	Ave		0.8433				3.1		15.0			
trans-1,2-Dichloroethene	0.4671 0.4054	0.4591	0.4324	0.4401	0.4365	Ave		0.4401				4.9		15.0			
Hexane	0.0783 0.0743	0.0784	0.0709	0.0762	0.0797	Ave		0.0763				4.3		15.0			
1,1-Dichloroethane	0.7084 0.6404	0.7270	0.6483	0.6818	0.6915	Ave		0.6829			0.1000	4.9		15.0			
Vinyl acetate	0.0302 0.0382	0.0316	0.0308	0.0366	0.0400	Ave		0.0346				12.0		15.0			
2,2-Dichloropropane	0.3958 0.4009	0.3735	0.3839	0.4008	0.4249	Ave		0.3966				4.4		15.0			
cis-1,2-Dichloroethene	0.4660 0.4187	0.4620	0.4274	0.4484	0.4474	Ave		0.4450				4.2		15.0			
2-Butanone	0.1045 0.0871	0.0892	0.0856	0.0898	0.0881	Ave		0.0907				7.6		15.0			
Bromochloromethane	0.1947 0.1841	0.1961	0.1864	0.1964	0.2028	Ave		0.1934				3.6		15.0			
Tetrahydrofuran	0.0635 0.0588	0.0774	0.0604	0.0602	0.0611	Ave		0.0636				11.0		15.0			
Chloroform	0.6744 0.6305	0.7025	0.6442	0.6657	0.6803	Ave		0.6663				3.9		15.0			
1,1,1-Trichloroethane	0.5450 0.5334	0.5431	0.5073	0.5454	0.5680	Ave		0.5404				3.7		15.0			
Cyclohexane	0.6423 0.6349	0.6599	0.5833	0.6490	0.6763	Ave		0.6410				4.9		15.0			
1,1-Dichloropropene	0.4789 0.4865	0.5165	0.4636	0.4873	0.5075	Ave		0.4900				3.9		15.0			
Carbon tetrachloride	0.4202 0.4681	0.4558	0.4209	0.4739	0.4888	Ave		0.4546				6.3		15.0			
Benzene	1.4584 1.4225	1.4726	1.3976	1.4474	1.4776	Ave		1.4460				2.1		15.0			
1,2-Dichloroethane	0.4014 0.3945	0.4249	0.3869	0.4040	0.4084	Ave		0.4033				3.2		15.0			
Trichloroethene	0.3974 0.3713	0.3745	0.3600	0.3804	0.3838	Ave		0.3779				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.5490 0.5638	0.5676	0.5191	0.5805	0.6022	Ave		0.5637				5.0		15.0			
1,2-Dichloropropane	0.2924 0.3026	0.2999	0.2710	0.3117	0.3082	Ave		0.2976				4.9		15.0			
Dibromomethane	0.1561 0.1655	0.1739	0.1585	0.1659	0.1690	Ave		0.1648				4.0		15.0			
1,4-Dioxane	0.0017 0.0021	0.0024	0.0019	0.0021	0.0024	Ave		0.0021				12.0		15.0			
Bromodichloromethane	0.2858 0.3738	0.3245	0.3253	0.3562	0.3681	Ave		0.3390				9.9		15.0			
2-Chloroethyl vinyl ether	0.0637 0.1165	0.0730	0.0875	0.0969	0.0997	Lin1	-0.140	0.1114							0.9930		0.9900
cis-1,3-Dichloropropene	0.2485 0.4004	0.2728	0.2997	0.3426	0.3620	Lin1	-0.214	0.3880							0.9960		0.9900
4-Methyl-2-pentanone	0.1251 0.1761	0.1569	0.1441	0.1685	0.1717	Ave		0.1571				12.0		15.0			
Toluene	2.4964 2.0082	2.5638	2.0462	2.0392	2.1864	Ave		2.2234				11.0		15.0			
trans-1,3-Dichloropropene	0.3289 0.4446	0.3264	0.3542	0.3786	0.4299	Ave		0.3771				13.0		15.0			
Ethyl methacrylate	0.2604 0.3589	0.2922	0.3068	0.3273	0.3807	Ave		0.3210				14.0		15.0			
1,1,2-Trichloroethane	0.2925 0.2959	0.3077	0.2929	0.3030	0.3114	Ave		0.3006				2.7		15.0			
Tetrachloroethene	0.4133 0.4146	0.4404	0.4027	0.4246	0.4476	Ave		0.4239				4.1		15.0			
1,3-Dichloropropane	0.4880 0.5288	0.5105	0.4996	0.5046	0.5404	Ave		0.5120				3.8		15.0			
2-Hexanone	0.1207 0.1483	0.1358	0.1377	0.1386	0.1554	Ave		0.1394				8.5		15.0			
Dibromochloromethane	0.2911 0.3578	0.2870	0.2947	0.3152	0.3542	Ave		0.3167				10.0		15.0			
1,2-Dibromoethane	0.2566 0.3058	0.2753	0.2844	0.2921	0.3136	Ave		0.2880				7.2		15.0			
Chlorobenzene	1.2828 1.2480	1.2633	1.2272	1.2366	1.3261	Ave		1.2640			0.3000	2.9		15.0			
1,1,1,2-Tetrachloroethane	0.4392 0.4848	0.4850	0.4607	0.4803	0.5401	Ave		0.4817				7.0		15.0			
Ethylbenzene	0.6619 0.6922	0.6533	0.6794	0.6915	0.7531	Ave		0.6886				5.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	1.5336 1.4861	1.6352	1.6595	1.7309	1.8773	Ave		1.6538				8.5		15.0			
o-Xylene	0.8230 0.9047	0.8706	0.8915	0.9245	1.0088	Ave		0.9038				6.9		15.0			
Styrene	1.1282 1.3929	1.1899	1.2597	1.3494	1.4622	Ave		1.2970				9.8		15.0			
Bromoform	0.1634 0.2260	0.1790	0.1835	0.1954	0.2249	Ave		0.1954			0.1000	13.0		15.0			
Isopropylbenzene	1.9701 2.3478	2.0502	2.1946	2.3528	2.5810	Ave		2.2494				10.0		15.0			
1,1,2,2-Tetrachloroethane	0.6612 0.6315	0.6452	0.5887	0.6416	0.6406	Ave		0.6348			0.3000	3.9		15.0			
Bromobenzene	0.8873 0.9012	0.8688	0.8194	0.8700	0.9013	Ave		0.8747				3.5		15.0			
1,2,3-Trichloropropane	0.1965 0.1952	0.2146	0.1828	0.1910	0.2080	Ave		0.1980				5.8		15.0			
trans-1,4-Dichloro-2-butene	0.1249 0.1203	0.1232	0.1053	0.1137	0.1164	Ave		0.1173				6.1		15.0			
n-Propylbenzene	0.7511 0.8885	0.8079	0.7930	0.8782	0.9113	Ave		0.8383				7.5		15.0			
2-Chlorotoluene	0.8162 0.8410	0.7903	0.8095	0.8442	0.8659	Ave		0.8278				3.3		15.0			
1,3,5-Trimethylbenzene	2.2799 2.9229	2.3979	2.5338	2.8013	2.9366	Ave		2.6454				11.0		15.0			
4-Chlorotoluene	2.6515 2.7164	2.5944	2.5470	2.6738	2.7232	Ave		2.6510				2.6		15.0			
tert-Butylbenzene	1.8297 2.5112	1.8781	2.0570	2.3874	2.5069	Ave		2.1951				14.0		15.0			
1,2,4-Trimethylbenzene	2.3578 2.9656	2.4916	2.6670	2.8810	2.9934	Ave		2.7261				9.7		15.0			
sec-Butylbenzene	2.7131 3.3725	2.7512	2.9385	3.2729	3.4117	Ave		3.0767				10.0		15.0			
1,3-Dichlorobenzene	1.8155 1.7683	1.8196	1.6936	1.7695	1.8121	Ave		1.7798				2.7		15.0			
p-Isopropyltoluene	2.2226 2.9651	2.4005	2.5470	2.8918	2.9922	Ave		2.6699				12.0		15.0			
1,4-Dichlorobenzene	1.9308 1.8321	1.8364	1.7737	1.8677	1.8955	Ave		1.8560				3.0		15.0			
n-Butylbenzene	2.1121 2.5030	2.1368	2.2000	2.4493	2.5690	Ave		2.3284				8.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.7483 1.7094	1.7439	1.6963	1.7751	1.8225	Ave		1.7493				2.6		15.0			
1,2-Dibromo-3-Chloropropane	0.0927 0.1171	0.1051	0.0883	0.1129	0.1215	Ave		0.1063				13.0		15.0			
1,3,5-Trichlorobenzene	1.2362 1.2346	1.2878	1.2042	1.3188	1.3360	Ave		1.2696				4.1		15.0			
1,2,4-Trichlorobenzene	0.9557 1.0150	0.9746	0.9417	1.0654	1.1003	Ave		1.0088				6.3		15.0			
Hexachlorobutadiene	0.5783 0.5334	0.5938	0.5590	0.6380	0.6215	Ave		0.5873				6.6		15.0			
Naphthalene	1.4625 2.0692	1.6561	1.6653	2.0093	2.2516	Lin1	-0.899	2.1332							0.9960		0.9900
1,2,3-Trichlorobenzene	0.9002 0.8311	0.9217	0.8176	0.9158	0.9348	Ave		0.8869				5.6		15.0			
Dibromofluoromethane (Surr)	0.3112 0.3193	0.3246	0.3087	0.3413	0.3345	Ave		0.3233				4.0		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3194 0.3179	0.3251	0.3051	0.3223	0.3263	Ave		0.3193				2.4		15.0			
Toluene-d8 (Surr)	1.5842 1.6556	1.6671	1.5555	1.6537	1.7721	Ave		1.6480				4.6		15.0			
4-Bromofluorobenzene (Surr)	0.5415 0.5744	0.5701	0.5631	0.5629	0.6103	Ave		0.5704				4.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 19:01 Calibration End Date: 08/22/2013 20:52 Calibration ID: 17024

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-98656/13	UXC4309.D
Level 2	STD 240-98656/12	UXC4308.D
Level 3	STD 240-98656/11	UXC4307.D
Level 4	STD 240-98656/10	UXC4306.D
Level 5	STD 240-98656/9	UXC4305.D
Level 6	STD 240-98656/8	UXC4304.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.6779 0.6367	0.6657	0.6646	0.6374	0.6342	Ave		0.6527				2.9		15.0			
Ethyl ether	0.2477 0.2516	0.2495	0.2526	0.2474	0.2391	Ave		0.2480				1.9		15.0			
3-Chloro-1-propene	0.1914 0.2222	0.1985	0.1893	0.2056	0.2132	Ave		0.2034				6.3		15.0			
Diisopropyl ether	0.2998 0.3561	0.3194	0.3264	0.3307	0.3418	Ave		0.3290				5.8		15.0			
2-Chloro-1,3-butadiene	0.5528 0.6048	0.5476	0.5730	0.5869	0.5906	Ave		0.5759				3.9		15.0			
Ethyl-t-butyl ether (ETBE)	0.8226 0.9697	0.8804	0.8735	0.8939	0.9288	Ave		0.8948				5.6		15.0			
Ethyl acetate	0.1339 0.1475	0.1333	0.1362	0.1297	0.1506	Ave		0.1385				6.1		15.0			
Propionitrile	0.0200 0.0324	0.0312	0.0284	0.0282	0.0293	Ave		0.0283				15.0		15.0			
Methacrylonitrile	0.0994 0.1237	0.1209	0.1029	0.1140	0.1210	Ave		0.1137				9.0		15.0			
Isobutyl alcohol	0.0050 0.0057	0.0048	0.0049	0.0042	0.0055	Ave		0.0050				11.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6038 0.7912	0.6480	0.6872	0.7136	0.7558	Ave		0.6999				9.8		15.0			
n-Heptane	0.0571 0.0694	0.0609	0.0612	0.0680	0.0692	Ave		0.0643				8.1		15.0			
n-Butanol	0.0030 0.0043	0.0038	0.0042	0.0039	0.0045	Ave		0.0039				14.0		15.0			
Methyl methacrylate	0.1090 0.1178	0.1025	0.0908	0.1002	0.1113	Ave		0.1053				9.0		15.0			
2-Nitropropane	0.0255 0.0246	0.0232	0.0198	0.0219	0.0230	Ave		0.0230				8.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 19:01 Calibration End Date: 08/22/2013 20:52 Calibration ID: 17024

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0603 0.1016	0.0697	0.0814	0.0802	0.0914	Lin1	-0.545	0.0978							0.9940		0.9900
1,2,3-Trimethylbenzene	2.1936 3.3662	2.3500	2.7504	2.8092	3.2831	Lin1	-1.702	3.3238							0.9970		0.9900
2-Methylnaphthalene	0.5728 0.8431	0.5680	0.5198	0.8556	0.9803	Qua	-2.945	1.1289	-0.003						0.9950		0.9900
n-Butyl acetate	0.1618 0.2104	0.1591	0.1739	0.1804	0.2013	Ave		0.1812				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

no samples

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-98656/20 Calibration Date: 08/22/2013 23:29

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC4316.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3960	0.3933		1.00	0.0100	-0.7	50.0
Chloromethane	Ave	0.4670	0.4347	0.1000	1.00	0.0100	-6.9	50.0
Vinyl chloride	Ave	0.4513	0.4196		1.00	0.0100	-7.0	20.0
Bromomethane	Ave	0.2345	0.1966		1.00	0.0100	-16.2	50.0
Chloroethane	Ave	0.2570	0.2306		1.00	0.0100	-10.3	50.0
Trichlorofluoromethane	Ave	0.4695	0.4749		1.00	0.0100	1.2	50.0
Acrolein	Ave	0.0342	0.0301		20.0	0.0300	-12.0	50.0
1,1-Dichloroethene	Ave	0.3990	0.3863		1.00	0.0100	-3.2	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.3243	0.3082		1.00	0.0100	-4.9	50.0
Acetone	Lin1		0.0666		10.0	0.0200	-13.8	50.0
Iodomethane	Ave	0.6820	0.6690		1.00	0.0100	-1.9	50.0
Carbon disulfide	Ave	1.270	1.256		1.00	0.0100	-1.1	50.0
Acetonitrile	Ave	0.0251	0.0252		20.0	0.0300	0.5	50.0
Methyl acetate	Ave	0.1860	0.1996		10.0	0.0100	7.3	50.0
Methylene Chloride	Lin1		0.4513		1.00	0.0100	1.0	50.0
tert-Butyl alcohol	Ave	0.0141	0.0133		50.0	0.200	-6.1	50.0
Acrylonitrile	Ave	0.0924	0.0910		20.0	0.0300	-1.6	50.0
Methyl tert-butyl ether	Ave	0.8433	0.7813		1.00	0.0100	-7.4	50.0
trans-1,2-Dichloroethene	Ave	0.4401	0.4211		1.00	0.0100	-4.3	50.0
Hexane	Ave	0.0763	0.0709		1.00	0.0100	-7.1	20.0
1,1-Dichloroethane	Ave	0.6829	0.6773	0.1000	1.00	0.0100	-0.8	50.0
Vinyl acetate	Ave	0.0346	0.0267		2.00	0.0100	-22.7	50.0
2,2-Dichloropropane	Ave	0.3966	0.3479		1.00	0.0100	-12.3	50.0
cis-1,2-Dichloroethene	Ave	0.4450	0.4276		1.00	0.0100	-3.9	50.0
2-Butanone	Ave	0.0907	0.0804		10.0	0.0200	-11.3	50.0
Bromochloromethane	Ave	0.1934	0.1942		1.00	0.0100	0.4	50.0
Tetrahydrofuran	Ave	0.0636	0.0592		5.00	0.0100	-6.9	50.0
Chloroform	Ave	0.6663	0.6620		1.00	0.0100	-0.6	20.0
1,1,1-Trichloroethane	Ave	0.5404	0.5216		1.00	0.0100	-3.5	50.0
Cyclohexane	Ave	0.6410	0.5725		1.00	0.0100	-10.7	50.0
1,1-Dichloropropene	Ave	0.4900	0.4463		1.00	0.0100	-8.9	50.0
Carbon tetrachloride	Ave	0.4546	0.4366		1.00	0.0100	-4.0	50.0
Benzene	Ave	1.446	1.479		1.00	0.0100	2.3	50.0
1,2-Dichloroethane	Ave	0.4033	0.4189		1.00	0.0100	3.9	50.0
Trichloroethene	Ave	0.3779	0.3817		1.00	0.0100	1.0	50.0
Methylcyclohexane	Ave	0.5637	0.4787		1.00	0.0100	-15.1	50.0
1,2-Dichloropropane	Ave	0.2976	0.3009		1.00	0.0100	1.1	20.0
Dibromomethane	Ave	0.1648	0.1683		1.00	0.0100	2.1	50.0
Bromodichloromethane	Ave	0.3390	0.3598		1.00	0.0100	6.2	50.0
2-Chloroethyl vinyl ether	Lin1		0.0831		10.0	0.0100	-12.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-98656/20 Calibration Date: 08/22/2013 23:29

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC4316.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Lin1		0.3212		1.00	0.0100	-11.7	50.0
4-Methyl-2-pentanone	Ave	0.1571	0.1504		10.0	0.0200	-4.3	50.0
Toluene	Ave	2.223	2.158		1.00	0.0100	-2.9	20.0
trans-1,3-Dichloropropene	Ave	0.3771	0.3676		1.00	0.0100	-2.5	50.0
1,1,2-Trichloroethane	Ave	0.3006	0.3111		1.00	0.0100	3.5	50.0
Tetrachloroethene	Ave	0.4239	0.4250		1.00	0.0100	0.3	50.0
1,3-Dichloropropane	Ave	0.5120	0.5462		1.00	0.0100	6.7	50.0
2-Hexanone	Ave	0.1394	0.1304		10.0	0.0200	-6.4	50.0
Dibromochloromethane	Ave	0.3167	0.3238		1.00	0.0100	2.2	50.0
1,2-Dibromoethane	Ave	0.2880	0.2987		1.00	0.0100	3.7	50.0
Chlorobenzene	Ave	1.264	1.274	0.3000	1.00	0.0100	0.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4817	0.4851		1.00	0.0100	0.7	50.0
Ethylbenzene	Ave	0.6886	0.7096		1.00	0.0100	3.1	20.0
m-Xylene & p-Xylene	Ave	1.654	1.762		2.00	0.0200	6.6	50.0
o-Xylene	Ave	0.9038	0.9258		1.00	0.0100	2.4	50.0
Styrene	Ave	1.297	1.407		1.00	0.0100	8.5	50.0
Bromoform	Ave	0.1954	0.1896	0.1000	1.00	0.0100	-2.9	50.0
Isopropylbenzene	Ave	2.249	2.288		1.00	0.0100	1.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6348	0.5852	0.3000	1.00	0.0100	-7.8	50.0
Bromobenzene	Ave	0.8747	0.8383		1.00	0.0100	-4.2	50.0
1,2,3-Trichloropropane	Ave	0.1980	0.1879		1.00	0.0100	-5.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1173	0.1119		1.00	0.0200	-4.6	50.0
n-Propylbenzene	Ave	0.8383	0.8523		1.00	0.0100	1.7	50.0
2-Chlorotoluene	Ave	0.8278	0.8080		1.00	0.0100	-2.4	50.0
1,3,5-Trimethylbenzene	Ave	2.645	2.660		1.00	0.0100	0.5	50.0
4-Chlorotoluene	Ave	2.651	2.561		1.00	0.0100	-3.4	50.0
tert-Butylbenzene	Ave	2.195	2.201		1.00	0.0100	0.3	50.0
1,2,4-Trimethylbenzene	Ave	2.726	2.790		1.00	0.0100	2.3	50.0
sec-Butylbenzene	Ave	3.077	3.056		1.00	0.0100	-0.7	50.0
1,3-Dichlorobenzene	Ave	1.780	1.676		1.00	0.0100	-5.8	50.0
p-Isopropyltoluene	Ave	2.670	2.764		1.00	0.0100	3.5	50.0
1,4-Dichlorobenzene	Ave	1.856	1.746		1.00	0.0100	-5.9	50.0
n-Butylbenzene	Ave	2.328	2.271		1.00	0.0100	-2.5	50.0
1,2-Dichlorobenzene	Ave	1.749	1.675		1.00	0.0100	-4.3	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1063	0.0940		2.00	0.0100	-11.6	50.0
1,2,4-Trichlorobenzene	Ave	1.009	0.9043		1.00	0.0100	-10.4	50.0
Hexachlorobutadiene	Ave	0.5873	0.5061		1.00	0.0100	-13.8	50.0
Naphthalene	Lin1		1.619		1.00	0.0100	-19.9	50.0
1,2,3-Trichlorobenzene	Ave	0.8869	0.7759		1.00	0.0100	-12.5	50.0
Dibromofluoromethane (Surr)	Ave	0.3233	0.3102		0.00854	0.00890	-4.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.3059		0.00852	0.00890	-4.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-98656/20 Calibration Date: 08/22/2013 23:29

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC4316.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.648	1.634		0.00883	0.00890	-0.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5704	0.5684		0.00887	0.00890	-0.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-98656/20 Calibration Date: 08/22/2013 23:29

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 19:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 20:52

Lab File ID: UXC4316.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2480	0.2540		2.00	0.0100	2.4	50.0
Diisopropyl ether	Ave	0.3290	0.3022		10.0	0.0100	-8.2	50.0
Isobutyl alcohol	Ave	0.0050	0.0052		50.0	0.500	3.2	50.0
Cyclohexanone	Linl		0.0128		20.0	0.200	-84.1*	50.0
1,2,3-Trimethylbenzene	Linl		3.009		0.00956	0.0100	-4.4	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab File ID: BFB260.D BFB Injection Date: 10/29/2013

Instrument ID: A3UX15 BFB Injection Time: 09:36

Analysis Batch No.: 107534

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.9	
75	30.0 - 60.0 % of mass 95	48.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.7	(0.8)1
174	50.0 - 120.00 % of mass 95	91.0	
175	5.0 - 9.0 % of mass 174	6.3	(6.9)1
176	95.0 - 101.0 % of mass 174	87.1	(95.7)1
177	5.0 - 9.0 % of mass 176	5.9	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-107534/2	UXC6354.D	10/29/2013	10:12
	LCS 240-107534/4	UXC6355.D	10/29/2013	10:35
	CCV 240-107534/3	UXC6356.D	10/29/2013	10:58
	MB 240-107534/5	UXC6358.D	10/29/2013	11:43
MSA-MW46D-101613	240-30344-3	UXC6377.D	10/29/2013	18:49
TB-061713	240-30344-4	UXC6378.D	10/29/2013	19:11

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCVIS 240-107534/2 Calibration Date: 10/29/2013 10:12

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC6354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3960	0.4299		1.00	0.0100	8.6	50.0
Chloromethane	Ave	0.4670	0.5058	0.1000	1.00	0.0100	8.3	50.0
Vinyl chloride	Ave	0.4513	0.5343		1.00	0.0100	18.4	20.0
Bromomethane	Ave	0.2345	0.2726		1.00	0.0100	16.2	50.0
Chloroethane	Ave	0.2570	0.2700		1.00	0.0100	5.1	50.0
Trichlorofluoromethane	Ave	0.4695	0.5064		1.00	0.0100	7.9	50.0
Acrolein	Ave	0.0342	0.0084		20.0	0.0500	-75.4*	50.0
1,1-Dichloroethene	Ave	0.3990	0.3942		1.00	0.0100	-1.2	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.3243	0.3336		1.00	0.0100	2.9	50.0
Acetone	Lin1		0.0660		10.0	0.0200	-14.7	50.0
Iodomethane	Ave	0.6820	0.6578		1.00	0.0100	-3.6	50.0
Carbon disulfide	Ave	1.270	1.315		1.00	0.0100	3.5	50.0
Methyl acetate	Ave	0.1860	0.1693		10.0	0.0500	-9.0	50.0
Methylene Chloride	Lin1		0.5068		1.00	0.0100	14.8	50.0
tert-Butyl alcohol	Ave	0.0141	0.0140		50.0	0.100	-1.0	50.0
Acrylonitrile	Ave	0.0924	0.0978		20.0	0.100	5.8	50.0
Methyl tert-butyl ether	Ave	0.8433	0.7586		1.00	0.0100	-10.0	50.0
trans-1,2-Dichloroethene	Ave	0.4401	0.4355		1.00	0.0100	-1.0	50.0
Hexane	Ave	0.0763	0.0691		1.00	0.0100	-9.4	20.0
1,1-Dichloroethane	Ave	0.6829	0.7120	0.1000	1.00	0.0100	4.3	50.0
Vinyl acetate	Ave	0.0346	0.0286		2.00	0.00960	-17.4	50.0
2,2-Dichloropropane	Ave	0.3966	0.4501		1.00	0.0100	13.5	50.0
cis-1,2-Dichloroethene	Ave	0.4450	0.4287		1.00	0.0100	-3.7	50.0
2-Butanone	Ave	0.0907	0.0770		10.0	0.0200	-15.2	50.0
Bromochloromethane	Ave	0.1934	0.1819		1.00	0.0100	-6.0	50.0
Tetrahydrofuran	Ave	0.0636	0.0507		5.00	0.0200	-20.3	50.0
Chloroform	Ave	0.6663	0.6337		1.00	0.0100	-4.9	20.0
1,1,1-Trichloroethane	Ave	0.5404	0.5191		1.00	0.0100	-3.9	50.0
Cyclohexane	Ave	0.6410	0.6625		1.00	0.0100	3.4	50.0
1,1-Dichloropropene	Ave	0.4900	0.4193		1.00	0.0100	-14.4	50.0
Carbon tetrachloride	Ave	0.4546	0.4291		1.00	0.0100	-5.6	50.0
Benzene	Ave	1.446	1.500		1.00	0.0100	3.7	50.0
1,2-Dichloroethane	Ave	0.4033	0.3664		1.00	0.0100	-9.2	50.0
Trichloroethene	Ave	0.3779	0.3321		1.00	0.0100	-12.1	50.0
Methylcyclohexane	Ave	0.5637	0.5550		1.00	0.0100	-1.5	50.0
1,2-Dichloropropane	Ave	0.2976	0.3264		1.00	0.0100	9.7	20.0
Dibromomethane	Ave	0.1648	0.1577		1.00	0.0100	-4.3	50.0
1,4-Dioxane	Ave	0.0021	0.0021		50.0	0.200	-0.4	50.0
Bromodichloromethane	Ave	0.3390	0.3452		1.00	0.0100	1.8	50.0
2-Chloroethyl vinyl ether	Lin1		0.0890		10.0	0.0200	-13.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCVIS 240-107534/2 Calibration Date: 10/29/2013 10:12

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC6354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Lin1		0.3340		1.00	0.0100	-8.4	50.0
4-Methyl-2-pentanone	Ave	0.1571	0.1651		10.0	0.0200	5.1	50.0
Toluene	Ave	2.223	2.166		1.00	0.0100	-2.6	20.0
trans-1,3-Dichloropropene	Ave	0.3771	0.3861		1.00	0.0100	2.4	50.0
Ethyl methacrylate	Ave	0.3210	0.3409		1.00	0.0100	6.2	50.0
1,1,2-Trichloroethane	Ave	0.3006	0.3291		1.00	0.0100	9.5	50.0
Tetrachloroethene	Ave	0.4239	0.4037		1.00	0.0100	-4.7	50.0
1,3-Dichloropropane	Ave	0.5120	0.5671		1.00	0.0100	10.8	50.0
2-Hexanone	Ave	0.1394	0.1581		10.0	0.0200	13.4	50.0
Dibromochloromethane	Ave	0.3167	0.3090		1.00	0.0100	-2.4	50.0
1,2-Dibromoethane	Ave	0.2880	0.2998		1.00	0.0100	4.1	50.0
Chlorobenzene	Ave	1.264	1.306	0.3000	1.00	0.0100	3.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4817	0.4762		1.00	0.0100	-1.1	50.0
Ethylbenzene	Ave	0.6886	0.6977		1.00	0.0100	1.3	20.0
m-Xylene & p-Xylene	Ave	1.654	1.751		2.00	0.0100	5.9	50.0
o-Xylene	Ave	0.9038	0.9253		1.00	0.0100	2.4	50.0
Styrene	Ave	1.297	1.435		1.00	0.0100	10.6	50.0
Bromoform	Ave	0.1954	0.1878	0.1000	1.00	0.0100	-3.9	50.0
Isopropylbenzene	Ave	2.249	2.356		1.00	0.0100	4.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6348	0.6651	0.3000	1.00	0.0100	4.8	50.0
Bromobenzene	Ave	0.8747	0.8696		1.00	0.0100	-0.6	50.0
1,2,3-Trichloropropane	Ave	0.1980	0.1969		1.00	0.0100	-0.6	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1173	0.1197		1.00	0.0100	2.0	50.0
n-Propylbenzene	Ave	0.8383	0.9612		1.00	0.0100	14.7	50.0
2-Chlorotoluene	Ave	0.8278	0.8789		1.00	0.0100	6.2	50.0
1,3,5-Trimethylbenzene	Ave	2.645	3.003		1.00	0.0100	13.5	50.0
4-Chlorotoluene	Ave	2.651	2.957		1.00	0.0100	11.5	50.0
tert-Butylbenzene	Ave	2.195	2.387		1.00	0.0100	8.7	50.0
1,2,4-Trimethylbenzene	Ave	2.726	3.217		1.00	0.0100	18.0	50.0
sec-Butylbenzene	Ave	3.077	3.544		1.00	0.0100	15.2	50.0
1,3-Dichlorobenzene	Ave	1.780	1.800		1.00	0.0100	1.1	50.0
p-Isopropyltoluene	Ave	2.670	3.091		1.00	0.0100	15.8	50.0
1,4-Dichlorobenzene	Ave	1.856	1.832		1.00	0.0100	-1.3	50.0
n-Butylbenzene	Ave	2.328	2.594		1.00	0.0100	11.4	50.0
1,2-Dichlorobenzene	Ave	1.749	1.765		1.00	0.0100	0.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1063	0.0879		2.00	0.0100	-17.3	50.0
1,2,4-Trichlorobenzene	Ave	1.009	0.8059		1.00	0.0100	-20.1	50.0
Hexachlorobutadiene	Ave	0.5873	0.5365		1.00	0.0100	-8.7	50.0
Naphthalene	Lin1		1.281		1.00	0.0100	-35.7	50.0
1,2,3-Trichlorobenzene	Ave	0.8869	0.7359		1.00	0.0100	-17.0	50.0
Dibromofluoromethane (Surr)	Ave	0.3233	0.2942		0.00810	0.00890	-9.0	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCVIS 240-107534/2 Calibration Date: 10/29/2013 10:12

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC6354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.2858		0.00797	0.00890	-10.5	50.0
Toluene-d8 (Surr)	Ave	1.648	1.712		0.00925	0.00890	3.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5704	0.5747		0.00897	0.00890	0.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCVIS 240-107534/2 Calibration Date: 10/29/2013 10:12

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 19:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 20:52

Lab File ID: UXC6354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.6527	0.6947		2.00	0.0100	6.4	50.0
Ethyl ether	Ave	0.2480	0.2464		2.00	0.0100	-0.6	50.0
3-Chloro-1-propene	Ave	0.2034	0.2359		2.00	0.0100	16.0	50.0
Isobutyl alcohol	Ave	0.0050	0.0057		50.0	0.250	12.6	50.0
n-Heptane	Ave	0.0643	0.0610		1.00	0.0100	-5.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107534/3 Calibration Date: 10/29/2013 10:58

Instrument ID: A3UX15 Calib Start Date: 06/01/2011 15:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2011 17:38

Lab File ID: UXC6356.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl acrylate	Ave	0.3610	0.1765		1.00	0.0100	-51.1*	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107534/3 Calibration Date: 10/29/2013 10:58

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC6356.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0251	0.0323		20.0	0.100	28.6	50.0
1,3,5-Trichlorobenzene	Ave	1.270	1.224		1.00	0.0100	-3.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107534/3 Calibration Date: 10/29/2013 10:58

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 19:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 20:52

Lab File ID: UXC6356.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diisopropyl ether	Ave	0.3290	0.2746		10.0	0.0100	-16.5	50.0
2-Chloro-1,3-butadiene	Ave	0.5759	0.4778		2.00	0.0100	-17.0	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8948	0.7917		5.00	0.0100	-11.5	50.0
Ethyl acetate	Ave	0.1385	0.1234		4.00	0.0200	-10.9	50.0
Propionitrile	Ave	0.0283	0.0320		4.00	0.100	13.4	50.0
Methacrylonitrile	Ave	0.1137	0.1273		2.00	0.100	12.0	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6999	0.6069		5.00	0.0100	-13.3	50.0
n-Butanol	Ave	0.0039	0.0036		50.0	0.250	-9.1	50.0
Methyl methacrylate	Ave	0.1053	0.1285		2.00	0.0200	22.1	50.0
2-Nitropropane	Ave	0.0230	0.0230		2.00	0.0200	-0.0	50.0
Cyclohexanone	Lin1		0.0112		20.0	0.100	-82.9*	50.0
1,2,3-Trimethylbenzene	Lin1		3.213		0.0102	0.0100	1.8	50.0
2-Methylnaphthalene	Qua		0.2869		5.00	0.0200	-60.7*	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107534/3 Calibration Date: 10/29/2013 10:58

Instrument ID: A3UX15 Calib Start Date: 08/10/2012 21:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/10/2012 23:45

Lab File ID: UXC6356.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzyl chloride	Ave	0.0913	0.1432		1.00	0.0100	56.8*	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab File ID: UXC6358.D Lab Sample ID: MB 240-107534/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 10/29/2013 11:43

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-107534/4	UXC6355.D	10/29/2013 10:35
MSA-MW46D-101613	240-30344-3	UXC6377.D	10/29/2013 18:49
TB-061713	240-30344-4	UXC6378.D	10/29/2013 19:11

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107534/5

Matrix: Water | Lab File ID: UXC6358.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/29/2013 11:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107534 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107534/5

Matrix: Water | Lab File ID: UXC6358.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/29/2013 11:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107534 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107534/5

Matrix: Water | Lab File ID: UXC6358.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/29/2013 11:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107534 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	99		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107534/5

Matrix: Water | Lab File ID: UXC6358.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/29/2013 11:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107534 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6355.D

Lab ID: LCS 240-107534/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.61	96	72-116	
1,1,1-Trichloroethane	10.0	9.18	92	74-118	
1,1,2,2-Tetrachloroethane	10.0	10.4	104	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.42	94	74-151	
1,1-Dichloroethane	10.0	10.3	103	82-115	
1,1-Dichloroethene	10.0	9.06	91	78-131	
1,1-Dichloropropene	10.0	9.30	93	83-114	
1,2,3-Trichlorobenzene	10.0	7.55	75	54-126	
1,2,3-Trichloropropane	10.0	9.52	95	73-129	
1,2,4-Trichlorobenzene	10.0	7.57	76	48-135	
1,2,4-Trimethylbenzene	10.0	11.7	117	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.33	73	42-136	
1,2-Dichlorobenzene	10.0	9.98	100	81-110	
1,2-Dichloroethane	10.0	9.10	91	71-127	
1,2-Dichloropropane	10.0	11.3	113	81-115	
1,3-Dichlorobenzene	10.0	10.1	101	80-110	
1,3-Dichloropropane	10.0	11.6	116	79-116	
1,4-Dichlorobenzene	10.0	10.1	101	82-110	
2,2-Dichloropropane	10.0	10.1	101	50-129	
2-Chloroethyl vinyl ether	12.0	11.5	96	52-131	
2-Chlorotoluene	10.0	10.8	108	76-116	
2-Hexanone	20.0	27.8	139	55-133	*
Bromobenzene	10.0	10.1	101	76-115	
Bromochloromethane	10.0	8.96	90	77-120	
4-Chlorotoluene	10.0	11.3	113	77-115	
p-Isopropyltoluene	10.0	11.8	118	74-120	
Acetone	20.0	18.1	91	43-136	
Benzene	10.0	10.3	103	83-112	
Bromoform	10.0	8.66	87	40-131	
Bromomethane	10.0	11.8	118	11-185	
Carbon disulfide	10.0	9.27	93	62-142	
Carbon tetrachloride	10.0	9.36	94	66-128	
Chlorobenzene	10.0	10.4	104	85-110	
Chloroethane	10.0	10.2	102	25-153	
Chloroform	10.0	9.25	93	79-117	
Chloromethane	10.0	11.6	116	44-126	
cis-1,2-Dichloroethene	10.0	9.04	90	80-113	
cis-1,3-Dichloropropene	10.0	10.0	100	61-115	
Hexachlorobutadiene	10.0	8.84	88	36-134	
Dibromomethane	10.0	9.49	95	81-120	
Bromodichloromethane	10.0	10.1	101	72-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6355.D

Lab ID: LCS 240-107534/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	11.3	113	19-129	
Ethylbenzene	10.0	10.7	107	83-112	
1,2-Dibromoethane	10.0	10.8	108	79-113	
Naphthalene	10.0	5.96	60	32-141	
m-Xylene & p-Xylene	10.0	10.7	107	83-113	
n-Butylbenzene	10.0	11.1	111	66-125	
Isopropylbenzene	10.0	10.3	103	75-114	
n-Propylbenzene	10.0	11.5	115	74-121	
2-Butanone	20.0	18.9	94	60-126	
4-Methyl-2-pentanone	20.0	23.2	116	63-128	
sec-Butylbenzene	10.0	11.5	115	70-117	
Methyl tert-butyl ether	10.0	8.41	84	52-144	
Methylene Chloride	10.0	10.5	105	66-131	
o-Xylene	10.0	10.3	103	83-113	
Styrene	10.0	11.2	112	79-114	
tert-Butylbenzene	10.0	11.2	112	71-115	
Tetrachloroethene	10.0	9.76	98	79-114	
Toluene	10.0	9.77	98	84-111	
trans-1,2-Dichloroethene	10.0	9.47	95	83-117	
trans-1,3-Dichloropropene	10.0	11.8	118	58-117	*
Trichloroethene	10.0	9.08	91	76-117	
Trichlorofluoromethane	10.0	12.9	129	49-157	
Vinyl acetate	16.0	13.1	82	46-161	
Vinyl chloride	10.0	13.6	136	53-127	*
tert-Butyl alcohol	100	93.5	94	70-130	
Xylenes, Total	20.0	21.0	105	83-112	
Dibromochloromethane	10.0	9.78	98	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab File ID: BFB261.D BFB Injection Date: 10/30/2013

Instrument ID: A3UX15 BFB Injection Time: 10:06

Analysis Batch No.: 107712

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.4	
75	30.0 - 60.0 % of mass 95	48.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	8.0	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	82.4	
175	5.0 - 9.0 % of mass 174	6.2	(7.5)1
176	95.0 - 101.0 % of mass 174	79.2	(96.0)1
177	5.0 - 9.0 % of mass 176	5.1	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-107712/2	UXC6413.D	10/30/2013	10:36
	LCS 240-107712/4	UXC6414.D	10/30/2013	10:59
	CCV 240-107712/3	UXC6415.D	10/30/2013	11:22
	MB 240-107712/5	UXC6417.D	10/30/2013	12:07
MSA-MW46I-101613	240-30344-2	UXC6419.D	10/30/2013	12:52
MSA-MW47S-101613	240-30344-5	UXC6420.D	10/30/2013	13:14
	240-30386-B-4 MS	UXC6424.D	10/30/2013	14:45
	240-30386-B-4 MSD	UXC6425.D	10/30/2013	15:08

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCVIS 240-107712/2 Calibration Date: 10/30/2013 10:36

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC6413.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3960	0.4218		1.00	0.0100	6.5	50.0
Chloromethane	Ave	0.4670	0.4954	0.1000	1.00	0.0100	6.1	50.0
Vinyl chloride	Ave	0.4513	0.5150		1.00	0.0100	14.1	20.0
Bromomethane	Ave	0.2345	0.2250		1.00	0.0100	-4.1	50.0
Chloroethane	Ave	0.2570	0.2596		1.00	0.0100	1.0	50.0
Trichlorofluoromethane	Ave	0.4695	0.4763		1.00	0.0100	1.5	50.0
Acrolein	Ave	0.0342	0.0084		20.0	0.0500	-75.5*	50.0
1,1-Dichloroethene	Ave	0.3990	0.3605		1.00	0.0100	-9.6	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.3243	0.2931		1.00	0.0100	-9.6	50.0
Acetone	Lin1		0.0701		10.0	0.0200	-8.9	50.0
Iodomethane	Ave	0.6820	0.6085		1.00	0.0100	-10.8	50.0
Carbon disulfide	Ave	1.270	1.228		1.00	0.0100	-3.3	50.0
Methyl acetate	Ave	0.1860	0.1788		10.0	0.0500	-3.9	50.0
Methylene Chloride	Lin1		0.5131		1.00	0.0100	16.4	50.0
tert-Butyl alcohol	Ave	0.0141	0.0135		50.0	0.100	-4.3	50.0
Acrylonitrile	Ave	0.0924	0.0980		20.0	0.100	6.0	50.0
Methyl tert-butyl ether	Ave	0.8433	0.7349		1.00	0.0100	-12.9	50.0
trans-1,2-Dichloroethene	Ave	0.4401	0.4110		1.00	0.0100	-6.6	50.0
Hexane	Ave	0.0763	0.0647		1.00	0.0100	-15.2	20.0
1,1-Dichloroethane	Ave	0.6829	0.6941	0.1000	1.00	0.0100	1.6	50.0
Vinyl acetate	Ave	0.0346	0.0228		2.00	0.00960	-34.0	50.0
2,2-Dichloropropane	Ave	0.3966	0.4281		1.00	0.0100	7.9	50.0
cis-1,2-Dichloroethene	Ave	0.4450	0.4212		1.00	0.0100	-5.3	50.0
2-Butanone	Ave	0.0907	0.0875		10.0	0.0200	-3.6	50.0
Bromochloromethane	Ave	0.1934	0.1841		1.00	0.0100	-4.8	50.0
Tetrahydrofuran	Ave	0.0636	0.0545		5.00	0.0200	-14.2	50.0
Chloroform	Ave	0.6663	0.6513		1.00	0.0100	-2.2	20.0
1,1,1-Trichloroethane	Ave	0.5404	0.5048		1.00	0.0100	-6.6	50.0
Cyclohexane	Ave	0.6410	0.6182		1.00	0.0100	-3.6	50.0
1,1-Dichloropropene	Ave	0.4900	0.4174		1.00	0.0100	-14.8	50.0
Carbon tetrachloride	Ave	0.4546	0.4154		1.00	0.0100	-8.6	50.0
Benzene	Ave	1.446	1.497		1.00	0.0100	3.5	50.0
1,2-Dichloroethane	Ave	0.4033	0.3839		1.00	0.0100	-4.8	50.0
Trichloroethene	Ave	0.3779	0.3335		1.00	0.0100	-11.8	50.0
Methylcyclohexane	Ave	0.5637	0.5103		1.00	0.0100	-9.5	50.0
1,2-Dichloropropane	Ave	0.2976	0.3352		1.00	0.0100	12.6	20.0
1,4-Dioxane	Ave	0.0021	0.0021		50.0	0.200	1.2	50.0
Dibromomethane	Ave	0.1648	0.1608		1.00	0.0100	-2.4	50.0
Bromodichloromethane	Ave	0.3390	0.3496		1.00	0.0100	3.1	50.0
2-Chloroethyl vinyl ether	Lin1		0.0890		10.0	0.0200	-13.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCVIS 240-107712/2 Calibration Date: 10/30/2013 10:36

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC6413.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Linl		0.3380		1.00	0.0100	-7.4	50.0
4-Methyl-2-pentanone	Ave	0.1571	0.1797		10.0	0.0200	14.4	50.0
Toluene	Ave	2.223	2.121		1.00	0.0100	-4.6	20.0
trans-1,3-Dichloropropene	Ave	0.3771	0.3987		1.00	0.0100	5.7	50.0
Ethyl methacrylate	Ave	0.3210	0.3960		1.00	0.0100	23.3	50.0
1,1,2-Trichloroethane	Ave	0.3006	0.3133		1.00	0.0100	4.2	50.0
Tetrachloroethene	Ave	0.4239	0.3913		1.00	0.0100	-7.7	50.0
1,3-Dichloropropane	Ave	0.5120	0.5785		1.00	0.0100	13.0	50.0
2-Hexanone	Ave	0.1394	0.1891		10.0	0.0200	35.6	50.0
Dibromochloromethane	Ave	0.3167	0.3212		1.00	0.0100	1.4	50.0
1,2-Dibromoethane	Ave	0.2880	0.2993		1.00	0.0100	3.9	50.0
Chlorobenzene	Ave	1.264	1.290	0.3000	1.00	0.0100	2.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4817	0.4650		1.00	0.0100	-3.5	50.0
Ethylbenzene	Ave	0.6886	0.7048		1.00	0.0100	2.4	20.0
m-Xylene & p-Xylene	Ave	1.654	1.721		2.00	0.0100	4.0	50.0
o-Xylene	Ave	0.9038	0.8972		1.00	0.0100	-0.7	50.0
Styrene	Ave	1.297	1.450		1.00	0.0100	11.8	50.0
Bromoform	Ave	0.1954	0.1879	0.1000	1.00	0.0100	-3.8	50.0
Isopropylbenzene	Ave	2.249	2.237		1.00	0.0100	-0.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6348	0.6757	0.3000	1.00	0.0100	6.4	50.0
Bromobenzene	Ave	0.8747	0.8514		1.00	0.0100	-2.7	50.0
1,2,3-Trichloropropane	Ave	0.1980	0.1973		1.00	0.0100	-0.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1173	0.1221		1.00	0.0100	4.1	50.0
n-Propylbenzene	Ave	0.8383	0.9166		1.00	0.0100	9.3	50.0
2-Chlorotoluene	Ave	0.8278	0.8617		1.00	0.0100	4.1	50.0
1,3,5-Trimethylbenzene	Ave	2.645	2.967		1.00	0.0100	12.2	50.0
4-Chlorotoluene	Ave	2.651	2.975		1.00	0.0100	12.2	50.0
tert-Butylbenzene	Ave	2.195	2.349		1.00	0.0100	7.0	50.0
1,2,4-Trimethylbenzene	Ave	2.726	3.153		1.00	0.0100	15.7	50.0
sec-Butylbenzene	Ave	3.077	3.429		1.00	0.0100	11.5	50.0
1,3-Dichlorobenzene	Ave	1.780	1.789		1.00	0.0100	0.5	50.0
p-Isopropyltoluene	Ave	2.670	3.027		1.00	0.0100	13.4	50.0
1,4-Dichlorobenzene	Ave	1.856	1.823		1.00	0.0100	-1.8	50.0
n-Butylbenzene	Ave	2.328	2.545		1.00	0.0100	9.3	50.0
1,2-Dichlorobenzene	Ave	1.749	1.762		1.00	0.0100	0.7	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1063	0.0815		2.00	0.0100	-23.3	50.0
1,2,4-Trichlorobenzene	Ave	1.009	0.7308		1.00	0.0100	-27.6	50.0
Hexachlorobutadiene	Ave	0.5873	0.4985		1.00	0.0100	-15.1	50.0
Naphthalene	Linl		1.172		1.00	0.0100	-40.9	50.0
1,2,3-Trichlorobenzene	Ave	0.8869	0.6723		1.00	0.0100	-24.2	50.0
Dibromofluoromethane (Surr)	Ave	0.3233	0.2985		0.00822	0.00890	-7.7	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCVIS 240-107712/2 Calibration Date: 10/30/2013 10:36

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC6413.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.3029		0.00844	0.00890	-5.1	50.0
Toluene-d8 (Surr)	Ave	1.648	1.687		0.00911	0.00890	2.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5704	0.5867		0.00915	0.00890	2.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCVIS 240-107712/2 Calibration Date: 10/30/2013 10:36

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 19:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 20:52

Lab File ID: UXC6413.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.6527	0.6831		2.00	0.0100	4.7	50.0
Ethyl ether	Ave	0.2480	0.2483		2.00	0.0100	0.1	50.0
3-Chloro-1-propene	Ave	0.2034	0.2526		2.00	0.0100	24.2	50.0
Isobutyl alcohol	Ave	0.0050	0.0059		50.0	0.250	18.2	50.0
n-Heptane	Ave	0.0643	0.0599		1.00	0.0100	-6.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107712/3 Calibration Date: 10/30/2013 11:22

Instrument ID: A3UX15 Calib Start Date: 06/01/2011 15:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2011 17:38

Lab File ID: UXC6415.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl acrylate	Ave	0.3610	0.2243		1.00	0.0100	-37.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107712/3 Calibration Date: 10/30/2013 11:22

Instrument ID: A3UX15 Calib Start Date: 08/10/2012 21:54

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/10/2012 23:45

Lab File ID: UXC6415.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzyl chloride	Ave	0.0913	0.1482		1.00	0.0100	62.3*	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107712/3 Calibration Date: 10/30/2013 11:22

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC6415.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0251	0.0386		20.0	0.100	54.0*	50.0
1,3,5-Trichlorobenzene	Ave	1.270	1.196		1.00	0.0100	-5.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107712/3 Calibration Date: 10/30/2013 11:22

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 19:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 20:52

Lab File ID: UXC6415.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diisopropyl ether	Ave	0.3290	0.2906		10.0	0.0100	-11.7	50.0
2-Chloro-1,3-butadiene	Ave	0.5759	0.5318		2.00	0.0100	-7.7	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8948	0.8351		5.00	0.0100	-6.7	50.0
Ethyl acetate	Ave	0.1385	0.1531		4.00	0.0200	10.5	50.0
Propionitrile	Ave	0.0283	0.0350		4.00	0.100	24.0	50.0
Methacrylonitrile	Ave	0.1137	0.1468		2.00	0.100	29.1	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6999	0.6348		5.00	0.0100	-9.3	50.0
n-Butanol	Ave	0.0039	0.0038		50.0	0.250	-2.9	50.0
Methyl methacrylate	Ave	0.1053	0.1611		2.00	0.0200	53.0*	50.0
2-Nitropropane	Ave	0.0230	0.0279		2.00	0.0200	21.0	50.0
Cyclohexanone	Lin1		0.0107		20.0	0.100	-83.5*	50.0
1,2,3-Trimethylbenzene	Lin1		3.282		0.0104	0.0100	3.8	50.0
2-Methylnaphthalene	Qua		0.2907		5.00	0.0200	-60.3*	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab File ID: UXC6417.D Lab Sample ID: MB 240-107712/5

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX15 Date Analyzed: 10/30/2013 12:07

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-107712/4	UXC6414.D	10/30/2013 10:59
MSA-MW46I-101613	240-30344-2	UXC6419.D	10/30/2013 12:52
MSA-MW47S-101613	240-30344-5	UXC6420.D	10/30/2013 13:14
	240-30386-B-4 MS	UXC6424.D	10/30/2013 14:45
	240-30386-B-4 MSD	UXC6425.D	10/30/2013 15:08

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107712/5

Matrix: Water | Lab File ID: UXC6417.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 12:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107712 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107712/5

Matrix: Water | Lab File ID: UXC6417.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 12:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107712 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.12		1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-107712/5

Matrix: Water Lab File ID: UXC6417.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/30/2013 12:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107712 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	102		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-107712/5

Matrix: Water Lab File ID: UXC6417.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/30/2013 12:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107712 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6414.D

Lab ID: LCS 240-107712/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.70	97	72-116	
1,1,1-Trichloroethane	10.0	9.23	92	74-118	
1,1,2,2-Tetrachloroethane	10.0	10.8	108	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	8.84	88	74-151	
1,1-Dichloroethane	10.0	10.3	103	82-115	
1,1-Dichloroethene	10.0	8.72	87	78-131	
1,1-Dichloropropene	10.0	9.55	95	83-114	
1,2,3-Trichlorobenzene	10.0	7.35	73	54-126	
1,2,3-Trichloropropane	10.0	10.3	103	73-129	
1,2,4-Trichlorobenzene	10.0	6.99	70	48-135	
1,2,4-Trimethylbenzene	10.0	11.8	118	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.98	80	42-136	
1,2-Dichlorobenzene	10.0	9.96	100	81-110	
1,2-Dichloroethane	10.0	9.69	97	71-127	
1,2-Dichloropropane	10.0	11.4	114	81-115	
1,3-Dichlorobenzene	10.0	9.91	99	80-110	
1,3-Dichloropropane	10.0	11.9	119	79-116	*
1,4-Dichlorobenzene	10.0	10.1	101	82-110	
2,2-Dichloropropane	10.0	10.2	102	50-129	
2-Chloroethyl vinyl ether	12.0	11.2	93	52-131	
2-Chlorotoluene	10.0	10.6	106	76-116	
2-Hexanone	20.0	28.0	140	55-133	*
Bromobenzene	10.0	10.1	101	76-115	
Bromochloromethane	10.0	8.76	88	77-120	
4-Chlorotoluene	10.0	11.6	116	77-115	*
p-Isopropyltoluene	10.0	11.9	119	74-120	
Acetone	20.0	16.3	81	43-136	
Benzene	10.0	10.4	104	83-112	
Bromoform	10.0	9.08	91	40-131	
Bromomethane	10.0	8.13	81	11-185	
Carbon disulfide	10.0	9.48	95	62-142	
Carbon tetrachloride	10.0	9.44	94	66-128	
Chlorobenzene	10.0	10.6	106	85-110	
Chloroethane	10.0	9.00	90	25-153	
Chloroform	10.0	9.44	94	79-117	
Chloromethane	10.0	9.70	97	44-126	
cis-1,2-Dichloroethene	10.0	9.14	91	80-113	
cis-1,3-Dichloropropene	10.0	9.95	100	61-115	
Hexachlorobutadiene	10.0	8.79	88	36-134	
Dibromomethane	10.0	9.66	97	81-120	
Bromodichloromethane	10.0	10.4	104	72-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6414.D

Lab ID: LCS 240-107712/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	8.95	90	19-129	
Ethylbenzene	10.0	10.6	106	83-112	
1,2-Dibromoethane	10.0	10.9	109	79-113	
Naphthalene	10.0	5.95	59	32-141	
m-Xylene & p-Xylene	10.0	10.8	108	83-113	
n-Butylbenzene	10.0	11.3	113	66-125	
Isopropylbenzene	10.0	10.3	103	75-114	
n-Propylbenzene	10.0	11.9	119	74-121	
2-Butanone	20.0	19.2	96	60-126	
4-Methyl-2-pentanone	20.0	24.7	124	63-128	
sec-Butylbenzene	10.0	12.0	120	70-117	*
Methyl tert-butyl ether	10.0	8.34	83	52-144	
Methylene Chloride	10.0	10.8	108	66-131	
o-Xylene	10.0	9.99	100	83-113	
Styrene	10.0	11.3	113	79-114	
tert-Butylbenzene	10.0	11.4	114	71-115	
Tetrachloroethene	10.0	9.91	99	79-114	
Toluene	10.0	9.98	100	84-111	
trans-1,2-Dichloroethene	10.0	9.39	94	83-117	
trans-1,3-Dichloropropene	10.0	12.1	121	58-117	*
Trichloroethene	10.0	9.20	92	76-117	
Trichlorofluoromethane	10.0	10.2	102	49-157	
Vinyl acetate	16.0	14.0	87	46-161	
Vinyl chloride	10.0	11.8	118	53-127	
tert-Butyl alcohol	100	98.7	99	70-130	
Xylenes, Total	20.0	20.8	104	83-112	
Dibromochloromethane	10.0	10.2	102	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6424.D

Lab ID: 240-30386-B-4 MS not in SDG Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	125	13 U	110	88	68-121	
1,1,2,2-Tetrachloroethane	125	13 U	142	113	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	125	13 U	109	87	70-152	
1,1-Dichloroethane	125	13 U	125	100	79-116	
1,1-Dichloroethene	125	13 U	108	87	74-135	
1,2,4-Trichlorobenzene	125	13 U	91.1	73	38-138	
1,2-Dibromo-3-Chloropropane	125	25 U	108	87	32-139	
1,2-Dichlorobenzene	125	13 U	125	100	75-111	
1,2-Dichloroethane	125	13 U	123	99	68-129	
1,2-Dichloropropane	125	13 U	139	111	78-115	
1,3-Dichlorobenzene	125	13 U	121	97	73-110	
1,4-Dichlorobenzene	125	13 U	122	98	75-110	
2-Hexanone	250	130 U	331	132	47-139	
Acetone	250	130 U	215	86	33-145	
Benzene	125	13 U	127	102	72-121	
Bromoform	125	13 U	116	93	32-128	
Bromomethane	125	13 U	107	85	10-186	
Carbon disulfide	125	13 U	114	91	57-147	
Carbon tetrachloride	125	13 U	113	91	59-129	
Chlorobenzene	125	13 U	128	102	80-110	
Chloroethane	125	13 U	107	86	21-165	
Chloroform	125	13 U	118	94	76-118	
Chloromethane	125	13 U	128	102	33-132	
cis-1,2-Dichloroethene	125	400	466	54	70-120	F
cis-1,3-Dichloropropene	125	13 U	112	90	51-110	
Bromodichloromethane	125	13 U	127	102	67-120	
Dichlorodifluoromethane	125	13 U	128	102	17-128	
Ethylbenzene	125	13 U	126	101	75-116	
1,2-Dibromoethane	125	13 U	142	113	74-113	
m-Xylene & p-Xylene	125	25 U	131	105	75-117	
Isopropylbenzene	125	13 U	124	99	68-116	
2-Butanone	250	130 U	263	105	54-129	
4-Methyl-2-pentanone	250	130 U	276	110	56-131	
Methyl tert-butyl ether	125	13 U	107	85	46-144	
Methylene Chloride	125	11 J	132	97	63-128	
o-Xylene	125	13 U	121	97	76-116	
Styrene	125	13 U	135	108	71-117	
Tetrachloroethene	125	68	191	98	70-117	
Toluene	125	13 U	121	97	78-114	
trans-1,2-Dichloroethene	125	20	132	90	80-119	
trans-1,3-Dichloropropene	125	13 U	152	121	46-116	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6424.D

Lab ID: 240-30386-B-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Trichloroethene	125	42	152	89	66-120	
Trichlorofluoromethane	125	13 U	130	104	46-157	
Vinyl chloride	125	25	175	120	49-130	
Xylenes, Total	250	25 U	252	101	76-116	
Dibromochloromethane	125	13 U	131	105	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6425.D

Lab ID: 240-30386-B-4 MSD not in SDG Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	125	111	88	0	30	68-121	
1,1,2,2-Tetrachloroethane	125	141	112	1	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	125	111	88	2	30	70-152	
1,1-Dichloroethane	125	127	101	2	30	79-116	
1,1-Dichloroethene	125	109	87	1	30	74-135	
1,2,4-Trichlorobenzene	125	96.8	77	6	30	38-138	
1,2-Dibromo-3-Chloropropane	125	115	92	6	30	32-139	
1,2-Dichlorobenzene	125	127	101	1	30	75-111	
1,2-Dichloroethane	125	121	97	2	30	68-129	
1,2-Dichloropropane	125	140	112	1	30	78-115	
1,3-Dichlorobenzene	125	126	100	4	30	73-110	
1,4-Dichlorobenzene	125	123	99	1	30	75-110	
2-Hexanone	250	333	133	1	30	47-139	
Acetone	250	223	89	4	30	33-145	
Benzene	125	126	101	1	30	72-121	
Bromoform	125	115	92	0	30	32-128	
Bromomethane	125	126	101	17	30	10-186	
Carbon disulfide	125	113	91	1	30	57-147	
Carbon tetrachloride	125	112	89	1	30	59-129	
Chlorobenzene	125	129	103	1	30	80-110	
Chloroethane	125	117	94	9	30	21-165	
Chloroform	125	117	94	0	30	76-118	
Chloromethane	125	140	112	9	30	33-132	
cis-1,2-Dichloroethene	125	470	58	1	30	70-120	F
cis-1,3-Dichloropropene	125	119	95	6	30	51-110	
Bromodichloromethane	125	132	105	3	30	67-120	
Dichlorodifluoromethane	125	140	112	9	30	17-128	
Ethylbenzene	125	131	105	3	30	75-116	
1,2-Dibromoethane	125	137	110	3	30	74-113	
m-Xylene & p-Xylene	125	130	104	1	30	75-117	
Isopropylbenzene	125	126	101	2	30	68-116	
2-Butanone	250	256	102	3	30	54-129	
4-Methyl-2-pentanone	250	285	114	3	30	56-131	
Methyl tert-butyl ether	125	109	87	2	30	46-144	
Methylene Chloride	125	133	98	1	30	63-128	
o-Xylene	125	123	98	1	30	76-116	
Styrene	125	136	109	1	30	71-117	
Tetrachloroethene	125	183	92	4	30	70-117	
Toluene	125	123	98	2	30	78-114	
trans-1,2-Dichloroethene	125	133	91	1	30	80-119	
trans-1,3-Dichloropropene	125	155	124	2	30	46-116	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC6425.D

Lab ID: 240-30386-B-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Trichloroethene	125	153	89	1	30	66-120	
Trichlorofluoromethane	125	133	106	2	30	46-157	
Vinyl chloride	125	174	119	1	30	49-130	
Xylenes, Total	250	253	101	0	30	76-116	
Dibromochloromethane	125	132	106	0	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab File ID: BFB557.D BFB Injection Date: 10/29/2013

Instrument ID: A3UX17 BFB Injection Time: 17:37

Analysis Batch No.: 107637

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.2	
75	30.0 - 60.0 % of mass 95	53.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.4	(0.6)1
174	50.0 - 120.00 % of mass 95	74.3	
175	5.0 - 9.0 % of mass 174	4.9	(6.6)1
176	95.0 - 101.0 % of mass 174	71.7	(96.5)1
177	5.0 - 9.0 % of mass 176	4.4	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-107637/2	UXR9256.D	10/29/2013	18:01
	STD8260 240-107637/3	UXR9257.D	10/29/2013	18:23
	STD8260 240-107637/4	UXR9258.D	10/29/2013	18:46
	STD8260 240-107637/5	UXR9259.D	10/29/2013	19:08
	STD8260 240-107637/6	UXR9260.D	10/29/2013	19:30
	STD8260 240-107637/7	UXR9261.D	10/29/2013	19:52
	STDA9 240-107637/8	UXR9262.D	10/29/2013	20:14
	STDA9 240-107637/9	UXR9263.D	10/29/2013	20:37
	STDA9 240-107637/10	UXR9264.D	10/29/2013	20:59
	STDA9 240-107637/11	UXR9265.D	10/29/2013	21:22
	STDA9 240-107637/12	UXR9266.D	10/29/2013	21:44
	STDA9 240-107637/13	UXR9267.D	10/29/2013	22:06
	ICV 240-107637/14	UXR9268.D	10/29/2013	22:29
	LCS 240-107637/15	UXR9269.D	10/29/2013	22:51
	MB 240-107637/17	UXR9271.D	10/29/2013	23:35
MSA-MW46S-101613	240-30344-1	UXR9277.D	10/30/2013	01:51

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 107637

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 18:01 Calibration End Date: 10/29/2013 19:52 Calibration ID: 18554

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-107637/7	UXR9261.D
Level 2	STD8260 240-107637/6	UXR9260.D
Level 3	STD8260 240-107637/5	UXR9259.D
Level 4	STD8260 240-107637/4	UXR9258.D
Level 5	STD8260 240-107637/3	UXR9257.D
Level 6	STD8260 240-107637/2	UXR9256.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2781 0.3657	0.3186	0.3744	0.3659	0.3699	Ave		0.3454				11.0		15.0			
Chloromethane	0.3785 0.3161	0.3331	0.3302	0.3243	0.3233	Ave		0.3343			0.1000	6.7		15.0			
Vinyl chloride	0.3940 0.3554	0.3761	0.3813	0.3624	0.3577	Ave		0.3711				4.1		15.0			
Bromomethane	0.1995 0.1685	0.1916	0.1781	0.1722	0.1672	Ave		0.1795				7.4		15.0			
Chloroethane	0.1527 0.1242	0.1296	0.1207	0.1244	0.1235	Ave		0.1292				9.2		15.0			
Dichlorofluoromethane	0.4824 0.4317	0.4646	0.4630	0.4445	0.4296	Ave		0.4526				4.6		15.0			
Trichlorofluoromethane	0.3364 0.4063	0.3903	0.4118	0.3979	0.3981	Ave		0.3901				7.0		15.0			
Ethyl ether	0.2274 0.1878	0.2010	0.1862	0.1863	0.1807	Ave		0.1949				8.9		15.0			
Acrolein	0.0042 0.0056	0.0064	0.0056	0.0053	0.0056	Ave		0.0055				13.0		15.0			
1,1-Dichloroethene	0.2406 0.2301	0.2355	0.2200	0.2192	0.2230	Ave		0.2281				3.9		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1578 0.2041	0.1830	0.1850	0.1805	0.1986	Ave		0.1848				8.8		15.0			
Acetone	0.2423 0.0592	0.1051	0.0753	0.0650	0.0638	Lin1	0.1855	0.0574							1.0000		0.9900
Iodomethane	0.3925 0.3586	0.3770	0.3591	0.3610	0.3521	Ave		0.3667				4.1		15.0			
Carbon disulfide	0.7384 0.7191	0.6477	0.6465	0.6496	0.6695	Ave		0.6785				5.9		15.0			
3-Chloro-1-propene	0.1315 0.1442	0.1185	0.1256	0.1273	0.1357	Ave		0.1304				6.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 107637

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 18:01 Calibration End Date: 10/29/2013 19:52 Calibration ID: 18554

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methyl acetate	0.1411 0.1396	0.1391	0.1355	0.1353	0.1352	Ave		0.1376				1.9		15.0			
Methylene Chloride	2.5195 0.2833	0.8376	0.4728	0.3644	0.3038	Linl	1.1373	0.2519							1.0000		0.9900
tert-Butyl alcohol	0.0079 0.0107	0.0111	0.0099	0.0099	0.0106	Ave		0.0100				11.0		15.0			
Acrylonitrile	0.0708 0.0718	0.0672	0.0677	0.0667	0.0688	Ave		0.0688				3.0		15.0			
Methyl tert-butyl ether	0.5484 0.6419	0.5656	0.5826	0.5783	0.6035	Ave		0.5867				5.6		15.0			
trans-1,2-Dichloroethene	0.2662 0.2771	0.2667	0.2640	0.2581	0.2591	Ave		0.2652				2.6		15.0			
Hexane	0.0394 0.0738	0.0535	0.0574	0.0632	0.0714	Linl	-0.025	0.0720							0.9960		0.9900
1,1-Dichloroethane	0.4620 0.4573	0.4523	0.4553	0.4467	0.4470	Ave		0.4534			0.1000	1.3		15.0			
Vinyl acetate	0.1856 0.2578	0.1904	0.2097	0.2122	0.2399	Ave		0.2159				13.0		15.0			
2,2-Dichloropropane	0.2713 0.2869	0.2615	0.2727	0.2760	0.2862	Ave		0.2758				3.5		15.0			
cis-1,2-Dichloroethene	0.2823 0.2828	0.2669	0.2803	0.2701	0.2714	Ave		0.2757				2.5		15.0			
2-Butanone	0.0816 0.0777	0.0766	0.0709	0.0720	0.0748	Ave		0.0756				5.2		15.0			
Bromochloromethane	0.1417 0.1299	0.1272	0.1334	0.1284	0.1264	Ave		0.1312				4.4		15.0			
Tetrahydrofuran	0.0494 0.0491	0.0454	0.0421	0.0452	0.0459	Ave		0.0462				5.9		15.0			
Chloroform	0.5098 0.4605	0.4739	0.4624	0.4441	0.4476	Ave		0.4664				5.1		15.0			
1,1,1-Trichloroethane	0.3572 0.3776	0.3350	0.3576	0.3623	0.3606	Ave		0.3584				3.8		15.0			
Cyclohexane	0.2153 0.4334	0.3257	0.3544	0.3672	0.4168	Linl	-0.147	0.4227							0.9970		0.9900
1,1-Dichloropropene	0.2927 0.3527	0.2951	0.3170	0.3357	0.3409	Ave		0.3224				7.7		15.0			
Carbon tetrachloride	0.2841 0.3496	0.3096	0.3130	0.3196	0.3338	Ave		0.3183				7.0		15.0			
Isobutyl alcohol	0.0050 0.0066	0.0065	0.0064	0.0061	0.0063	Ave		0.0061				9.9		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 107637

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 18:01 Calibration End Date: 10/29/2013 19:52 Calibration ID: 18554

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Benzene	1.1582 1.1253	1.0868	1.0940	1.0872	1.0791	Ave		1.1051				2.8		15.0			
1,2-Dichloroethane	0.4212 0.3667	0.3806	0.3720	0.3578	0.3606	Ave		0.3765				6.2		15.0			
n-Heptane	0.0415 0.0740	0.0480	0.0542	0.0598	0.0683	Lin1	-0.027	0.0707							0.9930		0.9900
Trichloroethene	0.2988 0.2723	0.2645	0.2635	0.2651	0.2618	Ave		0.2710				5.2		15.0			
Methylcyclohexane	0.2417 0.4614	0.3320	0.3481	0.3759	0.4279	Lin1	-0.162	0.4422							0.9940		0.9900
1,2-Dichloropropane	0.2571 0.2518	0.2284	0.2456	0.2416	0.2442	Ave		0.2448				4.0		15.0			
Dibromomethane	0.1414 0.1446	0.1392	0.1365	0.1406	0.1384	Ave		0.1401				2.0		15.0			
1,4-Dioxane	0.0028 0.0021	0.0018	0.0019	0.0019	0.0020	Lin1	0.0032	0.0020							0.9980		0.9900
Bromodichloromethane	0.3016 0.3298	0.2802	0.2922	0.2923	0.3088	Ave		0.3008				5.7		15.0			
2-Chloroethyl vinyl ether	0.0616 0.0963	0.0622	0.0719	0.0777	0.0904	Lin1	-0.065	0.0922							0.9930		0.9900
cis-1,3-Dichloropropene	0.2704 0.3844	0.2869	0.2997	0.3213	0.3556	Ave		0.3197				14.0		15.0			
4-Methyl-2-pentanone	0.1272 0.1689	0.1251	0.1373	0.1429	0.1559	Ave		0.1429				12.0		15.0			
Toluene	1.5109 1.6897	1.4630	1.5338	1.5222	1.5870	Ave		1.5511				5.1		15.0			
trans-1,3-Dichloropropene	0.2621 0.4263	0.2936	0.3172	0.3478	0.3918	Lin1	-0.139	0.4065							0.9930		0.9900
Ethyl methacrylate	0.2167 0.3998	0.2225	0.2737	0.3266	0.3738	Lin1	-0.168	0.3827							0.9910		0.9900
1,1,2-Trichloroethane	0.2956 0.2804	0.2789	0.2734	0.2739	0.2780	Ave		0.2800				2.9		15.0			
Tetrachloroethene	0.2849 0.2969	0.2929	0.2884	0.2793	0.2891	Ave		0.2886				2.1		15.0			
1,3-Dichloropropane	0.5215 0.5326	0.4971	0.5120	0.5020	0.5239	Ave		0.5148				2.7		15.0			
2-Hexanone	0.0867 0.1544	0.1089	0.1211	0.1310	0.1463	Lin1	-0.104	0.1496							0.9960		0.9900
Dibromochloromethane	0.2136 0.2850	0.2197	0.2298	0.2471	0.2628	Ave		0.2430				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 107637

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 18:01 Calibration End Date: 10/29/2013 19:52 Calibration ID: 18554

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dibromoethane	0.2458 0.2725	0.2232	0.2437	0.2450	0.2663	Ave		0.2494				7.1		15.0			
Chlorobenzene	0.9816 1.0453	0.9785	0.9842	0.9721	1.0165	Ave		0.9964			0.3000	2.9		15.0			
1,1,1,2-Tetrachloroethane	0.2737 0.3416	0.2917	0.2882	0.3080	0.3275	Ave		0.3051				8.4		15.0			
Ethylbenzene	0.4617 0.5987	0.4434	0.5118	0.5163	0.5584	Ave		0.5151				11.0		15.0			
m-Xylene & p-Xylene	0.4447 0.7410	0.5678	0.6173	0.6551	0.6978	Lin1	-0.209	0.7206							0.9980		0.9900
o-Xylene	0.4582 0.7194	0.4927	0.5952	0.6217	0.6751	Lin1	-0.214	0.6964							0.9960		0.9900
Styrene	0.6634 1.2963	0.7816	0.9384	1.0199	1.1589	Lin1	-0.519	1.2249							0.9910		0.9900
Bromoform	0.0965 0.1545	0.1066	0.1111	0.1183	0.1337	Qua	-0.021	0.1121	0.0011		0.1000				1.0000		0.9900
Isopropylbenzene	0.9938 1.9512	1.2746	1.4871	1.5942	1.7750	Lin1	-0.730	1.8626							0.9940		0.9900
1,1,2,2-Tetrachloroethane	0.5904 0.5684	0.5666	0.5665	0.5506	0.5585	Ave		0.5669			0.3000	2.4		15.0			
Bromobenzene	0.7149 0.7479	0.7242	0.7125	0.7213	0.7056	Ave		0.7211				2.0		15.0			
1,2,3-Trichloropropane	0.2036 0.2020	0.2169	0.2008	0.1981	0.1883	Ave		0.2016				4.6		15.0			
trans-1,4-Dichloro-2-butene	0.0644 0.1335	0.0927	0.1058	0.1232	0.1168	Lin1	-0.046	0.1282							0.9950		0.9900
n-Propylbenzene	0.5730 0.9406	0.6642	0.7872	0.8623	0.8865	Lin1	-0.278	0.9186							0.9980		0.9900
2-Chlorotoluene	0.5869 0.7694	0.6986	0.7203	0.7528	0.7262	Ave		0.7090				9.1		15.0			
1,3,5-Trimethylbenzene	1.6709 2.7937	2.0706	2.4228	2.5947	2.6462	Lin1	-0.781	2.7406							0.9990		0.9900
4-Chlorotoluene	0.6217 0.8396	0.7792	0.7758	0.7971	0.8121	Ave		0.7709				10.0		15.0			
tert-Butylbenzene	1.4244 2.3315	1.8103	2.0025	2.1776	2.2152	Lin1	-0.616	2.2888							0.9990		0.9900
1,2,4-Trimethylbenzene	1.5532 2.9783	2.1739	2.5425	2.7416	2.8051	Lin1	-0.944	2.9181							0.9980		0.9900
sec-Butylbenzene	2.0454 3.3632	2.5147	2.9354	3.0526	3.1590	Lin1	-0.914	3.2832							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 107637

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 18:01 Calibration End Date: 10/29/2013 19:52 Calibration ID: 18554

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,3-Dichlorobenzene	1.3862 1.5435	1.4986	1.4673	1.4742	1.4820	Ave		1.4753				3.5		15.0			
p-Isopropyltoluene	1.6327 2.9838	2.1744	2.4978	2.7271	2.8484	Lin1	-0.939	2.9275							0.9980		0.9900
1,4-Dichlorobenzene	1.7829 1.5725	1.6134	1.5120	1.5260	1.5083	Ave		1.5858				6.6		15.0			
n-Butylbenzene	1.4290 2.4116	1.6897	1.9103	2.1901	2.3155	Lin1	-0.771	2.3606							0.9970		0.9900
1,2-Dichlorobenzene	1.4353 1.3681	1.3519	1.3637	1.3628	1.3491	Ave		1.3718				2.3		15.0			
1,2-Dibromo-3-Chloropropane	0.0612 0.0464	0.0523	0.0548	0.0511	0.0475	Ave		0.0522				10.0		15.0			
1,2,4-Trichlorobenzene	0.6798 0.4528	0.5680	0.5641	0.5824	0.5299	Ave		0.5628				13.0		15.0			
Hexachlorobutadiene	0.4493 0.1784	0.3510	0.3128	0.2934	0.2271	Qua	0.1789	0.2806	-0.003						0.9970		0.9900
Naphthalene	0.9331 0.6880	0.7640	0.8166	0.9537	0.8808	Ave		0.8394				12.0		15.0			
1,2,3-Trichlorobenzene	0.6516 0.2575	0.4969	0.4834	0.4954	0.3785	Qua	0.0770	0.5167	-0.007						0.9970		0.9900
Dibromofluoromethane (Surr)	0.2403 0.2363	0.2282	0.2284	0.2313	0.2371	Ave		0.2336				2.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2922 0.3011	0.3075	0.3105	0.3019	0.3011	Ave		0.3024				2.1		15.0			
Toluene-d8 (Surr)	1.0926 1.3935	1.2379	1.2658	1.2865	1.3585	Ave		1.2725				8.3		15.0			
4-Bromofluorobenzene (Surr)	0.3439 0.5179	0.4181	0.4306	0.4586	0.4956	Ave		0.4441				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 107637

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 20:14 Calibration End Date: 10/29/2013 22:06 Calibration ID: 18555

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-107637/13	UXR9267.D
Level 2	STDA9 240-107637/12	UXR9266.D
Level 3	STDA9 240-107637/11	UXR9265.D
Level 4	STDA9 240-107637/10	UXR9264.D
Level 5	STDA9 240-107637/9	UXR9263.D
Level 6	STDA9 240-107637/8	UXR9262.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acetonitrile	0.0257 0.0243	0.0255	0.0241	0.0251	0.0251	Ave		0.0250				2.6		15.0			
Diisopropyl ether	0.1569 0.2182	0.1777	0.1912	0.1951	0.2137	Ave		0.1921				12.0		15.0			
2-Chloro-1,3-butadiene	0.2658 0.3661	0.2812	0.3224	0.3387	0.3691	Ave		0.3239				13.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.4894 0.6202	0.4973	0.5517	0.5664	0.6129	Ave		0.5563				10.0		15.0			
Ethyl acetate	0.1213 0.1342	0.1189	0.1285	0.1340	0.1313	Ave		0.1280				5.1		15.0			
Propionitrile	0.0251 0.0264	0.0249	0.0266	0.0259	0.0266	Ave		0.0259				2.9		15.0			
Methacrylonitrile	0.1068 0.1342	0.1087	0.1233	0.1259	0.1289	Ave		0.1213				9.2		15.0			
Tert-amyl-methyl ether (TAME)	0.4194 0.5516	0.4188	0.4714	0.4891	0.5299	Ave		0.4800				11.0		15.0			
n-Butanol	0.0032 0.0041	0.0034	0.0033	0.0038	0.0040	Ave		0.0036				11.0		15.0			
Ethyl acrylate	0.1540 0.2179	0.1651	0.1825	0.1900	0.2011	Ave		0.1851				13.0		15.0			
Methyl methacrylate	0.1167 0.1823	0.1268	0.1476	0.1625	0.1700	Lin1	-0.179	0.1790							0.9980		0.9900
2-Nitropropane	0.0365 0.0407	0.0300	0.0322	0.0325	0.0354	Ave		0.0346				11.0		15.0			
Cyclohexanone	0.0062 0.0088	0.0076	0.0083	0.0085	0.0091	Ave		0.0081				13.0		15.0			
Pentachloroethane	0.1039 0.1672	0.0975	0.1118	0.1192	0.1409	Qua	-0.072	0.1136	0.0007						1.0000		0.9900
1,2,3-Trimethylbenzene	1.8651 3.1637	2.0280	2.4747	2.7274	3.1008	Lin1	-1.875	3.1459							0.9970		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 107637

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 20:14 Calibration End Date: 10/29/2013 22:06 Calibration ID: 18555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Benzyl chloride	0.0714 0.1600	0.0849	0.1119	0.1124	0.1416	Qua	-0.084	0.1218	0.0010						0.9990		0.9900
1,3,5-Trichlorobenzene	0.8544 0.9380	0.9122	0.9544	0.9669	0.9965	Ave		0.9371				5.3		15.0			
2-Methylnaphthalene	0.2779 +++++	0.3571	0.3366	0.4264	0.4521	Lin1	-0.424	0.4485							0.9940		0.9900
n-Butyl acetate	0.0740 0.1223	0.0742	0.0840	0.0992	0.1068	Lin1	-0.075	0.1168							0.9920		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-107637/14 Calibration Date: 10/29/2013 22:29

Instrument ID: A3UX17 Calib Start Date: 10/29/2013 18:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/29/2013 19:52

Lab File ID: UXR9268.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3454	0.2756		1.00	0.0100	-20.2	50.0
Chloromethane	Ave	0.3343	0.2871	0.1000	1.00	0.0100	-14.1	50.0
Vinyl chloride	Ave	0.3711	0.3348		1.00	0.0100	-9.8	20.0
Bromomethane	Ave	0.1795	0.1580		1.00	0.0100	-12.0	50.0
Chloroethane	Ave	0.1292	0.1176		1.00	0.0100	-9.0	50.0
Dichlorofluoromethane	Ave	0.4526	0.4351		2.00	0.0100	-3.9	50.0
Trichlorofluoromethane	Ave	0.3901	0.3695		1.00	0.0100	-5.3	50.0
Ethyl ether	Ave	0.1949	0.1908		2.00	0.0100	-2.1	50.0
Acrolein	Ave	0.0055	0.0054		20.0	0.0500	-1.2	50.0
1,1-Dichloroethene	Ave	0.2281	0.2124		1.00	0.0100	-6.9	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1848	0.1915		1.00	0.0100	3.6	50.0
Acetone	Linl		0.0743		10.0	0.0200	13.3	50.0
Iodomethane	Ave	0.3667	0.3702		1.00	0.0100	0.9	50.0
Carbon disulfide	Ave	0.6785	0.6744		1.00	0.0100	-0.6	50.0
3-Chloro-1-propene	Ave	0.1304	0.1195		2.00	0.0100	-8.4	50.0
Methyl acetate	Ave	0.1376	0.1419		10.0	0.0500	3.1	50.0
Methylene Chloride	Linl		0.3806		1.00	0.0100	5.9	50.0
tert-Butyl alcohol	Ave	0.0100	0.0099		50.0	0.100	-1.3	50.0
Acrylonitrile	Ave	0.0688	0.0697		20.0	0.100	1.3	50.0
Methyl tert-butyl ether	Ave	0.5867	0.5886		1.00	0.0100	0.3	50.0
trans-1,2-Dichloroethene	Ave	0.2652	0.2773		1.00	0.0100	4.5	50.0
Hexane	Linl		0.0634		1.00	0.0100	-8.4	20.0
1,1-Dichloroethane	Ave	0.4534	0.4585	0.1000	1.00	0.0100	1.1	50.0
Vinyl acetate	Ave	0.2159	0.2100		2.00	0.0160	-2.8	50.0
2,2-Dichloropropane	Ave	0.2758	0.2604		1.00	0.0100	-5.6	50.0
cis-1,2-Dichloroethene	Ave	0.2757	0.2757		1.00	0.0100	0.0	50.0
2-Butanone	Ave	0.0756	0.0821		10.0	0.0200	8.7	50.0
Bromochloromethane	Ave	0.1312	0.1253		1.00	0.0100	-4.5	50.0
Tetrahydrofuran	Ave	0.0462	0.0451		5.00	0.0200	-2.5	50.0
Chloroform	Ave	0.4664	0.4538		1.00	0.0100	-2.7	20.0
1,1,1-Trichloroethane	Ave	0.3584	0.3621		1.00	0.0100	1.0	50.0
Cyclohexane	Linl		0.3790		1.00	0.0100	-6.9	50.0
1,1-Dichloropropene	Ave	0.3224	0.3579		1.00	0.0100	11.0	50.0
Carbon tetrachloride	Ave	0.3183	0.3406		1.00	0.0100	7.0	50.0
Isobutyl alcohol	Ave	0.0061	0.0065		50.0	0.250	5.5	50.0
Benzene	Ave	1.105	1.116		1.00	0.0100	1.0	50.0
1,2-Dichloroethane	Ave	0.3765	0.3684		1.00	0.0100	-2.1	50.0
n-Heptane	Linl		0.0625		1.00	0.0100	-7.7	50.0
Trichloroethene	Ave	0.2710	0.2711		1.00	0.0100	0.0	50.0
Methylcyclohexane	Linl		0.3939		1.00	0.0100	-7.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-107637/14 Calibration Date: 10/29/2013 22:29

Instrument ID: A3UX17 Calib Start Date: 10/29/2013 18:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/29/2013 19:52

Lab File ID: UXR9268.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2448	0.2448		1.00	0.0100	-0.0	20.0
1,4-Dioxane	Linl		0.0017		50.0	0.200	-16.0	50.0
Dibromomethane	Ave	0.1401	0.1381		1.00	0.0100	-1.4	50.0
Bromodichloromethane	Ave	0.3008	0.2925		1.00	0.0100	-2.8	50.0
2-Chloroethyl vinyl ether	Linl		0.0709		10.0	0.0120	-17.3	50.0
cis-1,3-Dichloropropene	Ave	0.3197	0.3167		1.00	0.0100	-1.0	50.0
4-Methyl-2-pentanone	Ave	0.1429	0.1483		10.0	0.0200	3.8	50.0
Toluene	Ave	1.551	1.561		1.00	0.0100	0.6	20.0
trans-1,3-Dichloropropene	Linl		0.3803		1.00	0.0100	-3.0	50.0
Ethyl methacrylate	Linl		0.3241		1.00	0.0100	-10.9	50.0
1,1,2-Trichloroethane	Ave	0.2800	0.2721		1.00	0.0100	-2.8	50.0
Tetrachloroethene	Ave	0.2886	0.2899		1.00	0.0100	0.5	50.0
1,3-Dichloropropane	Ave	0.5148	0.5131		1.00	0.0100	-0.3	50.0
2-Hexanone	Linl		0.1433		10.0	0.0200	-0.7	50.0
Dibromochloromethane	Ave	0.2430	0.2507		1.00	0.0100	3.1	50.0
1,2-Dibromoethane	Ave	0.2494	0.2541		1.00	0.0100	1.9	50.0
Chlorobenzene	Ave	0.996	0.9854	0.3000	1.00	0.0100	-1.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3051	0.3233		1.00	0.0100	6.0	50.0
Ethylbenzene	Ave	0.5151	0.5303		1.00	0.0100	3.0	20.0
m-Xylene & p-Xylene	Linl		0.6628		2.00	0.0100	-5.1	50.0
o-Xylene	Linl		0.6393		1.00	0.0100	-5.1	50.0
Styrene	Linl		1.048		1.00	0.0100	-10.2	50.0
Bromoform	Qua		0.1174	0.1000	1.00	0.0100	-2.6	50.0
Isopropylbenzene	Linl		1.662		1.00	0.0100	-6.8	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5669	0.5384	0.3000	1.00	0.0100	-5.0	50.0
Bromobenzene	Ave	0.7211	0.6958		1.00	0.0100	-3.5	50.0
1,2,3-Trichloropropane	Ave	0.2016	0.1901		1.00	0.0100	-5.7	50.0
trans-1,4-Dichloro-2-butene	Linl		0.1196		1.00	0.0100	-3.0	50.0
n-Propylbenzene	Linl		0.8091		1.00	0.0100	-8.9	50.0
2-Chlorotoluene	Ave	0.7090	0.7181		1.00	0.0100	1.3	50.0
1,3,5-Trimethylbenzene	Linl		2.504		1.00	0.0100	-5.8	50.0
4-Chlorotoluene	Ave	0.7709	0.7572		1.00	0.0100	-1.8	50.0
tert-Butylbenzene	Linl		2.092		1.00	0.0100	-5.9	50.0
1,2,4-Trimethylbenzene	Linl		2.619		1.00	0.0100	-7.0	50.0
sec-Butylbenzene	Linl		2.953		1.00	0.0100	-7.3	50.0
1,3-Dichlorobenzene	Ave	1.475	1.442		1.00	0.0100	-2.3	50.0
p-Isopropyltoluene	Linl		2.607		1.00	0.0100	-7.7	50.0
1,4-Dichlorobenzene	Ave	1.586	1.458		1.00	0.0100	-8.1	50.0
n-Butylbenzene	Linl		2.020		1.00	0.0100	-11.2	50.0
1,2-Dichlorobenzene	Ave	1.372	1.357		1.00	0.0100	-1.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0522	0.0496		2.00	0.0100	-5.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-107637/14 Calibration Date: 10/29/2013 22:29

Instrument ID: A3UX17 Calib Start Date: 10/29/2013 18:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/29/2013 19:52

Lab File ID: UXR9268.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Ave	0.5628	0.4768		1.00	0.0100	-15.3	50.0
Hexachlorobutadiene	Qua		0.2405		1.00	0.0100	-13.5	50.0
Naphthalene	Ave	0.8394	0.6622		1.00	0.0100	-21.1	50.0
1,2,3-Trichlorobenzene	Qua		0.3286		1.00	0.0100	-32.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2336	0.2103		0.00802	0.00891	-10.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3024	0.2709		0.00798	0.00891	-10.4	50.0
Toluene-d8 (Surr)	Ave	1.272	1.213		0.00849	0.00891	-4.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4441	0.4431		0.00889	0.00891	-0.2	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab File ID: UXR9271.D Lab Sample ID: MB 240-107637/17

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 10/29/2013 23:35

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
MSA-MW46S-101613	240-30344-1	UXR9277.D	10/30/2013 01:51

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-107637/17

Matrix: Water Lab File ID: UXR9271.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/29/2013 23:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107637 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107637/17

Matrix: Water | Lab File ID: UXR9271.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/29/2013 23:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107637 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-107637/17

Matrix: Water Lab File ID: UXR9271.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/29/2013 23:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107637 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	96		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107637/17

Matrix: Water | Lab File ID: UXR9271.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/29/2013 23:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107637 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I-TIC 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR9269.D

Lab ID: LCS 240-107637/15 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.6	106	72-116	
1,1,1-Trichloroethane	10.0	10.3	103	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.99	100	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.6	106	74-151	
1,1-Dichloroethane	10.0	10.3	103	82-115	
1,1-Dichloroethene	10.0	9.90	99	78-131	
1,1-Dichloropropene	10.0	11.6	116	83-114	*
1,2,3-Trichlorobenzene	10.0	8.62	86	54-126	
1,2,3-Trichloropropane	10.0	10.2	102	73-129	
1,2,4-Trichlorobenzene	10.0	9.30	93	48-135	
1,2,4-Trimethylbenzene	10.0	9.44	94	76-120	
1,2-Dibromo-3-Chloropropane	10.0	9.76	98	42-136	
1,2-Dichlorobenzene	10.0	10.1	101	81-110	
1,2-Dichloroethane	10.0	9.77	98	71-127	
1,2-Dichloropropane	10.0	10.1	101	81-115	
1,3-Dichlorobenzene	10.0	10.0	100	80-110	
1,3-Dichloropropane	10.0	9.89	99	79-116	
1,4-Dichlorobenzene	10.0	9.65	96	82-110	
2,2-Dichloropropane	10.0	10.1	101	50-129	
2-Chloroethyl vinyl ether	12.0	10.2	85	52-131	
2-Chlorotoluene	10.0	10.2	102	76-116	
2-Hexanone	20.0	20.1	100	55-133	
Bromobenzene	10.0	9.97	100	76-115	
Bromochloromethane	10.0	10.2	102	77-120	
4-Chlorotoluene	10.0	10.3	103	77-115	
p-Isopropyltoluene	10.0	9.64	96	74-120	
Acetone	20.0	20.2	101	43-136	
Benzene	10.0	10.1	101	83-112	
Bromoform	10.0	9.90	99	40-131	
Bromomethane	10.0	8.85	89	11-185	
Carbon disulfide	10.0	10.1	101	62-142	
Carbon tetrachloride	10.0	10.8	108	66-128	
Chlorobenzene	10.0	10.1	101	85-110	
Chloroethane	10.0	9.20	92	25-153	
Chloroform	10.0	9.97	100	79-117	
Chloromethane	10.0	8.71	87	44-126	
cis-1,2-Dichloroethene	10.0	10.3	103	80-113	
cis-1,3-Dichloropropene	10.0	10.4	104	61-115	
Hexachlorobutadiene	10.0	10.1	101	36-134	
Dibromomethane	10.0	10.2	102	81-120	
Bromodichloromethane	10.0	9.71	97	72-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR9269.D

Lab ID: LCS 240-107637/15 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	8.56	86	19-129	
Ethylbenzene	10.0	10.5	105	83-112	
1,2-Dibromoethane	10.0	10.3	103	79-113	
Naphthalene	10.0	9.31	93	32-141	
m-Xylene & p-Xylene	10.0	9.72	97	83-113	
n-Butylbenzene	10.0	9.59	96	66-125	
Isopropylbenzene	10.0	9.46	95	75-114	
n-Propylbenzene	10.0	9.57	96	74-121	
2-Butanone	20.0	21.9	110	60-126	
4-Methyl-2-pentanone	20.0	21.3	107	63-128	
sec-Butylbenzene	10.0	9.72	97	70-117	
Methyl tert-butyl ether	10.0	10.2	102	52-144	
Methylene Chloride	10.0	9.52	95	66-131	
o-Xylene	10.0	9.53	95	83-113	
Styrene	10.0	9.09	91	79-114	
tert-Butylbenzene	10.0	9.70	97	71-115	
Tetrachloroethene	10.0	10.4	104	79-114	
Toluene	10.0	10.4	104	84-111	
trans-1,2-Dichloroethene	10.0	10.7	107	83-117	
trans-1,3-Dichloropropene	10.0	9.85	98	58-117	
Trichloroethene	10.0	10.5	105	76-117	
Trichlorofluoromethane	10.0	9.73	97	49-157	
Vinyl acetate	16.0	18.1	113	46-161	
Vinyl chloride	10.0	9.12	91	53-127	
tert-Butyl alcohol	100	102	102	70-130	
Xylenes, Total	20.0	19.3	96	83-112	
Dibromochloromethane	10.0	9.98	100	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MSA-MW46S-101613	240-30344-1	66	71	65	69	87	77
MSA-MW46I-101613	240-30344-2	66	69	64	68	86	83
MSA-MW46D-101613	240-30344-3	64	68	59	66	90	83
MSA-MW47S-101613	240-30344-5	54	63	55	65	85	74
	MB 240-106515/16-A	81	81	72	78	82	93
	LCS 240-106515/17-A	83	84	78	79	97	93

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-110
PHL = Phenol-d5 (Surr)	21-110
NBZ = Nitrobenzene-d5 (Surr)	21-110
FBP = 2-Fluorobiphenyl (Surr)	20-110
TBP = 2,4,6-Tribromophenol (Surr)	21-110
TPH = Terphenyl-d14 (Surr)	24-110

Column to be used to flag recovery values

FORM II 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Sample No.: STD6 240-106341/10 Date Analyzed: 10/21/2013 18:37

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31021010.D Heated Purge: (Y/N) N

Calibration ID: 18104

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		173931	6.47	749561	7.58	451624	9.09
UPPER LIMIT		347862	6.97	1499122	8.08	903248	9.59
LOWER LIMIT		86966	5.97	374781	7.08	225812	8.59
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-106341/11		196418	6.47	826636	7.58	506602	9.09
CCV 240-107533/2 CCVIS		128777	6.33	548205	7.45	327074	8.95

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Sample No.: STD6 240-106341/10 Date Analyzed: 10/21/2013 18:37

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31021010.D Heated Purge: (Y/N) N

Calibration ID: 18104

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		728251	10.36	1006144	13.21	875605	15.52
UPPER LIMIT		1456502	10.86	2012288	13.71	1751210	16.02
LOWER LIMIT		364126	9.86	503072	12.71	437803	15.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-106341/11		835760	10.36	1126720	13.21	989147	15.52
CCV 240-107533/2 CCVIS		549597	10.21	731800	12.97	667589	15.20

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Sample No.: CCV 240-107533/2 Date Analyzed: 10/29/2013 10:10

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31029002.D Heated Purge: (Y/N) N

Calibration ID: 18104

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		128777	6.33	548205	7.45	327074	8.95
UPPER LIMIT		257554	6.83	1096410	7.95	654148	9.45
LOWER LIMIT		64389	5.83	274103	6.95	163537	8.45
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-106515/16-A		112709	6.33	472624	7.45	284893	8.95
LCS 240-106515/17-A		101924	6.33	426134	7.45	262655	8.95
240-30344-2	MSA-MW46I-101613	110787	6.33	447959	7.45	286350	8.95
240-30344-5	MSA-MW47S-101613	119358	6.33	485161	7.45	292725	8.95
240-30344-1	MSA-MW46S-101613	117403	6.33	463184	7.45	293961	8.95
240-30344-3	MSA-MW46D-101613	110289	6.33	471800	7.45	297312	8.95

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Sample No.: CCV 240-107533/2 Date Analyzed: 10/29/2013 10:10

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31029002.D Heated Purge: (Y/N) N

Calibration ID: 18104

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		549597	10.21	731800	12.97	667589	15.20
UPPER LIMIT		1099194	10.71	1463600	13.47	1335178	15.70
LOWER LIMIT		274799	9.71	365900	12.47	333795	14.70
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-106515/16-A		526935	10.21	611632	12.96	543912	15.20
LCS 240-106515/17-A		458364	10.21	561357	12.96	503049	15.20
240-30344-2	MSA-MW46I-101613	520351	10.21	640043	12.96	591801	15.20
240-30344-5	MSA-MW47S-101613	561641	10.21	673702	12.96	630687	15.20
240-30344-1	MSA-MW46S-101613	547887	10.21	695816	12.96	649969	15.20
240-30344-3	MSA-MW46D-101613	533929	10.21	705165	12.96	635844	15.20

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab File ID: 31029003.D Lab Sample ID: MB 240-106515/16-A

Matrix: Water Date Extracted: 10/22/2013 08:31

Instrument ID: A4HP7 Date Analyzed: 10/29/2013 10:35

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-106515/17-A	31029004.D	10/29/2013 11:00
MSA-MW46I-101613	240-30344-2	31029013.D	10/29/2013 14:46
MSA-MW47S-101613	240-30344-5	31029016.D	10/29/2013 16:01
MSA-MW46S-101613	240-30344-1	31029017.D	10/29/2013 16:27
MSA-MW46D-101613	240-30344-3	31029018.D	10/29/2013 16:52

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-106515/16-A

Matrix: Water Lab File ID: 31029003.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3520C Date Extracted: 10/22/2013 08:31

Sample wt/vol: 1000(mL) Date Analyzed: 10/29/2013 10:35

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.0	U	1.0	0.13
123-91-1	1,4-Dioxane	1.0	U	1.0	0.49
88-06-2	2,4,6-Trichlorophenol	5.0	U	5.0	0.24
95-95-4	2,4,5-Trichlorophenol	5.0	U	5.0	0.30
120-83-2	2,4-Dichlorophenol	2.0	U	2.0	0.19
105-67-9	2,4-Dimethylphenol	2.0	U	2.0	0.25
51-28-5	2,4-Dinitrophenol	5.0	U	5.0	0.32
121-14-2	2,4-Dinitrotoluene	5.0	U	5.0	0.25
91-58-7	2-Chloronaphthalene	1.0	U	1.0	0.10
95-57-8	2-Chlorophenol	1.0	U	1.0	0.29
91-57-6	2-Methylnaphthalene	0.20	U	0.20	0.090
95-48-7	2-Methylphenol	1.0	U	1.0	0.17
88-74-4	2-Nitroaniline	2.0	U	2.0	0.21
88-75-5	2-Nitrophenol	2.0	U	2.0	0.28
15831-10-4	3 & 4 Methylphenol	2.0	U	2.0	0.80
91-94-1	3,3'-Dichlorobenzidine	5.0	U	5.0	0.37
99-09-2	3-Nitroaniline	2.0	U	2.0	0.28
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	5.0	2.4
101-55-3	4-Bromophenyl phenyl ether	2.0	U	2.0	0.22
59-50-7	4-Chloro-3-methylphenol	2.0	U	2.0	0.21
106-47-8	4-Chloroaniline	2.0	U	2.0	0.21
7005-72-3	4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30
100-01-6	4-Nitroaniline	2.0	U	2.0	0.22
83-32-9	Acenaphthene	0.20	U	0.20	0.044
208-96-8	Acenaphthylene	0.20	U	0.20	0.048
98-86-2	Acetophenone	1.0	U	1.0	0.34
120-12-7	Anthracene	0.20	U	0.20	0.088
1912-24-9	Atrazine	1.0	U	1.0	0.34
100-52-7	Benzaldehyde	1.0	U	1.0	0.39
56-55-3	Benzo[a]anthracene	0.20	U	0.20	0.030
50-32-8	Benzo[a]pyrene	0.20	U	0.20	0.051
205-99-2	Benzo[b]fluoranthene	0.20	U	0.20	0.039
191-24-2	Benzo[g,h,i]perylene	0.20	U	0.20	0.046
207-08-9	Benzo[k]fluoranthene	0.20	U	0.20	0.045

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-106515/16-A

Matrix: Water | Lab File ID: 31029003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/29/2013 10:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.0	U	1.0	0.32
111-44-4	Bis(2-chloroethyl)ether	1.0	U	1.0	0.10
117-81-7	Bis(2-ethylhexyl) phthalate	0.235	J	2.0	0.22
85-68-7	Butyl benzyl phthalate	2.0	U	2.0	0.26
105-60-2	Caprolactam	5.0	U	5.0	0.20
86-74-8	Carbazole	1.0	U	1.0	0.28
218-01-9	Chrysene	0.20	U	0.20	0.050
84-74-2	Di-n-butyl phthalate	0.758	J	2.0	0.67
117-84-0	Di-n-octyl phthalate	2.0	U	2.0	0.23
53-70-3	Dibenzo(a,h)anthracene	0.20	U	0.20	0.045
132-64-9	Dibenzofuran	1.0	U	1.0	0.020
84-66-2	Diethyl phthalate	2.0	U	2.0	0.60
131-11-3	Dimethyl phthalate	2.0	U	2.0	0.29
206-44-0	Fluoranthene	0.20	U	0.20	0.045
86-73-7	Fluorene	0.20	U	0.20	0.041
118-74-1	Hexachlorobenzene	0.20	U	0.20	0.085
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.27
77-47-4	Hexachlorocyclopentadiene	10	U	10	0.24
67-72-1	Hexachloroethane	1.0	U	1.0	0.19
193-39-5	Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.043
78-59-1	Isophorone	1.0	U	1.0	0.27
621-64-7	N-Nitrosodi-n-propylamine	1.0	U	1.0	0.24
62-75-9	N-Nitrosodimethylamine	1.0	U	1.0	0.31
86-30-6	N-Nitrosodiphenylamine	1.0	U	1.0	0.31
91-20-3	Naphthalene	0.20	U	0.20	0.063
98-95-3	Nitrobenzene	1.0	U	1.0	0.040
87-86-5	Pentachlorophenol	5.0	U	5.0	0.27
85-01-8	Phenanthrene	0.20	U	0.20	0.062
108-95-2	Phenol	1.0	U	1.0	0.60
129-00-0	Pyrene	0.20	U	0.20	0.042
108-60-1	2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.40
606-20-2	2,6-Dinitrotoluene	5.0	U	5.0	0.80
100-02-7	4-Nitrophenol	5.0	U	5.0	0.29

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-106515/16-A

Matrix: Water | Lab File ID: 31029003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/22/2013 08:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/29/2013 10:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107533 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	93		24-110
4165-62-2	Phenol-d5 (Surr)	81		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	72		21-110
367-12-4	2-Fluorophenol (Surr)	81		10-110
321-60-8	2-Fluorobiphenyl (Surr)	78		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	82		21-110

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Batch Number: 106515 Batch Start Date: 10/22/13 10:10 Batch Analyst: Cerne, Amanda

Batch Method: 3520C Batch End Date: 10/23/13 03:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	EXBNASPIKE 00004	EXBNASURR W 00004
240-30344-I-1	MSA-MW46S-101613	3520C, 8270D	T	940 mL	2 mL	7	2		1 mL
240-30344-I-2	MSA-MW46I-101613	3520C, 8270D	T	1000 mL	2 mL	7	2		1 mL
240-30344-J-3	MSA-MW46D-101613	3520C, 8270D	T	1020 mL	2 mL	7	2		1 mL
240-30344-I-5	MSA-MW47S-101613	3520C, 8270D	T	970 mL	2 mL	7	2		1 mL
MB 240-106515/16		3520C, 8270D		1000 mL	2 mL	7	2		1 mL
LCS 240-106515/17		3520C, 8270D		1000 mL	2 mL	7	2	1 mL	1 mL

Batch Notes	
Acid used for pH adjust Lot #	1117338
Na2SO4 Lot Number	963863
Person's name who did the prep	1222799

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 31029004.D

Lab ID: LCS 240-106515/17-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	20.0	15.1	76	43-110	
1,4-Dioxane	20.0	15.0	75	27-110	
2,4,6-Trichlorophenol	20.0	15.9	80	45-110	
2,4,5-Trichlorophenol	20.0	16.1	80	48-110	
2,4-Dichlorophenol	20.0	15.4	77	41-110	
2,4-Dimethylphenol	20.0	13.1	66	32-110	
2,4-Dinitrophenol	40.0	23.9	60	10-110	
2,4-Dinitrotoluene	20.0	16.7	84	53-110	
2-Chloronaphthalene	20.0	14.9	74	43-110	
2-Chlorophenol	20.0	15.7	79	29-110	
2-Methylnaphthalene	20.0	14.9	74	45-110	
2-Methylphenol	20.0	14.8	74	42-110	
2-Nitroaniline	20.0	17.2	86	54-110	
2-Nitrophenol	20.0	15.8	79	40-110	
3 & 4 Methylphenol	20.0	15.8	79	44-110	
3,3'-Dichlorobenzidine	40.0	33.1	83	22-110	
3-Nitroaniline	20.0	17.2	86	53-110	
4,6-Dinitro-2-methylphenol	40.0	26.7	67	31-110	
4-Bromophenyl phenyl ether	20.0	15.8	79	45-110	
4-Chloro-3-methylphenol	20.0	16.0	80	52-110	
4-Chloroaniline	20.0	13.9	69	44-110	
4-Chlorophenyl phenyl ether	20.0	16.1	80	47-110	
4-Nitroaniline	20.0	16.3	82	54-110	
Acenaphthene	20.0	15.5	77	47-110	
Acenaphthylene	20.0	14.4	72	49-110	
Acetophenone	20.0	15.5	78	46-110	
Anthracene	20.0	15.2	76	52-110	
Atrazine	40.0	28.0	70	66-126	
Benzaldehyde	40.0	33.5	84	38-110	
Benzo[a]anthracene	20.0	15.4	77	52-110	
Benzo[a]pyrene	20.0	14.6	73	44-110	
Benzo[b]fluoranthene	20.0	15.2	76	48-110	
Benzo[g,h,i]perylene	20.0	15.5	78	50-110	
Benzo[k]fluoranthene	20.0	15.8	79	49-110	
Bis(2-chloroethoxy)methane	20.0	15.2	76	43-110	
Bis(2-chloroethyl)ether	20.0	15.1	75	40-110	
Bis(2-ethylhexyl) phthalate	20.0	15.5	78	39-116	
Butyl benzyl phthalate	20.0	16.1	81	55-110	
Caprolactam	40.0	36.5	91	45-111	
Carbazole	20.0	15.7	79	55-110	
Chrysene	20.0	15.5	77	55-110	
Di-n-butyl phthalate	20.0	16.9	84	57-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 31029004.D

Lab ID: LCS 240-106515/17-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	20.0	14.7	73	40-110	
Dibenzo(a,h)anthracene	20.0	15.6	78	49-110	
Dibenzofuran	20.0	15.2	76	51-110	
Diethyl phthalate	20.0	16.5	82	58-110	
Dimethyl phthalate	20.0	16.8	84	57-110	
Fluoranthene	20.0	15.5	77	54-110	
Fluorene	20.0	15.2	76	52-110	
Hexachlorobenzene	20.0	16.4	82	50-110	
Hexachlorobutadiene	20.0	12.6	63	33-110	
Hexachlorocyclopentadiene	20.0	2.30 J	11	4-110	
Hexachloroethane	20.0	12.9	65	35-110	
Indeno[1,2,3-cd]pyrene	20.0	15.4	77	50-110	
Isophorone	20.0	14.3	72	49-110	
N-Nitrosodi-n-propylamine	20.0	15.0	75	47-110	
N-Nitrosodimethylamine	20.0	14.3	72	40-110	
N-Nitrosodiphenylamine	40.0	32.2	80	50-110	
Naphthalene	20.0	14.5	73	44-110	
Nitrobenzene	20.0	15.6	78	42-110	
Pentachlorophenol	40.0	24.3	61	18-110	
Phenanthrene	20.0	15.2	76	53-110	
Phenol	20.0	16.0	80	33-110	
Pyrene	20.0	16.0	80	52-110	
2,2'-oxybis[1-chloropropane]	20.0	15.6	78	37-110	
2,6-Dinitrotoluene	20.0	16.7	83	54-110	
4-Nitrophenol	40.0	33.9	85	33-112	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab File ID: 31021001.D DFTPP Injection Date: 10/21/2013

Instrument ID: A4HP7 DFTPP Injection Time: 14:48

Analysis Batch No.: 106341

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	41.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	46.6	
70	Less than 2.0% of mass 69	0.3	(0.7)1
127	25.0 - 75.0% of mass 198	50.3	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.3	
275	10.0- 30.0% of mass 198	27.4	
365	Greater than 0.75% of mass 198	3.2	
441	Present, but less than mass 443	9.5	
442	40.0 - 110.0% of mass 198	61.3	
443	15.0 - 24.0% of mass 442	12.2	(20.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-106341/2	31021002.D	10/21/2013	15:11
	STD4 240-106341/3	31021003.D	10/21/2013	15:37
	STD3 240-106341/4	31021004.D	10/21/2013	16:03
	STD2 240-106341/5	31021005.D	10/21/2013	16:29
	STD1 240-106341/6	31021006.D	10/21/2013	16:54
	STD9 240-106341/7	31021007.D	10/21/2013	17:20
	STD8 240-106341/8	31021008.D	10/21/2013	17:46
	STD7 240-106341/9	31021009.D	10/21/2013	18:12
	STD6 240-106341/10	31021010.D	10/21/2013	18:37
	ICV 240-106341/11	31021011.D	10/21/2013	19:03

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-106341/6	31021006.D
Level 2	STD2 240-106341/5	31021005.D
Level 3	STD3 240-106341/4	31021004.D
Level 4	STD4 240-106341/3	31021003.D
Level 5	STD5 240-106341/2	31021002.D
Level 6	STD6 240-106341/10	31021010.D
Level 7	STD7 240-106341/9	31021009.D
Level 8	STD8 240-106341/8	31021008.D
Level 9	STD9 240-106341/7	31021007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5108	0.5510 0.4571	0.5028 0.4815	0.4783 0.4944	0.5117	Ave		0.4985				5.6		20.0			
N-Nitrosodimethylamine	0.7869	0.6560 0.7747	0.6526 0.7737	0.7126 0.7880	0.6639	Ave		0.7261				8.5		20.0			
Pyridine	1.3613	1.2783 1.2478	1.2113 1.3741	1.3268 1.2991	1.3296	Ave		1.3035				4.3		20.0			
Benzaldehyde	1.2354 1.2301	1.1874 1.2141	1.2463 1.1927	1.2223 1.1549	1.2110	Ave		1.2105			0.0100	2.3		20.0			
Phenol	1.6513	1.5783 1.6093	1.7397 1.5932	1.5695 1.6099	1.5718	Ave		1.6154			0.8000	3.5		20.0			
Aniline	2.1142	1.9597 2.0467	2.0428 2.0696	1.9776 2.0792	2.0320	Ave		2.0402				2.5		20.0			
Bis(2-chloroethyl)ether	1.3159	1.3419 1.3156	1.3217 1.3119	1.3002 1.2992	1.2495	Ave		1.3070			0.7000	2.0		20.0			
2-Chlorophenol	1.2614	1.0929 1.2361	1.1871 1.2518	1.2114 1.2578	1.2254	Ave		1.2155			0.8000	4.6		20.0			
1,3-Dichlorobenzene	1.3482	1.2793 1.3322	1.3280 1.3712	1.3208 1.3766	1.3005	Ave		1.3321				2.5		20.0			
1,4-Dichlorobenzene	1.3686	1.3151 1.3684	1.3635 1.4048	1.3621 1.3968	1.4006	Ave		1.3725				2.1		20.0			
Benzyl alcohol	0.8714	0.8997 0.8475	0.8585 0.8740	0.8325 0.8553	0.8229	Ave		0.8577				2.8		20.0			
1,2-Dichlorobenzene	1.3099	1.2428 1.2793	1.2616 1.3242	1.2571 1.3290	1.2881	Ave		1.2865				2.5		20.0			
2-Methylphenol	1.2032	1.0619 1.2057	1.1665 1.1941	1.1563 1.1966	1.1736	Ave		1.1698			0.7000	4.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,2'-oxybis[1-chloropropane]	1.3679	1.4117 1.3414	1.3367 1.3314	1.3484 1.3263	1.3129	Ave		1.3471				2.3		20.0			
Indene	2.3252	2.2034 2.3674	2.2250 2.3928	2.1874 2.4447	2.2482	Ave		2.2993				4.2		20.0			
3 & 4 Methylphenol	1.2721	1.1475 1.2572	1.2429 1.2623	1.2242 1.2936	1.2278	Ave		1.2409				3.6		20.0			
N-Nitrosodi-n-propylamine	1.0783	0.9950 1.0453	1.0354 1.0643	1.0312 1.0721	1.0101	Ave		1.0415			0.5000	2.8		20.0			
Acetophenone	2.0271	1.9458 1.9833	1.9828 2.0164	1.9751 2.0322	1.9440	Ave		1.9883			0.0100	1.7		20.0			
Hexachloroethane	0.6038	0.5063 0.5955	0.5463 0.6026	0.5793 0.6063	0.5827	Ave		0.5778			0.3000	6.0		20.0			
Nitrobenzene	0.3892	0.3590 0.4130	0.4052 0.4014	0.3910 0.4000	0.3716	Ave		0.3913			0.2000	4.6		20.0			
Isophorone	0.6593	0.6133 0.6915	0.6470 0.6700	0.6454 0.6809	0.6228	Ave		0.6538			0.4000	4.2		20.0			
2,4-Dimethylphenol	0.3409	0.3511 0.3587	0.3437 0.3541	0.3528 0.3540	0.3353	Ave		0.3488			0.2000	2.3		20.0			
2-Nitrophenol	0.1643	0.1247 0.1767	0.1533 0.1757	0.1532 0.1784	0.1519	Ave		0.1598			0.1000	11.0		20.0			
Benzoic acid	0.1664	+++++ 0.1900	0.0867 0.1948	0.1111 0.1938	0.1308	Lin1	-0.305	0.1959							0.9940		0.9900
Bis(2-chloroethoxy)methane	0.3696	0.3415 0.3765	0.3586 0.3737	0.3615 0.3817	0.3514	Ave		0.3643			0.3000	3.7		20.0			
2,4-Dichlorophenol	0.2482	0.2434 0.2636	0.2447 0.2636	0.2508 0.2646	0.2514	Ave		0.2538			0.2000	3.5		20.0			
1,2,4-Trichlorobenzene	0.2813	0.2866 0.3039	0.2813 0.2994	0.2836 0.3076	0.2817	Ave		0.2907				3.8		20.0			
Naphthalene	1.0051 0.8975	0.8657 0.9544	0.8773 0.9781	0.9085 0.9761	0.8835	Ave		0.9274			0.7000	5.6		20.0			
4-Chloroaniline	0.4156	0.4091 0.4051	0.4039 0.4052	0.4098 0.4088	0.3858	Ave		0.4054			0.0100	2.2		20.0			
Hexachlorobutadiene	0.1933	0.1691 0.1971	0.1863 0.1941	0.1990 0.2018	0.1821	Ave		0.1904			0.0100	5.7		20.0			
Caprolactam	0.0850	0.0819 0.0818	0.0944 0.0791	0.0896 0.0793	0.0917	Ave		0.0853			0.0100	6.9		20.0			
4-Chloro-3-methylphenol	0.3153	0.2904 0.3331	0.3107 0.3327	0.3162 0.3361	0.3074	Ave		0.3177			0.2000	4.9		20.0			
2-Methylnaphthalene	0.6344 0.6149	0.5663 0.6395	0.6216 0.6447	0.6228 0.6702	0.5791	Ave		0.6215			0.4000	5.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.5681 0.5773	0.5232 0.6046	0.5576 0.6007	0.5815 0.6214	0.5425	Ave		0.5752				5.4		20.0			
Hexachlorocyclopentadiene	0.3620	0.3191 0.3859	0.3319 0.3897	0.3260 0.4115	0.3543	Ave		0.3601			0.0500	9.3		20.0			
1,2,4,5-Tetrachlorobenzene	0.5034	0.5159 0.5238	0.4799 0.5203	0.4912 0.5446	0.5031	Ave		0.5103			0.0100	4.0		20.0			
2,4,6-Trichlorophenol	0.3179	0.2803 0.3325	0.3269 0.3336	0.3021 0.3504	0.3064	Ave		0.3188			0.2000	6.9		20.0			
2,4,5-Trichlorophenol	0.3374	0.2724 0.3492	0.3273 0.3471	0.3170 0.3584	0.3335	Ave		0.3303			0.2000	8.1		20.0			
1,1'-Biphenyl	1.2992 1.2803	1.2251 1.3398	1.2753 1.3418	1.2483 1.4062	1.2443	Ave		1.2956			0.0100	4.5		20.0			
2-Chloronaphthalene	1.0067 0.9649	0.9516 1.0056	0.9709 1.0054	0.9620 1.0454	0.9461	Ave		0.9843			0.8000	3.4		20.0			
2-Nitroaniline	0.3892	0.3112 0.3829	0.3444 0.3776	0.3524 0.3840	0.3482	Ave		0.3612			0.0100	7.5		20.0			
Dimethyl phthalate	1.1509	1.1101 1.1519	1.1344 1.1221	1.1241 1.1832	1.1163	Ave		1.1366			0.0100	2.1		20.0			
1,3-Dinitrobenzene	0.1872	0.1403 0.1865	0.1664 0.1891	0.1615 0.1958	0.1749	Ave		0.1752				11.0		20.0			
2,6-Dinitrotoluene	0.2611	0.2159 0.2601	0.2520 0.2555	0.2428 0.2641	0.2415	Ave		0.2491				6.3		20.0			
Acenaphthylene	1.6339 1.5169	1.3808 1.5885	1.5093 1.6037	1.5111 1.6860	1.4715	Ave		1.5446			0.9000	6.0		20.0			
3-Nitroaniline	0.2564	0.2196 0.2601	0.2684 0.2665	0.2624 0.2769	0.2673	Ave		0.2597			0.0100	6.7		20.0			
2,4-Dinitrophenol	0.1776	+++++ 0.1910	0.1214 0.1963	0.1231 0.2115	0.1531	Lin1	-0.257	0.2037			0.0100				0.9950		0.9900
Acenaphthene	1.0073 1.0240	0.9435 1.0696	1.0212 1.0903	0.9803 1.1475	0.9906	Ave		1.0305			0.9000	6.1		20.0			
4-Nitrophenol	0.2684	0.2209 0.2760	0.2406 0.2715	0.2398 0.2876	0.2421	Ave		0.2559				9.0		20.0			
2,4-Dinitrotoluene	0.3452	0.3049 0.3426	0.3565 0.3488	0.3366 0.3635	0.3370	Ave		0.3419			0.2000	5.1		20.0			
Dibenzofuran	1.5411 1.3758	1.3837 1.4617	1.4104 1.4384	1.3860 1.5200	1.3399	Ave		1.4286			0.8000	4.8		20.0			
2,3,4,6-Tetrachlorophenol	0.2790	0.2645 0.2901	0.3022 0.2890	0.2738 0.3125	0.2811	Ave		0.2865			0.0100	5.4		20.0			
Diethyl phthalate	1.1064	1.1335 1.1660	1.1661 1.1751	1.1473 1.2438	1.1382	Ave		1.1595			0.0100	3.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chlorophenyl phenyl ether	0.6099	0.5855 0.6358	0.6126 0.6183	0.5770 0.6457	0.5797	Ave		0.6081			0.4000	4.2		20.0			
4-Nitroaniline	0.2697	0.2098 0.2882	0.2544 0.2892	0.2630 0.3097	0.2436	Ave		0.2659			0.0100	12.0		20.0			
Fluorene	1.4828 1.1969	1.0813 1.2299	1.1972 1.2151	1.1462 1.2675	1.1211	Ave		1.2153			0.9000	9.5		20.0			
4,6-Dinitro-2-methylphenol	0.1461	0.0720 0.1570	0.1031 0.1632	0.1117 0.1617	0.1247	Lin1	-0.124	0.1606			0.0100				0.9960		0.9900
N-Nitrosodiphenylamine	0.4978	0.4266 0.5196	0.4501 0.5271	0.4664 0.5303	0.4772	Ave		0.4869			0.0100	7.8		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.8892	0.7234 0.8843	0.7535 0.8411	0.7807 0.8175	0.8051	Ave		0.8108				7.5		20.0			
Azobenzene	0.8892	0.7169 0.8848	0.7513 0.8411	0.7807 0.8175	0.8051	Ave		0.8108				7.5		20.0			
4-Bromophenyl phenyl ether	0.2062	0.1837 0.2018	0.1937 0.2036	0.2031 0.2017	0.1980	Ave		0.1990			0.1000	3.6		20.0			
Hexachlorobenzene	0.2134 0.2064	0.1725 0.2085	0.1975 0.2075	0.2058 0.2073	0.1978	Ave		0.2018			0.1000	6.0		20.0			
Atrazine	0.2119	0.1789 0.2077	0.1855 0.2076	0.1781 0.2055	0.1860	Ave		0.1952			0.0100	7.3		20.0			
Pentachlorophenol	0.1445	0.0890 0.1549	0.1108 0.1650	0.1156 0.1646	0.1290	Lin1	-0.109	0.1612			0.0500				0.9960		0.9900
Phenanthrene	1.0926 0.9572	0.9018 0.9812	0.9099 1.0281	0.9154 1.0351	0.9153	Ave		0.9707			0.7000	7.0		20.0			
Anthracene	1.0129 0.9843	0.9260 1.0341	0.9469 1.0562	0.9777 1.0759	0.9563	Ave		0.9967			0.7000	5.2		20.0			
Carbazole	0.9151	0.7257 0.9824	0.8156 0.9987	0.8403 1.0111	0.8348	Ave		0.8905			0.0100	12.0		20.0			
Di-n-butyl phthalate	1.2334	0.9662 1.2864	1.0311 1.3272	1.0268 1.2612	1.0683	Ave		1.1501			0.0100	12.0		20.0			
Fluoranthene	1.1297 1.1777	0.9129 1.2538	0.9950 1.2955	1.0287 1.3107	1.0406	Ave		1.1272			0.6000	13.0		20.0			
Benzidine	0.4070	0.4067 0.3792	0.3831 0.3618	0.4086 0.3454	0.3762	Ave		0.3835				6.0		20.0			
Pyrene	0.9187 0.8790	0.8505 0.9491	0.8789 0.9638	0.8968 0.9831	0.8560	Ave		0.9084			0.6000	5.3		20.0			
Butyl benzyl phthalate	0.4198	0.3906 0.4339	0.4181 0.4339	0.4204 0.4362	0.4173	Ave		0.4213			0.0100	3.5		20.0			
3,3'-Dichlorobenzidine	0.3331	0.2844 0.3549	0.3132 0.3678	0.3197 0.3807	0.3209	Ave		0.3343			0.0100	9.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Bis(2-ethylhexyl) phthalate	0.6135	0.5493 0.6451	0.6287 0.6481	0.6055 0.6703	0.6147	Ave		0.6219			0.0100	5.9		20.0			
Benzo[a]anthracene	1.0467 0.9256	0.8813 0.9666	0.9602 0.9631	0.9481 0.9763	0.9219	Ave		0.9544			0.8000	4.8		20.0			
Chrysene	0.9181 0.8721	0.8280 0.8943	0.8938 0.9009	0.8994 0.9252	0.8575	Ave		0.8877			0.7000	3.4		20.0			
Di-n-octyl phthalate	1.1818	0.9324 1.2197	1.0653 1.2442	1.0939 1.3038	1.1248	Ave		1.1457			0.0100	10.0		20.0			
Benzo[b]fluoranthene	0.9887 0.9911	0.8540 1.0403	0.9348 1.0343	1.0086 1.0781	0.9437	Ave		0.9860			0.7000	6.8		20.0			
Benzo[k]fluoranthene	1.0157 1.0399	0.9570 1.0805	1.0076 1.1313	1.0081 1.1378	1.0126	Ave		1.0434			0.7000	5.8		20.0			
Benzo[a]pyrene	1.0418 0.9695	0.8867 1.0129	0.9421 1.0234	0.9637 1.0503	0.9240	Ave		0.9794			0.7000	5.8		20.0			
Indeno[1,2,3-cd]pyrene	1.1852 1.1195	1.0009 1.1552	1.0792 1.1595	1.1247 1.1638	1.0744	Ave		1.1180			0.5000	5.2		20.0			
Dibenzo(a,h)anthracene	0.9362 0.9611	0.8406 0.9932	0.8831 1.0160	0.9270 1.0320	0.9154	Ave		0.9450			0.4000	6.6		20.0			
Benzo[g,h,i]perylene	1.0405 0.9338	0.8780 0.9425	0.9099 0.9404	0.9260 0.9404	0.9016	Ave		0.9348			0.5000	4.8		20.0			
2-Fluorophenol (Surr)	1.1744	1.1572 1.1664	1.1978 1.1706	1.2337 1.1505	1.2204	Ave		1.1839				2.6		20.0			
Phenol-d5 (Surr)	1.5745	1.3915 1.5486	1.6151 1.5596	1.5401 1.5459	1.5519	Ave		1.5409				4.2		20.0			
Nitrobenzene-d5 (Surr)	0.4347 0.4285	0.4275 0.4399	0.4220 0.4293	0.4175 0.4273	0.4003	Ave		0.4252				2.7		20.0			
2-Fluorobiphenyl (Surr)	1.2468 1.1375	1.0932 1.1628	1.1165 1.1658	1.0951 1.2245	1.0814	Ave		1.1471				5.1		20.0			
2,4,6-Tribromophenol (Surr)	0.1407	0.1437 0.1504	0.1624 0.1473	0.1428 0.1551	0.1475	Ave		0.1488				4.8		20.0			
Terphenyl-d14 (Surr)	0.8792 0.5822	0.5854 0.6116	0.6016 0.6166	0.5831 0.6282	0.5607	Ave		0.6276				15.0		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

NO Samples

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-106341/11 Calibration Date: 10/21/2013 19:03

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31021011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4985	0.5300		10.6	10.0	6.3	30.0
N-Nitrosodimethylamine	Ave	0.7261	0.7966		11.0	10.0	9.7	30.0
Pyridine	Ave	1.304	1.462		11.2	10.0	12.2	30.0
Benzaldehyde	Ave	1.210	1.309	0.0100	21.6	20.0	8.2	30.0
Phenol	Ave	1.615	1.748	0.8000	10.8	10.0	8.2	30.0
Aniline	Ave	2.040	2.216		10.9	10.0	8.6	30.0
Bis(2-chloroethyl)ether	Ave	1.307	1.396	0.7000	10.7	10.0	6.8	30.0
2-Chlorophenol	Ave	1.215	1.326	0.8000	10.9	10.0	9.1	30.0
1,3-Dichlorobenzene	Ave	1.332	1.436		10.8	10.0	7.8	30.0
1,4-Dichlorobenzene	Ave	1.372	1.464		10.7	10.0	6.7	30.0
Benzyl alcohol	Ave	0.8577	0.9216		10.7	10.0	7.4	30.0
1,2-Dichlorobenzene	Ave	1.287	1.404		10.9	10.0	9.1	30.0
2-Methylphenol	Ave	1.170	1.292	0.7000	11.0	10.0	10.4	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.347	1.447		7.73	7.20	7.4	30.0
Indene	Ave	2.299	2.559		22.3	20.0	11.3	30.0
3 & 4 Methylphenol	Ave	1.241	1.361		11.0	10.0	9.7	30.0
N-Nitrosodi-n-propylamine	Ave	1.041	1.152	0.5000	11.1	10.0	10.6	30.0
Acetophenone	Ave	1.988	2.127	0.0100	10.7	10.0	7.0	30.0
Hexachloroethane	Ave	0.5778	0.6377	0.3000	11.0	10.0	10.4	30.0
Nitrobenzene	Ave	0.3913	0.4333	0.2000	11.1	10.0	10.7	30.0
Isophorone	Ave	0.6538	0.7441	0.4000	11.4	10.0	13.8	30.0
2,4-Dimethylphenol	Ave	0.3488	0.3682	0.2000	10.6	10.0	5.6	30.0
2-Nitrophenol	Ave	0.1598	0.1814	0.1000	11.4	10.0	13.5	30.0
Benzoic acid	Lin1		0.1969		21.7	20.0	8.3	30.0
Bis(2-chloroethoxy)methane	Ave	0.3643	0.3811	0.3000	10.5	10.0	4.6	30.0
2,4-Dichlorophenol	Ave	0.2538	0.2665	0.2000	10.5	10.0	5.0	30.0
1,2,4-Trichlorobenzene	Ave	0.2907	0.3138		10.8	10.0	8.0	30.0
Naphthalene	Ave	0.9274	0.9838	0.7000	10.6	10.0	6.1	30.0
4-Chloroaniline	Ave	0.4054	0.4459	0.0100	11.0	10.0	10.0	30.0
Hexachlorobutadiene	Ave	0.1904	0.2051	0.0100	10.8	10.0	7.7	30.0
Caprolactam	Ave	0.0853	0.0865	0.0100	20.3	20.0	1.3	30.0
4-Chloro-3-methylphenol	Ave	0.3177	0.3437	0.2000	10.8	10.0	8.2	30.0
2-Methylnaphthalene	Ave	0.6215	0.6515	0.4000	10.5	10.0	4.8	30.0
1-Methylnaphthalene	Ave	0.5752	0.6007		10.4	10.0	4.4	30.0
Hexachlorocyclopentadiene	Ave	0.3601	0.4144	0.0500	11.5	10.0	15.1	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5103	0.5395	0.0100	10.6	10.0	5.7	30.0
2,4,6-Trichlorophenol	Ave	0.3188	0.3458	0.2000	10.8	10.0	8.5	30.0
2,4,5-Trichlorophenol	Ave	0.3303	0.3631	0.2000	11.0	10.0	9.9	30.0
1,1'-Biphenyl	Ave	1.296	1.355	0.0100	10.5	10.0	4.6	30.0
2-Chloronaphthalene	Ave	0.9843	1.040	0.8000	10.6	10.0	5.7	30.0
2-Nitroaniline	Ave	0.3612	0.4188	0.0100	11.6	10.0	15.9	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-106341/11 Calibration Date: 10/21/2013 19:03

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31021011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.137	1.221	0.0100	10.7	10.0	7.4	30.0
1,3-Dinitrobenzene	Ave	0.1752	0.1895		10.8	10.0	8.2	30.0
2,6-Dinitrotoluene	Ave	0.2491	0.2767		11.1	10.0	11.1	30.0
Acenaphthylene	Ave	1.545	1.661	0.9000	10.8	10.0	7.5	30.0
3-Nitroaniline	Ave	0.2597	0.2629	0.0100	10.1	10.0	1.2	30.0
2,4-Dinitrophenol	Lin1		0.1903	0.0100	19.9	20.0	-0.3	30.0
Acenaphthene	Ave	1.030	1.127	0.9000	10.9	10.0	9.4	30.0
4-Nitrophenol	Ave	0.2559	0.2905		22.7	20.0	13.5	30.0
2,4-Dinitrotoluene	Ave	0.3419	0.3600	0.2000	10.5	10.0	5.3	30.0
Dibenzofuran	Ave	1.429	1.482	0.8000	10.4	10.0	3.8	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.2865	0.2969	0.0100	10.4	10.0	3.6	30.0
Diethyl phthalate	Ave	1.160	1.216	0.0100	10.5	10.0	4.9	30.0
4-Chlorophenyl phenyl ether	Ave	0.6081	0.6523	0.4000	10.7	10.0	7.3	30.0
4-Nitroaniline	Ave	0.2659	0.3015	0.0100	11.3	10.0	13.3	30.0
Fluorene	Ave	1.215	1.292	0.9000	10.6	10.0	6.3	30.0
4,6-Dinitro-2-methylphenol	Lin1		0.1577	0.0100	20.4	20.0	2.1	30.0
N-Nitrosodiphenylamine	Ave	0.4869	0.5052	0.0100	20.8	20.0	3.8	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8108	0.9292		11.5	10.0	14.6	30.0
4-Bromophenyl phenyl ether	Ave	0.1990	0.2107	0.1000	10.6	10.0	5.9	30.0
Hexachlorobenzene	Ave	0.2018	0.2182	0.1000	10.8	10.0	8.1	30.0
Atrazine	Ave	0.1952	0.2158	0.0100	22.1	20.0	10.6	30.0
Pentachlorophenol	Lin1		0.1642	0.0500	21.0	20.0	5.2	30.0
Phenanthrene	Ave	0.9707	1.003	0.7000	10.3	10.0	3.4	30.0
Anthracene	Ave	0.997	1.059	0.7000	10.6	10.0	6.3	30.0
Carbazole	Ave	0.8905	0.9712	0.0100	10.9	10.0	9.1	30.0
Di-n-butyl phthalate	Ave	1.150	1.290	0.0100	11.2	10.0	12.2	30.0
Fluoranthene	Ave	1.127	1.255	0.6000	11.1	10.0	11.3	30.0
Benzidine	Ave	0.3835	0.4271		22.3	20.0	11.4	30.0
Pyrene	Ave	0.9084	0.9600	0.6000	10.6	10.0	5.7	30.0
Butyl benzyl phthalate	Ave	0.4213	0.4483	0.0100	10.6	10.0	6.4	30.0
3,3'-Dichlorobenzidine	Ave	0.3343	0.3531	0.0100	21.1	20.0	5.6	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.6219	0.6584	0.0100	10.6	10.0	5.9	30.0
Benzo[a]anthracene	Ave	0.9544	0.999	0.8000	10.5	10.0	4.7	30.0
Chrysene	Ave	0.8877	0.9709	0.7000	10.9	10.0	9.4	30.0
Di-n-octyl phthalate	Ave	1.146	1.269	0.0100	11.1	10.0	10.8	30.0
Benzo[b]fluoranthene	Ave	0.9860	1.038	0.7000	10.5	10.0	5.2	30.0
Benzo[k]fluoranthene	Ave	1.043	1.106	0.7000	10.6	10.0	6.0	30.0
Benzo[a]pyrene	Ave	0.9794	1.010	0.7000	10.3	10.0	3.2	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.118	1.142	0.5000	10.2	10.0	2.1	30.0
Dibenzo(a,h)anthracene	Ave	0.9450	1.020	0.4000	10.8	10.0	7.9	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-106341/11 Calibration Date: 10/21/2013 19:03

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31021011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[g,h,i]perylene	Ave	0.9348	0.9837	0.5000	10.5	10.0	5.2	30.0
2-Fluorophenol (Surr)	Ave	1.184	1.150		9.72	10.0	-2.8	30.0
Phenol-d5 (Surr)	Ave	1.541	1.555		10.1	10.0	0.9	30.0
Nitrobenzene-d5 (Surr)	Ave	0.4252	0.4416		10.4	10.0	3.9	30.0
2-Fluorobiphenyl (Surr)	Ave	1.147	1.116		9.73	10.0	-2.7	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1488	0.1440		9.68	10.0	-3.2	30.0
Terphenyl-d14 (Surr)	Ave	0.6276	0.5905		9.41	10.0	-5.9	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab File ID: 31029001.D DFTPP Injection Date: 10/29/2013

Instrument ID: A4HP7 DFTPP Injection Time: 09:48

Analysis Batch No.: 107533

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	41.7	
68	Less than 2.0% of mass 69	0.5	(1.1)1
69	Mass 69 relative abundance	46.8	
70	Less than 2.0% of mass 69	0.2	(0.5)1
127	25.0 - 75.0% of mass 198	50.8	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	28.2	
365	Greater than 0.75% of mass 198	3.3	
441	Present, but less than mass 443	11.3	
442	40.0 - 110.0% of mass 198	74.0	
443	15.0 - 24.0% of mass 442	14.3	(19.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-107533/2	31029002.D	10/29/2013	10:10
	MB 240-106515/16-A	31029003.D	10/29/2013	10:35
	LCS 240-106515/17-A	31029004.D	10/29/2013	11:00
MSA-MW46I-101613	240-30344-2	31029013.D	10/29/2013	14:46
MSA-MW47S-101613	240-30344-5	31029016.D	10/29/2013	16:01
MSA-MW46S-101613	240-30344-1	31029017.D	10/29/2013	16:27
MSA-MW46D-101613	240-30344-3	31029018.D	10/29/2013	16:52

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107533/2 Calibration Date: 10/29/2013 10:10

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31029002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4985	0.5610		11.3	10.0	12.5	20.0
N-Nitrosodimethylamine	Ave	0.7261	0.7198		9.91	10.0	-0.9	20.0
Pyridine	Ave	1.304	1.302		9.99	10.0	-0.1	20.0
Benzaldehyde	Ave	1.210	1.209	0.0100	20.0	20.0	-0.0	20.0
Phenol	Ave	1.615	1.675	0.8000	10.4	10.0	3.7	20.0
Aniline	Ave	2.040	2.094		10.3	10.0	2.6	20.0
Bis(2-chloroethyl)ether	Ave	1.307	1.279	0.7000	9.79	10.0	-2.1	20.0
2-Chlorophenol	Ave	1.215	1.286	0.8000	10.6	10.0	5.8	20.0
1,3-Dichlorobenzene	Ave	1.332	1.385		10.4	10.0	3.9	20.0
1,4-Dichlorobenzene	Ave	1.372	1.433		10.4	10.0	4.4	20.0
Benzyl alcohol	Ave	0.8577	0.8514		9.93	10.0	-0.7	20.0
1,2-Dichlorobenzene	Ave	1.287	1.335		10.4	10.0	3.8	20.0
2-Methylphenol	Ave	1.170	1.183	0.7000	10.1	10.0	1.2	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.347	1.379		10.2	10.0	2.4	20.0
Indene	Ave	2.299	2.403		20.9	20.0	4.5	20.0
3 & 4 Methylphenol	Ave	1.241	1.284		10.3	10.0	3.5	20.0
N-Nitrosodi-n-propylamine	Ave	1.041	1.057	0.5000	10.1	10.0	1.5	20.0
Acetophenone	Ave	1.988	1.999	0.0100	10.1	10.0	0.5	20.0
Hexachloroethane	Ave	0.5778	0.6177	0.3000	10.7	10.0	6.9	20.0
Nitrobenzene	Ave	0.3913	0.3963	0.2000	10.1	10.0	1.3	20.0
Isophorone	Ave	0.6538	0.6583	0.4000	10.1	10.0	0.7	20.0
2-Nitrophenol	Ave	0.1598	0.1678	0.1000	10.5	10.0	5.0	20.0
2,4-Dimethylphenol	Ave	0.3488	0.3573	0.2000	10.2	10.0	2.4	20.0
Benzoic acid	Lin1		0.1765		19.6	20.0	-2.2	20.0
Bis(2-chloroethoxy)methane	Ave	0.3643	0.3691	0.3000	10.1	10.0	1.3	20.0
2,4-Dichlorophenol	Ave	0.2538	0.2573	0.2000	10.1	10.0	1.4	20.0
1,2,4-Trichlorobenzene	Ave	0.2907	0.3016		10.4	10.0	3.8	20.0
Naphthalene	Ave	0.9274	0.9105	0.7000	9.82	10.0	-1.8	20.0
4-Chloroaniline	Ave	0.4054	0.4004	0.0100	9.88	10.0	-1.2	20.0
Hexachlorobutadiene	Ave	0.1904	0.1924	0.0100	10.1	10.0	1.1	20.0
Caprolactam	Ave	0.0853	0.0902	0.0100	21.1	20.0	5.7	20.0
4-Chloro-3-methylphenol	Ave	0.3177	0.3228	0.2000	10.2	10.0	1.6	20.0
2-Methylnaphthalene	Ave	0.6215	0.6319	0.4000	10.2	10.0	1.7	20.0
1-Methylnaphthalene	Ave	0.5752	0.5806		10.1	10.0	0.9	20.0
Hexachlorocyclopentadiene	Ave	0.3601	0.3448	0.0500	9.58	10.0	-4.2	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5103	0.5265	0.0100	10.3	10.0	3.2	20.0
2,4,6-Trichlorophenol	Ave	0.3188	0.3330	0.2000	10.4	10.0	4.5	20.0
2,4,5-Trichlorophenol	Ave	0.3303	0.3534	0.2000	10.7	10.0	7.0	20.0
1,1'-Biphenyl	Ave	1.296	1.285	0.0100	9.92	10.0	-0.8	20.0
2-Chloronaphthalene	Ave	0.9843	0.9943	0.8000	10.1	10.0	1.0	20.0
2-Nitroaniline	Ave	0.3612	0.4049	0.0100	11.2	10.0	12.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107533/2 Calibration Date: 10/29/2013 10:10

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31029002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.137	1.201	0.0100	10.6	10.0	5.6	20.0
1,3-Dinitrobenzene	Ave	0.1752	0.2063		11.8	10.0	17.7	20.0
2,6-Dinitrotoluene	Ave	0.2491	0.2709		10.9	10.0	8.7	20.0
Acenaphthylene	Ave	1.545	1.584	0.9000	10.3	10.0	2.6	20.0
3-Nitroaniline	Ave	0.2597	0.2749	0.0100	10.6	10.0	5.9	20.0
2,4-Dinitrophenol	Lin1		0.1823	0.0100	19.2	20.0	-4.2	20.0
Acenaphthene	Ave	1.030	1.042	0.9000	10.1	10.0	1.2	20.0
4-Nitrophenol	Ave	0.2559	0.2742		21.4	20.0	7.2	20.0
2,4-Dinitrotoluene	Ave	0.3419	0.3566	0.2000	10.4	10.0	4.3	20.0
Dibenzofuran	Ave	1.429	1.452	0.8000	10.2	10.0	1.7	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2865	0.3192	0.0100	11.1	10.0	11.4	20.0
Diethyl phthalate	Ave	1.160	1.211	0.0100	10.4	10.0	4.5	20.0
4-Chlorophenyl phenyl ether	Ave	0.6081	0.6238	0.4000	10.3	10.0	2.6	20.0
4-Nitroaniline	Ave	0.2659	0.2880	0.0100	10.8	10.0	8.3	20.0
Fluorene	Ave	1.215	1.212	0.9000	9.98	10.0	-0.2	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1405	0.0100	18.3	20.0	-8.6	20.0
N-Nitrosodiphenylamine	Ave	0.4869	0.5283	0.0100	21.7	20.0	8.5	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8108	0.8690		10.7	10.0	7.2	20.0
4-Bromophenyl phenyl ether	Ave	0.1990	0.2202	0.1000	11.1	10.0	10.7	20.0
Hexachlorobenzene	Ave	0.2018	0.2184	0.1000	10.8	10.0	8.2	20.0
Atrazine	Ave	0.1952	0.1962	0.0100	20.1	20.0	0.5	20.0
Pentachlorophenol	Lin1		0.1487	0.0500	19.1	20.0	-4.4	20.0
Phenanthrene	Ave	0.9707	0.9800	0.7000	10.1	10.0	1.0	20.0
Anthracene	Ave	0.997	1.016	0.7000	10.2	10.0	2.0	20.0
Carbazole	Ave	0.8905	0.9206	0.0100	10.3	10.0	3.4	20.0
Di-n-butyl phthalate	Ave	1.150	1.215	0.0100	10.6	10.0	5.7	20.0
Fluoranthene	Ave	1.127	1.180	0.6000	10.5	10.0	4.7	20.0
Benzidine	Ave	0.3835	0.3317		17.3	20.0	-13.5	20.0
Pyrene	Ave	0.9084	0.9101	0.6000	10.0	10.0	0.2	20.0
Butyl benzyl phthalate	Ave	0.4213	0.4225	0.0100	10.0	10.0	0.3	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6219	0.6263	0.0100	10.1	10.0	0.7	20.0
3,3'-Dichlorobenzidine	Ave	0.3343	0.3346	0.0100	20.0	20.0	0.0	20.0
Benzo[a]anthracene	Ave	0.9544	0.9609	0.8000	10.1	10.0	0.7	20.0
Chrysene	Ave	0.8877	0.8944	0.7000	10.1	10.0	0.8	20.0
Di-n-octyl phthalate	Ave	1.146	1.163	0.0100	10.1	10.0	1.5	20.0
Benzo[b]fluoranthene	Ave	0.9860	1.005	0.7000	10.2	10.0	2.0	20.0
Benzo[k]fluoranthene	Ave	1.043	1.032	0.7000	9.89	10.0	-1.1	20.0
Benzo[a]pyrene	Ave	0.9794	0.9889	0.7000	10.1	10.0	1.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.118	1.148	0.5000	10.3	10.0	2.7	20.0
Dibenzo(a,h)anthracene	Ave	0.9450	0.9588	0.4000	10.1	10.0	1.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-107533/2 Calibration Date: 10/29/2013 10:10

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31029002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[g,h,i]perylene	Ave	0.9348	0.9511	0.5000	10.2	10.0	1.7	20.0
2-Fluorophenol (Surr)	Ave	1.184	1.203		10.2	10.0	1.6	20.0
Phenol-d5 (Surr)	Ave	1.541	1.581		10.3	10.0	2.6	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4252	0.4106		9.66	10.0	-3.4	20.0
2-Fluorobiphenyl (Surr)	Ave	1.147	1.161		10.1	10.0	1.2	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1488	0.1597		10.7	10.0	7.4	20.0
Terphenyl-d14 (Surr)	Ave	0.6276	0.5996		9.55	10.0	-4.5	20.0

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
MSA-MW46S-101613	240-30344-1	83
MSA-MW46I-101613	240-30344-2	76
MSA-MW46D-101613	240-30344-3	82
MSA-MW47S-101613	240-30344-5	94
	MB 240-106236/5	79
	LCS 240-106236/6	98

	QC LIMITS
TFT = Trifluorotoluene (Surr)	40-133

Column to be used to flag recovery values

FORM II 8015C

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: MB 240-106236/5

Matrix: Water Date Extracted: 10/18/2013 17:25

Lab File ID:(1) YF101805.D Lab File ID:(2)

Date Analyzed:(1) 10/18/2013 17:25 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-106236/6	10/18/2013 18:04	
MSA-MW46S-101613	240-30344-1	10/19/2013 02:25	
MSA-MW46I-101613	240-30344-2	10/19/2013 03:03	
MSA-MW46D-101613	240-30344-3	10/19/2013 03:40	
MSA-MW47S-101613	240-30344-5	10/19/2013 04:18	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-106236/5

Matrix: Water | Lab File ID: YF101805.D

Analysis Method: 8015C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2013 17:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 106236 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	100	U	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	79		40-133

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF101806.D

Lab ID: LCS 240-106236/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	777	97	67-132	

Column to be used to flag recovery and RPD values

FORM III 8015C

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: YPID Start Date: 10/04/2013 20:56

Analysis Batch Number: 104293 End Date: 10/06/2013 01:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-104293/4 IC		10/04/2013 20:56	1	YF100404.D	RTX-VRX 0.45(mm)
STD2 240-104293/5 IC		10/04/2013 21:36	1	YF100405.D	RTX-VRX 0.45(mm)
STD3 240-104293/6 IC		10/04/2013 22:18	1	YF100406.D	RTX-VRX 0.45(mm)
STD4 240-104293/7 ICRT		10/04/2013 22:59	1	YF100407.D	RTX-VRX 0.45(mm)
STD5 240-104293/8 IC		10/04/2013 23:40	1	YF100408.D	RTX-VRX 0.45(mm)
STD6 240-104293/9 IC		10/05/2013 00:21	1	YF100409.D	RTX-VRX 0.45(mm)
ICV 240-104293/10		10/05/2013 01:02	1	YF100410.D	RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 01:42	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 02:23	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 03:03	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 03:43	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 04:23	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 05:02	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 05:42	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 06:22	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 07:01	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 07:41	1		RTX-VRX 0.45(mm)
CCV 240-104293/21		10/05/2013 08:21	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 09:01	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 09:41	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 10:21	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 14:22	2		RTX-VRX 0.45(mm)
CCV 240-104293/32		10/05/2013 15:43	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 17:04	500		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 17:44	500		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 18:24	500		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 19:04	100		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 19:44	100		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 20:24	100		RTX-VRX 0.45(mm)
CCV 240-104293/39		10/05/2013 21:04	1		RTX-VRX 0.45(mm)
RINSE 240-104293/40		10/05/2013 21:44	1		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 23:04	50		RTX-VRX 0.45(mm)
ZZZZZ		10/05/2013 23:45	50		RTX-VRX 0.45(mm)
ZZZZZ		10/06/2013 00:26	50		RTX-VRX 0.45(mm)
CCV 240-104293/45		10/06/2013 01:07	1		RTX-VRX 0.45(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: YPID Start Date: 10/18/2013 16:47

Analysis Batch Number: 106236 End Date: 10/19/2013 08:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-106236/4		10/18/2013 16:47	1	YF101804.D	RTX-VRX 0.45(mm)
MB 240-106236/5		10/18/2013 17:25	1	YF101805.D	RTX-VRX 0.45(mm)
LCS 240-106236/6		10/18/2013 18:04	1	YF101806.D	RTX-VRX 0.45(mm)
CCV 240-106236/15		10/18/2013 23:53	1	YF101815.D	RTX-VRX 0.45(mm)
240-30344-1	MSA-MW46S-101613	10/19/2013 02:25	1	YF101819.D	RTX-VRX 0.45(mm)
240-30344-2	MSA-MW46I-101613	10/19/2013 03:03	1	YF101820.D	RTX-VRX 0.45(mm)
240-30344-3	MSA-MW46D-101613	10/19/2013 03:40	1	YF101821.D	RTX-VRX 0.45(mm)
240-30344-5	MSA-MW47S-101613	10/19/2013 04:18	1	YF101822.D	RTX-VRX 0.45(mm)
CCV 240-106236/23		10/19/2013 04:55	1	YF101823.D	RTX-VRX 0.45(mm)
ZZZZZ		10/19/2013 05:33	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2013 06:11	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2013 06:50	1		RTX-VRX 0.45(mm)
ZZZZZ		10/19/2013 07:28	1		RTX-VRX 0.45(mm)
CCV 240-106236/28		10/19/2013 08:06	1		RTX-VRX 0.45(mm)

8015C

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 104293

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2013 20:56 Calibration End Date: 10/05/2013 00:21 Calibration ID: 17915

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-104293/4	YF100404.D
Level 2	STD2 240-104293/5	YF100405.D
Level 3	STD3 240-104293/6	YF100406.D
Level 4	STD4 240-104293/7	YF100407.D
Level 5	STD5 240-104293/8	YF100408.D
Level 6	STD6 240-104293/9	YF100409.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	229507 183127	212148 182363	197769	186868	Ave		198630.342				9.5		20.0			
C6-C12	264979 199178	234946 198472	215864	203208	Ave		219441.135				12.0		20.0			
Trifluorotoluene (Surr)	217500 186581	200350 185536	205093	198561	Ave		198936.817				6.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-104293/10 Calibration Date: 10/05/2013 01:02

Instrument ID: YPID Calib Start Date: 10/04/2013 20:56

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:21

Lab File ID: YF100410.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	198630	184269		742	800	-7.2	20.0
C6-C12	Ave	219441	208279		759	800	-5.1	20.0
Trifluorotoluene (Surr)	Ave	198937	178716		8.98	10.0	-10.2	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-104293/10 Calibration Date: 10/05/2013 01:02

Instrument ID: YPID Calib Start Date: 10/04/2013 20:56

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:21

Lab File ID: YF100410.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.78	4.77	18.79
C6-C12	13.45	4.77	22.13
Trifluorotoluene (Surr)	9.68	9.42	9.92

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Sample No.: CCVRT 240-106236/4 Date Analyzed: 10/18/2013 16:47

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF101804.D Heated Purge: (Y/N) N

Calibration ID: 17915

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.69		
UPPER LIMIT				9.79		
LOWER LIMIT				9.59		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-106236/4		10/18/2013 16:47	YF101804.D	9.69		
MB 240-106236/5		10/18/2013 17:25	YF101805.D	9.68		
LCS 240-106236/6		10/18/2013 18:04	YF101806.D	9.68		
CCV 240-106236/15		10/18/2013 23:53	YF101815.D	9.69		
240-30344-1	MSA-MW46S-101613	10/19/2013 02:25	YF101819.D	9.68		
240-30344-2	MSA-MW46I-101613	10/19/2013 03:03	YF101820.D	9.68		
240-30344-3	MSA-MW46D-101613	10/19/2013 03:40	YF101821.D	9.68		
240-30344-5	MSA-MW47S-101613	10/19/2013 04:18	YF101822.D	9.68		
CCV 240-106236/23		10/19/2013 04:55	YF101823.D	9.69		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCVRT 240-106236/4 Calibration Date: 10/18/2013 16:47

Instrument ID: YPID Calib Start Date: 10/04/2013 20:56

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:21

Lab File ID: YF101804.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	198630	179246		722	800	-9.8	20.0
C6-C12	Ave	219441	196149		715	800	-10.6	20.0
Trifluorotoluene (Surr)	Ave	198937	165789		8.33	10.0	-16.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-106236/15 Calibration Date: 10/18/2013 23:53

Instrument ID: YPID Calib Start Date: 10/04/2013 20:56

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:21

Lab File ID: YF101815.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	198630	170412		686	800	-14.2	20.0
C6-C12	Ave	219441	184869		674	800	-15.8	20.0
Trifluorotoluene (Surr)	Ave	198937	173683		8.73	10.0	-12.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-106236/23 Calibration Date: 10/19/2013 04:55

Instrument ID: YPID Calib Start Date: 10/04/2013 20:56

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:21

Lab File ID: YF101823.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	198630	167963		676	800	-15.4	20.0
C6-C12	Ave	219441	182791		666	800	-16.7	20.0
Trifluorotoluene (Surr)	Ave	198937	174741		8.78	10.0	-12.2	20.0

FORM II

DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ID:

Client Sample ID	Lab Sample ID	C91 #
MSA-MW46S-101613	240-30344-1	48
MSA-MW46I-101613	240-30344-2	48
MSA-MW46D-101613	240-30344-3	41
MSA-MW47S-101613	240-30344-5	43
	MB 240-106111/12-A	45
	LCS 240-106111/13-A	64

	QC LIMITS
C9 = n-Nonane	20-120

Column to be used to flag recovery values

FORM II 8015C

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: MB 240-106111/12-A

Matrix: Water Date Extracted: 10/18/2013 08:21

Lab File ID:(1) P5F22005.D Lab File ID:(2)

Date Analyzed:(1) 10/22/2013 20:12 Date Analyzed:(2)

Instrument ID:(1) A2HP5F Instrument ID:(2)

GC Column:(1) ID: GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-106111/13-A	10/22/2013 20:42	
MSA-MW46S-101613	240-30344-1	10/23/2013 01:14	
MSA-MW46I-101613	240-30344-2	10/23/2013 01:44	
MSA-MW46D-101613	240-30344-3	10/23/2013 02:15	
MSA-MW47S-101613	240-30344-5	10/23/2013 02:45	

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Batch Number: 106111 Batch Start Date: 10/18/13 10:40 Batch Analyst: Click, Kieth

Batch Method: 3520C Batch End Date: 10/19/13 04:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	EXDIESELSPKW 00032	EXTPHSURR 00022
240-30344-J-1	MSA-MW46S-101613	3520C, 8015C	T	960 mL	5 mL	7	2		1 mL
240-30344-K-2	MSA-MW46I-101613	3520C, 8015C	T	1000 mL	5 mL	7	2		1 mL
240-30344-H-3	MSA-MW46D-101613	3520C, 8015C	T	1050 mL	5 mL	7	2		1 mL
240-30344-H-5	MSA-MW47S-101613	3520C, 8015C	T	990 mL	5 mL	7	2		1 mL
MB 240-106111/12		3520C, 8015C		1000 mL	5 mL	7	2		1 mL
LCS 240-106111/13		3520C, 8015C		1000 mL	5 mL	7	2	1 mL	1 mL

Batch Notes	
Na2SO4 Lot Number	963868
Prep Solvent Lot #	1222801

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-106111/12-A

Matrix: Water Lab File ID: P5F22005.D

Analysis Method: 8015C Date Collected:

Extraction Method: 3520C Date Extracted: 10/18/2013 08:21

Sample wt/vol: 1000(mL) Date Analyzed: 10/22/2013 20:12

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 106668 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	500	U	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	45		20-120

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P5F22006.D

Lab ID: LCS 240-106111/13-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Diesel	2500	2550	102	40-124	

Column to be used to flag recovery and RPD values

FORM III 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: A2HP5F Start Date: 10/14/2013 17:36

Analysis Batch Number: 105429 End Date: 10/14/2013 20:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-105429/4 IC		10/14/2013 17:36	1	P5F01404.D	
STD2 240-105429/5 IC		10/14/2013 18:07	1	P5F01405.D	
STD3 240-105429/6 ICRT		10/14/2013 18:37	1	P5F01406.D	
STD4 240-105429/7 IC		10/14/2013 19:07	1	P5F01407.D	
STD5 240-105429/8 IC		10/14/2013 19:38	1	P5F01408.D	
ICV 240-105429/9		10/14/2013 20:08	1	P5F01409.D	

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: A2HP5F Start Date: 10/22/2013 19:42

Analysis Batch Number: 106668 End Date: 10/23/2013 03:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-106668/4 CCVRT		10/22/2013 19:42	1	P5F22004.D	
MB 240-106111/12-A		10/22/2013 20:12	1	P5F22005.D	
LCS 240-106111/13-A		10/22/2013 20:42	1	P5F22006.D	
CCV 240-106668/9		10/22/2013 22:13	1	P5F22009.D	
ZZZZZ		10/22/2013 22:43	1		
ZZZZZ		10/22/2013 23:13	1		
ZZZZZ		10/22/2013 23:43	1		
ZZZZZ		10/23/2013 00:13	1		
240-30344-1	MSA-MW46S-101613	10/23/2013 01:14	1	P5F22015.D	
240-30344-2	MSA-MW46I-101613	10/23/2013 01:44	1	P5F22016.D	
240-30344-3	MSA-MW46D-101613	10/23/2013 02:15	1	P5F22017.D	
240-30344-5	MSA-MW47S-101613	10/23/2013 02:45	1	P5F22018.D	
CCV 240-106668/19		10/23/2013 03:15	1	P5F22019.D	

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30344-1 Analy Batch No.: 105429

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 17:36 Calibration End Date: 10/14/2013 19:38 Calibration ID: 18060

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-105429/4	P5F01404.D
Level 2	STD2 240-105429/5	P5F01405.D
Level 3	STD3 240-105429/6	P5F01406.D
Level 4	STD4 240-105429/7	P5F01407.D
Level 5	STD5 240-105429/8	P5F01408.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	283286 200088	211930	264597	257900	Ave		243560.362				15.0		20.0			
n-Nonane	263491 212916	205591	276378	273515	Ave		246378.022				14.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-105429/9 Calibration Date: 10/14/2013 20:08

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F01409.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	243560	205641		423	501	-15.6	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICV 240-105429/9 Calibration Date: 10/14/2013 20:08

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F01409.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.46	5.33	13.59

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Sample No.: CCV 240-106668/4 Date Analyzed: 10/22/2013 19:42

Instrument ID: A2HP5F GC Column: ID: ()

Lab File ID (Standard): P5F22004.D Heated Purge: (Y/N) N

Calibration ID: 18060

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				4.47		
UPPER LIMIT				4.57		
LOWER LIMIT				4.37		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-106668/4 CCVRT		10/22/2013 19:42	P5F22004.D	4.47		
MB 240-106111/12-A		10/22/2013 20:12	P5F22005.D	4.48		
LCS 240-106111/13-A		10/22/2013 20:42	P5F22006.D	4.48		
CCV 240-106668/9		10/22/2013 22:13	P5F22009.D	4.47		
240-30344-1	MSA-MW46S-101613	10/23/2013 01:14	P5F22015.D	4.48		
240-30344-2	MSA-MW46I-101613	10/23/2013 01:44	P5F22016.D	4.48		
240-30344-3	MSA-MW46D-101613	10/23/2013 02:15	P5F22017.D	4.48		
240-30344-5	MSA-MW47S-101613	10/23/2013 02:45	P5F22018.D	4.48		
CCV 240-106668/19		10/23/2013 03:15	P5F22019.D	4.48		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-106668/4 Calibration Date: 10/22/2013 19:42

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F22004.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	243560	265033		544	500	8.8	20.0
n-Nonane	Ave	246378	271782		55.2	50.0	10.3	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-106668/9 Calibration Date: 10/22/2013 22:13

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F22009.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	243560	207582		426	500	-14.8	20.0
n-Nonane	Ave	246378	211850		43.0	50.0	-14.0	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: CCV 240-106668/19 Calibration Date: 10/23/2013 03:15

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F22019.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	243560	237840		488	500	-2.3	20.0
n-Nonane	Ave	246378	261549		53.1	50.0	6.2	20.0

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-30344-1

SDG No.:

Project: DUMP ROAD MSA

Client Sample ID	Lab Sample ID
MSA-MW46S-101613	240-30344-1
MSA-MW46I-101613	240-30344-2
MSA-MW46D-101613	240-30344-3
MSA-MW47S-101613	240-30344-5

Comments:

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-30344-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C MDL Date: 01/01/2011 08:42

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-30344-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C XMDL Date: 01/01/2011 08:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30344-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C MDL Date: 01/01/2011 08:42

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30344-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C XMDL Date: 01/01/2011 08:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-30344-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS

Lab Name: TestAmerica Canton Job Number: 240-30344-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30344-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30344-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-30344-1

SDG No.:

Instrument ID: I9 Date: 10/21/2013 15:10

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Silver		2000	6010C
Arsenic		5000	6010C
Beryllium		4000	6010C
Cadmium		2000	6010C
Barium		25000	6010C
Copper		30000	6010C
Chromium		20000	6010C
Nickel		30000	6010C
Lead		15000	6010C
Antimony		10000	6010C
Cobalt		10000	6010C
Selenium		10000	6010C
Thallium		10000	6010C
Zinc		10000	6010C
Molybdenum		10000	6010C
Vanadium		5000	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-30344-1

SDG No.:

Instrument ID: H1 Date: 04/01/2011 10:45

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		50	7470A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-106546/1-A	10/22/2013 09:59	106546		50	50
LCS 240-106546/2-A	10/22/2013 09:59	106546		50	50
240-30344-2	10/22/2013 09:59	106546		50	50
240-30344-2 MS	10/22/2013 09:59	106546		50	50
240-30344-2 DU	10/22/2013 09:59	106546		50	50
240-30344-1	10/22/2013 09:59	106546		50	50
240-30344-3	10/22/2013 09:59	106546		50	50
240-30344-5	10/22/2013 09:59	106546		50	50
240-30344-1	10/22/2013 09:59	106546		50	50
240-30344-2	10/22/2013 09:59	106546		50	50
240-30344-3	10/22/2013 09:59	106546		50	50
240-30344-5	10/22/2013 09:59	106546		50	50

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Batch Number: 106546 Batch Start Date: 10/22/13 09:59 Batch Analyst: Sutherland, Aaron

Batch Method: 3005A Batch End Date: 10/22/13 17:29

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAGSPIKEW 00034	MTICP1 00023	MTICP2A 00031	MTTMHCL 00017
MB 240-106546/1		3005A, 6010C		50 mL	50 mL				2.5 mL
LCS 240-106546/2		3005A, 6010C		50 mL	50 mL	1 mL	1 mL	1 mL	2.5 mL
240-30344-G-2	MSA-MW46I-101613	3005A, 6010C	R	50 mL	50 mL				2.5 mL
240-30344-G-2 MS	MSA-MW46I-101613	3005A, 6010C	R	50 mL	50 mL	1 mL	1 mL	1 mL	2.5 mL
240-30344-G-2 DU	MSA-MW46I-101613	3005A, 6010C	R	50 mL	50 mL				2.5 mL
240-30344-G-1	MSA-MW46S-101613	3005A, 6010C	R	50 mL	50 mL				2.5 mL
240-30344-G-3	MSA-MW46D-101613	3005A, 6010C	R	50 mL	50 mL				2.5 mL
240-30344-G-5	MSA-MW47S-101613	3005A, 6010C	R	50 mL	50 mL				2.5 mL
240-30344-F-1	MSA-MW46S-101613	3005A, 6010C	D	50 mL	50 mL				2.5 mL
240-30344-F-2	MSA-MW46I-101613	3005A, 6010C	D	50 mL	50 mL				2.5 mL
240-30344-F-3	MSA-MW46D-101613	3005A, 6010C	D	50 mL	50 mL				2.5 mL
240-30344-F-5	MSA-MW47S-101613	3005A, 6010C	D	50 mL	50 mL				2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00018					
MB 240-106546/1		3005A, 6010C		1 mL					
LCS 240-106546/2		3005A, 6010C		1 mL					
240-30344-G-2	MSA-MW46I-101613	3005A, 6010C	R	1 mL					
240-30344-G-2 MS	MSA-MW46I-101613	3005A, 6010C	R	1 mL					
240-30344-G-2 DU	MSA-MW46I-101613	3005A, 6010C	R	1 mL					
240-30344-G-1	MSA-MW46S-101613	3005A, 6010C	R	1 mL					
240-30344-G-3	MSA-MW46D-101613	3005A, 6010C	R	1 mL					
240-30344-G-5	MSA-MW47S-101613	3005A, 6010C	R	1 mL					
240-30344-F-1	MSA-MW46S-101613	3005A, 6010C	D	1 mL					
240-30344-F-2	MSA-MW46I-101613	3005A, 6010C	D	1 mL					
240-30344-F-3	MSA-MW46D-101613	3005A, 6010C	D	1 mL					
240-30344-F-5	MSA-MW47S-101613	3005A, 6010C	D	1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-106546/1-A

Instrument Code: I9 Batch No.: 107650

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	10	U		6010C
7440-38-2	Arsenic	15	U		6010C
7440-41-7	Beryllium	5.0	U		6010C
7440-43-9	Cadmium	5.0	U		6010C
7440-39-3	Barium	1.17	J		6010C
7440-50-8	Copper	25	U		6010C
7440-47-3	Chromium	10	U		6010C
7440-02-0	Nickel	40	U		6010C
7439-92-1	Lead	10	U		6010C
7440-36-0	Antimony	20	U		6010C
7440-48-4	Cobalt	10	U		6010C
7782-49-2	Selenium	20	U		6010C
7440-28-0	Thallium	20	U		6010C
7440-66-6	Zinc	8.97	J		6010C
7439-98-7	Molybdenum	40	U		6010C
7440-62-2	Vanadium	10	U		6010C

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-106546/2-A

Lab Name: TestAmerica Canton Job No.: 240-30344-1

Sample Matrix: Water LCS Source: MTAGSPIKEW_00034

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	50.0	52.8		106	80	120		6010C
Arsenic	2000	2150		108	80	120		6010C
Beryllium	50.0	49.9		100	80	120		6010C
Cadmium	50.0	51.4		103	80	120		6010C
Barium	2000	2010		101	80	120		6010C
Copper	250	257		103	80	120		6010C
Chromium	200	216		108	80	120		6010C
Nickel	500	529		106	80	120		6010C
Lead	500	524		105	80	120		6010C
Antimony	500	527		105	80	120		6010C
Cobalt	500	517		103	80	120		6010C
Selenium	2000	2080		104	80	120		6010C
Thallium	2000	2170		109	80	120		6010C
Zinc	500	538		108	80	120		6010C
Molybdenum	1000	1070		107	80	120		6010C
Vanadium	500	474		95	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: MSA-MW46I-101613 MS
Lab ID: 240-30344-2 MS
Lab Name: TestAmerica Canton
Job No.: 240-30344-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	50.5		10	U	50.0	101	75-125		6010C
Arsenic	2100		4.1	J	2000	105	75-125		6010C
Beryllium	47.9		5.0	U	50.0	96	75-125		6010C
Cadmium	48.9		5.0	U	50.0	98	75-125		6010C
Barium	1950		26	J	2000	96	75-125		6010C
Copper	246		25	U	250	98	75-125		6010C
Chromium	208		10	U	200	104	75-125		6010C
Nickel	576		40		500	107	75-125		6010C
Lead	502		10	U	500	100	75-125		6010C
Antimony	510		20	U	500	102	75-125		6010C
Cobalt	605		80		500	105	75-125		6010C
Selenium	1990		20	U	2000	100	75-125		6010C
Thallium	2200		20	U	2000	110	75-125	^	6010C
Zinc	561		29	J	500	107	75-125		6010C
Molybdenum	1040		1.3	J	1000	104	75-125		6010C
Vanadium	447		10	U	500	89	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

6-IN
DUPLICATES
METALS - TOTAL RECOVERABLE

Client ID: MSA-MW46I-101613 DU
Lab ID: 240-30344-2 DU
Lab Name: TestAmerica Canton
Job No.: 240-30344-1
SDG No.:
% Solids for Sample:
% Solids for Duplicate:
Matrix: Water
Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Silver	10	10	U	10	U	NC		6010C
Arsenic	15	4.1	J	3.73	J	10		6010C
Beryllium	5.0	5.0	U	5.0	U	NC		6010C
Cadmium	5.0	5.0	U	5.0	U	NC		6010C
Barium	200	26	J	26.1	J	1		6010C
Copper	25	25	U	25	U	NC		6010C
Chromium	10	10	U	10	U	NC		6010C
Nickel	40	40		41.8		4		6010C
Lead	10	10	U	10	U	NC		6010C
Antimony	20	20	U	20	U	NC		6010C
Cobalt	10	80		82.2		3		6010C
Selenium	20	20	U	20	U	NC		6010C
Thallium	20	20	U	20	U	NC		6010C
Zinc	50	29	J	29.9	J	5		6010C
Molybdenum	40	1.3	J	40	U	NC		6010C
Vanadium	10	10	U	10	U	NC		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-30344-2

SDG No:

Lab Name: TestAmerica Canton Job No: 240-30344-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	10	U	50	U	NC		6010C
Arsenic	4.1	J	75	U	NC		6010C
Beryllium	5.0	U	25	U	NC		6010C
Cadmium	5.0	U	25	U	NC		6010C
Barium	26	J	26.5	J	NC		6010C
Copper	25	U	130	U	NC		6010C
Chromium	10	U	50	U	NC		6010C
Nickel	40		39.9	J	NC		6010C
Lead	10	U	50	U	NC		6010C
Antimony	20	U	100	U	NC		6010C
Cobalt	80		79.2		NC		6010C
Selenium	20	U	100	U	NC		6010C
Thallium	20	U	100	U	NC		6010C
Zinc	29	J	29.9	J	NC		6010C
Molybdenum	1.3	J	200	U	NC		6010C
Vanadium	10	U	50	U	NC		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/29/2013 10:09 End Date: 10/30/2013 05:37

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ICIS 240-107650/1	1		10:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-107650/2 IC			10:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-107650/3 IC			10:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-107650/4	1		10:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICB 240-107650/5	1		10:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-107650/6			10:29																				
ZZZZZZ			10:34																				
ICSA 240-107650/8	1		10:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-107650/9	1		10:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-107650/10			10:46																				
CCB 240-107650/11			10:49																				
ZZZZZZ			10:54																				
ZZZZZZ			10:58																				
ZZZZZZ			11:02																				
ZZZZZZ			11:06																				
ZZZZZZ			11:10																				
ZZZZZZ			11:14																				
CCV 240-107650/18			11:20																				
CCB 240-107650/19			11:24																				
ZZZZZZ			11:28																				
ZZZZZZ			11:32																				
CRI 240-107650/22	1		11:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-107650/23			11:52																				
CCB 240-107650/24			11:55																				
ZZZZZZ			12:00																				
ZZZZZZ			12:04																				
ZZZZZZ			12:08																				
ZZZZZZ			12:11																				
ZZZZZZ			12:15																				
ZZZZZZ			12:19																				
ZZZZZZ			12:23																				
ZZZZZZ			12:27																				
CCV 240-107650/33	1		12:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-107650/34	1		12:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			12:40																				
ZZZZZZ			12:44																				
ZZZZZZ			12:48																				
ZZZZZZ			12:52																				
ZZZZZZ			12:56																				
MB 240-106546/1-A	1	R	13:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-106546/2-A	1	R	13:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/29/2013 10:09 End Date: 10/30/2013 05:37

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
240-30344-2	1	R	13:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30344-2 SD	5	R	13:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30344-2 DU	1	R	13:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-107650/45	1		13:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-107650/46	1		13:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30344-2 MS	1	R	13:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30344-1	1	R	13:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30344-3	1	R	13:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30344-5	1	R	13:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			13:44																				
ZZZZZZ			13:48																				
ZZZZZZ			13:53																				
ZZZZZZ			13:57																				
ZZZZZZ			14:01																				
ZZZZZZ			14:05																				
CCV 240-107650/57	1		14:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-107650/58	1		14:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30344-1	1	D	14:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30344-2	1	D	14:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30344-3	1	D	14:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30344-5	1	D	14:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			14:33																				
ZZZZZZ			14:37																				
ZZZZZZ			14:41																				
ZZZZZZ			14:45																				
ZZZZZZ			14:50																				
ZZZZZZ			14:54																				
CCV 240-107650/69	1		14:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-107650/70	1		15:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			15:06																				
ZZZZZZ			15:10																				
ZZZZZZ			15:14																				
ZZZZZZ			15:18																				
ZZZZZZ			15:22																				
ZZZZZZ			15:26																				
CRI 240-107650/77	1		15:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			15:34																				
ZZZZZZ			15:38																				
ZZZZZZ			15:42																				
CCV 240-107650/81			15:46																				
CCB 240-107650/82			15:50																				
ZZZZZZ			15:54																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/29/2013 10:09 End Date: 10/30/2013 05:37

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn					
ZZZZZZ			15:59																					
ZZZZZZ			16:02																					
ZZZZZZ			16:06																					
ZZZZZZ			16:10																					
ZZZZZZ			16:14																					
ZZZZZZ			16:18																					
ZZZZZZ			16:22																					
ZZZZZZ			16:27																					
ZZZZZZ			16:31																					
CCV 240-107650/93			16:35																					
CCB 240-107650/94			16:39																					
ZZZZZZ			16:43																					
ZZZZZZ			16:47																					
ZZZZZZ			16:51																					
ZZZZZZ			16:55																					
ZZZZZZ			16:59																					
ZZZZZZ			17:04																					
ZZZZZZ			17:08																					
ZZZZZZ			17:12																					
ZZZZZZ			17:16																					
ZZZZZZ			17:20																					
CCV 240-107650/105			17:24																					
CCB 240-107650/106			17:28																					
ZZZZZZ			17:32																					
ZZZZZZ			17:36																					
ZZZZZZ			17:40																					
ZZZZZZ			17:45																					
ZZZZZZ			17:48																					
ZZZZZZ			17:52																					
ZZZZZZ			17:56																					
ZZZZZZ			18:00																					
ZZZZZZ			18:04																					
ZZZZZZ			18:08																					
CCV 240-107650/117			18:12																					
CCB 240-107650/118			18:16																					
ZZZZZZ			18:20																					
ZZZZZZ			18:24																					
ZZZZZZ			18:28																					
ZZZZZZ			18:32																					
ZZZZZZ			18:36																					
ZZZZZZ			18:41																					
ZZZZZZ			18:45																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/29/2013 10:09 End Date: 10/30/2013 05:37

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn					
ZZZZZZ			18:49																					
ZZZZZZ			18:53																					
ZZZZZZ			18:57																					
CCV 240-107650/129			19:01																					
CCB 240-107650/130			19:05																					
ZZZZZZ			19:09																					
ZZZZZZ			19:13																					
ZZZZZZ			19:17																					
ZZZZZZ			19:22																					
ZZZZZZ			19:26																					
ZZZZZZ			19:30																					
ZZZZZZ			19:34																					
ZZZZZZ			19:38																					
ZZZZZZ			19:42																					
ZZZZZZ			19:46																					
CCV 240-107650/141			19:50																					
CCB 240-107650/142			19:54																					
ZZZZZZ			19:58																					
ZZZZZZ			20:02																					
ZZZZZZ			20:06																					
ZZZZZZ			20:10																					
ZZZZZZ			20:14																					
ZZZZZZ			20:18																					
ZZZZZZ			20:22																					
ZZZZZZ			20:26																					
ZZZZZZ			20:30																					
ZZZZZZ			20:35																					
CCV 240-107650/153			20:39																					
CCB 240-107650/154			20:43																					
ZZZZZZ			20:47																					
ZZZZZZ			20:51																					
ZZZZZZ			20:55																					
ZZZZZZ			20:59																					
ZZZZZZ			21:03																					
ZZZZZZ			21:07																					
ZZZZZZ			21:11																					
ZZZZZZ			21:15																					
ZZZZZZ			21:19																					
ZZZZZZ			21:24																					
CCV 240-107650/165			21:28																					
CCB 240-107650/166			21:32																					
ZZZZZZ			21:36																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/29/2013 10:09 End Date: 10/30/2013 05:37

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			21:40																				
ZZZZZZ			21:44																				
ZZZZZZ			21:48																				
ZZZZZZ			21:52																				
ZZZZZZ			21:56																				
ZZZZZZ			22:00																				
ZZZZZZ			22:03																				
ZZZZZZ			22:08																				
ZZZZZZ			22:12																				
CCV 240-107650/177			22:16																				
CCB 240-107650/178			22:20																				
ZZZZZZ			22:24																				
ZZZZZZ			22:28																				
ZZZZZZ			22:32																				
ZZZZZZ			22:37																				
ZZZZZZ			22:41																				
ZZZZZZ			22:45																				
ZZZZZZ			22:49																				
ZZZZZZ			22:53																				
ZZZZZZ			22:57																				
ZZZZZZ			23:01																				
CCV 240-107650/189			23:05																				
CCB 240-107650/190			23:09																				
ZZZZZZ			23:13																				
ZZZZZZ			23:17																				
ZZZZZZ			23:21																				
ZZZZZZ			23:26																				
ZZZZZZ			23:30																				
ZZZZZZ			23:34																				
ZZZZZZ			23:38																				
ZZZZZZ			23:42																				
ZZZZZZ			23:46																				
ZZZZZZ			23:50																				
CCV 240-107650/201			23:55																				
CCB 240-107650/202			23:58																				
ZZZZZZ			00:03																				
ZZZZZZ			00:07																				
ZZZZZZ			00:11																				
ZZZZZZ			00:15																				
ZZZZZZ			00:19																				
ZZZZZZ			00:23																				
ZZZZZZ			00:27																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/29/2013 10:09 End Date: 10/30/2013 05:37

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			00:31																				
ZZZZZZ			00:35																				
ZZZZZZ			00:39																				
CCV 240-107650/213			00:43																				
CCB 240-107650/214			00:47																				
ZZZZZZ			00:51																				
ZZZZZZ			00:55																				
ZZZZZZ			01:00																				
ZZZZZZ			01:04																				
ZZZZZZ			01:08																				
ZZZZZZ			01:12																				
ZZZZZZ			01:16																				
ZZZZZZ			01:21																				
ZZZZZZ			01:25																				
ZZZZZZ			01:29																				
CCV 240-107650/225			01:33																				
CCB 240-107650/226			01:37																				
ZZZZZZ			01:41																				
ZZZZZZ			01:45																				
ZZZZZZ			01:49																				
ZZZZZZ			01:53																				
ZZZZZZ			01:57																				
ZZZZZZ			02:01																				
ZZZZZZ			02:06																				
ZZZZZZ			02:10																				
ZZZZZZ			02:14																				
ZZZZZZ			02:18																				
CCV 240-107650/237			02:22																				
CCB 240-107650/238			02:26																				
ZZZZZZ			02:30																				
ZZZZZZ			02:34																				
ZZZZZZ			02:38																				
ZZZZZZ			02:42																				
ZZZZZZ			02:46																				
ZZZZZZ			02:50																				
ZZZZZZ			02:54																				
ZZZZZZ			02:58																				
ZZZZZZ			03:02																				
ZZZZZZ			03:06																				
CCV 240-107650/249			03:10																				
CCB 240-107650/250			03:14																				
ZZZZZZ			03:18																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/29/2013 10:09 End Date: 10/30/2013 05:37

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			03:22																				
ZZZZZZ			03:26																				
ZZZZZZ			03:30																				
ZZZZZZ			03:34																				
ZZZZZZ			03:38																				
ZZZZZZ			03:42																				
CCV 240-107650/258			03:47																				
CCB 240-107650/259			03:50																				
CCV 240-107650/260			04:40																				
CCB 240-107650/261			04:44																				
ZZZZZZ			04:48																				
ZZZZZZ			04:52																				
ZZZZZZ			04:57																				
ZZZZZZ			05:01																				
ZZZZZZ			05:05																				
ZZZZZZ			05:09																				
ZZZZZZ			05:13																				
CRI 240-107650/269			05:17																				
CCV 240-107650/270			05:21																				
CCB 240-107650/271			05:25																				
ZZZZZZ			05:29																				
CCV 240-107650/273			05:33																				
CCB 240-107650/274			05:37																				

Prep Types

D = Dissolved

R = Total Recoverable

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

ICV Source: MT6500ICV_00013 Concentration Units: ug/L

CCV Source: MTICPCCV_00011

Analyte	ICV 240-107650/4 10/29/2013 10:21				CCV 240-107650/33 10/29/2013 12:32				CCV 240-107650/45 10/29/2013 13:20			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	385		375	103	517		500	103	520		500	104
Arsenic	388		375	103	524		500	105	530		500	106
Barium	1510		1500	100	2000		2000	100	2000		2000	100
Beryllium	1520		1500	101	2030		2000	101	2030		2000	101
Cadmium	382		375	102	518		500	104	519		500	104
Chromium	1520		1500	101	2120		2000	106	2160		2000	108
Cobalt	1480		1500	98	2080		2000	104	2110		2000	105
Copper	1500		1500	100	2020		2000	101	2020		2000	101
Lead	373		375	99	516		500	103	526		500	105
Molybdenum	1520		1500	101	2140		2000	107	2190		2000	110
Nickel	1500		1500	100	2090		2000	104	2110		2000	105
Selenium	383		375	102	499		500	100	496		500	99
Silver	767		750	102	1030		1000	103	1020		1000	102
Thallium	754		750	101	1070		1000	107	1100		1000	110
Vanadium	1510		1500	101	1940		2000	97	1900		2000	95
Zinc	1500		1500	100	2090		2000	105	2100		2000	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

ICV Source: MT6500ICV_00013 Concentration Units: ug/L

CCV Source: MTICPCCV_00011

Analyte	CCV 240-107650/57 10/29/2013 14:09				CCV 240-107650/69 10/29/2013 14:58							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	515		500	103	496		500	99				
Arsenic	532		500	106	512		500	102				
Barium	1990		2000	100	1910		2000	96				
Beryllium	2020		2000	101	1940		2000	97				
Cadmium	517		500	103	497		500	99				
Chromium	2170		2000	109	2090		2000	105				
Cobalt	2120		2000	106	2040		2000	102				
Copper	2010		2000	101	1930		2000	96				
Lead	530		500	106	513		500	103				
Molybdenum	2200		2000	110	2120		2000	106				
Nickel	2130		2000	106	2050		2000	102				
Selenium	493		500	99	473		500	95				
Silver	1020		1000	102	976		1000	98				
Thallium	1110		1000	111	1070		1000	107				
Vanadium	1880		2000	94	1800		2000	90				
Zinc	2130		2000	107	2050		2000	103				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-107650/22 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	9.92	J	99	70-130
Arsenic	15.0	15.7		105	70-130
Beryllium	5.00	5.00		100	70-130
Cadmium	5.00	5.01		100	70-130
Barium	200	200		100	70-130
Copper	20.0	20.4	J	102	70-130
Chromium	10.0	10.7		107	70-130
Nickel	40.0	40.8		102	70-130
Lead	10.0	10.4		104	70-130
Antimony	20.0	23.1		116	70-130
Cobalt	10.0	10.0		100	70-130
Selenium	20.0	20.9		104	70-130
Thallium	20.0	20.4		102	70-130
Zinc	50.0	50.8		102	70-130
Molybdenum	40.0	41.8		105	70-130
Vanadium	10.0	8.46	J	85	70-130

Lab Sample ID: CRI 240-107650/77 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	9.88	J	99	70-130
Arsenic	15.0	18.4		123	70-130
Beryllium	5.00	4.95	J	99	70-130
Cadmium	5.00	5.09		102	70-130
Barium	200	199	J	100	70-130
Copper	20.0	22.2	J	111	70-130
Chromium	10.0	11.2		112	70-130
Nickel	40.0	42.2		106	70-130
Lead	10.0	11.2		112	70-130
Antimony	20.0	21.6		108	70-130
Cobalt	10.0	10.3		103	70-130
Selenium	20.0	22.8		114	70-130
Thallium	20.0	22.2		111	70-130
Zinc	50.0	52.6		105	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-107650/77 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Molybdenum	40.0	44.3		111	70-130
Vanadium	10.0	8.41	J	84	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-107650/5 10/29/2013 10:25		CCB 240-107650/34 10/29/2013 12:35		CCB 240-107650/46 10/29/2013 13:24		CCB 240-107650/58 10/29/2013 14:13	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	1.96	J	20	U	1.84	J
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	200	U	200	U
Beryllium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Lead	10	10	U	10	U	10	U	10	U
Molybdenum	40	40	U	40	U	40	U	40	U
Nickel	40	40	U	40	U	40	U	40	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	10	U	10	U	10	U	10	U
Zinc	50	50	U	50	U	50	U	50	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-107650/70 10/29/2013 15:02							
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U						
Arsenic	15	15	U						
Barium	200	200	U						
Beryllium	5.0	5.0	U						
Cadmium	5.0	5.0	U						
Chromium	10	10	U						
Cobalt	10	10	U						
Copper	25	25	U						
Lead	10	10	U						
Molybdenum	40	40	U						
Nickel	40	40	U						
Selenium	20	20	U						
Silver	10	10	U						
Thallium	20	20	U						
Vanadium	10	10	U						
Zinc	50	50	U						

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICSA 240-107650/8 Instrument ID: I9

Lab File ID: I9102913A.asc ICS Source: MTTRICSAW_00020

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-0.498**	
Arsenic		**-4.73**	
Barium		**0.178**	
Beryllium		**-0.166**	
Cadmium		**-0.0586**	
Chromium		**3.56**	
Cobalt		**-1.54**	
Copper		**0.678**	
Lead		**-1.30**	
Molybdenum		**-3.00**	
Nickel		**4.62**	
Selenium		**-2.49**	
Silver		**-0.520**	
Thallium		**-3.29**	
Vanadium		**2.50**	
Zinc		**11.6**	
Aluminum	*500000*	*513660*	*103*
Boron		*3.76*	
Calcium	*500000*	*487330*	*97*
Iron	*200000*	*199310*	*100*
Lithium		*-9.17*	
Magnesium	*500000*	*515310*	*103*
Manganese		*2.75*	
Potassium		*87.1*	
Silicon		*-6.05*	
Sodium		*53.8*	
Strontium		*4.58*	
Tin		*1.93*	
Titanium		*0.447*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Lab Sample ID: ICSAB 240-107650/9 Instrument ID: I9

Lab File ID: I9102913A.asc ICS Source: MTICPICSABW_00002

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**1000**	**1045**	**105**
Arsenic	**1000**	**1017**	**102**
Barium	**500**	**506**	**101**
Beryllium	**500**	**495**	**99**
Cadmium	**1000**	**1045**	**105**
Chromium	**500**	**503**	**101**
Cobalt	**500**	**504**	**101**
Copper	**500**	**530**	**106**
Lead	**1000**	**945**	**95**
Molybdenum	**1000**	**1004**	**100**
Nickel	**1000**	**1011**	**101**
Selenium	**1000**	**1013**	**101**
Silver	**1000**	**1093**	**109**
Thallium	**1000**	**995**	**100**
Vanadium	**500**	**489**	**98**
Zinc	**1000**	**1005**	**100**
Aluminum	*500000*	*508360*	*102*
Boron	*500*	*516*	*103*
Calcium	*500000*	*483980*	*97*
Iron	*200000*	*197250*	*99*
Lithium	*500*	*538*	*108*
Magnesium	*500000*	*504380*	*101*
Manganese	*500*	*507*	*101*
Potassium	*10000*	*10716*	*107*
Silicon	*10000*	*10128*	*101*
Sodium	*10000*	*10589*	*106*
Strontium	*1500*	*1470*	*98*
Tin	*500*	*518*	*104*
Titanium	*500*	*512*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-106547/1-A	10/22/2013 14:30	106547		50	50
LCS 240-106547/2-A	10/22/2013 14:30	106547		50	50
240-30344-2	10/22/2013 14:30	106547		50	50
240-30344-2 MS	10/22/2013 14:30	106547		50	50
240-30344-2 DU	10/22/2013 14:30	106547		50	50
240-30344-1	10/22/2013 14:30	106547		50	50
240-30344-3	10/22/2013 14:30	106547		50	50
240-30344-5	10/22/2013 14:30	106547		50	50
240-30344-1	10/22/2013 14:30	106547		50	50
240-30344-2	10/22/2013 14:30	106547		50	50
240-30344-3	10/22/2013 14:30	106547		50	50
240-30344-5	10/22/2013 14:30	106547		50	50

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Batch Number: 106971 Batch Start Date: 10/23/13 11:10 Batch Analyst: Martin, Aaron

Batch Method: 7470A Batch End Date: 10/23/13 13:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTH2S04 00014	MTHGCALW 00491	MTHgStd 00009	MTK2S208RGNT 00046
ICV 240-106971/8		7470A, 7470A		50 mL	50 mL	2.5 mL		0.25 mL	4 mL
ICB 240-106971/9		7470A, 7470A		50 mL	50 mL	2.5 mL			4 mL
CRA 240-106971/10		7470A, 7470A		50 mL	50 mL	2.5 mL	0.1 mL		4 mL
CCVL 240-106971/11		7470A, 7470A		50 mL	50 mL	2.5 mL	5 mL		4 mL
CCV 240-106971/12		7470A, 7470A		50 mL	50 mL	2.5 mL	5 mL		4 mL
CCB 240-106971/13		7470A, 7470A		50 mL	50 mL	2.5 mL			4 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00051	MTTMHNO3 00019				
ICV 240-106971/8		7470A, 7470A		7.5 mL	1.25 mL				
ICB 240-106971/9		7470A, 7470A		7.5 mL	1.25 mL				
CRA 240-106971/10		7470A, 7470A		7.5 mL	1.25 mL				
CCVL 240-106971/11		7470A, 7470A		7.5 mL	1.25 mL				
CCV 240-106971/12		7470A, 7470A		7.5 mL	1.25 mL				
CCB 240-106971/13		7470A, 7470A		7.5 mL	1.25 mL				

Batch Notes	
Hot Block ID number	C1
Pipette ID	383364-383366-1099562
Digestion Tube/Cup Lot #	1306-159

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-106547/1-A

Instrument Code: H1 Batch No.: 107013

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-106547/2-A

Lab Name: TestAmerica Canton Job No.: 240-30344-1

Sample Matrix: Water LCS Source: MTHGCALW_00490

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	5.08		102	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: MSA-MW46I-101613 MS
Lab ID: 240-30344-2 MS
Lab Name: TestAmerica Canton
Job No.: 240-30344-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.996		0.20	U	1.00	100	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

6-IN
DUPLICATES
METALS

Client ID: MSA-MW46I-101613 DU | Lab ID: 240-30344-2 DU

Lab Name: TestAmerica Canton | Job No.: 240-30344-1

SDG No.:

% Solids for Sample: | % Solids for Duplicate:

Matrix: Water | Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.20	0.20	U	0.20	U	NC		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 10/24/2013 08:31 End Date: 10/24/2013 20:04

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
IC 240-106971/1-A			08:31	X
IC 240-106971/1-A			08:32	X
IC 240-106971/2-A			08:34	X
IC 240-106971/2-A			08:37	X
IC 240-106971/3-A			08:38	X
IC 240-106971/3-A			08:40	X
IC 240-106971/4-A			08:42	X
IC 240-106971/4-A			08:43	X
IC 240-106971/5-A			08:45	X
IC 240-106971/5-A			08:46	X
IC 240-106971/6-A			08:48	X
IC 240-106971/6-A			08:50	X
IC 240-106971/7-A			08:52	X
IC 240-106971/7-A			08:53	X
ICV 240-106971/8-A	1		09:26	X
ICB 240-106971/9-A	1		09:28	X
CRA 240-106971/10-A	1		09:29	X
CCVL 240-106971/11-A	1		14:12	X
CCB 240-106971/13-A			14:14	
ZZZZZZ			14:15	
ZZZZZZ			14:17	
ZZZZZZ			14:18	
ZZZZZZ			14:19	
ZZZZZZ			14:21	
ZZZZZZ			14:23	
CCV 240-106971/12-A			14:24	
CCB 240-106971/13-A			14:25	
CCV 240-106971/12-A			16:51	
CCB 240-106971/13-A			16:53	
ZZZZZZ			16:54	
ZZZZZZ			16:57	
ZZZZZZ			16:58	
ZZZZZZ			16:59	
ZZZZZZ			17:02	
ZZZZZZ			17:03	
ZZZZZZ			17:05	
ZZZZZZ			17:06	
ZZZZZZ			17:08	
ZZZZZZ			17:09	
CCV 240-106971/12-A			17:11	
CCB 240-106971/13-A			17:12	
ZZZZZZ			17:14	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 10/24/2013 08:31 End Date: 10/24/2013 20:04

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
ZZZZZZ			17:15	
ZZZZZZ			17:17	
ZZZZZZ			17:19	
ZZZZZZ			17:20	
ZZZZZZ			17:21	
ZZZZZZ			17:23	
ZZZZZZ			17:24	
ZZZZZZ			17:26	
ZZZZZZ			17:27	
CCV 240-106971/12-A			17:29	
CCB 240-106971/13-A			17:30	
ZZZZZZ			17:32	
ZZZZZZ			17:34	
CCV 240-106971/12-A			17:36	
CCB 240-106971/13-A			17:37	
CCV 240-106971/12-A			17:52	
CCB 240-106971/13-A			17:54	
ZZZZZZ			17:55	
ZZZZZZ			17:57	
ZZZZZZ			17:59	
ZZZZZZ			18:00	
ZZZZZZ			18:02	
ZZZZZZ			18:03	
ZZZZZZ			18:05	
ZZZZZZ			18:06	
CCV 240-106971/12-A			18:10	
CCB 240-106971/13-A			18:11	
ZZZZZZ			18:13	
ZZZZZZ			18:14	
ZZZZZZ			18:16	
ZZZZZZ			18:17	
ZZZZZZ			18:19	
ZZZZZZ			18:20	
ZZZZZZ			18:22	
ZZZZZZ			18:23	
ZZZZZZ			18:25	
ZZZZZZ			18:26	
CCV 240-106971/12-A			18:28	
CCB 240-106971/13-A			18:31	
ZZZZZZ			18:32	
ZZZZZZ			18:35	
ZZZZZZ			18:36	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 10/24/2013 08:31 End Date: 10/24/2013 20:04

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
ZZZZZZ			18:37	
ZZZZZZ			18:39	
ZZZZZZ			18:40	
ZZZZZZ			18:42	
ZZZZZZ			18:44	
CRA 240-106971/10-A			18:45	
ZZZZZZ			18:47	
ZZZZZZ			18:48	
CCV 240-106971/12-A	1		18:51	X
CCB 240-106971/13-A	1		18:52	X
ZZZZZZ			18:54	
ZZZZZZ			18:55	
ZZZZZZ			18:56	
ZZZZZZ			18:58	
ZZZZZZ			19:00	
ZZZZZZ			19:01	
ZZZZZZ			19:02	
ZZZZZZ			19:04	
ZZZZZZ			19:06	
MB 240-106547/1-A	1	T	19:07	X
CCV 240-106971/12-A	1		19:09	X
CCB 240-106971/13-A	1		19:10	X
LCS 240-106547/2-A	1	T	19:12	X
240-30344-2	1	T	19:13	X
240-30344-2 MS	1	T	19:15	X
240-30344-2 DU	1	T	19:16	X
240-30344-1	1	T	19:18	X
240-30344-3	1	T	19:21	X
240-30344-5	1	T	19:22	X
ZZZZZZ			19:24	
ZZZZZZ			19:26	
ZZZZZZ			19:27	
CCV 240-106971/12-A	1		19:29	X
CCB 240-106971/13-A	1		19:30	X
ZZZZZZ			19:32	
ZZZZZZ			19:34	
ZZZZZZ			19:35	
240-30344-1	1	D	19:36	X
240-30344-2	1	D	19:38	X
240-30344-3	1	D	19:40	X
240-30344-5	1	D	19:41	X
ZZZZZZ			19:43	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 10/24/2013 08:31 End Date: 10/24/2013 20:04

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			19:44																				
ZZZZZZ			19:46																				
CCV 240-106971/12-A	1		19:48	X																			
CCB 240-106971/13-A	1		19:50	X																			
ZZZZZZ			19:51																				
ZZZZZZ			19:52																				
ZZZZZZ			19:54																				
ZZZZZZ			19:55																				
ZZZZZZ			19:57																				
ZZZZZZ			19:58																				
CRA 240-106971/10-A			20:00																				
CCV 240-106971/12-A			20:02																				
CCB 240-106971/13-A			20:04																				

Prep Types
D = Dissolved
T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00491

Analyte	ICV 240-106971/8-A 10/24/2013 09:26				CCVL 240-106971/11-A 10/24/2013 14:12				CCV 240-106971/12-A 10/24/2013 18:51			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.05		5.00	101	9.81		10.0	98	10.3		10.0	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00491

Analyte	CCV 240-106971/12-A 10/24/2013 19:09				CCV 240-106971/12-A 10/24/2013 19:29				CCV 240-106971/12-A 10/24/2013 19:48			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	10.2		10.0	102	10.2		10.0	102	10.1		10.0	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Method: 7470A Instrument ID: H1

Lab Sample ID: CRA 240-106971/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00491

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.177	J	89	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-106971/9-A 10/24/2013 09:28		CCB 240-106971/13-A 10/24/2013 18:52		CCB 240-106971/13-A 10/24/2013 19:10		CCB 240-106971/13-A 10/24/2013 19:30	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30344-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-106971/13-A 10/24/2013 19:50							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **SEPTEMBER 17, 2013**

FROM: **EDWARD SEDLMYER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION – VOC / SVOC / PET / PCB / METALS LOCKHEED MARTIN – MARTIN STATE AIRPORT (MSA) DUMP ROAD SOURCE AREAS**
SDG 240-27894-1

SAMPLES: 4/Soil/VOC/SVOC/PET/PCB/METALS (Sb, As, Ba, Be, Cd Cr, Co, Cu, Pb, Hg, Mo, Ni, Se, Ag, Tl, V, and Zn)

DR-TP-A76-10 DR-TP-A76-11 DR-TP-A82-03
DR-TP-A82-03A

1/Aqueous/VOC

TB-081213-240-27894-1

Overview

The sample set for Lockheed Martin – MSA Dump Road Source Areas, SDG 240-27894-1 consists of four (4) soil environmental samples and one (1) trip blank. The samples were analyzed for volatile organic compounds (VOC), semivolatile organic compounds (SVOC), petroleum hydrocarbons (PET), polychlorinated biphenyls (PCB), and metals as outlined above.

The samples were collected by Tetra Tech on August 12, 2013 and analyzed by Test America (North Canton). All analyses were conducted in accordance with SW-846 Methods 8260B, 8270D, 8015C, 8082A, 6010C, and 7471B analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, internal standard recoveries, ICP interference results, laboratory duplicate results, ICP serial dilution results, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

- The VOC initial calibration relative response factors (RRFs) were less than the 0.05 quality control limit for tert-butyl alcohol and vinyl acetate on instrument A3UX11. Only non-detected results were reported for tert-butyl alcohol and vinyl acetate in sample TB-081213-240-27894-1 and these results were rejected (UR).

- The VOC initial calibration and associated continuing calibration relative response factors (RRFs) were less than the 0.05 quality control limit for tert-butyl alcohol and vinyl acetate on instrument A3UX14. Only non-detected results were reported for tert-butyl alcohol and vinyl acetate in samples DR-TP-A76-10 and DR-TP-A76-11 and these results were rejected (UR).

- The VOC initial calibration and associated continuing calibration relative response factors (RRFs) were less than the 0.05 quality control limit for tert-butyl alcohol and vinyl acetate on instrument A3UX8. Only non-detected results were reported for tert-butyl alcohol and vinyl

acetate in samples DR-TP-A82-03 and DR-TP-A82-03A and these results were rejected (UR).

- The VOC continuing calibration RRF was less than the 0.05 quality control limit for tert-butyl alcohol on instrument A3UX11 on 8/21/13 @10:29. The non-detected result reported for tert-butyl alcohol for sample TB-081213-240-27894-1 was rejected (UR).

Minor

- The VOC continuing calibration %Ds were greater than the quality control limit of 20% and greater than 50% for bromomethane and trichlorofluoromethane, for instrument A3UX14 on 08/14/13 @ 10:17. The nondetected results reported for the aforementioned compounds in samples DR-TP-A76-10 and DR-TP-A76-11 were qualified as estimated (UJ).

- The following contaminants were detected in the laboratory method blank at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
1,2,4-Trichlorobenzene[1]	9.7 ug/kg	48.5 ug/kg
Carbon Disulfide[1]	23.9 ug/kg	119.5 ug/kg
Naphthalene[1]	13.2 ug/kg	66 ug/kg
Toluene[1]	33.9 ug/kg	169.5 ug/kg
Naphthalene[2]	0.357 ug/kg	1.785 ug/kg
Methylene chloride[2]	1.91 ug/kg	19.1 ug/kg

1 - Maximum concentration present in the method blank (MB 240-97336/1-A) affecting samples DR-TP-A76-10 and DR-TP-A76-11.
2 - Maximum concentration present in the method blank (MB 240-97446/1-A) affecting samples DR-TP-A82-03 and DR-TP-A82-03A.

An action level of 10X the maximum contaminant level was established for methylene chloride; 5X for all other compounds to evaluate sample data for blank contamination. Sample aliquot, percent solids and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive results for the aforementioned compounds less than the blank action level for soil samples were qualified (B) as a result of laboratory blank contamination.

- The SVOC laboratory control sample (LCS) associated with batch 97388/14-A had a percent recovery less than the quality control limit for benzaldehyde. The nondetected benzaldehyde results for all soil samples were qualified as biased low (UL).

- The TPH (C10-32) continuing calibration %Ds were greater than the quality control limit of 20% for instrument A2HP5F on 08/16/13 @07:17 and @09:47. The nondetected TPH (C10-32) result for sample DR-TP-A82-03A was qualified as estimated (UJ).

- The PCB surrogate spike compound decachlorobiphenyl, had %Rs on both GC columns greater than the quality control limits and tetrachloro-m-xylene greater than the quality control limit on CLP-1 column for sample DR-TP-A76-10. The positive Aroclor-1260 result for sample DR-TP-A76-10 has been qualified as estimated (J).

- The PCB surrogate spike compound decachlorobiphenyl, had zero %Rs on both GC columns less than the quality control limits for sample DR-TP-A76-11. The nondetected results for all Aroclor's for sample DR-TP-A76-11 have been qualified as estimated (UJ).

- The following contaminant was detected in the laboratory method blanks at the following maximum concentration:

Analyte	Maximum Concentration	Action Level
Antimony[1]	3.32 ug/L	16.6 ug/L

[1] Maximum concentration present in CCB 98850/31 affecting all samples.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive results less than the blank action level were qualified (B) as a result of laboratory blank contamination.

- The contract required detection limit (CRDL) analyzed on 08/23/13 @ 16:59 had a percent recovery for silver > 110% quality control limit affecting all samples. Positive results < 2X CRDL reported for silver in samples DR-TP-A76-10 and DR-TP-A82-03 were qualified as estimated (J) due to conflicting directional bias. Positive result < 2X CRDL reported for silver in sample DR-TP-A76-11 was qualified as estimated biased high (K).

- The ICP serial dilution %Ds were > 10% quality control limit (sample result > 50X IDL) for chromium and lead. The positive results > 50X IDL reported for chromium and lead were qualified as estimated (J).

- The matrix spike percent recoveries for antimony and copper were < 75% quality control limit for sample DR-TP-A76-10. The nondetected result reported for antimony in sample DR-TP-A82-03A was qualified as biased low (UL). The positive copper results for all samples were qualified as biased low (L).

- The matrix spike percent recoveries for barium and cadmium were >125% quality control limit for sample DR-TP-A76-10. Positive cadmium results for all samples were qualified as biased high (K). Positive barium results for samples DR-TP-A76-10, DR-TP-A76-11 and DR-TP-A82-03 were qualified as biased high (K). Positive barium result for sample DR-TP-A82-03A was qualified as estimated (J), due to conflicting directional bias.

- Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

Notes

The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for acetone, vinyl acetate, and bromoform, for instrument A3UX11 on 08/21/13 @ 10:29. No action was taken on this basis because all the affected sample results were previously qualified due to RRF noncompliance or were nondetected for the aforementioned compounds.

The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for 1,1,2-trichlorotrifluoroethane, 2,2-dichloropropane,1,1,1-trichloroethane, and carbon tetrachloride, for instrument A3UX14 on 08/14/13 @ 10:17. No action was taken on this basis because all the affected sample results were nondetected for the aforementioned compounds.

A VOC continuing calibration %D was greater than the quality control limit of 20% and less than 50% for tert-amyl-methyl ether, for instrument A3UX14 on 08/14/13 @ 10:38. No action was taken on this basis because all the affected sample results were nondetected for tert-amyl-methyl ether.

The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for

trans-1,3-dichloropropene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, naphthalene, and 1,2,3-trichlorobenzene, for instrument A3UX8 on 08/16/13 @ 01:08. No action was taken on this basis because all the affected sample results were previously qualified due to blank contamination or were nondetected for the aforementioned compounds.

The LCS associated with batch 97336/2-A had a percent recovery greater than the quality control limit for bromomethane. No action was taken on this basis because the affected sample results were nondetected for bromomethane.

The PCB surrogate spike compound decachlorobiphenyl, had a %R on the CLP-1 column greater than the quality control limits for sample DR-TP-A82-03. No action was taken on this basis because all other surrogate recoveries were acceptable.

The CRDL percent recovery for vanadium on 08/23/13 @16:59 was > 110% quality control limit affecting all samples. No validation actions were required as all results were > 2X CRDL.

The CRDL percent recoveries for antimony on 08/23/13 @14:05 and @16:59 were > 110% quality control limit. No validation actions were required as all results were either qualified as a result of blank contamination or were nondetects.

The laboratory received two samples identified as DR-TP-A82-03. The suffix "A" was added to sample collected @14:20 in the database to make the sample identification unique.

Samples DR-TP-A76-10 and DR-TP-A76-11 were analyzed as VOC medium level samples due to concentrations greater than the linear calibration range of the instrument. This accounts for the elevated detection limits for the nondetected compounds.

Samples DR-TP-A76-10, DR-TP-A76-11 and DR-TP-A82-03 were analyzed at dilutions for the SVOC and TPH (C10-C32) fractions due to concentrations greater than the linear calibration range of the instrument. This accounts for the elevated detection limits for the nondetected compounds.

Samples DR-TP-A76-11 and DR-TP-A82-03 were analyzed at dilutions for the PCB fraction. Sample DR-TP-A76-11 was diluted due to a matrix issue. Sample DR-TP-A82-03 was diluted due to an Aroclor-1248 concentration greater than the linear calibration range of the instrument. This accounts for the elevated detection limits for the nondetected compounds.

Executive Summary

Laboratory Performance: Blank contamination resulted in the qualification of data for the VOC and metals fractions. Two VOC compounds had RRF noncompliances resulting in the rejection of data. Continuing calibration %D noncompliances in the VOC and TPH (C10-C32) fractions resulted in the qualification of data. The CRDL percent recoveries for several analytes were outside the 90-110% quality control limits. LCS percent recovery noncompliance resulted in the qualification of SVOC data. Surrogate percent recovery noncompliances resulted in the qualification of PCB data.

Other Factors Affecting Data Quality: The ICP serial dilution percent difference was > 10% quality control limit for chromium and lead affecting several samples. Matrix spike percent recovery noncompliances for barium and cadmium resulted in the qualification of data. Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994) and Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Edward Sedlmyer
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-10						DR-TP-A76-10A			DR-TP-A76-11		
SDG: 240-27894-1	LAB_ID	240-27894-1						240-27894-1			240-27894-2		
FRACTION: OV	SAMP_DATE	8/12/2013						8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	NM			TIC			TIC			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.2			85.2			85.2			77.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		9.7	U								9.6	U	
1,1,1-TRICHLOROETHANE		22	U								22	U	
1,1,2,2-TETRACHLOROETHANE		9.5	U								9.4	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		42	U								41	U	
1,1-DICHLOROETHANE		18	U								18	U	
1,1-DICHLOROETHENE		19	U								19	U	
1,1-DICHLOROPROPENE		11	U								11	U	
1,2,3-TRICHLOROBENZENE		11	U								11	U	
1,2,3-TRICHLOROPROPANE		22	U								22	U	
1,2,3-TRIMETHYLBENZENE		160	J	P							19	J	P
1,2,4-TRICHLOROBENZENE		27	B	A							7.7	U	
1,2,4-TRIMETHYLBENZENE		31	J	P							54	J	P
1,2-DIBROMO-3-CHLOROPROPANE		53	U								53	U	
1,2-DIBROMOETHANE		11	U								11	U	
1,2-DICHLOROBENZENE		780									50	J	P
1,2-DICHLOROETHANE		64	J	P							170	J	P
1,2-DICHLOROPROPANE		8.7	U								8.7	U	
1,3-DICHLOROBENZENE		22	J	P							5.1	U	
1,3-DICHLOROPROPANE		23	U								23	U	
1,4-DICHLOROBENZENE		79	J	P							8.5	U	
2,2-DICHLOROPROPANE		25	U								24	U	
2-BUTANONE		46	U								45	U	
2-CHLOROETHYL VINYL ETHER		46	U								45	U	
2-CHLOROTOLUENE		9.6	U								9.5	U	
2-HEXANONE		21	U								21	U	
4-CHLOROTOLUENE		11	U								10	U	
4-ISOPROPYLTOLUENE		8	J	P							7.5	J	P
4-METHYL-2-PENTANONE		51	U								51	U	
ACETONE		180	U								180	U	
BENZENE		13	J	P							37	J	P
BENZENE, 1-ETHYL-2,3-DIMETHYL-					660	NJ	Z1						
BROMOBENZENE		14	U								14	U	
BROMOCHLOROMETHANE		14	U								14	U	
BROMODICHLOROMETHANE		11	U								10	U	
BROMOFORM		20	U								20	U	
BROMOMETHANE		31	UJ	C							31	UJ	C

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-11			DR-TP-A76-11A			DR-TP-A76-11B			DR-TP-A82-03		
SDG: 240-27894-1	LAB_ID	240-27894-2			240-27894-2			240-27894-2			240-27894-4		
FRACTION: OV	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	TIC			TIC			TIC			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	77.1			77.1			77.1			89.5		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE											0.56	U	
1,1,1-TRICHLOROETHANE											0.51	U	
1,1,2,2-TETRACHLOROETHANE											0.31	U	
1,1,2-TRICHLOROTRIFLUOROETHANE											1.2	U	
1,1-DICHLOROETHANE											0.33	U	
1,1-DICHLOROETHENE											0.47	U	
1,1-DICHLOROPROPENE											0.27	U	
1,2,3-TRICHLOROBENZENE											0.34	U	
1,2,3-TRICHLOROPROPANE											0.81	U	
1,2,3-TRIMETHYLBENZENE											0.15	U	
1,2,4-TRICHLOROBENZENE											0.24	U	
1,2,4-TRIMETHYLBENZENE											0.59	U	
1,2-DIBROMO-3-CHLOROPROPANE											1.2	U	
1,2-DIBROMOETHANE											0.45	U	
1,2-DICHLOROBENZENE											0.33	U	
1,2-DICHLOROETHANE											0.31	U	
1,2-DICHLOROPROPANE											0.62	U	
1,3-DICHLOROBENZENE											0.32	U	
1,3-DICHLOROPROPANE											0.31	U	
1,4-DICHLOROBENZENE											0.6	U	
2,2-DICHLOROPROPANE											0.85	U	
2-BUTANONE											2.8	J	P
2-CHLOROETHYL VINYL ETHER											1.3	U	
2-CHLOROTOLUENE											0.36	U	
2-HEXANONE											0.57	U	
4-CHLOROTOLUENE											0.37	U	
4-ISOPROPYLTOLUENE											0.19	U	
4-METHYL-2-PENTANONE											0.49	U	
ACETONE											26		
BENZENE											0.21	U	
BENZENE, 1-ETHYL-2,3-DIMETHYL-													
BROMOBENZENE											0.3	U	
BROMOCHLOROMETHANE											0.64	U	
BROMODICHLOROMETHANE											0.25	U	
BROMOFORM											0.3	U	
BROMOMETHANE											0.49	U	

PROJ_NO: 04882	NSAMPLE	DR-TP-A82-03A					
SDG: 240-27894-1	LAB_ID	240-27894-5					
FRACTION: OV	SAMP_DATE	8/12/2013					
MEDIA: SOIL	QC_TYPE	NM			TIC		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	51.6			51.6		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1.2	U				
1,1,1-TRICHLOROETHANE		1.1	U				
1,1,2,2-TETRACHLOROETHANE		0.68	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		2.6	U				
1,1-DICHLOROETHANE		0.72	U				
1,1-DICHLOROETHENE		1	U				
1,1-DICHLOROPROPENE		0.6	U				
1,2,3-TRICHLOROBENZENE		0.76	U				
1,2,3-TRICHLOROPROPANE		1.8	U				
1,2,3-TRIMETHYLBENZENE		0.34	U				
1,2,4-TRICHLOROBENZENE		0.54	U				
1,2,4-TRIMETHYLBENZENE		1.3	U				
1,2-DIBROMO-3-CHLOROPROPANE		2.6	U				
1,2-DIBROMOETHANE		1	U				
1,2-DICHLOROBENZENE		0.72	U				
1,2-DICHLOROETHANE		0.68	U				
1,2-DICHLOROPROPANE		1.4	U				
1,3-DICHLOROBENZENE		0.7	U				
1,3-DICHLOROPROPANE		0.68	U				
1,4-DICHLOROBENZENE		1.3	U				
2,2-DICHLOROPROPANE		1.9	U				
2-BUTANONE		19	J	P			
2-CHLOROETHYL VINYL ETHER		2.8	U				
2-CHLOROTOLUENE		0.8	U				
2-HEXANONE		1.3	U				
4-CHLOROTOLUENE		0.82	U				
4-ISOPROPYLTOLUENE		0.42	U				
4-METHYL-2-PENTANONE		1.1	U				
ACETONE		160					
BENZENE		0.46	U				
BENZENE, 1-ETHYL-2,3-DIMETHYL-							
BROMOBENZENE		0.66	U				
BROMOCHLOROMETHANE		1.4	U				
BROMODICHLOROMETHANE		0.56	U				
BROMOFORM		0.66	U				
BROMOMETHANE		1.1	U				

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-10						DR-TP-A76-10A			DR-TP-A76-11		
SDG: 240-27894-1	LAB_ID	240-27894-1						240-27894-1			240-27894-2		
FRACTION: OV	SAMP_DATE	8/12/2013						8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	NM			TIC			TIC			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.2			85.2			85.2			77.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		54	B	A							95	B	A
CARBON TETRACHLORIDE		6.8	U								6.8	U	
CHLOROBENZENE		22	J	P							6.8	U	
CHLORODIBROMOMETHANE		13	U								13	U	
CHLOROETHANE		65	U								64	U	
CHLOROFORM		9.4	U								9.3	U	
CHLOROMETHANE		15	U								15	U	
CIS-1,2-DICHLOROETHENE		7.4	U								220	J	P
CIS-1,3-DICHLOROPROPENE		8.4	U								8.3	U	
DIBROMOMETHANE		15	U								15	U	
DICHLORODIFLUOROMETHANE		17	U								17	U	
DIISOPROPYL ETHER		53	U								53	U	
ETHYL TERT-BUTYL ETHER		0.23	U								0.23	U	
ETHYLBENZENE		130	J	P							73	J	P
HEXACHLOROBUTADIENE		15	U								15	U	
ISOPROPYLBENZENE		26	J	P							16	J	P
M+P-XYLENES		49	J	P							55	J	P
METHYL ACETATE													
METHYL TERT-BUTYL ETHER		7.6	U								7.5	U	
METHYLENE CHLORIDE		82	U								81	U	
NAPHTHALENE		1700									820		
N-BUTYLBENZENE		38	J	P							27	J	P
N-PROPYLBENZENE		39	J	P							39	J	P
O-XYLENE		39	J	P							23	J	P
SEC-BUTYLBENZENE		28	J	P							14	J	P
STYRENE		6	U								5.9	U	
TERT-AMYL METHYL ETHER		0.39	U								0.39	U	
TERT-BUTYLBENZENE		6.9	U								10	J	P
TERTIARY-BUTYL ALCOHOL		260	UR	C							250	UR	C
TETRACHLOROETHENE		13	U								13	U	
TOLUENE		90	B	A							150	B	A
TOTAL XYLENES		88	J	P							78	J	P
TRANS-1,2-DICHLOROETHENE		9.8	U								49	J	P
TRANS-1,3-DICHLOROPROPENE		21	U								21	U	
TRICHLOROETHENE		18	J	P							35	J	P
TRICHLOROFLUOROMETHANE		17	UJ	C							17	UJ	C

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-11			DR-TP-A76-11A			DR-TP-A76-11B			DR-TP-A82-03		
SDG: 240-27894-1	LAB_ID	240-27894-2			240-27894-2			240-27894-2			240-27894-4		
FRACTION: OV	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	TIC			TIC			TIC			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	77.1			77.1			77.1			89.5		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE											0.4	U	
CARBON TETRACHLORIDE											0.33	U	
CHLOROBENZENE											0.3	U	
CHLORODIBROMOMETHANE											0.5	U	
CHLOROETHANE											0.78	U	
CHLOROFORM											0.26	U	
CHLOROMETHANE											0.37	U	
CIS-1,2-DICHLOROETHENE											0.33	U	
CIS-1,3-DICHLOROPROPENE											0.31	U	
DIBROMOMETHANE											0.57	U	
DICHLORODIFLUOROMETHANE											0.45	U	
DIISOPROPYL ETHER											1.4	U	
ETHYL TERT-BUTYL ETHER											0.2	U	
ETHYLBENZENE											0.24	U	
HEXACHLOROBUTADIENE											1.1	U	
ISOPROPYLBENZENE											0.14	U	
M+P-XYLENES											1.1	U	
METHYL ACETATE													
METHYL TERT-BUTYL ETHER											0.39	U	
METHYLENE CHLORIDE											0.61	U	
NAPHTHALENE											0.28	B	A
N-BUTYLBENZENE											0.21	U	
N-PROPYLBENZENE											0.36	U	
O-XYLENE											0.32	U	
SEC-BUTYLBENZENE											0.16	U	
STYRENE											0.14	U	
TERT-AMYL METHYL ETHER											0.33	U	
TERT-BUTYLBENZENE											0.26	U	
TERTIARY-BUTYL ALCOHOL											6.9	UR	C
TETRACHLOROETHENE											0.47	U	
TOLUENE											0.24	U	
TOTAL XYLENES											0.32	U	
TRANS-1,2-DICHLOROETHENE											0.37	U	
TRANS-1,3-DICHLOROPROPENE											0.49	U	
TRICHLOROETHENE											0.38	U	
TRICHLOROFLUOROMETHANE											0.31	U	

PROJ_NO: 04882	NSAMPLE	DR-TP-A82-03A					
SDG: 240-27894-1	LAB_ID	240-27894-5					
FRACTION: OV	SAMP_DATE	8/12/2013					
MEDIA: SOIL	QC_TYPE	NM			TIC		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	51.6			51.6		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1.2	J	P			
CARBON TETRACHLORIDE		0.74	U				
CHLOROBENZENE		0.66	U				
CHLORODIBROMOMETHANE		1.1	U				
CHLOROETHANE		1.7	U				
CHLOROFORM		0.58	U				
CHLOROMETHANE		0.82	U				
CIS-1,2-DICHLOROETHENE		0.72	U				
CIS-1,3-DICHLOROPROPENE		0.68	U				
DIBROMOMETHANE		1.3	U				
DICHLORODIFLUOROMETHANE		1	U				
DIISOPROPYL ETHER		3	U				
ETHYL TERT-BUTYL ETHER		0.44	U				
ETHYLBENZENE		0.52	U				
HEXACHLOROBUTADIENE		2.4	U				
ISOPROPYLBENZENE		0.32	U				
M+P-XYLENES		2.4	U				
METHYL ACETATE					5.1	NJ	Z1
METHYL TERT-BUTYL ETHER		0.86	U				
METHYLENE CHLORIDE		2.5	B	A			
NAPHTHALENE		0.38	U				
N-BUTYLBENZENE		0.46	U				
N-PROPYLBENZENE		0.8	U				
O-XYLENE		0.7	U				
SEC-BUTYLBENZENE		0.36	U				
STYRENE		0.3	U				
TERT-AMYL METHYL ETHER		0.74	U				
TERT-BUTYLBENZENE		0.58	U				
TERTIARY-BUTYL ALCOHOL		15	UR	C			
TETRACHLOROETHENE		1	U				
TOLUENE		0.54	U				
TOTAL XYLENES		0.7	U				
TRANS-1,2-DICHLOROETHENE		0.82	U				
TRANS-1,3-DICHLOROPROPENE		1.1	U				
TRICHLOROETHENE		0.84	U				
TRICHLOROFLUOROMETHANE		0.68	U				

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-10						DR-TP-A76-10A			DR-TP-A76-11		
SDG: 240-27894-1	LAB_ID	240-27894-1						240-27894-1			240-27894-2		
FRACTION: OV	SAMP_DATE	8/12/2013						8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	NM			TIC			TIC			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.2			85.2			85.2			77.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN					810	NJ	Z1	650	NJ	Z1			
VINYL ACETATE		25	UR	C							24	UR	C
VINYL CHLORIDE		19	U								340		

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-11			DR-TP-A76-11A			DR-TP-A76-11B			DR-TP-A82-03		
SDG: 240-27894-1	LAB_ID	240-27894-2			240-27894-2			240-27894-2			240-27894-4		
FRACTION: OV	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	TIC			TIC			TIC			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	77.1			77.1			77.1			89.5		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN		1000	NJ	Z1	690	NJ	Z1	770	NJ	Z1			
VINYL ACETATE											0.23	UR	C
VINYL CHLORIDE											0.35	U	

PROJ_NO: 04882	NSAMPLE	DR-TP-A82-03A					
SDG: 240-27894-1	LAB_ID	240-27894-5					
FRACTION: OV	SAMP_DATE	8/12/2013					
MEDIA: SOIL	QC_TYPE	NM			TIC		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	51.6			51.6		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN							
VINYL ACETATE		0.5	UR	C			
VINYL CHLORIDE		2.9	J	P			

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-10			DR-TP-A76-11		
SDG: 240-27894-1	LAB_ID	240-27894-1			240-27894-2		
FRACTION: TICOV	SAMP_DATE	8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	TIC			TIC		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	85.2			77.1		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-METHANONAPHTHALENE, 1,4-DIHYDRO-					820	NJ	Z1
1H-INDENE, 1-METHYL-					730	NJ	Z1
1H-INDENE, 2,3-DIHYDRO-4,6-DIMETHYL-		810	NJ	Z1			
BENZENE, 1,2,4,5-TETRAMETHYL-		820	NJ	Z1			
BENZO[B]THIOPHENE		650	NJ	Z1			
BIPHENYL					680	NJ	Z1
CYCLOPENTA[C]THIAPYRAN					970	NJ	Z1
DECAHYDRO-4,4,8,9,10-PENTAMETHYLNAPHTHAL		770	NJ	Z1			
INDANE		710	NJ	Z1	760	NJ	Z1
NAPHTHALENE, 1-METHYL-		1000	NJ	Z1			
NAPHTHALENE, 2-METHYL-					830	NJ	Z1
NAPHTHALENE, DECAHYDRO-2-METHYL-		860	NJ	Z1			
SILANE, (4-ETHYLPHENYL)TRIMETHYL-					680	NJ	Z1

PROJ_NO: 04882	NSAMPLE	TB-081213-240-27894-1
SDG: 240-27894-1	LAB_ID	240-27894-3
FRACTION: OV	SAMP_DATE	8/12/2013
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U	
1,1-DICHLOROETHANE	0.15	U	
1,1-DICHLOROETHENE	0.19	U	
1,1-DICHLOROPROPENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U	
1,2-DIBROMOETHANE	0.24	U	
1,2-DICHLOROBENZENE	0.13	U	
1,2-DICHLOROETHANE	0.22	U	
1,2-DICHLOROPROPANE	0.18	U	
1,3-DICHLOROBENZENE	0.14	U	
1,3-DICHLOROPROPANE	0.16	U	
1,4-DICHLOROBENZENE	0.13	U	
2,2-DICHLOROPROPANE	0.13	U	
2-BUTANONE	0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U	
2-CHLOROTOLUENE	0.11	U	
2-HEXANONE	0.41	U	
4-CHLOROTOLUENE	0.18	U	
4-ISOPROPYLTOLUENE	0.12	U	
4-METHYL-2-PENTANONE	0.32	U	
ACETONE	1.1	U	
BENZENE	0.13	U	
BROMOBENZENE	0.13	U	
BROMOCHLOROMETHANE	0.29	U	
BROMODICHLOROMETHANE	0.15	U	
BROMOFORM	0.64	U	
BROMOMETHANE	0.41	U	
CARBON DISULFIDE	0.13	U	

PROJ_NO: 04882	NSAMPLE	TB-081213-240-27894-1		
SDG: 240-27894-1	LAB_ID	240-27894-3		
FRACTION: OV	SAMP_DATE	8/12/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
CARBON TETRACHLORIDE		0.13	U	
CHLOROBENZENE		0.15	U	
CHLORODIBROMOMETHANE		0.18	U	
CHLOROETHANE		0.29	U	
CHLOROFORM		0.16	U	
CHLOROMETHANE		0.3	U	
CIS-1,2-DICHLOROETHENE		0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U	
DIBROMOMETHANE		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U	
DIISOPROPYL ETHER		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U	
ETHYLBENZENE		0.17	U	
HEXACHLOROBUTADIENE		0.3	U	
ISOPROPYLBENZENE		0.13	U	
M+P-XYLENES		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U	
METHYLENE CHLORIDE		0.33	U	
NAPHTHALENE		0.24	U	
N-BUTYLBENZENE		0.12	U	
N-PROPYLBENZENE		0.14	U	
O-XYLENE		0.14	U	
SEC-BUTYLBENZENE		0.13	U	
STYRENE		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U	
TERT-BUTYLBENZENE		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C
TETRACHLOROETHENE		0.29	U	
TOLUENE		0.13	U	
TOTAL XYLENES		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U	
TRICHLOROETHENE		0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U	
VINYL ACETATE		0.19	UR	C
VINYL CHLORIDE		0.22	U	

PROJ_NO: 04882	NSAMPLE	TB-081213-240-27894-1		
SDG: 240-27894-1	LAB_ID	240-27894-3		
FRACTION: TICOV	SAMP_DATE	8/12/2013		
MEDIA: WATER	QC_TYPE	TIC		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
SILANOL, TRIMETHYL-		2.3	NJ	Z1

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-10			DR-TP-A76-11			DR-TP-A82-03			DR-TP-A82-03A		
SDG: 240-27894-1	LAB_ID	240-27894-1			240-27894-2			240-27894-4			240-27894-5		
FRACTION: OS	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.2			77.1			89.5			51.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		370	J	P	1100	J	P	26	U		6.7	U	
1,4-DIOXANE		260	U		1400	U		160	U		42	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		110	U		610	U		70	U		18	U	
2,4,5-TRICHLOROPHENOL		300	U		1600	U		180	U		48	U	
2,4,6-TRICHLOROPHENOL		110	U		570	U		65	U		17	U	
2,4-DICHLOROPHENOL		240	U		1300	U		150	U		38	U	
2,4-DIMETHYLPHENOL		240	U		1300	U		150	U		38	U	
2,4-DINITROPHENOL		250	U		1300	U		150	U		40	U	
2,4-DINITROTOLUENE		200	U		1100	U		130	U		33	U	
2,6-DINITROTOLUENE		250	U		1300	U		150	U		40	U	
2-CHLORONAPHTHALENE		5.3	U		29	U		3.3	U		0.86	U	
2-CHLOROPHENOL		97	U		520	U		60	U		16	U	
2-METHYLNAPHTHALENE		1300			1500			56			0.96	U	
2-METHYLPHENOL		130	U		700	U		81	U		21	U	
2-NITROANILINE		110	U		580	U		67	U		17	U	
2-NITROPHENOL		98	U		530	U		61	U		16	U	
3&4-METHYLPHENOL		240	U		1300	U		150	U		38	U	
3,3'-DICHLOROBENZIDINE		210	U		1100	U		130	U		35	U	
3-NITROANILINE		190	U		1000	U		120	U		31	U	
4,6-DINITRO-2-METHYLPHENOL		110	U		590	U		68	U		18	U	
4-BROMOPHENYL PHENYL ETHER		150	U		830	U		96	U		25	U	
4-CHLORO-3-METHYLPHENOL		250	U		1300	U		150	U		40	U	
4-CHLOROANILINE		200	U		1100	U		130	U		33	U	
4-CHLOROPHENYL PHENYL ETHER		150	U		830	U		96	U		25	U	
4-NITROANILINE		310	U		1700	U		190	U		50	U	
4-NITROPHENOL		200	U		1100	U		130	U		33	U	
ACENAPHTHENE		920			6700			150			1.5	U	
ACENAPHTHYLENE		630			3400			53			0.67	U	
ACETOPHENONE		110	U		590	U		68	U		18	U	
ANTHRACENE		1400			15000			640			1.5	U	
ATRAZINE		110	U		580	U		67	U		17	U	
BENZALDEHYDE		140	UL	E	770	UL	E	88	UL	E	23	UL	E
BENZO(A)ANTHRACENE		3100			27000			3300			15		
BENZO(A)PYRENE		2400			24000			3100			15		
BENZO(B)FLUORANTHENE		3500			28000			4800			18		
BENZO(G,H,I)PERYLENE		1400			12000			2400			10	J	P

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-10			DR-TP-A76-11			DR-TP-A82-03			DR-TP-A82-03A		
SDG: 240-27894-1	LAB_ID	240-27894-1			240-27894-2			240-27894-4			240-27894-5		
FRACTION: OS	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.2			77.1			89.5			51.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(K)FLUORANTHENE		1200			10000			1700			6.7	J	P
BIS(2-CHLOROETHOXY)METHANE		260	U		1400	U		160	U		42	U	
BIS(2-CHLOROETHYL)ETHER		24	U		130	U		15	U		3.8	U	
BIS(2-ETHYLHEXYL)PHTHALATE		710	J	P	1200	U		230	J	P	39	J	P
BUTYL BENZYL PHTHALATE		120	U		640	U		74	U		19	U	
CAPROLACTAM		440	U		2400	U		270	U		71	U	
CARBAZOLE		1500			5500			280	J	P	52	U	
CHRYSENE		3200			24000			3400			14		
DIBENZO(A,H)ANTHRACENE		380			3300			620			1.3	U	
DIBENZOFURAN		1200			12000			130	J	P	1.3	U	
DIETHYL PHTHALATE		190	U		1000	U		120	U		31	U	
DIMETHYL PHTHALATE		200	U		1100	U		130	U		33	U	
DI-N-BUTYL PHTHALATE		180	U		960	U		110	U		29	U	
DI-N-OCTYL PHTHALATE		93	U		500	U		58	U		15	U	
FLUORANTHENE		8000			59000			4700			26		
FLUORENE		1600			8200			130			1	U	
HEXACHLOROBENZENE		25	U		130	U		15	U		4	U	
HEXACHLOROBUTADIENE		66	U		360	U		41	U		11	U	
HEXACHLOROCYCLOPENTADIENE		96	U		520	U		60	U		16	U	
HEXACHLOROETHANE		110	U		570	U		66	U		17	U	
INDENO(1,2,3-CD)PYRENE		1300			12000			2100			8.4	J	P
ISOPHORONE		150	U		830	U		96	U		25	U	
NAPHTHALENE		6300			7400			100			11	J	P
NITROBENZENE		26	U		140	U		16	U		4.2	U	
N-NITROSODIMETHYLAMINE		190	U		1000	U		120	U		31	U	
N-NITROSO-DI-N-PROPYLAMINE		75	U		400	U		46	U		12	U	
N-NITROSODIPHENYLAMINE		250	U		1300	U		150	U		40	U	
PENTACHLOROPHENOL		110	U		580	U		67	U		17	U	
PHENANTHRENE		6000			42000			2400			16		
PHENOL		86	U		470	U		54	U		14	U	
PYRENE		6300			48000			4300			26		

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-10						DR-TP-A76-11					
SDG: 240-27894-1	LAB_ID	240-27894-1						240-27894-2					
FRACTION: PET	SAMP_DATE	8/12/2013						8/12/2013					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	85.2			85.2			77.1			77.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					5600						340		
TPH (C10-C32)		1200						630					

PROJ_NO: 04882	NSAMPLE	DR-TP-A82-03						DR-TP-A82-03A					
SDG: 240-27894-1	LAB_ID	240-27894-4						240-27894-5					
FRACTION: PET	SAMP_DATE	8/12/2013						8/12/2013					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	89.5			89.5			51.6			51.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					49	U					90	U	
TPH (C10-C32)		930						18	UJ	C			

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-10			DR-TP-A76-11			DR-TP-A82-03			DR-TP-A82-03A		
SDG: 240-27894-1	LAB_ID	240-27894-1			240-27894-2			240-27894-4			240-27894-5		
FRACTION: PCB	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.2			77.1			89.5			51.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		24	U		140	UJ	R	120	U		40	U	
AROCLOR-1221		19	U		100	UJ	R	89	U		31	U	
AROCLOR-1232		16	U		90	UJ	R	78	U		27	U	
AROCLOR-1242		15	U		84	UJ	R	72	U		25	U	
AROCLOR-1248		20	U		110	UJ	R	370			32	U	
AROCLOR-1254		20	U		110	UJ	R	95	U		32	U	
AROCLOR-1260		39	J	R	110	UJ	R	150	J	P	32	U	

PROJ_NO: 04882	NSAMPLE	DR-TP-A76-10			DR-TP-A76-11			DR-TP-A82-03			DR-TP-A82-03A		
SDG: 240-27894-1	LAB_ID	240-27894-1			240-27894-2			240-27894-4			240-27894-5		
FRACTION: M	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013			8/12/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	85.2			77.1			89.5			51.6		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.3	B	A	2	B	A	0.44	B	A	0.67	UL	D
ARSENIC		5.8			7.2			5.1			7.5		
BARIUM		42	K	D	45	K	D	73	K	D	31	J	DP
BERYLLIUM		0.77			1.3			1.2			1.3		
CADMIUM		20	K	D	3.6	K	D	1.6	K	D	2	K	D
CHROMIUM		270	J	I	100	J	I	42			49		
COBALT		7.5			6.8			9.8			18		
COPPER		46	L	D	35	L	D	37	L	D	18	L	D
LEAD		45	J	I	86	J	I	55	J	I	20	J	I
MERCURY		0.079	J	P	0.056	J	P	0.17			0.066	J	P
MOLYBDENUM		3.1	J	P	0.82	J	P	0.68	J	P	0.83	J	P
NICKEL		18			20			39			28		
SELENIUM		0.51	U		0.53	U		0.56	J	P	0.78	U	
SILVER		0.62	J	CP	1.5	K	C	0.39	J	CP	0.17	U	
THALLIUM		0.63	U		0.64	U		0.57	U		0.95	U	
VANADIUM		38			82			36			35		
ZINC		280			180			120			110		

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 | Lab Sample ID: 240-27894-1

Matrix: Solid | Lab File ID: 144244.D

Analysis Method: 8260B | Date Collected: 08/12/2013 10:50

Sample wt/vol: 5.5(g) | Date Analyzed: 08/14/2013 12:47

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.8 | Level: (low/med) Medium

Analysis Batch No.: 97390 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	270	U	270	9.7
71-55-6	1,1,1-Trichloroethane	270	U	270	22
79-34-5	1,1,2,2-Tetrachloroethane	270	U	270	9.5
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	270	U	270	42
75-34-3	1,1-Dichloroethane	270	U	270	18
75-35-4	1,1-Dichloroethene	270	U	270	19
563-58-6	1,1-Dichloropropene	270	U	270	11
87-61-6	1,2,3-Trichlorobenzene	270	U	270	11
96-18-4	1,2,3-Trichloropropane	270	U	270	22
526-73-8	1,2,3-Trimethylbenzene	160	J	270	0.18
120-82-1	1,2,4-Trichlorobenzene	27	J B	270	7.8
95-63-6	1,2,4-Trimethylbenzene	31	J	270	5.3
96-12-8	1,2-Dibromo-3-Chloropropane	530	U	530	53
106-93-4	1,2-Dibromoethane	270	U	270	11
95-50-1	1,2-Dichlorobenzene	780		270	9.2
107-06-2	1,2-Dichloroethane	64	J	270	11
78-87-5	1,2-Dichloropropane	270	U	270	8.7
541-73-1	1,3-Dichlorobenzene	22	J	270	5.1
142-28-9	1,3-Dichloropropane	270	U	270	23
106-46-7	1,4-Dichlorobenzene	79	J	270	8.5
594-20-7	2,2-Dichloropropane	270	U	270	25
78-93-3	2-Butanone	1100	U	1100	46
110-75-8	2-Chloroethyl vinyl ether	1100	U	1100	46
95-49-8	2-Chlorotoluene	270	U	270	9.6
591-78-6	2-Hexanone	1100	U	1100	21
106-43-4	4-Chlorotoluene	270	U	270	11
108-10-1	4-Methyl-2-pentanone	1100	U	1100	51
67-64-1	Acetone	1100	U	1100	180
71-43-2	Benzene	13	J	270	13
108-86-1	Bromobenzene	270	U	270	14
74-97-5	Bromochloromethane	270	U	270	14
75-27-4	Bromodichloromethane	270	U	270	11
75-25-2	Bromoform	270	U	270	20
74-83-9	Bromomethane	270	U *	270	31
75-15-0	Carbon disulfide	54	J B	270	13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 | Lab Sample ID: 240-27894-1

Matrix: Solid | Lab File ID: 144244.D

Analysis Method: 8260B | Date Collected: 08/12/2013 10:50

Sample wt/vol: 5.5(g) | Date Analyzed: 08/14/2013 12:47

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.8 | Level: (low/med) Medium

Analysis Batch No.: 97390 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	270	U	270	6.8
108-90-7	Chlorobenzene	22	J	270	6.8
75-00-3	Chloroethane	270	U	270	65
67-66-3	Chloroform	270	U	270	9.4
74-87-3	Chloromethane	270	U	270	15
156-59-2	cis-1,2-Dichloroethene	270	U	270	7.4
10061-01-5	cis-1,3-Dichloropropene	270	U	270	8.4
124-48-1	Dibromochloromethane	270	U	270	13
74-95-3	Dibromomethane	270	U	270	15
75-71-8	Dichlorodifluoromethane	270	U	270	17
108-20-3	Diisopropyl ether	530	U	530	53
100-41-4	Ethylbenzene	130	J	270	5.8
637-92-3	Ethyl-t-butyl ether (ETBE)	270	U	270	0.23
87-68-3	Hexachlorobutadiene	270	U	270	15
98-82-8	Isopropylbenzene	26	J	270	6.9
1634-04-4	Methyl tert-butyl ether	270	U	270	7.6
75-09-2	Methylene Chloride	270	U	270	82
179601-23-1	m-Xylene & p-Xylene	49	J	530	6.6
91-20-3	Naphthalene	1700	B	270	7.1
104-51-8	n-Butylbenzene	38	J	270	8.5
103-65-1	n-Propylbenzene	39	J	270	15
95-47-6	o-Xylene	39	J	270	9.1
99-87-6	p-Isopropyltoluene	8.0	J	270	5.1
135-98-8	sec-Butylbenzene	28	J	270	5.0
100-42-5	Styrene	270	U	270	6.0
994-05-8	Tert-amyl-methyl ether (TAME)	270	U	270	0.39
75-65-0	tert-Butyl alcohol	11000	U	11000	260
98-06-6	tert-Butylbenzene	270	U	270	6.9
127-18-4	Tetrachloroethene	270	U	270	13
108-88-3	Toluene	90	J B	270	18
156-60-5	trans-1,2-Dichloroethene	270	U	270	9.8
10061-02-6	trans-1,3-Dichloropropene	270	U	270	21
79-01-6	Trichloroethene	18	J	270	10
75-69-4	Trichlorofluoromethane	270	U	270	17
108-05-4	Vinyl acetate	530	U	530	25
75-01-4	Vinyl chloride	270	U	270	19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 | Lab Sample ID: 240-27894-1

Matrix: Solid | Lab File ID: 144244.D

Analysis Method: 8260B | Date Collected: 08/12/2013 10:50

Sample wt/vol: 5.5(g) | Date Analyzed: 08/14/2013 12:47

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.8 | Level: (low/med) Medium

Analysis Batch No.: 97390 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	88	J	530	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		39-128
460-00-4	4-Bromofluorobenzene (Surr)	77		26-141
1868-53-7	Dibromofluoromethane (Surr)	92		30-122
2037-26-5	Toluene-d8 (Surr)	84		33-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 Lab Sample ID: 240-27894-1

Matrix: Solid Lab File ID: 144244.D

Analysis Method: 8260B Date Collected: 08/12/2013 10:50

Sample wt/vol: 5.5(g) Date Analyzed: 08/14/2013 12:47

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.8 Level: (low/med) Medium

Analysis Batch No.: 97390 Units: ug/Kg

Number TICs Found: 10 TIC Result Total: 7740

CAS NO.	COMPOUND NAME	RT	RESULT	Q
496-11-7	Indane	11.69	710	T J N
933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	12.19	660	T J N
2958-76-1	Naphthalene, decahydro-2-methyl-	12.50	860	T J N
95-93-2	Benzene, 1,2,4,5-tetramethyl-	12.82	820	T J N
	Unknown	12.96	810	T J
95-15-8	Benzo[b]thiophene	13.43	650	T J N
1685-82-1	1H-Indene, 2,3-dihydro-4,6-dimethyl-	13.78	810	T J N
	Unknown	13.93	650	T J
90-12-0	Naphthalene, 1-methyl-	14.36	1000	T J N
80655-44-3	Decahydro-4,4,8,9,10-pentamethylnaphthal	14.55	770	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 | Lab Sample ID: 240-27894-2

Matrix: Solid | Lab File ID: 144245.D

Analysis Method: 8260B | Date Collected: 08/12/2013 11:05

Sample wt/vol: 6.14(g) | Date Analyzed: 08/14/2013 13:08

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.9 | Level: (low/med) Medium

Analysis Batch No.: 97390 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	260	U	260	9.6
71-55-6	1,1,1-Trichloroethane	260	U	260	22
79-34-5	1,1,2,2-Tetrachloroethane	260	U	260	9.4
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	260	U	260	41
75-34-3	1,1-Dichloroethane	260	U	260	18
75-35-4	1,1-Dichloroethene	260	U	260	19
563-58-6	1,1-Dichloropropene	260	U	260	11
87-61-6	1,2,3-Trichlorobenzene	260	U	260	11
96-18-4	1,2,3-Trichloropropane	260	U	260	22
526-73-8	1,2,3-Trimethylbenzene	19	J	260	0.18
120-82-1	1,2,4-Trichlorobenzene	260	U	260	7.7
95-63-6	1,2,4-Trimethylbenzene	54	J	260	5.3
96-12-8	1,2-Dibromo-3-Chloropropane	530	U	530	53
106-93-4	1,2-Dibromoethane	260	U	260	11
95-50-1	1,2-Dichlorobenzene	50	J	260	9.1
107-06-2	1,2-Dichloroethane	170	J	260	11
78-87-5	1,2-Dichloropropane	260	U	260	8.7
541-73-1	1,3-Dichlorobenzene	260	U	260	5.1
142-28-9	1,3-Dichloropropane	260	U	260	23
106-46-7	1,4-Dichlorobenzene	260	U	260	8.5
594-20-7	2,2-Dichloropropane	260	U	260	24
78-93-3	2-Butanone	1100	U	1100	45
110-75-8	2-Chloroethyl vinyl ether	1100	U	1100	45
95-49-8	2-Chlorotoluene	260	U	260	9.5
591-78-6	2-Hexanone	1100	U	1100	21
106-43-4	4-Chlorotoluene	260	U	260	10
108-10-1	4-Methyl-2-pentanone	1100	U	1100	51
67-64-1	Acetone	1100	U	1100	180
71-43-2	Benzene	37	J	260	13
108-86-1	Bromobenzene	260	U	260	14
74-97-5	Bromochloromethane	260	U	260	14
75-27-4	Bromodichloromethane	260	U	260	10
75-25-2	Bromoform	260	U	260	20
74-83-9	Bromomethane	260	U *	260	31
75-15-0	Carbon disulfide	95	J B	260	13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 Lab Sample ID: 240-27894-2

Matrix: Solid Lab File ID: 144245.D

Analysis Method: 8260B Date Collected: 08/12/2013 11:05

Sample wt/vol: 6.14(g) Date Analyzed: 08/14/2013 13:08

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.9 Level: (low/med) Medium

Analysis Batch No.: 97390 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	260	U	260	6.8
108-90-7	Chlorobenzene	260	U	260	6.8
75-00-3	Chloroethane	260	U	260	64
67-66-3	Chloroform	260	U	260	9.3
74-87-3	Chloromethane	260	U	260	15
156-59-2	cis-1,2-Dichloroethene	220	J	260	7.3
10061-01-5	cis-1,3-Dichloropropene	260	U	260	8.3
124-48-1	Dibromochloromethane	260	U	260	13
74-95-3	Dibromomethane	260	U	260	15
75-71-8	Dichlorodifluoromethane	260	U	260	17
108-20-3	Diisopropyl ether	530	U	530	53
100-41-4	Ethylbenzene	73	J	260	5.7
637-92-3	Ethyl-t-butyl ether (ETBE)	260	U	260	0.23
87-68-3	Hexachlorobutadiene	260	U	260	15
98-82-8	Isopropylbenzene	16	J	260	6.9
1634-04-4	Methyl tert-butyl ether	260	U	260	7.5
75-09-2	Methylene Chloride	260	U	260	81
179601-23-1	m-Xylene & p-Xylene	55	J	530	6.6
91-20-3	Naphthalene	820	B	260	7.1
104-51-8	n-Butylbenzene	27	J	260	8.5
103-65-1	n-Propylbenzene	39	J	260	15
95-47-6	o-Xylene	23	J	260	9.0
99-87-6	p-Isopropyltoluene	7.5	J	260	5.1
135-98-8	sec-Butylbenzene	14	J	260	5.0
100-42-5	Styrene	260	U	260	5.9
994-05-8	Tert-amyl-methyl ether (TAME)	260	U	260	0.39
75-65-0	tert-Butyl alcohol	11000	U	11000	250
98-06-6	tert-Butylbenzene	10	J	260	6.9
127-18-4	Tetrachloroethene	260	U	260	13
108-88-3	Toluene	150	J B	260	18
156-60-5	trans-1,2-Dichloroethene	49	J	260	9.7
10061-02-6	trans-1,3-Dichloropropene	260	U	260	21
79-01-6	Trichloroethene	35	J	260	10
75-69-4	Trichlorofluoromethane	260	U	260	17
108-05-4	Vinyl acetate	530	U	530	24
75-01-4	Vinyl chloride	340		260	19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 Lab Sample ID: 240-27894-2

Matrix: Solid Lab File ID: 144245.D

Analysis Method: 8260B Date Collected: 08/12/2013 11:05

Sample wt/vol: 6.14(g) Date Analyzed: 08/14/2013 13:08

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.9 Level: (low/med) Medium

Analysis Batch No.: 97390 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	78	J	530	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		39-128
460-00-4	4-Bromofluorobenzene (Surr)	79		26-141
1868-53-7	Dibromofluoromethane (Surr)	89		30-122
2037-26-5	Toluene-d8 (Surr)	82		33-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 Lab Sample ID: 240-27894-2

Matrix: Solid Lab File ID: 144245.D

Analysis Method: 8260B Date Collected: 08/12/2013 11:05

Sample wt/vol: 6.14(g) Date Analyzed: 08/14/2013 13:08

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 22.9 Level: (low/med) Medium

Analysis Batch No.: 97390 Units: ug/Kg

Number TICs Found: 10 TIC Result Total: 7930

CAS NO.	COMPOUND NAME	RT	RESULT	Q
496-11-7	Indane	11.69	760	T J N
	Unknown	11.92	690	T J
	Unknown	12.32	770	T J
767-59-9	1H-Indene, 1-methyl-	12.96	730	T J N
270-63-3	Cyclopenta[c]thiapyran	13.43	970	T J N
17988-50-0	Silane, (4-ethylphenyl)trimethyl-	13.63	680	T J N
	Unknown	13.78	1000	T J
91-57-6	Naphthalene, 2-methyl-	14.20	830	T J N
4453-90-1	1,4-Methanonaphthalene, 1,4-dihydro-	14.36	820	T J N
92-52-4	Biphenyl	14.79	680	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 Lab Sample ID: 240-27894-4

Matrix: Solid Lab File ID: UX86861.D

Analysis Method: 8260B Date Collected: 08/12/2013 14:30

Sample wt/vol: 6.18(g) Date Analyzed: 08/16/2013 07:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 10.5 Level: (low/med) Low

Analysis Batch No.: 97710 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.5	U	4.5	0.56
71-55-6	1,1,1-Trichloroethane	4.5	U	4.5	0.51
79-34-5	1,1,2,2-Tetrachloroethane	4.5	U	4.5	0.31
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.5	U	4.5	1.2
75-34-3	1,1-Dichloroethane	4.5	U	4.5	0.33
75-35-4	1,1-Dichloroethene	4.5	U	4.5	0.47
563-58-6	1,1-Dichloropropene	4.5	U	4.5	0.27
87-61-6	1,2,3-Trichlorobenzene	4.5	U	4.5	0.34
96-18-4	1,2,3-Trichloropropane	4.5	U	4.5	0.81
526-73-8	1,2,3-Trimethylbenzene	4.5	U	4.5	0.15
120-82-1	1,2,4-Trichlorobenzene	4.5	U	4.5	0.24
95-63-6	1,2,4-Trimethylbenzene	4.5	U	4.5	0.59
96-12-8	1,2-Dibromo-3-Chloropropane	9.0	U	9.0	1.2
106-93-4	1,2-Dibromoethane	4.5	U	4.5	0.45
95-50-1	1,2-Dichlorobenzene	4.5	U	4.5	0.33
107-06-2	1,2-Dichloroethane	4.5	U	4.5	0.31
78-87-5	1,2-Dichloropropane	4.5	U	4.5	0.62
541-73-1	1,3-Dichlorobenzene	4.5	U	4.5	0.32
142-28-9	1,3-Dichloropropane	4.5	U	4.5	0.31
106-46-7	1,4-Dichlorobenzene	4.5	U	4.5	0.60
594-20-7	2,2-Dichloropropane	4.5	U	4.5	0.85
78-93-3	2-Butanone	2.8	J	18	1.3
110-75-8	2-Chloroethyl vinyl ether	45	U	45	1.3
95-49-8	2-Chlorotoluene	4.5	U	4.5	0.36
591-78-6	2-Hexanone	18	U	18	0.57
106-43-4	4-Chlorotoluene	4.5	U	4.5	0.37
108-10-1	4-Methyl-2-pentanone	18	U	18	0.49
67-64-1	Acetone	26		18	5.7
71-43-2	Benzene	4.5	U	4.5	0.21
108-86-1	Bromobenzene	4.5	U	4.5	0.30
74-97-5	Bromochloromethane	4.5	U	4.5	0.64
75-27-4	Bromodichloromethane	4.5	U	4.5	0.25
75-25-2	Bromoform	4.5	U	4.5	0.30
74-83-9	Bromomethane	4.5	U	4.5	0.49
75-15-0	Carbon disulfide	4.5	U	4.5	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 Lab Sample ID: 240-27894-4

Matrix: Solid Lab File ID: UX86861.D

Analysis Method: 8260B Date Collected: 08/12/2013 14:30

Sample wt/vol: 6.18(g) Date Analyzed: 08/16/2013 07:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 10.5 Level: (low/med) Low

Analysis Batch No.: 97710 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.5	U	4.5	0.33
108-90-7	Chlorobenzene	4.5	U	4.5	0.30
75-00-3	Chloroethane	4.5	U	4.5	0.78
67-66-3	Chloroform	4.5	U	4.5	0.26
74-87-3	Chloromethane	4.5	U	4.5	0.37
156-59-2	cis-1,2-Dichloroethene	4.5	U	4.5	0.33
10061-01-5	cis-1,3-Dichloropropene	4.5	U	4.5	0.31
124-48-1	Dibromochloromethane	4.5	U	4.5	0.50
74-95-3	Dibromomethane	4.5	U	4.5	0.57
75-71-8	Dichlorodifluoromethane	4.5	U	4.5	0.45
108-20-3	Diisopropyl ether	9.0	U	9.0	1.4
100-41-4	Ethylbenzene	4.5	U	4.5	0.24
637-92-3	Ethyl-t-butyl ether (ETBE)	4.5	U	4.5	0.20
87-68-3	Hexachlorobutadiene	4.5	U	4.5	1.1
98-82-8	Isopropylbenzene	4.5	U	4.5	0.14
1634-04-4	Methyl tert-butyl ether	4.5	U	4.5	0.39
75-09-2	Methylene Chloride	4.5	U	4.5	0.61
179601-23-1	m-Xylene & p-Xylene	9.0	U	9.0	1.1
91-20-3	Naphthalene	0.28	J B	4.5	0.17
104-51-8	n-Butylbenzene	4.5	U	4.5	0.21
103-65-1	n-Propylbenzene	4.5	U	4.5	0.36
95-47-6	o-Xylene	4.5	U	4.5	0.32
99-87-6	p-Isopropyltoluene	4.5	U	4.5	0.19
135-98-8	sec-Butylbenzene	4.5	U	4.5	0.16
100-42-5	Styrene	4.5	U	4.5	0.14
994-05-8	Tert-amyl-methyl ether (TAME)	4.5	U	4.5	0.33
75-65-0	tert-Butyl alcohol	180	U	180	6.9
98-06-6	tert-Butylbenzene	4.5	U	4.5	0.26
127-18-4	Tetrachloroethene	4.5	U	4.5	0.47
108-88-3	Toluene	4.5	U	4.5	0.24
156-60-5	trans-1,2-Dichloroethene	4.5	U	4.5	0.37
10061-02-6	trans-1,3-Dichloropropene	4.5	U	4.5	0.49
79-01-6	Trichloroethene	4.5	U	4.5	0.38
75-69-4	Trichlorofluoromethane	4.5	U	4.5	0.31
108-05-4	Vinyl acetate	9.0	U	9.0	0.23
75-01-4	Vinyl chloride	4.5	U	4.5	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 | Lab Sample ID: 240-27894-4

Matrix: Solid | Lab File ID: UX86861.D

Analysis Method: 8260B | Date Collected: 08/12/2013 14:30

Sample wt/vol: 6.18(g) | Date Analyzed: 08/16/2013 07:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 10.5 | Level: (low/med) Low

Analysis Batch No.: 97710 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	9.0	U	9.0	0.32

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		58-123
460-00-4	4-Bromofluorobenzene (Surr)	75		52-136
1868-53-7	Dibromofluoromethane (Surr)	93		37-132
2037-26-5	Toluene-d8 (Surr)	116		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 | Lab Sample ID: 240-27894-4

Matrix: Solid | Lab File ID: UX86861.D

Analysis Method: 8260B | Date Collected: 08/12/2013 14:30

Sample wt/vol: 6.18(g) | Date Analyzed: 08/16/2013 07:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 10.5 | Level: (low/med) Low

Analysis Batch No.: 97710 | Units: ug/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A | Lab Sample ID: 240-27894-5

Matrix: Solid | Lab File ID: UX86862.D

Analysis Method: 8260B | Date Collected: 08/12/2013 14:20

Sample wt/vol: 4.86(g) | Date Analyzed: 08/16/2013 08:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 48.4 | Level: (low/med) Low

Analysis Batch No.: 97710 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	10	U	10	1.2
71-55-6	1,1,1-Trichloroethane	10	U	10	1.1
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	10	U	10	2.6
75-34-3	1,1-Dichloroethane	10	U	10	0.72
75-35-4	1,1-Dichloroethene	10	U	10	1.0
563-58-6	1,1-Dichloropropene	10	U	10	0.60
87-61-6	1,2,3-Trichlorobenzene	10	U	10	0.76
96-18-4	1,2,3-Trichloropropane	10	U	10	1.8
526-73-8	1,2,3-Trimethylbenzene	10	U	10	0.34
120-82-1	1,2,4-Trichlorobenzene	10	U	10	0.54
95-63-6	1,2,4-Trimethylbenzene	10	U	10	1.3
96-12-8	1,2-Dibromo-3-Chloropropane	20	U	20	2.6
106-93-4	1,2-Dibromoethane	10	U	10	1.0
95-50-1	1,2-Dichlorobenzene	10	U	10	0.72
107-06-2	1,2-Dichloroethane	10	U	10	0.68
78-87-5	1,2-Dichloropropane	10	U	10	1.4
541-73-1	1,3-Dichlorobenzene	10	U	10	0.70
142-28-9	1,3-Dichloropropane	10	U	10	0.68
106-46-7	1,4-Dichlorobenzene	10	U	10	1.3
594-20-7	2,2-Dichloropropane	10	U	10	1.9
78-93-3	2-Butanone	19	J	40	2.8
110-75-8	2-Chloroethyl vinyl ether	100	U	100	2.8
95-49-8	2-Chlorotoluene	10	U	10	0.80
591-78-6	2-Hexanone	40	U	40	1.3
106-43-4	4-Chlorotoluene	10	U	10	0.82
108-10-1	4-Methyl-2-pentanone	40	U	40	1.1
67-64-1	Acetone	160		40	13
71-43-2	Benzene	10	U	10	0.46
108-86-1	Bromobenzene	10	U	10	0.66
74-97-5	Bromochloromethane	10	U	10	1.4
75-27-4	Bromodichloromethane	10	U	10	0.56
75-25-2	Bromoform	10	U	10	0.66
74-83-9	Bromomethane	10	U	10	1.1
75-15-0	Carbon disulfide	1.2	J	10	0.88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A | Lab Sample ID: 240-27894-5

Matrix: Solid | Lab File ID: UX86862.D

Analysis Method: 8260B | Date Collected: 08/12/2013 14:20

Sample wt/vol: 4.86(g) | Date Analyzed: 08/16/2013 08:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 48.4 | Level: (low/med) Low

Analysis Batch No.: 97710 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	10	U	10	0.74
108-90-7	Chlorobenzene	10	U	10	0.66
75-00-3	Chloroethane	10	U	10	1.7
67-66-3	Chloroform	10	U	10	0.58
74-87-3	Chloromethane	10	U	10	0.82
156-59-2	cis-1,2-Dichloroethene	10	U	10	0.72
10061-01-5	cis-1,3-Dichloropropene	10	U	10	0.68
124-48-1	Dibromochloromethane	10	U	10	1.1
74-95-3	Dibromomethane	10	U	10	1.3
75-71-8	Dichlorodifluoromethane	10	U	10	1.0
108-20-3	Diisopropyl ether	20	U	20	3.0
100-41-4	Ethylbenzene	10	U	10	0.52
637-92-3	Ethyl-t-butyl ether (ETBE)	10	U	10	0.44
87-68-3	Hexachlorobutadiene	10	U	10	2.4
98-82-8	Isopropylbenzene	10	U	10	0.32
1634-04-4	Methyl tert-butyl ether	10	U	10	0.86
75-09-2	Methylene Chloride	2.5	J B	10	1.3
179601-23-1	m-Xylene & p-Xylene	20	U	20	2.4
91-20-3	Naphthalene	10	U	10	0.38
104-51-8	n-Butylbenzene	10	U	10	0.46
103-65-1	n-Propylbenzene	10	U	10	0.80
95-47-6	o-Xylene	10	U	10	0.70
99-87-6	p-Isopropyltoluene	10	U	10	0.42
135-98-8	sec-Butylbenzene	10	U	10	0.36
100-42-5	Styrene	10	U	10	0.30
994-05-8	Tert-amyl-methyl ether (TAME)	10	U	10	0.74
75-65-0	tert-Butyl alcohol	400	U	400	15
98-06-6	tert-Butylbenzene	10	U	10	0.58
127-18-4	Tetrachloroethene	10	U	10	1.0
108-88-3	Toluene	10	U	10	0.54
156-60-5	trans-1,2-Dichloroethene	10	U	10	0.82
10061-02-6	trans-1,3-Dichloropropene	10	U	10	1.1
79-01-6	Trichloroethene	10	U	10	0.84
75-69-4	Trichlorofluoromethane	10	U	10	0.68
108-05-4	Vinyl acetate	20	U	20	0.50
75-01-4	Vinyl chloride	2.9	J	10	0.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A | Lab Sample ID: 240-27894-5

Matrix: Solid | Lab File ID: UX86862.D

Analysis Method: 8260B | Date Collected: 08/12/2013 14:20

Sample wt/vol: 4.86(g) | Date Analyzed: 08/16/2013 08:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 48.4 | Level: (low/med) Low

Analysis Batch No.: 97710 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	20	U	20	0.70

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		58-123
460-00-4	4-Bromofluorobenzene (Surr)	75		52-136
1868-53-7	Dibromofluoromethane (Surr)	93		37-132
2037-26-5	Toluene-d8 (Surr)	116		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A | Lab Sample ID: 240-27894-5

Matrix: Solid | Lab File ID: UX86862.D

Analysis Method: 8260B | Date Collected: 08/12/2013 14:20

Sample wt/vol: 4.86(g) | Date Analyzed: 08/16/2013 08:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 48.4 | Level: (low/med) Low

Analysis Batch No.: 97710 | Units: ug/Kg

Number TICs Found: 1 | TIC Result Total: 5.1

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
79-20-9	Methyl acetate	3.22	5.1	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: TB-081213 | Lab Sample ID: 240-27894-3

Matrix: Water | Lab File ID: UXJ3491.D

Analysis Method: 8260B | Date Collected: 08/12/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 19:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98342 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: TB-081213 | Lab Sample ID: 240-27894-3

Matrix: Water | Lab File ID: UXJ3491.D

Analysis Method: 8260B | Date Collected: 08/12/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 19:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98342 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: TB-081213 | Lab Sample ID: 240-27894-3

Matrix: Water | Lab File ID: UXJ3491.D

Analysis Method: 8260B | Date Collected: 08/12/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 19:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98342 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: TB-081213 | Lab Sample ID: 240-27894-3

Matrix: Water | Lab File ID: UXJ3491.D

Analysis Method: 8260B | Date Collected: 08/12/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 19:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98342 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 2.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	2.3	T J N

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 | Lab Sample ID: 240-27894-1

Matrix: Solid | Lab File ID: 30827025.D

Analysis Method: 8270D | Date Collected: 08/12/2013 10:50

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 29.75(g) | Date Analyzed: 08/27/2013 21:07

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	370	J	590	41
123-91-1	1,4-Dioxane	1200	U	1200	260
88-06-2	2,4,6-Trichlorophenol	1800	U	1800	110
95-95-4	2,4,5-Trichlorophenol	1800	U	1800	300
120-83-2	2,4-Dichlorophenol	1800	U	1800	240
105-67-9	2,4-Dimethylphenol	1800	U	1800	240
51-28-5	2,4-Dinitrophenol	3900	U	3900	250
121-14-2	2,4-Dinitrotoluene	2400	U	2400	200
91-58-7	2-Chloronaphthalene	590	U	590	5.3
95-57-8	2-Chlorophenol	590	U	590	97
91-57-6	2-Methylnaphthalene	1300		79	5.9
95-48-7	2-Methylphenol	2400	U	2400	130
88-74-4	2-Nitroaniline	2400	U	2400	110
88-75-5	2-Nitrophenol	590	U	590	98
15831-10-4	3 & 4 Methylphenol	4700	U	4700	240
91-94-1	3,3'-Dichlorobenzidine	1200	U	1200	210
99-09-2	3-Nitroaniline	2400	U	2400	190
534-52-1	4,6-Dinitro-2-methylphenol	1800	U	1800	110
101-55-3	4-Bromophenyl phenyl ether	590	U	590	150
59-50-7	4-Chloro-3-methylphenol	1800	U	1800	250
106-47-8	4-Chloroaniline	1800	U	1800	200
7005-72-3	4-Chlorophenyl phenyl ether	590	U	590	150
100-01-6	4-Nitroaniline	2400	U	2400	310
83-32-9	Acenaphthene	920		79	9.0
208-96-8	Acenaphthylene	630		79	4.1
98-86-2	Acetophenone	1200	U	1200	110
120-12-7	Anthracene	1400		79	9.2
1912-24-9	Atrazine	2400	U	2400	110
100-52-7	Benzaldehyde	1200	U *	1200	140
56-55-3	Benzo[a]anthracene	3100		79	7.5
50-32-8	Benzo[a]pyrene	2400		79	7.6
205-99-2	Benzo[b]fluoranthene	3500		79	7.0
191-24-2	Benzo[g,h,i]perylene	1400		79	4.1
207-08-9	Benzo[k]fluoranthene	1200		79	8.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 | Lab Sample ID: 240-27894-1

Matrix: Solid | Lab File ID: 30827025.D

Analysis Method: 8270D | Date Collected: 08/12/2013 10:50

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 29.75(g) | Date Analyzed: 08/27/2013 21:07

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1200	U	1200	260
111-44-4	Bis(2-chloroethyl)ether	1200	U	1200	24
117-81-7	Bis(2-ethylhexyl) phthalate	710	J	830	220
85-68-7	Butyl benzyl phthalate	830	U	830	120
105-60-2	Caprolactam	3900	U	3900	440
86-74-8	Carbazole	1500		590	320
218-01-9	Chrysene	3200		79	13
84-74-2	Di-n-butyl phthalate	830	U	830	180
117-84-0	Di-n-octyl phthalate	830	U	830	93
53-70-3	Dibenzo(a,h)anthracene	380		79	7.8
132-64-9	Dibenzofuran	1200		590	7.8
84-66-2	Diethyl phthalate	830	U	830	190
131-11-3	Dimethyl phthalate	830	U	830	200
206-44-0	Fluoranthene	8000		79	6.5
86-73-7	Fluorene	1600		79	6.3
118-74-1	Hexachlorobenzene	79	U	79	25
87-68-3	Hexachlorobutadiene	590	U	590	66
77-47-4	Hexachlorocyclopentadiene	3900	U	3900	96
67-72-1	Hexachloroethane	590	U	590	110
193-39-5	Indeno[1,2,3-cd]pyrene	1300		79	4.1
78-59-1	Isophorone	590	U	590	150
621-64-7	N-Nitrosodi-n-propylamine	590	U	590	75
62-75-9	N-Nitrosodimethylamine	1200	U	1200	190
86-30-6	N-Nitrosodiphenylamine	590	U	590	250
91-20-3	Naphthalene	6300		79	9.7
98-95-3	Nitrobenzene	1200	U	1200	26
87-86-5	Pentachlorophenol	1800	U	1800	110
85-01-8	Phenanthrene	6000		79	8.6
108-95-2	Phenol	590	U	590	86
129-00-0	Pyrene	6300		79	5.2
108-60-1	2,2'-oxybis[1-chloropropane]	1200	U	1200	110
606-20-2	2,6-Dinitrotoluene	2400	U	2400	250
100-02-7	4-Nitrophenol	3900	U	3900	200

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 | Lab Sample ID: 240-27894-1

Matrix: Solid | Lab File ID: 30827025.D

Analysis Method: 8270D | Date Collected: 08/12/2013 10:50

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 29.75(g) | Date Analyzed: 08/27/2013 21:07

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	86		36-110
4165-62-2	Phenol-d5 (Surr)	68		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	66		20-110
367-12-4	2-Fluorophenol (Surr)	64		24-110
321-60-8	2-Fluorobiphenyl (Surr)	68		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	69		10-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 | Lab Sample ID: 240-27894-2

Matrix: Solid | Lab File ID: 30827024.D

Analysis Method: 8270D | Date Collected: 08/12/2013 11:05

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.50(g) | Date Analyzed: 08/27/2013 20:41

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 50

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 22.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1100	J	3200	220
123-91-1	1,4-Dioxane	6400	U	6400	1400
88-06-2	2,4,6-Trichlorophenol	9600	U	9600	570
95-95-4	2,4,5-Trichlorophenol	9600	U	9600	1600
120-83-2	2,4-Dichlorophenol	9600	U	9600	1300
105-67-9	2,4-Dimethylphenol	9600	U	9600	1300
51-28-5	2,4-Dinitrophenol	21000	U	21000	1300
121-14-2	2,4-Dinitrotoluene	13000	U	13000	1100
91-58-7	2-Chloronaphthalene	3200	U	3200	29
95-57-8	2-Chlorophenol	3200	U	3200	520
91-57-6	2-Methylnaphthalene	1500		430	32
95-48-7	2-Methylphenol	13000	U	13000	700
88-74-4	2-Nitroaniline	13000	U	13000	580
88-75-5	2-Nitrophenol	3200	U	3200	530
15831-10-4	3 & 4 Methylphenol	26000	U	26000	1300
91-94-1	3,3'-Dichlorobenzidine	6400	U	6400	1100
99-09-2	3-Nitroaniline	13000	U	13000	1000
534-52-1	4,6-Dinitro-2-methylphenol	9600	U	9600	590
101-55-3	4-Bromophenyl phenyl ether	3200	U	3200	830
59-50-7	4-Chloro-3-methylphenol	9600	U	9600	1300
106-47-8	4-Chloroaniline	9600	U	9600	1100
7005-72-3	4-Chlorophenyl phenyl ether	3200	U	3200	830
100-01-6	4-Nitroaniline	13000	U	13000	1700
83-32-9	Acenaphthene	6700		430	49
208-96-8	Acenaphthylene	3400		430	22
98-86-2	Acetophenone	6400	U	6400	590
120-12-7	Anthracene	15000		430	50
1912-24-9	Atrazine	13000	U	13000	580
100-52-7	Benzaldehyde	6400	U *	6400	770
56-55-3	Benzo[a]anthracene	27000		430	40
50-32-8	Benzo[a]pyrene	24000		430	41
205-99-2	Benzo[b]fluoranthene	28000		430	38
191-24-2	Benzo[g,h,i]perylene	12000		430	22
207-08-9	Benzo[k]fluoranthene	10000		430	43

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 | Lab Sample ID: 240-27894-2

Matrix: Solid | Lab File ID: 30827024.D

Analysis Method: 8270D | Date Collected: 08/12/2013 11:05

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.50(g) | Date Analyzed: 08/27/2013 20:41

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 50

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 22.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	6400	U	6400	1400
111-44-4	Bis(2-chloroethyl)ether	6400	U	6400	130
117-81-7	Bis(2-ethylhexyl) phthalate	4500	U	4500	1200
85-68-7	Butyl benzyl phthalate	4500	U	4500	640
105-60-2	Caprolactam	21000	U	21000	2400
86-74-8	Carbazole	5500		3200	1700
218-01-9	Chrysene	24000		430	70
84-74-2	Di-n-butyl phthalate	4500	U	4500	960
117-84-0	Di-n-octyl phthalate	4500	U	4500	500
53-70-3	Dibenzo(a,h)anthracene	3300		430	42
132-64-9	Dibenzofuran	12000		3200	42
84-66-2	Diethyl phthalate	4500	U	4500	1000
131-11-3	Dimethyl phthalate	4500	U	4500	1100
206-44-0	Fluoranthene	59000		430	35
86-73-7	Fluorene	8200		430	34
118-74-1	Hexachlorobenzene	430	U	430	130
87-68-3	Hexachlorobutadiene	3200	U	3200	360
77-47-4	Hexachlorocyclopentadiene	21000	U	21000	520
67-72-1	Hexachloroethane	3200	U	3200	570
193-39-5	Indeno[1,2,3-cd]pyrene	12000		430	22
78-59-1	Isophorone	3200	U	3200	830
621-64-7	N-Nitrosodi-n-propylamine	3200	U	3200	400
62-75-9	N-Nitrosodimethylamine	6400	U	6400	1000
86-30-6	N-Nitrosodiphenylamine	3200	U	3200	1300
91-20-3	Naphthalene	7400		430	52
98-95-3	Nitrobenzene	6400	U	6400	140
87-86-5	Pentachlorophenol	9600	U	9600	580
85-01-8	Phenanthrene	42000		430	47
108-95-2	Phenol	3200	U	3200	470
129-00-0	Pyrene	48000		430	28
108-60-1	2,2'-oxybis[1-chloropropane]	6400	U	6400	610
606-20-2	2,6-Dinitrotoluene	13000	U	13000	1300
100-02-7	4-Nitrophenol	21000	U	21000	1100

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 | Lab Sample ID: 240-27894-2

Matrix: Solid | Lab File ID: 30827024.D

Analysis Method: 8270D | Date Collected: 08/12/2013 11:05

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.50(g) | Date Analyzed: 08/27/2013 20:41

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 50

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 22.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	87		36-110
4165-62-2	Phenol-d5 (Surr)	67		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	59		20-110
367-12-4	2-Fluorophenol (Surr)	65		24-110
321-60-8	2-Fluorobiphenyl (Surr)	64		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	57		10-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 | Lab Sample ID: 240-27894-4

Matrix: Solid | Lab File ID: 30827026.D

Analysis Method: 8270D | Date Collected: 08/12/2013 14:30

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.39(g) | Date Analyzed: 08/27/2013 21:33

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 6.667

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 10.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	370	U	370	26
123-91-1	1,4-Dioxane	740	U	740	160
88-06-2	2,4,6-Trichlorophenol	1100	U	1100	65
95-95-4	2,4,5-Trichlorophenol	1100	U	1100	180
120-83-2	2,4-Dichlorophenol	1100	U	1100	150
105-67-9	2,4-Dimethylphenol	1100	U	1100	150
51-28-5	2,4-Dinitrophenol	2400	U	2400	150
121-14-2	2,4-Dinitrotoluene	1500	U	1500	130
91-58-7	2-Chloronaphthalene	370	U	370	3.3
95-57-8	2-Chlorophenol	370	U	370	60
91-57-6	2-Methylnaphthalene	56		49	3.7
95-48-7	2-Methylphenol	1500	U	1500	81
88-74-4	2-Nitroaniline	1500	U	1500	67
88-75-5	2-Nitrophenol	370	U	370	61
15831-10-4	3 & 4 Methylphenol	2900	U	2900	150
91-94-1	3,3'-Dichlorobenzidine	740	U	740	130
99-09-2	3-Nitroaniline	1500	U	1500	120
534-52-1	4,6-Dinitro-2-methylphenol	1100	U	1100	68
101-55-3	4-Bromophenyl phenyl ether	370	U	370	96
59-50-7	4-Chloro-3-methylphenol	1100	U	1100	150
106-47-8	4-Chloroaniline	1100	U	1100	130
7005-72-3	4-Chlorophenyl phenyl ether	370	U	370	96
100-01-6	4-Nitroaniline	1500	U	1500	190
83-32-9	Acenaphthene	150		49	5.6
208-96-8	Acenaphthylene	53		49	2.6
98-86-2	Acetophenone	740	U	740	68
120-12-7	Anthracene	640		49	5.7
1912-24-9	Atrazine	1500	U	1500	67
100-52-7	Benzaldehyde	740	U *	740	88
56-55-3	Benzo[a]anthracene	3300		49	4.6
50-32-8	Benzo[a]pyrene	3100		49	4.7
205-99-2	Benzo[b]fluoranthene	4800		49	4.3
191-24-2	Benzo[g,h,i]perylene	2400		49	2.6
207-08-9	Benzo[k]fluoranthene	1700		49	5.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 | Lab Sample ID: 240-27894-4

Matrix: Solid | Lab File ID: 30827026.D

Analysis Method: 8270D | Date Collected: 08/12/2013 14:30

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.39(g) | Date Analyzed: 08/27/2013 21:33

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 6.667

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 10.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	740	U	740	160
111-44-4	Bis(2-chloroethyl)ether	740	U	740	15
117-81-7	Bis(2-ethylhexyl) phthalate	230	J	510	140
85-68-7	Butyl benzyl phthalate	510	U	510	74
105-60-2	Caprolactam	2400	U	2400	270
86-74-8	Carbazole	280	J	370	200
218-01-9	Chrysene	3400		49	8.1
84-74-2	Di-n-butyl phthalate	510	U	510	110
117-84-0	Di-n-octyl phthalate	510	U	510	58
53-70-3	Dibenzo(a,h)anthracene	620		49	4.9
132-64-9	Dibenzofuran	130	J	370	4.9
84-66-2	Diethyl phthalate	510	U	510	120
131-11-3	Dimethyl phthalate	510	U	510	130
206-44-0	Fluoranthene	4700		49	4.0
86-73-7	Fluorene	130		49	3.9
118-74-1	Hexachlorobenzene	49	U	49	15
87-68-3	Hexachlorobutadiene	370	U	370	41
77-47-4	Hexachlorocyclopentadiene	2400	U	2400	60
67-72-1	Hexachloroethane	370	U	370	66
193-39-5	Indeno[1,2,3-cd]pyrene	2100		49	2.6
78-59-1	Isophorone	370	U	370	96
621-64-7	N-Nitrosodi-n-propylamine	370	U	370	46
62-75-9	N-Nitrosodimethylamine	740	U	740	120
86-30-6	N-Nitrosodiphenylamine	370	U	370	150
91-20-3	Naphthalene	100		49	6.0
98-95-3	Nitrobenzene	740	U	740	16
87-86-5	Pentachlorophenol	1100	U	1100	67
85-01-8	Phenanthrene	2400		49	5.4
108-95-2	Phenol	370	U	370	54
129-00-0	Pyrene	4300		49	3.2
108-60-1	2,2'-oxybis[1-chloropropane]	740	U	740	70
606-20-2	2,6-Dinitrotoluene	1500	U	1500	150
100-02-7	4-Nitrophenol	2400	U	2400	130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 | Lab Sample ID: 240-27894-4

Matrix: Solid | Lab File ID: 30827026.D

Analysis Method: 8270D | Date Collected: 08/12/2013 14:30

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.39(g) | Date Analyzed: 08/27/2013 21:33

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 6.667

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 10.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	84		36-110
4165-62-2	Phenol-d5 (Surr)	66		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	56		20-110
367-12-4	2-Fluorophenol (Surr)	64		24-110
321-60-8	2-Fluorobiphenyl (Surr)	67		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	63		10-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A | Lab Sample ID: 240-27894-5

Matrix: Solid | Lab File ID: 30827027.D

Analysis Method: 8270D | Date Collected: 08/12/2013 14:20

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.32(g) | Date Analyzed: 08/27/2013 21:58

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 48.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	96	U	96	6.7
123-91-1	1,4-Dioxane	190	U	190	42
88-06-2	2,4,6-Trichlorophenol	290	U	290	17
95-95-4	2,4,5-Trichlorophenol	290	U	290	48
120-83-2	2,4-Dichlorophenol	290	U	290	38
105-67-9	2,4-Dimethylphenol	290	U	290	38
51-28-5	2,4-Dinitrophenol	630	U	630	40
121-14-2	2,4-Dinitrotoluene	380	U	380	33
91-58-7	2-Chloronaphthalene	96	U	96	0.86
95-57-8	2-Chlorophenol	96	U	96	16
91-57-6	2-Methylnaphthalene	13	U	13	0.96
95-48-7	2-Methylphenol	380	U	380	21
88-74-4	2-Nitroaniline	380	U	380	17
88-75-5	2-Nitrophenol	96	U	96	16
15831-10-4	3 & 4 Methylphenol	770	U	770	38
91-94-1	3,3'-Dichlorobenzidine	190	U	190	35
99-09-2	3-Nitroaniline	380	U	380	31
534-52-1	4,6-Dinitro-2-methylphenol	290	U	290	18
101-55-3	4-Bromophenyl phenyl ether	96	U	96	25
59-50-7	4-Chloro-3-methylphenol	290	U	290	40
106-47-8	4-Chloroaniline	290	U	290	33
7005-72-3	4-Chlorophenyl phenyl ether	96	U	96	25
100-01-6	4-Nitroaniline	380	U	380	50
83-32-9	Acenaphthene	13	U	13	1.5
208-96-8	Acenaphthylene	13	U	13	0.67
98-86-2	Acetophenone	190	U	190	18
120-12-7	Anthracene	13	U	13	1.5
1912-24-9	Atrazine	380	U	380	17
100-52-7	Benzaldehyde	190	U *	190	23
56-55-3	Benzo[a]anthracene	15		13	1.2
50-32-8	Benzo[a]pyrene	15		13	1.2
205-99-2	Benzo[b]fluoranthene	18		13	1.1
191-24-2	Benzo[g,h,i]perylene	10	J	13	0.67
207-08-9	Benzo[k]fluoranthene	6.7	J	13	1.3

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A | Lab Sample ID: 240-27894-5

Matrix: Solid | Lab File ID: 30827027.D

Analysis Method: 8270D | Date Collected: 08/12/2013 14:20

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.32(g) | Date Analyzed: 08/27/2013 21:58

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 48.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	190	U	190	42
111-44-4	Bis(2-chloroethyl)ether	190	U	190	3.8
117-81-7	Bis(2-ethylhexyl) phthalate	39	J	130	36
85-68-7	Butyl benzyl phthalate	130	U	130	19
105-60-2	Caprolactam	630	U	630	71
86-74-8	Carbazole	96	U	96	52
218-01-9	Chrysene	14		13	2.1
84-74-2	Di-n-butyl phthalate	130	U	130	29
117-84-0	Di-n-octyl phthalate	130	U	130	15
53-70-3	Dibenzo(a,h)anthracene	13	U	13	1.3
132-64-9	Dibenzofuran	96	U	96	1.3
84-66-2	Diethyl phthalate	130	U	130	31
131-11-3	Dimethyl phthalate	130	U	130	33
206-44-0	Fluoranthene	26		13	1.1
86-73-7	Fluorene	13	U	13	1.0
118-74-1	Hexachlorobenzene	13	U	13	4.0
87-68-3	Hexachlorobutadiene	96	U	96	11
77-47-4	Hexachlorocyclopentadiene	630	U	630	16
67-72-1	Hexachloroethane	96	U	96	17
193-39-5	Indeno[1,2,3-cd]pyrene	8.4	J	13	0.67
78-59-1	Isophorone	96	U	96	25
621-64-7	N-Nitrosodi-n-propylamine	96	U	96	12
62-75-9	N-Nitrosodimethylamine	190	U	190	31
86-30-6	N-Nitrosodiphenylamine	96	U	96	40
91-20-3	Naphthalene	11	J	13	1.6
98-95-3	Nitrobenzene	190	U	190	4.2
87-86-5	Pentachlorophenol	290	U	290	17
85-01-8	Phenanthrene	16		13	1.4
108-95-2	Phenol	96	U	96	14
129-00-0	Pyrene	26		13	0.84
108-60-1	2,2'-oxybis[1-chloropropane]	190	U	190	18
606-20-2	2,6-Dinitrotoluene	380	U	380	40
100-02-7	4-Nitrophenol	630	U	630	33

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A | Lab Sample ID: 240-27894-5

Matrix: Solid | Lab File ID: 30827027.D

Analysis Method: 8270D | Date Collected: 08/12/2013 14:20

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.32(g) | Date Analyzed: 08/27/2013 21:58

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 48.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	83		36-110
4165-62-2	Phenol-d5 (Surr)	72		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	61		20-110
367-12-4	2-Fluorophenol (Surr)	68		24-110
321-60-8	2-Fluorobiphenyl (Surr)	63		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	61		10-110

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 Lab Sample ID: 240-27894-1

Matrix: Solid Lab File ID: YF082149.D

Analysis Method: 8015B Date Collected: 08/12/2013 10:50

Sample wt/vol: 0.57(g) Date Analyzed: 08/22/2013 18:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.8 Level: (low/med) Low

Analysis Batch No.: 98315 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	5600		1000	470

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	32		10-150

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 | Lab Sample ID: 240-27894-2

Matrix: Solid | Lab File ID: YF082150.D

Analysis Method: 8015B | Date Collected: 08/12/2013 11:05

Sample wt/vol: 5.03(g) | Date Analyzed: 08/22/2013 19:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 22.9 | Level: (low/med) Low

Analysis Batch No.: 98315 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	340		130	59

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	30		10-150

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 | Lab Sample ID: 240-27894-4

Matrix: Solid | Lab File ID: YF082152.D

Analysis Method: 8015B | Date Collected: 08/12/2013 14:30

Sample wt/vol: 5.25(g) | Date Analyzed: 08/22/2013 20:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 10.5 | Level: (low/med) Low

Analysis Batch No.: 98315 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	110	U	110	49

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	26		10-150

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A | Lab Sample ID: 240-27894-5

Matrix: Solid | Lab File ID: YF082151.D

Analysis Method: 8015B | Date Collected: 08/12/2013 14:20

Sample wt/vol: 4.96(g) | Date Analyzed: 08/22/2013 20:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 48.4 | Level: (low/med) Low

Analysis Batch No.: 98315 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	200	U	200	90

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	28		10-150

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 Lab Sample ID: 240-27894-1

Matrix: Solid Lab File ID: P5F81618.D

Analysis Method: 8015C Date Collected: 08/12/2013 10:50

Extraction Method: 3540C Date Extracted: 08/14/2013 09:25

Sample wt/vol: 30.00(g) Date Analyzed: 08/17/2013 00:56

Con. Extract Vol.: 5(mL) Dilution Factor: 10

Injection Volume: 1(uL) GC Column: ____ ID: ____

% Moisture: 14.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 97853 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	1200		200	110

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	50		10-110

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 Lab Sample ID: 240-27894-2

Matrix: Solid Lab File ID: P5F81619.D

Analysis Method: 8015C Date Collected: 08/12/2013 11:05

Extraction Method: 3540C Date Extracted: 08/14/2013 09:25

Sample wt/vol: 29.57(g) Date Analyzed: 08/17/2013 01:26

Con. Extract Vol.: 5(mL) Dilution Factor: 10

Injection Volume: 1(uL) GC Column: ID:

% Moisture: 22.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 97853 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	630		220	120

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	59		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 Lab Sample ID: 240-27894-4

Matrix: Solid Lab File ID: P5F81620.D

Analysis Method: 8015C Date Collected: 08/12/2013 14:30

Extraction Method: 3540C Date Extracted: 08/14/2013 09:25

Sample wt/vol: 30.06(g) Date Analyzed: 08/17/2013 01:56

Con. Extract Vol.: 5(mL) Dilution Factor: 10

Injection Volume: 1(uL) GC Column: ID:

% Moisture: 10.5 GPC Cleanup:(Y/N) N

Analysis Batch No.: 97853 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	930		190	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	46		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A | Lab Sample ID: 240-27894-5

Matrix: Solid | Lab File ID: P5F81533.D

Analysis Method: 8015C | Date Collected: 08/12/2013 14:20

Extraction Method: 3540C | Date Extracted: 08/14/2013 09:25

Sample wt/vol: 29.84(g) | Date Analyzed: 08/16/2013 09:17

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: | ID:

% Moisture: 48.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 97627 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	33	U	33	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	60		10-110

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 Lab Sample ID: 240-27894-1

Matrix: Solid Lab File ID: P1100004.D

Analysis Method: 8082A Date Collected: 08/12/2013 10:50

Extraction Method: 3540C Date Extracted: 08/26/2013 15:43

Sample wt/vol: 30.40(g) Date Analyzed: 08/30/2013 03:30

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 14.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 99637 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	213	X	29-151
2051-24-3	Decachlorobiphenyl	213	X	14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 Lab Sample ID: 240-27894-1

Matrix: Solid Lab File ID: P1100004.D

Analysis Method: 8082A Date Collected: 08/12/2013 10:50

Extraction Method: 3540C Date Extracted: 08/26/2013 15:43

Sample wt/vol: 30.40(g) Date Analyzed: 08/30/2013 03:30

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 14.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 99637 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	38	U	38	24
11104-28-2	Aroclor-1221	38	U	38	19
11141-16-5	Aroclor-1232	38	U	38	16
53469-21-9	Aroclor-1242	38	U	38	15
12672-29-6	Aroclor-1248	38	U	38	20
11097-69-1	Aroclor-1254	38	U	38	20
11096-82-5	Aroclor-1260	39		38	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	119		29-151
2051-24-3	Decachlorobiphenyl	188	X	14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 Lab Sample ID: 240-27894-2

Matrix: Solid Lab File ID: P1100018.D

Analysis Method: 8082A Date Collected: 08/12/2013 11:05

Extraction Method: 3540C Date Extracted: 08/26/2013 15:43

Sample wt/vol: 30.23(g) Date Analyzed: 08/28/2013 05:47

Con. Extract Vol.: 10.0(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 22.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 99249 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	109		29-151
2051-24-3	Decachlorobiphenyl	0	X	14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-11 | Lab Sample ID: 240-27894-2

Matrix: Solid | Lab File ID: P1100018.D

Analysis Method: 8082A | Date Collected: 08/12/2013 11:05

Extraction Method: 3540C | Date Extracted: 08/26/2013 15:43

Sample wt/vol: 30.23(g) | Date Analyzed: 08/28/2013 05:47

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 22.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99249 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	210	U	210	140
11104-28-2	Aroclor-1221	210	U	210	100
11141-16-5	Aroclor-1232	210	U	210	90
53469-21-9	Aroclor-1242	210	U	210	84
12672-29-6	Aroclor-1248	210	U	210	110
11097-69-1	Aroclor-1254	210	U	210	110
11096-82-5	Aroclor-1260	210	U	210	110

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	63		29-151
2051-24-3	Decachlorobiphenyl	0	X	14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 Lab Sample ID: 240-27894-4

Matrix: Solid Lab File ID: P1100019.D

Analysis Method: 8082A Date Collected: 08/12/2013 14:30

Extraction Method: 3540C Date Extracted: 08/26/2013 15:43

Sample wt/vol: 30.14(g) Date Analyzed: 08/28/2013 06:01

Con. Extract Vol.: 10.0(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 10.5 GPC Cleanup:(Y/N) N

Analysis Batch No.: 99249 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	174	X	29-151
2051-24-3	Decachlorobiphenyl	77		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 Lab Sample ID: 240-27894-4

Matrix: Solid Lab File ID: P1100019.D

Analysis Method: 8082A Date Collected: 08/12/2013 14:30

Extraction Method: 3540C Date Extracted: 08/26/2013 15:43

Sample wt/vol: 30.14(g) Date Analyzed: 08/28/2013 06:01

Con. Extract Vol.: 10.0(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 10.5 GPC Cleanup:(Y/N) N

Analysis Batch No.: 99249 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	180	U	180	120
11104-28-2	Aroclor-1221	180	U	180	89
11141-16-5	Aroclor-1232	180	U	180	78
53469-21-9	Aroclor-1242	180	U	180	72
12672-29-6	Aroclor-1248	370		180	95
11097-69-1	Aroclor-1254	180	U	180	95
11096-82-5	Aroclor-1260	150	J	180	95

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	98		29-151
2051-24-3	Decachlorobiphenyl	146		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A Lab Sample ID: 240-27894-5

Matrix: Solid Lab File ID: P1100020.D

Analysis Method: 8082A Date Collected: 08/12/2013 14:20

Extraction Method: 3540C Date Extracted: 08/26/2013 15:43

Sample wt/vol: 30.43(g) Date Analyzed: 08/28/2013 06:15

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 48.4 GPC Cleanup:(Y/N) N

Analysis Batch No.: 99249 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	49		29-151
2051-24-3	Decachlorobiphenyl	67		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03A | Lab Sample ID: 240-27894-5

Matrix: Solid | Lab File ID: P1100020.D

Analysis Method: 8082A | Date Collected: 08/12/2013 14:20

Extraction Method: 3540C | Date Extracted: 08/26/2013 15:43

Sample wt/vol: 30.43(g) | Date Analyzed: 08/28/2013 06:15

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 48.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99249 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	63	U	63	40
11104-28-2	Aroclor-1221	63	U	63	31
11141-16-5	Aroclor-1232	63	U	63	27
53469-21-9	Aroclor-1242	63	U	63	25
12672-29-6	Aroclor-1248	63	U	63	32
11097-69-1	Aroclor-1254	63	U	63	32
11096-82-5	Aroclor-1260	63	U	63	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	58		29-151
2051-24-3	Decachlorobiphenyl	74		14-163

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-TP-A76-10 Lab Sample ID: 240-27894-1

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG ID.:

Matrix: Solid Date Sampled: 08/12/2013 10:50

Reporting Basis: DRY Date Received: 08/13/2013 09:20

% Solids: 85.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	1.3	2.3	0.44	mg/Kg	J		1	6010C
7440-38-2	Arsenic	5.8	1.7	0.34	mg/Kg			1	6010C
7440-39-3	Barium	42	23	0.081	mg/Kg			1	6010C
7440-41-7	Beryllium	0.77	0.57	0.049	mg/Kg			1	6010C
7440-43-9	Cadmium	20	0.57	0.041	mg/Kg			1	6010C
7440-47-3	Chromium	270	1.1	0.23	mg/Kg			1	6010C
7440-48-4	Cobalt	7.5	1.1	0.18	mg/Kg			1	6010C
7440-50-8	Copper	46	2.8	0.84	mg/Kg			1	6010C
7439-92-1	Lead	45	1.1	0.22	mg/Kg			1	6010C
7439-98-7	Molybdenum	3.1	4.6	0.31	mg/Kg	J		1	6010C
7440-02-0	Nickel	18	4.6	0.31	mg/Kg			1	6010C
7782-49-2	Selenium	2.3	2.3	0.51	mg/Kg	U		1	6010C
7440-22-4	Silver	0.62	1.1	0.11	mg/Kg	J		1	6010C
7440-28-0	Thallium	2.3	2.3	0.63	mg/Kg	U		1	6010C
7440-62-2	Vanadium	38	1.1	0.14	mg/Kg			1	6010C
7440-66-6	Zinc	280	5.7	1.1	mg/Kg			1	6010C
7439-97-6	Mercury	0.079	0.13	0.020	mg/Kg	J		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-TP-A76-11 Lab Sample ID: 240-27894-2

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG ID.:

Matrix: Solid Date Sampled: 08/12/2013 11:05

Reporting Basis: DRY Date Received: 08/13/2013 09:20

% Solids: 77.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.3	0.46	mg/Kg	J		1	6010C
7440-38-2	Arsenic	7.2	1.8	0.35	mg/Kg			1	6010C
7440-39-3	Barium	45	23	0.083	mg/Kg			1	6010C
7440-41-7	Beryllium	1.3	0.58	0.050	mg/Kg			1	6010C
7440-43-9	Cadmium	3.6	0.58	0.042	mg/Kg			1	6010C
7440-47-3	Chromium	100	1.2	0.23	mg/Kg			1	6010C
7440-48-4	Cobalt	6.8	1.2	0.19	mg/Kg			1	6010C
7440-50-8	Copper	35	2.9	0.87	mg/Kg			1	6010C
7439-92-1	Lead	86	1.2	0.22	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.82	4.7	0.32	mg/Kg	J		1	6010C
7440-02-0	Nickel	20	4.7	0.32	mg/Kg			1	6010C
7782-49-2	Selenium	2.3	2.3	0.53	mg/Kg	U		1	6010C
7440-22-4	Silver	1.5	1.2	0.12	mg/Kg			1	6010C
7440-28-0	Thallium	2.3	2.3	0.64	mg/Kg	U		1	6010C
7440-62-2	Vanadium	82	1.2	0.14	mg/Kg			1	6010C
7440-66-6	Zinc	180	5.8	1.2	mg/Kg			1	6010C
7439-97-6	Mercury	0.056	0.12	0.018	mg/Kg	J		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-TP-A82-03 Lab Sample ID: 240-27894-4

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG ID.:

Matrix: Solid Date Sampled: 08/12/2013 14:30

Reporting Basis: DRY Date Received: 08/13/2013 09:20

% Solids: 89.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.44	2.1	0.40	mg/Kg	J		1	6010C
7440-38-2	Arsenic	5.1	1.6	0.31	mg/Kg			1	6010C
7440-39-3	Barium	73	21	0.073	mg/Kg			1	6010C
7440-41-7	Beryllium	1.2	0.52	0.044	mg/Kg			1	6010C
7440-43-9	Cadmium	1.6	0.52	0.037	mg/Kg			1	6010C
7440-47-3	Chromium	42	1.0	0.21	mg/Kg			1	6010C
7440-48-4	Cobalt	9.8	1.0	0.17	mg/Kg			1	6010C
7440-50-8	Copper	37	2.6	0.77	mg/Kg			1	6010C
7439-92-1	Lead	55	1.0	0.20	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.68	4.1	0.28	mg/Kg	J		1	6010C
7440-02-0	Nickel	39	4.1	0.28	mg/Kg			1	6010C
7782-49-2	Selenium	0.56	2.1	0.47	mg/Kg	J		1	6010C
7440-22-4	Silver	0.39	1.0	0.10	mg/Kg	J		1	6010C
7440-28-0	Thallium	2.1	2.1	0.57	mg/Kg	U		1	6010C
7440-62-2	Vanadium	36	1.0	0.12	mg/Kg			1	6010C
7440-66-6	Zinc	120	5.2	1.0	mg/Kg			1	6010C
7439-97-6	Mercury	0.17	0.13	0.020	mg/Kg			1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-TP-A82-03A
Lab Sample ID: 240-27894-5
Lab Name: TestAmerica Canton
Job No.: 240-27894-1
SDG ID.:
Matrix: Solid
Date Sampled: 08/12/2013 14:20
Reporting Basis: DRY
Date Received: 08/13/2013 09:20
% Solids: 51.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	3.5	3.5	0.67	mg/Kg	U		1	6010C
7440-38-2	Arsenic	7.5	2.6	0.52	mg/Kg			1	6010C
7440-39-3	Barium	31	35	0.12	mg/Kg	J		1	6010C
7440-41-7	Beryllium	1.3	0.86	0.074	mg/Kg			1	6010C
7440-43-9	Cadmium	2.0	0.86	0.062	mg/Kg			1	6010C
7440-47-3	Chromium	49	1.7	0.35	mg/Kg			1	6010C
7440-48-4	Cobalt	18	1.7	0.28	mg/Kg			1	6010C
7440-50-8	Copper	18	4.3	1.3	mg/Kg			1	6010C
7439-92-1	Lead	20	1.7	0.33	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.83	6.9	0.47	mg/Kg	J		1	6010C
7440-02-0	Nickel	28	6.9	0.47	mg/Kg			1	6010C
7782-49-2	Selenium	3.5	3.5	0.78	mg/Kg	U		1	6010C
7440-22-4	Silver	1.7	1.7	0.17	mg/Kg	U		1	6010C
7440-28-0	Thallium	3.5	3.5	0.95	mg/Kg	U		1	6010C
7440-62-2	Vanadium	35	1.7	0.21	mg/Kg			1	6010C
7440-66-6	Zinc	110	8.6	1.7	mg/Kg			1	6010C
7439-97-6	Mercury	0.066	0.22	0.034	mg/Kg	J		1	7471B

Appendix C

Support Documentation

HOLDTIME

SDG 240-27894-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	DR-TP-A76-10	240-27894-1	NM	08/12/2013	08/16/2013	08/19/2013	4	3	7
HG	MG/KG	DR-TP-A76-11	240-27894-2	NM	08/12/2013	08/16/2013	08/19/2013	4	3	7
HG	MG/KG	DR-TP-A82-03	240-27894-4	NM	08/12/2013	08/16/2013	08/19/2013	4	3	7
HG	MG/KG	DR-TP-A82-03	240-27894-5	NM	08/12/2013	08/16/2013	08/19/2013	4	3	7
M	MG/KG	DR-TP-A82-03	240-27894-5	NM	08/12/2013	08/16/2013	08/23/2013	4	7	11
M	MG/KG	DR-TP-A76-10	240-27894-1	NM	08/12/2013	08/16/2013	08/23/2013	4	7	11
M	MG/KG	DR-TP-A82-03	240-27894-4	NM	08/12/2013	08/16/2013	08/23/2013	4	7	11
M	MG/KG	DR-TP-A76-11	240-27894-2	NM	08/12/2013	08/16/2013	08/23/2013	4	7	11
OS	UG/KG	DR-TP-A82-03	240-27894-5	NM	08/12/2013	08/14/2013	08/27/2013	2	13	15
OS	UG/KG	DR-TP-A82-03	240-27894-4	NM	08/12/2013	08/14/2013	08/27/2013	2	13	15
OS	UG/KG	DR-TP-A76-11	240-27894-2	NM	08/12/2013	08/14/2013	08/27/2013	2	13	15
OS	UG/KG	DR-TP-A76-10	240-27894-1	NM	08/12/2013	08/14/2013	08/27/2013	2	13	15
OV	UG/KG	DR-TP-A76-10	240-27894-1	NM	08/12/2013	08/14/2013	08/14/2013	2	0	2
OV	UG/KG	DR-TP-A82-03	240-27894-4	NM	08/12/2013	08/13/2013	08/16/2013	1	3	4
OV	UG/KG	DR-TP-A82-03	240-27894-5	NM	08/12/2013	08/13/2013	08/16/2013	1	3	4

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/KG	DR-TP-A76-11	240-27894-2	NM	08/12/2013	08/14/2013	08/14/2013	2	0	2
OV	UG/L	TB-081213	240-27894-3	NM	08/12/2013	08/21/2013	08/21/2013	9	0	9
PCB	UG/KG	DR-TP-A82-03	240-27894-4	NM	08/12/2013	08/26/2013	08/28/2013	14	2	16
PCB	UG/KG	DR-TP-A76-10	240-27894-1	NM	08/12/2013	08/26/2013	08/30/2013	14	4	18
PCB	UG/KG	DR-TP-A82-03	240-27894-5	NM	08/12/2013	08/26/2013	08/28/2013	14	2	16
PCB	UG/KG	DR-TP-A76-11	240-27894-2	NM	08/12/2013	08/26/2013	08/28/2013	14	2	16
	MG/KG	DR-TP-A76-10	240-27894-1	NM	08/12/2013	08/14/2013	08/17/2013	2	3	5
	MG/KG	DR-TP-A82-03	240-27894-5	NM	08/12/2013	08/14/2013	08/16/2013	2	2	4
	MG/KG	DR-TP-A82-03	240-27894-4	NM	08/12/2013	08/14/2013	08/17/2013	2	3	5
	MG/KG	DR-TP-A76-11	240-27894-2	NM	08/12/2013	08/14/2013	08/17/2013	2	3	5
	UG/KG	DR-TP-A82-03	240-27894-5	NM	08/12/2013	08/22/2013	08/22/2013	10	0	10
	UG/KG	DR-TP-A82-03	240-27894-4	NM	08/12/2013	08/22/2013	08/22/2013	10	0	10
	UG/KG	DR-TP-A76-11	240-27894-2	NM	08/12/2013	08/22/2013	08/22/2013	10	0	10
	UG/KG	DR-TP-A76-10	240-27894-1	NM	08/12/2013	08/22/2013	08/22/2013	10	0	10

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-27894-1

Job Description: Dump Road Test Pits

For:
Tetra Tech, Inc
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Approved for release
John McFadden
Project Manager I
8/30/2013 6:18 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
08/30/2013

cc: Samantha Brenner
Ms. Kelly Carper
Vanessa Good
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Test Pits

Report Number: 240-27894-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/13/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.8 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-TP-A76-10 (240-27894-1), DR-TP-A76-11 (240-27894-2), DR-TP-A82-03 (240-27894-4) and DR-TP-A82-03 (240-27894-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 08/13/2013 and 08/14/2013 and analyzed on 08/14/2013 and 08/16/2013.

1,2,4-Trichlorobenzene, Carbon disulfide, Naphthalene and Toluene were detected in method blank MB 240-97336/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Methylene Chloride and Naphthalene were detected in method blank MB 240-97446/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample for prep. batch 97336 recovered outside control limits for the following analyte(s): Bromomethane. Bromomethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Insufficient sample volume was available to meet method-mandated requirements for matrix spike/matrix spike duplicate (MS/MSD) analyses for prep. batch 97336 on these samples DR-TP-A76-10 (240-27894-1), DR-TP-A76-11 (240-27894-2).

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample TB-081213 (240-27894-3) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/21/2013.

No MS/MSD in batch 98342 due to instrument failure.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-TP-A76-10 (240-27894-1), DR-TP-A76-11 (240-27894-2), DR-TP-A82-03 (240-27894-4) and DR-TP-A82-03 (240-27894-5) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/14/2013 and analyzed on 08/27/2013.

Benzaldehyde failed the recovery criteria low for LCS 240-97388/14-A. Refer to the QC report for details.

Samples DR-TP-A76-10 (240-27894-1)[10X], DR-TP-A76-11 (240-27894-2)[50X] and DR-TP-A82-03 (240-27894-4)[6.67X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 97388 recovered outside control limits for the following analytes: Atrazine, Benzaldehyde. Since these are non-controlling analytes, no corrective action was taken.

The following sample was diluted due to the nature of the sample matrix: DR-TP-A76-10 (240-27894-1). Elevated reporting limits (RLs) are provided.

The laboratory control sample (LCS) for prep batch 97388, associated with samples DR-TP-A76-10 (240-27894-1), DR-TP-A76-11 (240-27894-2), DR-TP-A82-03 (240-27894-4), DR-TP-A82-03 (240-27894-5), had a recovery for benzaldehyde below acceptance criteria. This compound is not a control analyte; therefore, no corrective action was required. The data have been flagged accordingly.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples DR-TP-A76-10 (240-27894-1), DR-TP-A76-11 (240-27894-2), DR-TP-A82-03 (240-27894-4) and DR-TP-A82-03 (240-27894-5) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 08/22/2013.

No difficulties were encountered during the GRO analysis. All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)

Samples DR-TP-A76-10 (240-27894-1), DR-TP-A76-11 (240-27894-2), DR-TP-A82-03 (240-27894-4) and DR-TP-A82-03 (240-27894-5) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 08/14/2013 and analyzed on 08/16/2013 and 08/17/2013.

Samples DR-TP-A76-10 (240-27894-1)[10X], DR-TP-A76-11 (240-27894-2)[10X] and DR-TP-A82-03 (240-27894-4)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The continuing calibration verification (CCV) for diesel associated with batch 97627 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. DR-TP-A82-03 (240-27894-5)

No other difficulties were encountered during the DRO analysis. All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples DR-TP-A76-10 (240-27894-1), DR-TP-A76-11 (240-27894-2), DR-TP-A82-03 (240-27894-4) and DR-TP-A82-03 (240-27894-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/26/2013 and analyzed on 08/28/2013 and 08/30/2013.

Decachlorobiphenyl failed the surrogate recovery criteria high for DR-TP-A76-10 (240-27894-1). Decachlorobiphenyl failed the surrogate recovery criteria low for DR-TP-A76-11 (240-27894-2).

Samples DR-TP-A76-11 (240-27894-2)[5X] and DR-TP-A82-03 (240-27894-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DR-TP-A76-11 (240-27894-2).

Two surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample(s) contained an allowable number of surrogate compounds outside limits: DR-TP-A76-10 (240-27894-1). These results have been reported and qualified.

The following sample(s) appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: DR-TP-A82-03 (240-27894-4). Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur:

DR-TP-A76-10 (240-27894-1). Lot # S65830

No other difficulties were encountered during the PCBs analysis. All other quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)
Samples DR-TP-A76-10 (240-27894-1), DR-TP-A76-11 (240-27894-2), DR-TP-A82-03 (240-27894-4) and DR-TP-A82-03 (240-27894-5) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 08/16/2013 and analyzed on 08/23/2013.

Antimony, Molybdenum and Silver exceeded the RPD limit for the duplicate of sample DR-TP-A76-10DU (240-27894-1).

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

MERCURY
Samples DR-TP-A76-10 (240-27894-1), DR-TP-A76-11 (240-27894-2), DR-TP-A82-03 (240-27894-4) and DR-TP-A82-03 (240-27894-5) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared on 08/16/2013 and analyzed on 08/19/2013.

No other difficulties were encountered during the mercury analysis. All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS
Samples DR-TP-A76-10 (240-27894-1), DR-TP-A76-11 (240-27894-2), DR-TP-A82-03 (240-27894-4) and DR-TP-A82-03 (240-27894-5) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 08/13/2013.

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27894-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27894-1	DR-TP-A76-10	Solid	08/12/2013 1050	08/13/2013 0920
240-27894-2	DR-TP-A76-11	Solid	08/12/2013 1105	08/13/2013 0920
240-27894-3	TB-081213	Water	08/12/2013 0000	08/13/2013 0920
240-27894-4	DR-TP-A82-03	Solid	08/12/2013 1430	08/13/2013 0920
240-27894-5	DR-TP-A82-03	Solid	08/12/2013 1420	08/13/2013 0920

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27894-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Closed System Purge and Trap	TAL CAN		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL CAN	SW846 8270D	
Soxhlet Extraction	TAL CAN		SW846 3540C
Gasoline Range Organics - (GC)	TAL CAN	SW846 8015B	
Purge and Trap	TAL CAN		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL CAN	SW846 8015C	
Soxhlet Extraction	TAL CAN		SW846 3540C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL CAN	SW846 8082A	
Soxhlet Extraction	TAL CAN		SW846 3540C
Metals (ICP)	TAL CAN	SW846 6010C	
Preparation, Metals	TAL CAN		SW846 3050B
Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	TAL CAN	SW846 7471B	
Preparation, Mercury	TAL CAN		SW846 7471B
Percent Moisture	TAL CAN	EPA Moisture	
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
Tetra Tech	Tony Apanavage tony.apanavage@tetratech.com		015212
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
20251 Century Blvd., Ste. 200	301-233-8230		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Germantown / MD / 20874	W. Snell 706-201-3646		
Project Name and Location (State)	**Carrier/Waybill Number**		
Dump Road Test Pits			
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Tetra Core	VOCs	SVOCs, PCBs, DRO GRO	PP Metals	Special Instructions/ Conditions of Receipt
DR-TP-A76-10	8/12/13	1050			X		3						1	X	X	X	SVOCs incl. 1-4 Dioxane
DR-TP-A76-11	"	1105			X		3						1	X	X	X	
TB-081213	—	—		X						2				X			
DR-TP-A82-03	8/12/13	1430			X		3						1	X	X	X	
DR-TP-A82-03	8/12/13	1420			X		3						1	X	X	X	

Analysis (Attach list if more space is needed)

240-27894 Chain of Custody

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Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	8-12-13	1530	1. Received By	8/12/13	1540
2. Relinquished By	8/12/13	1630	2. Received By	8/13/13	930
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

TestAmerica Canton Sample Receipt Form/Narrative Login # : 27894
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 8-13-13 Opened on 8-13-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. 2.8 °C	Corrected Cooler Temp. 2.8 °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
~~IR GUN# 8~~	~~(CF -0 °C) Observed Cooler Temp. ____ °C~~	~~Corrected Cooler Temp. ____ °C~~	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

Rec'd 2 samples A82-08 @ 1420 COC = A82-03 @ 1420

A82-03 @ 1430 COC = A82-03 @ 1430

will log per sample ~~table~~ label

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-27894-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD exceeds the control limits
	F	MS/MSD Recovery and/or RPD exceeds the control limits
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC VOA		
	U	Indicates the analyte was analyzed for but not detected.
GC Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-27894-1

Lab Section	Qualifier	Description
Metals		
	U	Indicates the analyte was analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	F	MS/MSD Recovery and/or RPD exceeds the control limits
	W	PS: Post-digestion spike was outside control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	V	Serial Dilution exceeds the control limits

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-TP-A82-03	240-27894-4	93	84	116	75
DR-TP-A82-03	240-27894-5	93	78	116	75
	MB 240-97446/1-A	97	84	108	96
	LCS 240-97710/6	101	88	114	104
	240-27900-C-3-C MS	101	86	119	100
	240-27900-C-3-D MSD	95	81	117	96

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	37-132
DCA = 1,2-Dichloroethane-d4 (Surr)	58-123
TOL = Toluene-d8 (Surr)	67-125
BFB = 4-Bromofluorobenzene (Surr)	52-136

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Medium

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-TP-A76-10	240-27894-1	92	94	84	77
DR-TP-A76-11	240-27894-2	89	94	82	79
	MB 240-97336/1-A	105	112	99	91
	LCS 240-97336/2-A	114	121	105	96

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	30-122
DCA = 1,2-Dichloroethane-d4 (Surr)	39-128
TOL = Toluene-d8 (Surr)	33-134
BFB = 4-Bromofluorobenzene (Surr)	26-141

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-081213	240-27894-3	94	86	84	85
	MB 240-98342/6	97	81	87	85
	LCS 240-98342/4	92	80	94	101

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A3UX11 Start Date: 08/16/2013 14:53

Analysis Batch Number: 97870 End Date: 08/16/2013 20:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-97870/1		08/16/2013 14:53	1	BFB182.D	DB-624 0.18(mm)
STD8260 240-97870/2 IC		08/16/2013 15:26	1	UXJ3342.D	DB-624 0.18(mm)
STD8260 240-97870/3 IC		08/16/2013 15:50	1	UXJ3343.D	DB-624 0.18(mm)
STD8260 240-97870/4 ICIS		08/16/2013 16:14	1	UXJ3344.D	DB-624 0.18(mm)
STD8260 240-97870/5 IC		08/16/2013 16:38	1	UXJ3345.D	DB-624 0.18(mm)
STD8260 240-97870/6 IC		08/16/2013 17:02	1	UXJ3346.D	DB-624 0.18(mm)
STD8260 240-97870/7 IC		08/16/2013 17:25	1	UXJ3347.D	DB-624 0.18(mm)
STD6 240-97870/8 IC		08/16/2013 17:49	1	UXJ3348.D	DB-624 0.18(mm)
STD5 240-97870/9 IC		08/16/2013 18:13	1	UXJ3349.D	DB-624 0.18(mm)
STD4 240-97870/10 IC		08/16/2013 18:36	1	UXJ3350.D	DB-624 0.18(mm)
STD3 240-97870/11 IC		08/16/2013 19:00	1	UXJ3351.D	DB-624 0.18(mm)
STD2 240-97870/12 IC		08/16/2013 19:23	1	UXJ3352.D	DB-624 0.18(mm)
STD1 240-97870/13 IC		08/16/2013 19:47	1	UXJ3353.D	DB-624 0.18(mm)
ICV 240-97870/14		08/16/2013 20:11	1	UXJ3354.D	DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: BFB182.D BFB Injection Date: 08/16/2013

Instrument ID: A3UX11 BFB Injection Time: 14:53

Analysis Batch No.: 97870

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	27.9	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.0	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	77.0	
175	5.0 - 9.0 % of mass 174	5.6	(7.3)1
176	95.0 - 101.0 % of mass 174	75.2	(97.8)1
177	5.0 - 9.0 % of mass 176	5.4	(7.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97870/2	UXJ3342.D	08/16/2013	15:26
	STD8260 240-97870/3	UXJ3343.D	08/16/2013	15:50
	STD8260 240-97870/4	UXJ3344.D	08/16/2013	16:14
	STD8260 240-97870/5	UXJ3345.D	08/16/2013	16:38
	STD8260 240-97870/6	UXJ3346.D	08/16/2013	17:02
	STD8260 240-97870/7	UXJ3347.D	08/16/2013	17:25
	STD6 240-97870/8	UXJ3348.D	08/16/2013	17:49
	STD5 240-97870/9	UXJ3349.D	08/16/2013	18:13
	STD4 240-97870/10	UXJ3350.D	08/16/2013	18:36
	STD3 240-97870/11	UXJ3351.D	08/16/2013	19:00
	STD2 240-97870/12	UXJ3352.D	08/16/2013	19:23
	STD1 240-97870/13	UXJ3353.D	08/16/2013	19:47
	ICV 240-97870/14	UXJ3354.D	08/16/2013	20:11

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97870/7	UXJ3347.D
Level 2	STD8260 240-97870/6	UXJ3346.D
Level 3	STD8260 240-97870/5	UXJ3345.D
Level 4	STD8260 240-97870/4	UXJ3344.D
Level 5	STD8260 240-97870/3	UXJ3343.D
Level 6	STD8260 240-97870/2	UXJ3342.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2050 0.2069	0.2165	0.1905	0.1835	0.1962	Ave		0.1997				6.0		15.0			
Chloromethane	0.3836 0.3627	0.3744	0.3702	0.3585	0.3773	Ave		0.3711			0.1000	2.5		15.0			
Vinyl chloride	0.2970 0.2796	0.2816	0.2875	0.2788	0.2885	Ave		0.2855				2.4		15.0			
Bromomethane	0.0902 0.0928	0.0896	0.0882	0.0875	0.0852	Ave		0.0889				2.9		15.0			
Chloroethane	0.1253 0.1277	0.1308	0.1309	0.1239	0.1308	Ave		0.1282				2.4		15.0			
Trichlorofluoromethane	0.2678 0.2756	0.3067	0.2866	0.2745	0.2715	Ave		0.2804				5.1		15.0			
Acrolein	0.0410 0.0438	0.0438	0.0475	0.0482	0.0465	Ave		0.0451				6.0		15.0			
1,1-Dichloroethene	0.2532 0.2375	0.2478	0.2468	0.2446	0.2555	Ave		0.2476				2.6		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.0966 0.1399	0.1660	0.1326	0.1231	0.1275	Lin1	-0.014	0.1353							0.9940		0.9900
Acetone	0.3092 0.1071	0.2325	0.1721	0.1479	0.1289	Qua	0.3734	0.1375	0						1.0000		0.9900
Iodomethane	0.4129 0.3606	0.3709	0.3932	0.3933	0.4004	Ave		0.3885				5.0		15.0			
Carbon disulfide	0.7531 0.6075	0.7219	0.6836	0.6918	0.6835	Ave		0.6903				7.1		15.0			
Acetonitrile	0.0421 0.0334	0.0425	0.0426	0.0378	0.0368	Ave		0.0392				9.7		15.0			
Methyl acetate	0.3974 0.3192	0.3727	0.3681	0.3403	0.3439	Ave		0.3569				7.8		15.0			
Methylene Chloride	0.9491 0.2806	0.5689	0.4243	0.3380	0.3142	Lin1	0.6684	0.2703							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0210 0.0156	0.0209	0.0211	0.0210	0.0207	Ave		0.0200				11.0		15.0			
Acrylonitrile	0.1870 0.1457	0.1597	0.1621	0.1513	0.1512	Ave		0.1595				9.2		15.0			
trans-1,2-Dichloroethene	0.3533 0.3481	0.3265	0.3317	0.3389	0.3315	Ave		0.3383				3.1		15.0			
Methyl tert-butyl ether	0.9157 0.7559	0.7542	0.7730	0.7847	0.7711	Ave		0.7924				7.8		15.0			
Hexane	0.0451 0.0680	0.0773	0.0574	0.0681	0.0579	Lin1	-0.010	0.0654							0.9910		0.9900
1,1-Dichloroethane	0.8025 0.7508	0.7293	0.7254	0.7239	0.7105	Ave		0.7404			0.1000	4.5		15.0			
Vinyl acetate	0.0440 0.0495	0.0415	0.0482	0.0494	0.0501	Ave		0.0471				7.5		15.0			
2-Butanone	0.2005 0.1535	0.2003	0.1813	0.1847	0.1769	Ave		0.1829				9.5		15.0			
cis-1,2-Dichloroethene	0.3848 0.3690	0.3500	0.3592	0.3622	0.3649	Ave		0.3650				3.2		15.0			
2,2-Dichloropropane	0.3421 0.3268	0.3667	0.3653	0.3538	0.3552	Ave		0.3517				4.3		15.0			
Bromochloromethane	0.2257 0.2057	0.2118	0.1996	0.2003	0.2019	Ave		0.2075				4.8		15.0			
Tetrahydrofuran	0.1645 0.0965	0.1385	0.1158	0.1182	0.1091	Lin1	0.0767	0.0998							0.9950		0.9900
Chloroform	0.6517 0.6334	0.5981	0.6259	0.6108	0.6111	Ave		0.6218				3.1		15.0			
1,1,1-Trichloroethane	0.5102 0.4815	0.4629	0.4993	0.5043	0.4946	Ave		0.4921				3.5		15.0			
Cyclohexane	0.4992 0.6461	0.6130	0.5552	0.5930	0.5967	Ave		0.5839				8.7		15.0			
1,1-Dichloropropene	0.4438 0.4620	0.4196	0.4258	0.4347	0.4394	Ave		0.4375				3.4		15.0			
Carbon tetrachloride	0.4398 0.4455	0.4494	0.4270	0.4294	0.4398	Ave		0.4385				2.0		15.0			
Benzene	1.4334 1.4434	1.3464	1.3831	1.3517	1.3641	Ave		1.3870				3.0		15.0			
1,2-Dichloroethane	0.6202 0.5720	0.5573	0.5676	0.5564	0.5589	Ave		0.5721				4.3		15.0			
Trichloroethene	0.3938 0.4061	0.3696	0.3948	0.3853	0.4011	Ave		0.3918				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.2867 0.4356	0.3998	0.3263	0.3585	0.3855	Ave		0.3654				15.0		15.0			
1,2-Dichloropropane	0.4686 0.4171	0.4119	0.4140	0.4117	0.4108	Ave		0.4224				5.4		15.0			
Dibromomethane	0.2258 0.1875	0.1961	0.2070	0.1936	0.1955	Ave		0.2009				6.8		15.0			
1,4-Dioxane	0.0021	0.0025	0.0021	0.0024	0.0023	Ave		0.0023				8.1		15.0			
Bromodichloromethane	0.4259 0.4382	0.4007	0.4398	0.4113	0.4323	Ave		0.4247				3.7		15.0			
2-Chloroethyl vinyl ether	0.1674 0.1999	0.1676	0.1836	0.1888	0.1996	Ave		0.1845				7.9		15.0			
cis-1,3-Dichloropropene	0.4258 0.5097	0.4513	0.4726	0.4900	0.4938	Ave		0.4739				6.5		15.0			
4-Methyl-2-pentanone	0.3283 0.3278	0.3102	0.3353	0.3435	0.3475	Ave		0.3321				4.0		15.0			
Toluene	1.9738 2.1996	1.9199	2.0481	1.9932	2.1061	Ave		2.0401				4.9		15.0			
trans-1,3-Dichloropropene	0.5561 0.6042	0.5109	0.5712	0.5535	0.6213	Ave		0.5695				6.9		15.0			
Ethyl methacrylate	0.3733 0.4741	0.3854	0.4094	0.4308	0.5051	Ave		0.4297				12.0		15.0			
1,1,2-Trichloroethane	0.3726 0.3696	0.3942	0.4092	0.3712	0.3880	Ave		0.3841				4.1		15.0			
1,3-Dichloropropane	0.6458 0.6562	0.6480	0.6624	0.6374	0.6625	Ave		0.6520				1.5		15.0			
Tetrachloroethene	0.3366 0.3931	0.3605	0.3772	0.3618	0.3806	Ave		0.3683				5.4		15.0			
2-Hexanone	0.3457 0.2741	0.2638	0.2961	0.2980	0.3086	Ave		0.2977				9.7		15.0			
Dibromochloromethane	0.3797 0.4126	0.4179	0.4031	0.3981	0.4254	Ave		0.4062				4.0		15.0			
1,2-Dibromoethane	0.3707 0.3552	0.3627	0.3824	0.3517	0.3646	Ave		0.3645				3.0		15.0			
Chlorobenzene	1.3056 1.2616	1.2440	1.2606	1.1898	1.2600	Ave		1.2536			0.3000	3.0		15.0			
1,1,1,2-Tetrachloroethane	0.5187 0.4648	0.4407	0.4570	0.4455	0.4642	Ave		0.4652				6.0		15.0			
Ethylbenzene	0.5355 0.6600	0.5148	0.5782	0.6019	0.6572	Ave		0.5913				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6035 0.8215	0.6401	0.7252	0.7630	0.8230	Ave		0.7294				13.0		15.0			
o-Xylene	0.4762 0.6977	0.5965	0.6715	0.6753	0.6992	Ave		0.6361				14.0		15.0			
Styrene	0.8804 1.1787	0.9115	1.0905	1.0960	1.1784	Ave		1.0559				12.0		15.0			
Bromoform	0.1460 0.1361	0.1380	0.1257	0.1414	0.1505	Ave		0.1396			0.1000	6.2		15.0			
Isopropylbenzene	1.2466 1.5529	1.2639	1.4086	1.4368	1.5595	Ave		1.4114				9.6		15.0			
1,1,2,2-Tetrachloroethane	0.9587 0.7953	1.0655	0.9025	0.8644	0.8466	Ave		0.9055			0.3000	11.0		15.0			
Bromobenzene	1.1396 1.1159	1.1021	1.1178	1.1227	1.1382	Ave		1.1227				1.3		15.0			
1,2,3-Trichloropropane	0.3575 0.2637	0.3351	0.3244	0.2971	0.3012	Ave		0.3132				11.0		15.0			
trans-1,4-Dichloro-2-butene	0.2307 0.3110	0.3162	0.3231	0.3423	0.3074	Ave		0.3051				13.0		15.0			
n-Propylbenzene	0.9191 1.1733	1.0676	1.1471	1.0923	1.1433	Ave		1.0904				8.5		15.0			
2-Chlorotoluene	0.9723 1.0388	1.0833	0.9766	1.0638	1.0250	Ave		1.0267				4.4		15.0			
1,3,5-Trimethylbenzene	2.2255 3.0948	2.4704	2.7655	2.8790	3.0227	Ave		2.7430				12.0		15.0			
4-Chlorotoluene	0.9022 1.0802	1.0922	1.0204	1.0932	1.1027	Ave		1.0485				7.4		15.0			
tert-Butylbenzene	2.3013 2.5187	2.0190	2.5477	2.3018	2.3935	Ave		2.3470				8.2		15.0			
1,2,4-Trimethylbenzene	2.3778 3.0042	2.4562	2.7519	2.8622	2.8954	Ave		2.7246				9.3		15.0			
sec-Butylbenzene	2.3846 3.2334	2.6094	2.8211	2.9668	3.0465	Ave		2.8437				11.0		15.0			
1,3-Dichlorobenzene	1.8146 1.7530	1.6766	1.7132	1.6859	1.7001	Ave		1.7239				3.0		15.0			
p-Isopropyltoluene	1.7896 2.9109	2.1277	2.3539	2.4650	2.6051	Lin1	-1.400	2.8129							0.9960		0.9900
1,4-Dichlorobenzene	1.7782 1.7983	1.6803	1.7506	1.7134	1.7528	Ave		1.7456				2.5		15.0			
n-Butylbenzene	1.6781 2.1478	1.6030	1.5894	1.7118	1.8847	Ave		1.7691				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.6012 1.7185	1.6454	1.6361	1.6347	1.6381	Ave		1.6456				2.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1173 0.1360	0.1296	0.1578	0.1336	0.1458	Ave		0.1367				10.0		15.0			
1,3,5-Trichlorobenzene	1.0740 1.0627	1.0062	0.9283	0.9748	1.0091	Ave		1.0092				5.4		15.0			
1,2,4-Trichlorobenzene	0.8062 0.9580	0.7810	0.8479	0.8703	0.8928	Ave		0.8593				7.4		15.0			
Hexachlorobutadiene	0.3379 0.3800	0.4642	0.3382	0.3624	0.3737	Ave		0.3761				12.0		15.0			
Naphthalene	1.8724 2.4357	1.9574	2.0186	2.1470	2.4485	Ave		2.1466				11.0		15.0			
1,2,3-Trichlorobenzene	0.6297 0.8837	0.7184	0.7887	0.8500	0.8932	Ave		0.7939				13.0		15.0			
Dibromofluoromethane (Surr)	0.3664 0.3558	0.3145	0.3367	0.3468	0.3406	Ave		0.3435				5.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4791 0.4478	0.3961	0.4397	0.4403	0.4527	Ave		0.4426				6.1		15.0			
Toluene-d8 (Surr)	1.5671 1.8861	1.4287	1.6925	1.6839	1.8197	Ave		1.6797				9.9		15.0			
4-Bromofluorobenzene (Surr)	0.3557 0.3927	0.3559	0.3695	0.3822	0.4071	Ave		0.3772				5.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97870/7	UXJ3347.D
Level 2	STD8260 240-97870/6	UXJ3346.D
Level 3	STD8260 240-97870/5	UXJ3345.D
Level 4	STD8260 240-97870/4	UXJ3344.D
Level 5	STD8260 240-97870/3	UXJ3343.D
Level 6	STD8260 240-97870/2	UXJ3342.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	37670 1674324	84122	184865	357992	786564	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	70494 2935316	145493	359274	699276	1512643	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	54574 2262678	109459	279030	543815	1156920	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	16572 750741	34822	85591	170614	341479	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	23027 1033182	50818	127009	241697	524498	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	49207 2230636	119184	278147	535414	1088642	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	75423 3547077	170147	460723	940706	1864536	10.0 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	46533 1921917	96297	239541	477179	1024323	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Lin1	17749 1132252	64520	128658	240224	511343	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Qua	113662 1734140	180706	334068	576917	1034013	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	75881 2917862	144130	381607	767301	1605222	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	138407 4916428	280576	663513	1349534	2740530	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Ave	77437 2699262	165253	413849	738064	1477251	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	146068 5166380	289694	714488	1327804	2757559	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	174426 2270466	221105	411795	659284	1259781	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	77048 2519432	162210	409213	820218	1658784	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	68722 2358547	124096	314573	590396	1212261	2.00 80.0	4.00	10.0	20.0	40.0
trans-1,2-Dichloroethene	FB	Ave	64928 2817354	126894	321939	661194	1328990	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	168277 6116802	293099	750273	1530795	3091619	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Linl	8296 549917	30058	55739	132796	231959	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	147482 6075484	283431	704116	1412184	2848537	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	8093 400919	16132	46765	96307	200899	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	73701 2483660	155725	351977	720573	1418630	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	70711 2986166	136016	348663	706498	1463010	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	62876 2644982	142528	354561	690258	1424210	1.00 40.0	2.00	5.00	10.0	20.0
Bromochloromethane	FB	Ave	41475 1664636	82316	193701	390804	809454	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Linl	30231 780570	53820	112384	230526	437600	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	119768 5125558	232452	607504	1191585	2450060	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	93760 3896547	179909	484616	983764	1983228	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	91740 5228174	238229	538885	1156861	2392321	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	81567 3738492	163058	413275	848037	1761795	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	80820 3604798	174635	414420	837749	1763281	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	263417 11680428	523278	1342450	2636939	5469144	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	113973 4629229	216595	550937	1085474	2240904	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	72367 3285974	143654	383176	751692	1608372	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	52681 3525260	155391	316752	699361	1545753	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	86119 3374961	160089	401861	803215	1647105	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	41490 1517626	76221	200875	377719	784009	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	19124	48688	101123	230688	459671	50.0	100	250	500	1000
Bromodichloromethane	FB	Ave	78263 3546174	155716	426861	802346	1733123	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	61512 3234747	130272	356352	736496	1600271	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	78260 4124676	175388	458710	955910	1980069	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	120656 5305672	241122	650798	1340043	2786564	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	257780 12709295	528922	1415989	2857792	5914398	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	72624 3490944	140762	394935	793589	1744642	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	48753 2739435	106173	283018	617688	1418374	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	48661 2135382	108611	282872	532200	1089628	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	84344 3791320	178516	457959	913936	1860356	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	43965 2271126	99323	260804	518791	1068939	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	90292 3167859	145328	409397	854553	1733347	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	49596 2384043	115131	278692	570852	1194728	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	48411 2052317	99913	264349	504330	1024030	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	170512 7289570	342712	871537	1705868	3538281	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	67749 2685610	121422	315925	638725	1303618	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	69942 3813487	141838	399717	862971	1845458	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	157648 9492687	352702	1002731	2187887	4622353	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	62196 4031494	164334	464226	968283	1963599	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	114979 6810335	251122	753918	1571426	3309216	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Ave	19073 786582	38030	86870	202689	422572	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	162813 8972591	348217	973861	2060091	4379514	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	37114 1480988	85423	200643	387145	777320	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	44119 2078105	88357	248492	502803	1045086	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	13839 491105	26863	72108	133082	276589	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	8933 579121	25350	71824	153294	282246	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	35582 2184836	85591	255011	489193	1049752	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	37642 1934550	86857	217119	476448	941160	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	86155 5763197	198066	614808	1289424	2775461	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	34928 2011470	87566	226838	489604	1012483	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	89089 4690254	161876	566382	1030908	2197759	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	92052 5594414	196926	611779	1281879	2658607	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	92317 6021335	209209	627165	1328730	2797360	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	70250 3264396	134419	380853	755065	1561054	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Lin1	69280 5420748	170592	523286	1103993	2392065	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	68839 3348735	134715	389185	767374	1609437	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	64966 3999558	128523	353341	766653	1730602	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	61987 3200149	131922	363712	732114	1504119	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	4540 253293	10392	35078	59852	133891	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	41579 1978982	80675	206360	436602	926544	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	31209 1784011	62617	188486	389767	819739	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Ave	13080 707654	37217	75183	162311	343132	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	72487 4535747	156936	448759	961559	2248245	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	24376 1645664	57597	175337	380680	820127	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	67329 2878964	122232	326806	676518	1365685	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	88055 3623727	153942	426747	858864	1814980	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	204672 10897488	393613	1170106	2414419	5110289	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	46452 2268804	98061	255445	547967	1143107	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97870/13	UXJ3353.D
Level 2	STD2 240-97870/12	UXJ3352.D
Level 3	STD3 240-97870/11	UXJ3351.D
Level 4	STD4 240-97870/10	UXJ3350.D
Level 5	STD5 240-97870/9	UXJ3349.D
Level 6	STD6 240-97870/8	UXJ3348.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.2683 0.2447	0.2194	0.2342	0.2458	0.2389	Ave		0.2419				6.6		15.0			
Ethyl ether	0.4166 0.3363	0.3272	0.3580	0.3443	0.3257	Ave		0.3513				9.7		15.0			
3-Chloro-1-propene	0.1711 0.1594	0.1649	0.1607	0.1637	0.1626	Ave		0.1637				2.5		15.0			
Diisopropyl ether	0.2951 0.2879	0.2590	0.2753	0.2826	0.2723	Ave		0.2787				4.6		15.0			
2-Chloro-1,3-butadiene	0.8909 0.8067	0.7747	0.8019	0.7869	0.8028	Ave		0.8107				5.1		15.0			
Ethyl-t-butyl ether (ETBE)	1.2969 1.2223	1.0767	1.2033	1.1860	1.1554	Ave		1.1901				6.1		15.0			
Ethyl acetate	0.4121 0.3700	0.3322	0.3751	0.3629	0.3625	Ave		0.3691				7.0		15.0			
Propionitrile	0.0505 0.0472	0.0443	0.0487	0.0440	0.0440	Ave		0.0464				5.9		15.0			
Methacrylonitrile	0.2783 0.2434	0.2519	0.2401	0.2378	0.2377	Ave		0.2482				6.3		15.0			
Isobutyl alcohol	0.0164 0.0113	0.0121	0.0129	0.0136	0.0123	Ave		0.0131				14.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6900 0.7425	0.6114	0.6799	0.6892	0.7000	Ave		0.6855				6.2		15.0			
n-Heptane	0.0493 0.0610	0.0648	0.0455	0.0478	0.0794	Ave		0.0580				22.0	*	15.0			
n-Butanol	0.0080 0.0063	0.0099	0.0087	0.0109	0.0102	Qua	-0.239	0.0143	0						0.9960		0.9900
Methyl methacrylate	0.2857 0.3339	0.2857	0.2922	0.3108	0.3261	Ave		0.3057				6.9		15.0			
2-Nitropropane	0.1138 0.0943	0.0892	0.0956	0.0928	0.0925	Ave		0.0964				9.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1426 0.1291	0.1384	0.1537	0.1626	0.1663	Ave		0.1488				9.8		15.0			
1,2,3-Trimethylbenzene	2.0795 3.3094	1.9372	2.2909	2.5402	2.5808	Qua	0.4789	1.9657	0.0331						0.9990		0.9900
2-Methylnaphthalene	0.8153 1.3785	0.8449	0.8722	0.9460	1.0548	Qua	0.3760	0.7406	0.0079						1.0000		0.9900
n-Butyl acetate	0.3377 0.5103	0.3088	0.3478	0.4216	0.4644	Lin1	-0.602	0.4925							0.9930		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97870/13	UXJ3353.D
Level 2	STD2 240-97870/12	UXJ3352.D
Level 3	STD3 240-97870/11	UXJ3351.D
Level 4	STD4 240-97870/10	UXJ3350.D
Level 5	STD5 240-97870/9	UXJ3349.D
Level 6	STD6 240-97870/8	UXJ3348.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	48122 2041808	82495	225291	482196	960934	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	74729 2806085	123016	344397	675462	1309924	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	30687 1329979	61984	154638	321091	654102	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	264638 12013371	486917	1324389	2772493	5475775	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	159804 6731952	291252	771475	1543917	3228929	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	232617 10200483	404810	1157551	2326763	4647206	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl acetate	FB	Ave	147818 6174971	249785	721741	1423966	2916521	2.00 80.0	4.00	10.0	20.0	40.0
Propionitrile	FB	Ave	18107 788026	33304	93603	172695	354203	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	49913 2031281	94703	230982	466630	956107	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBZ	Ave	40240 1175888	62575	170717	353048	669278	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	123769 6195936	229885	654052	1352156	2815420	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	8844 508978	24378	43747	93794	319406	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	CBZ	Qua	19565 657701	51455	115560	282810	552427	20.0 800	40.0	100	200	400
Methyl methacrylate	FB	Ave	51248 2786779	107415	281105	609726	1311491	1.00 40.0	2.00	5.00	10.0	20.0
2-Nitropropane	FB	Ave	40816 1574387	67099	184016	363952	744495	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	45236 1814690	88426	259220	564736	1197424	10.0 400	20.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Qua	65956 4652444	123785	386358	882420	1858013	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Qua	51720 3875813	107974	294203	657279	1518848	2.00 80.0	4.00	10.0	20.0	40.0
n-Butyl acetate	FB	Lin1	121142 8516858	232217	669164	1654201	3735826	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.1287		1.00	0.0100	-35.5	50.0
Chloromethane	Ave	0.3711	0.3145	0.1000	1.00	0.0100	-15.2	50.0
Vinyl chloride	Ave	0.2855	0.2363		1.00	0.0100	-17.2	20.0
Bromomethane	Ave	0.0889	0.0702		1.00	0.0100	-21.1	50.0
Chloroethane	Ave	0.1282	0.1203		1.00	0.0100	-6.1	50.0
Trichlorofluoromethane	Ave	0.2804	0.2325		1.00	0.0100	-17.1	50.0
1,1-Dichloroethene	Ave	0.2476	0.2329		1.00	0.0100	-5.9	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1207		1.00	0.0100	-9.7	50.0
Acetone	Qua		0.1235		10.0	0.0200	-19.6	50.0
Iodomethane	Ave	0.3885	0.3704		1.00	0.0100	-4.7	50.0
Carbon disulfide	Ave	0.6903	0.6294		1.00	0.0100	-8.8	50.0
Methyl acetate	Ave	0.3569	0.3691		10.0	0.0100	3.4	50.0
Methylene Chloride	Lin1		0.3386		1.00	0.0100	0.5	50.0
tert-Butyl alcohol	Ave	0.0200	0.0157		50.0	0.200	-21.5	50.0
Methyl tert-butyl ether	Ave	0.7924	0.7415		1.00	0.0100	-6.4	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3252		1.00	0.0100	-3.9	50.0
Hexane	Lin1		0.0594		1.00	0.0100	-7.6	20.0
1,1-Dichloroethane	Ave	0.7404	0.7131	0.1000	1.00	0.0100	-3.7	50.0
Vinyl acetate	Ave	0.0471	0.0420		2.00	0.0100	-10.9	50.0
2-Butanone	Ave	0.1829	0.1619		10.0	0.0200	-11.5	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.3452		1.00	0.0100	-5.4	50.0
2,2-Dichloropropane	Ave	0.3517	0.3227		1.00	0.0100	-8.2	50.0
Bromochloromethane	Ave	0.2075	0.1929		1.00	0.0100	-7.0	50.0
Tetrahydrofuran	Lin1		0.0971		5.00	0.0100	-10.4	50.0
Chloroform	Ave	0.6218	0.6140		1.00	0.0100	-1.3	20.0
1,1,1-Trichloroethane	Ave	0.4921	0.4673		1.00	0.0100	-5.1	50.0
Cyclohexane	Ave	0.5839	0.5272		1.00	0.0100	-9.7	50.0
1,1-Dichloropropene	Ave	0.4375	0.4181		1.00	0.0100	-4.4	50.0
Carbon tetrachloride	Ave	0.4385	0.4112		1.00	0.0100	-6.2	50.0
1,2-Dichloroethane	Ave	0.5721	0.5534		1.00	0.0100	-3.3	50.0
Benzene	Ave	1.387	1.334		1.00	0.0100	-3.8	50.0
Trichloroethene	Ave	0.3918	0.3865		1.00	0.0100	-1.4	50.0
Methylcyclohexane	Ave	0.3654	0.3113		1.00	0.0100	-14.8	50.0
1,2-Dichloropropane	Ave	0.4224	0.4227		1.00	0.0100	0.0	20.0
Dibromomethane	Ave	0.2009	0.2036		1.00	0.0100	1.3	50.0
Bromodichloromethane	Ave	0.4247	0.4389		1.00	0.0100	3.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1845	0.1633		10.0	0.0100	-11.5	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4471		1.00	0.0100	-5.7	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.3155		10.0	0.0200	-5.0	50.0
Toluene	Ave	2.040	1.986		1.00	0.0100	-2.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
trans-1,3-Dichloropropene	Ave	0.5695	0.5490		1.00	0.0100	-3.6	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.3836		1.00	0.0100	-0.1	50.0
1,3-Dichloropropane	Ave	0.6520	0.6434		1.00	0.0100	-1.3	50.0
Tetrachloroethene	Ave	0.3683	0.3639		1.00	0.0100	-1.2	50.0
2-Hexanone	Ave	0.2977	0.2726		10.0	0.0200	-8.5	50.0
Dibromochloromethane	Ave	0.4062	0.4118		1.00	0.0100	1.4	50.0
1,2-Dibromoethane	Ave	0.3645	0.3367		1.00	0.0100	-7.7	50.0
Chlorobenzene	Ave	1.254	1.199	0.3000	1.00	0.0100	-4.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.4619		1.00	0.0100	-0.7	50.0
Ethylbenzene	Ave	0.5913	0.5816		1.00	0.0100	-1.6	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.7467		2.00	0.0200	2.4	50.0
o-Xylene	Ave	0.6361	0.6473		1.00	0.0100	1.8	50.0
Styrene	Ave	1.056	1.110		1.00	0.0100	5.1	50.0
Bromoform	Ave	0.1396	0.1502	0.1000	1.00	0.0100	7.6	50.0
Isopropylbenzene	Ave	1.411	1.390		1.00	0.0100	-1.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.7574	0.3000	1.00	0.0100	-16.4	50.0
Bromobenzene	Ave	1.123	1.055		1.00	0.0100	-6.0	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2891		1.00	0.0100	-7.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.2829		1.00	0.0200	-7.3	50.0
n-Propylbenzene	Ave	1.090	1.038		1.00	0.0100	-4.8	50.0
2-Chlorotoluene	Ave	1.027	0.9715		1.00	0.0100	-5.4	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.691		1.00	0.0100	-1.9	50.0
4-Chlorotoluene	Ave	1.048	0.9943		1.00	0.0100	-5.2	50.0
tert-Butylbenzene	Ave	2.347	2.193		1.00	0.0100	-6.5	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.528		1.00	0.0100	-7.2	50.0
sec-Butylbenzene	Ave	2.844	2.611		1.00	0.0100	-8.2	50.0
1,3-Dichlorobenzene	Ave	1.724	1.571		1.00	0.0100	-8.9	50.0
p-Isopropyltoluene	Lin1		2.299		1.00	0.0100	-13.3	50.0
1,4-Dichlorobenzene	Ave	1.746	1.652		1.00	0.0100	-5.4	50.0
n-Butylbenzene	Ave	1.769	1.599		1.00	0.0100	-9.6	50.0
1,2-Dichlorobenzene	Ave	1.646	1.501		1.00	0.0100	-8.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1208		2.00	0.0100	-11.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7631		1.00	0.0100	-11.2	50.0
Hexachlorobutadiene	Ave	0.3761	0.2697		1.00	0.0100	-28.3	50.0
Naphthalene	Ave	2.147	1.801		1.00	0.0100	-16.1	50.0
1,2,3-Trichlorobenzene	Ave	0.7939	0.7398		1.00	0.0100	-6.8	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.2912		0.00707	0.00834	-15.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3605		0.00679	0.00834	-18.6	50.0
Toluene-d8 (Surr)	Ave	1.680	1.563		0.00776	0.00834	-7.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.3899		0.00862	0.00834	3.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3513	0.3614		2.00	0.0100	2.9	50.0
Diisopropyl ether	Ave	0.2787	0.2903		10.0	0.0100	4.2	50.0
Isobutyl alcohol	Ave	0.0131	0.0096		50.0	0.500	-26.4	50.0
Cyclohexanone	Ave	0.1488	0.0210		20.0	0.200	-85.9*	50.0
1,2,3-Trimethylbenzene	Qua		2.606		0.0110	0.0100	9.8	50.0

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A3UX11 Start Date: 08/21/2013 10:02

Analysis Batch Number: 98342 End Date: 08/21/2013 21:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-98342/1		08/21/2013 10:02	1	BFB186.D	DB-624 0.18(mm)
CCVIS 240-98342/2		08/21/2013 10:29	1	UXJ3471.D	DB-624 0.18(mm)
LCS 240-98342/4		08/21/2013 10:53	1	UXJ3472.D	DB-624 0.18(mm)
CCV 240-98342/3		08/21/2013 11:17	1	UXJ3473.D	DB-624 0.18(mm)
MB 240-98342/6		08/21/2013 12:04	1	UXJ3475.D	DB-624 0.18(mm)
ZZZZZ		08/21/2013 12:28	1		DB-624 0.18(mm)
ZZZZZ		08/21/2013 12:51	50		DB-624 0.18(mm)
ZZZZZ		08/21/2013 15:19	1		DB-624 0.18(mm)
ZZZZZ		08/21/2013 16:31	250		DB-624 0.18(mm)
ZZZZZ		08/21/2013 16:55	200		DB-624 0.18(mm)
ZZZZZ		08/21/2013 17:19	2.5		DB-624 0.18(mm)
ZZZZZ		08/21/2013 18:54	1		DB-624 0.18(mm)
240-27894-3	TB-081213	08/21/2013 19:17	1	UXJ3491.D	DB-624 0.18(mm)
ZZZZZ		08/21/2013 19:41	1		DB-624 0.18(mm)
ZZZZZ		08/21/2013 20:04	1		DB-624 0.18(mm)
ZZZZZ		08/21/2013 20:28	1		DB-624 0.18(mm)
ZZZZZ		08/21/2013 20:52	1		DB-624 0.18(mm)
ZZZZZ		08/21/2013 21:15	1		DB-624 0.18(mm)
ZZZZZ		08/21/2013 21:39	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: BFB186.D BFB Injection Date: 08/21/2013

Instrument ID: A3UX11 BFB Injection Time: 10:02

Analysis Batch No.: 98342

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	30.2	
75	30.0 - 60.0 % of mass 95	43.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	81.7	
175	5.0 - 9.0 % of mass 174	6.8	(8.3)1
176	95.0 - 101.0 % of mass 174	78.4	(96.0)1
177	5.0 - 9.0 % of mass 176	5.0	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98342/2	UXJ3471.D	08/21/2013	10:29
	LCS 240-98342/4	UXJ3472.D	08/21/2013	10:53
	CCV 240-98342/3	UXJ3473.D	08/21/2013	11:17
	MB 240-98342/6	UXJ3475.D	08/21/2013	12:04
TB-081213	240-27894-3	UXJ3491.D	08/21/2013	19:17

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVIS 240-98342/2 Calibration Date: 08/21/2013 10:29

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3471.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.1817		1.00	0.0100	-9.1	50.0
Chloromethane	Ave	0.3711	0.4024	0.1000	1.00	0.0100	8.4	50.0
Vinyl chloride	Ave	0.2855	0.3019		1.00	0.0100	5.7	20.0
Bromomethane	Ave	0.0889	0.0883		1.00	0.0100	-0.7	50.0
Chloroethane	Ave	0.1282	0.1327		1.00	0.0100	3.5	50.0
Trichlorofluoromethane	Ave	0.2804	0.2677		1.00	0.0100	-4.5	50.0
Acrolein	Ave	0.0451	0.0590		20.0	0.100	30.6	50.0
1,1-Dichloroethene	Ave	0.2476	0.2560		1.00	0.0100	3.4	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1506		1.00	0.0100	12.3	50.0
Acetone	Qua		0.1037		10.0	0.0200	-35.5	50.0
Iodomethane	Ave	0.3885	0.3840		1.00	0.0100	-1.2	50.0
Carbon disulfide	Ave	0.6903	0.6494		1.00	0.0100	-5.9	50.0
Acetonitrile	Ave	0.0392	0.0378		20.0	0.100	-3.5	50.0
Methyl acetate	Ave	0.3569	0.3408		10.0	0.0200	-4.5	50.0
Methylene Chloride	Lin1		0.3630		1.00	0.0100	9.6	50.0
tert-Butyl alcohol	Ave	0.0200	0.0168		50.0	0.200	-16.1	50.0
Acrylonitrile	Ave	0.1595	0.1647		20.0	0.0200	3.3	50.0
Methyl tert-butyl ether	Ave	0.7924	0.7876		1.00	0.0100	-0.6	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3636		1.00	0.0100	7.5	50.0
Hexane	Lin1		0.0705		1.00	0.0100	9.2	20.0
1,1-Dichloroethane	Ave	0.7404	0.7693	0.1000	1.00	0.0100	3.9	50.0
Vinyl acetate	Ave	0.0471	0.0608		2.00	0.0100	29.0	50.0
2,2-Dichloropropane	Ave	0.3517	0.3574		1.00	0.0100	1.6	50.0
2-Butanone	Ave	0.1829	0.1551		10.0	0.0200	-15.2	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.3865		1.00	0.0100	5.9	50.0
Bromochloromethane	Ave	0.2075	0.2131		1.00	0.0100	2.7	50.0
Tetrahydrofuran	Lin1		0.0977		5.00	0.0100	-9.8	50.0
Chloroform	Ave	0.6218	0.6118		1.00	0.0100	-1.6	20.0
1,1,1-Trichloroethane	Ave	0.4921	0.4806		1.00	0.0100	-2.4	50.0
Cyclohexane	Ave	0.5839	0.5716		1.00	0.0100	-2.1	50.0
1,1-Dichloropropene	Ave	0.4375	0.4342		1.00	0.0100	-0.8	50.0
Carbon tetrachloride	Ave	0.4385	0.4548		1.00	0.0100	3.7	50.0
1,2-Dichloroethane	Ave	0.5721	0.5362		1.00	0.0100	-6.3	50.0
Benzene	Ave	1.387	1.355		1.00	0.0100	-2.3	50.0
Trichloroethene	Ave	0.3918	0.4254		1.00	0.0100	8.6	50.0
Methylcyclohexane	Ave	0.3654	0.3819		1.00	0.0100	4.5	50.0
1,2-Dichloropropane	Ave	0.4224	0.4008		1.00	0.0100	-5.1	20.0
Dibromomethane	Ave	0.2009	0.1909		1.00	0.0100	-5.0	50.0
1,4-Dioxane	Ave	0.0023	0.0007		50.0	0.500	-70.3*	50.0
Bromodichloromethane	Ave	0.4247	0.4313		1.00	0.0100	1.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVIS 240-98342/2 Calibration Date: 08/21/2013 10:29

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3471.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1845	0.1647		10.0	0.0200	-10.7	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4625		1.00	0.0100	-2.4	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.2936		10.0	0.0200	-11.6	50.0
Toluene	Ave	2.040	2.076		1.00	0.0100	1.7	20.0
trans-1,3-Dichloropropene	Ave	0.5695	0.5647		1.00	0.0100	-0.8	50.0
Ethyl methacrylate	Ave	0.4297	0.4057		1.00	0.0100	-5.6	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.3927		1.00	0.0100	2.2	50.0
1,3-Dichloropropane	Ave	0.6520	0.6563		1.00	0.0100	0.7	50.0
Tetrachloroethene	Ave	0.3683	0.4279		1.00	0.0100	16.2	50.0
2-Hexanone	Ave	0.2977	0.2417		10.0	0.0200	-18.8	50.0
Dibromochloromethane	Ave	0.4062	0.4659		1.00	0.0100	14.7	50.0
1,2-Dibromoethane	Ave	0.3645	0.3802		1.00	0.0100	4.3	50.0
Chlorobenzene	Ave	1.254	1.254	0.3000	1.00	0.0100	0.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.4959		1.00	0.0100	6.6	50.0
Ethylbenzene	Ave	0.5913	0.6410		1.00	0.0100	8.4	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.8206		2.00	0.0200	12.5	50.0
o-Xylene	Ave	0.6361	0.6783		1.00	0.0100	6.6	50.0
Styrene	Ave	1.056	1.146		1.00	0.0100	8.6	50.0
Bromoform	Ave	0.1396	0.1852	0.1000	1.00	0.0100	32.7	50.0
Isopropylbenzene	Ave	1.411	1.467		1.00	0.0100	3.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.7191	0.3000	1.00	0.0100	-20.6	50.0
Bromobenzene	Ave	1.123	0.9778		1.00	0.0100	-12.9	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2625		1.00	0.0100	-16.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.1964		1.00	0.0100	-35.6	50.0
n-Propylbenzene	Ave	1.090	0.999		1.00	0.0100	-8.4	50.0
2-Chlorotoluene	Ave	1.027	0.9147		1.00	0.0100	-10.9	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.549		1.00	0.0100	-7.1	50.0
4-Chlorotoluene	Ave	1.048	1.000		1.00	0.0100	-4.6	50.0
tert-Butylbenzene	Ave	2.347	2.037		1.00	0.0100	-13.2	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.393		1.00	0.0100	-12.2	50.0
sec-Butylbenzene	Ave	2.844	2.626		1.00	0.0100	-7.6	50.0
1,3-Dichlorobenzene	Ave	1.724	1.647		1.00	0.0100	-4.5	50.0
p-Isopropyltoluene	Lin1		2.239		1.00	0.0100	-15.4	50.0
1,4-Dichlorobenzene	Ave	1.746	1.664		1.00	0.0100	-4.6	50.0
n-Butylbenzene	Ave	1.769	1.604		1.00	0.0100	-9.4	50.0
1,2-Dichlorobenzene	Ave	1.646	1.520		1.00	0.0100	-7.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1388		2.00	0.0100	1.6	50.0
1,3,5-Trichlorobenzene	Ave	1.009	0.8763		1.00	0.0100	-13.2	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7784		1.00	0.0100	-9.4	50.0
Hexachlorobutadiene	Ave	0.3761	0.3258		1.00	0.0100	-13.4	50.0
Naphthalene	Ave	2.147	1.738		1.00	0.0100	-19.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVIS 240-98342/2 Calibration Date: 08/21/2013 10:29

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3471.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7939	0.7251		1.00	0.0100	-8.7	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.2946		0.00715	0.00834	-14.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3373		0.00636	0.00834	-23.8	50.0
Toluene-d8 (Surr)	Ave	1.680	1.620		0.00804	0.00834	-3.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.3868		0.00855	0.00834	2.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-98342/3 Calibration Date: 08/21/2013 11:17

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3473.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2419	0.2427		2.00	0.0100	0.3	50.0
Ethyl ether	Ave	0.3513	0.3612		2.00	0.0100	2.8	50.0
3-Chloro-1-propene	Ave	0.1637	0.1754		2.00	0.0100	7.2	50.0
Diisopropyl ether	Ave	0.2787	0.3134		10.0	0.0500	12.5	50.0
2-Chloro-1,3-butadiene	Ave	0.8107	0.8606		2.00	0.0100	6.2	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.190	1.282		5.00	0.0100	7.7	50.0
Ethyl acetate	Ave	0.3691	0.3841		4.00	0.0200	4.1	50.0
Propionitrile	Ave	0.0464	0.0518		4.00	0.0200	11.5	50.0
Methacrylonitrile	Ave	0.2482	0.2362		2.00	0.0100	-4.8	50.0
Isobutyl alcohol	Ave	0.0131	0.0122		50.0	0.200	-6.6	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6855	0.7087		5.00	0.0100	3.4	50.0
n-Heptane	Ave	0.0580	0.0605		1.00	0.0100	4.4	50.0
n-Butanol	Qua		0.0042		50.0	0.200	-60.5*	50.0
Methyl methacrylate	Ave	0.3057	0.2923		2.00	0.0100	-4.4	50.0
2-Nitropropane	Ave	0.0964	0.0831		2.00	0.0200	-13.8	50.0
Cyclohexanone	Ave	0.1488	0.0708		20.0	0.100	-52.4*	50.0
1,2,3-Trimethylbenzene	Qua		2.243		0.00961	0.0100	-3.9	50.0
2-Methylnaphthalene	Qua		0.7471		5.00	0.0200	-16.5	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: UXJ3475.D Lab Sample ID: MB 240-98342/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 08/21/2013 12:04

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98342/4	UXJ3472.D	08/21/2013 10:53
TB-081213	240-27894-3	UXJ3491.D	08/21/2013 19:17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98342/6

Matrix: Water | Lab File ID: UXJ3475.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 12:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98342 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98342/6

Matrix: Water | Lab File ID: UXJ3475.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 12:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98342 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
75-65-0	tert-Butyl alcohol	50	U	50	3.9
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98342/6

Matrix: Water | Lab File ID: UXJ3475.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 12:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98342 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	97		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98342/6

Matrix: Water Lab File ID: UXJ3475.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 12:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98342 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3472.D

Lab ID: LCS 240-98342/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.81	98	72-116	
1,1,1-Trichloroethane	10.0	9.95	100	74-118	
1,1,2,2-Tetrachloroethane	10.0	7.74	77	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	12.3	123	74-151	
1,1-Dichloroethane	10.0	10.6	106	82-115	
1,1-Dichloroethene	10.0	10.4	104	78-131	
1,1-Dichloropropene	10.0	9.18	92	83-114	
1,2,3-Trichlorobenzene	10.0	8.88	89	54-126	
1,2,3-Trichloropropane	10.0	8.04	80	73-129	
1,2,3-Trimethylbenzene	10.0	10.4	104	70-130	
1,2,4-Trichlorobenzene	10.0	8.35	84	48-135	
1,2,4-Trimethylbenzene	10.0	8.91	89	76-120	
1,2-Dibromo-3-Chloropropane	10.0	11.4	114	42-136	
1,2-Dichlorobenzene	10.0	9.36	94	81-110	
1,2-Dichloroethane	10.0	9.16	92	71-127	
1,2-Dichloropropane	10.0	9.94	99	81-115	
1,3-Dichlorobenzene	10.0	9.15	91	80-110	
1,3-Dichloropropane	10.0	9.37	94	79-116	
1,4-Dichlorobenzene	10.0	9.20	92	82-110	
2,2-Dichloropropane	10.0	10.2	102	50-129	
2-Chloroethyl vinyl ether	10.0	8.21 J	82	52-131	
2-Chlorotoluene	10.0	9.22	92	76-116	
2-Hexanone	20.0	16.0	80	55-133	
4-Chlorotoluene	10.0	9.03	90	77-115	
Acetone	20.0	12.9	65	43-136	
Benzene	10.0	9.93	99	83-112	
Bromobenzene	10.0	8.78	88	76-115	
Bromochloromethane	10.0	10.6	106	77-120	
Bromoform	10.0	12.4	124	40-131	
Bromomethane	10.0	9.25	92	11-185	
Carbon disulfide	10.0	9.79	98	62-142	
Carbon tetrachloride	10.0	10.4	104	66-128	
Chlorobenzene	10.0	9.44	94	85-110	
Chloroethane	10.0	9.71	97	25-153	
Chloroform	10.0	9.88	99	79-117	
Chloromethane	10.0	10.3	103	44-126	
cis-1,2-Dichloroethene	10.0	10.8	108	80-113	
Bromodichloromethane	10.0	10.7	107	72-121	
cis-1,3-Dichloropropene	10.0	9.47	95	61-115	
1,2-Dibromoethane	10.0	9.62	96	79-113	
Dibromomethane	10.0	9.79	98	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3472.D

Lab ID: LCS 240-98342/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	9.32	93	19-129	
Diisopropyl ether	10.0	11.6	116	77-118	
Ethylbenzene	10.0	9.95	100	83-112	
Hexachlorobutadiene	10.0	8.47	85	36-134	
Isopropylbenzene	10.0	9.66	97	75-114	
2-Butanone	20.0	18.0	90	60-126	
4-Methyl-2-pentanone	20.0	18.2	91	63-128	
m-Xylene & p-Xylene	20.0	19.7	99	83-113	
Methyl tert-butyl ether	10.0	10.2	102	52-144	
Naphthalene	10.0	8.19	82	32-141	
n-Butylbenzene	10.0	8.85	89	66-125	
Methylene Chloride	10.0	10.8	108	66-131	
n-Propylbenzene	10.0	9.34	93	74-121	
o-Xylene	10.0	10.1	101	83-113	
p-Isopropyltoluene	10.0	8.34	83	74-120	
sec-Butylbenzene	10.0	9.06	91	70-117	
Styrene	10.0	10.2	102	79-114	
tert-Butylbenzene	10.0	9.28	93	71-115	
Tetrachloroethene	10.0	10.0	100	79-114	
Toluene	10.0	9.37	94	84-111	
trans-1,2-Dichloroethene	10.0	10.6	106	83-117	
trans-1,3-Dichloropropene	10.0	9.07	91	58-117	
Trichloroethene	10.0	11.0	110	76-117	
Trichlorofluoromethane	10.0	9.54	95	49-157	
tert-Butyl alcohol	200	192	96	70-130	
Vinyl acetate	10.0	11.0	110	46-161	
Vinyl chloride	10.0	9.88	99	53-127	
Dibromochloromethane	10.0	10.6	106	64-119	
Xylenes, Total	30.0	29.8	99	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A3UX14 Start Date: 07/10/2013 14:02

Analysis Batch Number: 93208 End Date: 07/10/2013 21:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-93208/1		07/10/2013 14:02	1	BFB14474.D	DB-624 0.18(mm)
IC 240-93208/3		07/10/2013 14:44	1	143535.D	DB-624 0.18(mm)
IC 240-93208/4		07/10/2013 15:06	1	143536.D	DB-624 0.18(mm)
IC 240-93208/5		07/10/2013 15:28	1	143537.D	DB-624 0.18(mm)
ICIS 240-93208/6		07/10/2013 15:49	1	143538.D	DB-624 0.18(mm)
IC 240-93208/7		07/10/2013 16:10	1	143539.D	DB-624 0.18(mm)
IC 240-93208/8		07/10/2013 16:32	1	143540.D	DB-624 0.18(mm)
IC 240-93208/9		07/10/2013 16:53	1	143541.D	DB-624 0.18(mm)
IC 240-93208/10		07/10/2013 17:15	1	143542.D	DB-624 0.18(mm)
IC 240-93208/11		07/10/2013 17:36	1	143543.D	DB-624 0.18(mm)
IC 240-93208/12		07/10/2013 17:58	1	143544.D	DB-624 0.18(mm)
IC 240-93208/13		07/10/2013 18:19	1	143545.D	DB-624 0.18(mm)
IC 240-93208/14		07/10/2013 18:41	1	143546.D	DB-624 0.18(mm)
IC 240-93208/15		07/10/2013 19:02	1	143547.D	DB-624 0.18(mm)
IC 240-93208/16		07/10/2013 19:24	1	143548.D	DB-624 0.18(mm)
IC 240-93208/17		07/10/2013 19:45	1	143549.D	DB-624 0.18(mm)
IC 240-93208/18		07/10/2013 20:07	1	143550.D	DB-624 0.18(mm)
IC 240-93208/19		07/10/2013 20:28	1	143551.D	DB-624 0.18(mm)
IC 240-93208/20		07/10/2013 20:50	1	143552.D	DB-624 0.18(mm)
ICV 240-93208/21		07/10/2013 21:11	1	143553.D	DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: BFB14474.D BFB Injection Date: 07/10/2013

Instrument ID: A3UX14 BFB Injection Time: 14:02

Analysis Batch No.: 93208

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.7	
75	30.0 - 60.0 % of mass 95	42.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	87.3	
175	5.0 - 9.0 % of mass 174	6.2	(7.0)1
176	95.0 - 101.0 % of mass 174	84.7	(97.0)1
177	5.0 - 9.0 % of mass 176	5.5	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-93208/3	143535.D	07/10/2013	14:44
	IC 240-93208/4	143536.D	07/10/2013	15:06
	IC 240-93208/5	143537.D	07/10/2013	15:28
	ICIS 240-93208/6	143538.D	07/10/2013	15:49
	IC 240-93208/7	143539.D	07/10/2013	16:10
	IC 240-93208/8	143540.D	07/10/2013	16:32
	IC 240-93208/9	143541.D	07/10/2013	16:53
	IC 240-93208/10	143542.D	07/10/2013	17:15
	IC 240-93208/11	143543.D	07/10/2013	17:36
	IC 240-93208/12	143544.D	07/10/2013	17:58
	IC 240-93208/13	143545.D	07/10/2013	18:19
	IC 240-93208/14	143546.D	07/10/2013	18:41
	IC 240-93208/15	143547.D	07/10/2013	19:02
	IC 240-93208/16	143548.D	07/10/2013	19:24
	IC 240-93208/17	143549.D	07/10/2013	19:45
	IC 240-93208/18	143550.D	07/10/2013	20:07
	IC 240-93208/19	143551.D	07/10/2013	20:28
	IC 240-93208/20	143552.D	07/10/2013	20:50
	ICV 240-93208/21	143553.D	07/10/2013	21:11

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 14:44 Calibration End Date: 07/10/2013 17:36 Calibration ID: 16258

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-93208/11	143543.D
Level 2	IC 240-93208/10	143542.D
Level 3	IC 240-93208/9	143541.D
Level 4	IC 240-93208/8	143540.D
Level 5	IC 240-93208/7	143539.D
Level 6	ICIS 240-93208/6	143538.D
Level 7	IC 240-93208/5	143537.D
Level 8	IC 240-93208/4	143536.D
Level 9	IC 240-93208/3	143535.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2625 0.3476	0.3224 0.3483	0.3824 0.3406	0.3507 0.3517	0.3360	Ave		0.3380				9.6		15.0			
Chloromethane	0.4281 0.4208	0.4539 0.4184	0.4712 0.4130	0.4388 0.4101	0.4220	Ave		0.4307			0.1000	4.7		15.0			
Vinyl chloride	0.2954 0.3424	0.3415 0.3413	0.3858 0.3292	0.3492 0.3355	0.3492	Ave		0.3411				6.9		15.0			
Bromomethane	0.1975 0.0878	0.1188 0.0857	0.1172 0.0844	0.0965 0.0815	0.0958	Lin1	0.1145	0.0832							0.9990		0.9900
Chloroethane	0.1091 0.1108	0.1265 0.1105	0.1291 0.1109	0.1057 0.1070	0.1077	Ave		0.1130				7.6		15.0			
Dichlorofluoromethane	0.4420 0.3092	0.4136 0.3098	0.3581 0.3125	0.3315 0.3151	0.3158	Ave		0.3453				14.0		15.0			
Trichlorofluoromethane	0.2205 0.3072	0.2533 0.3198	0.3083 0.3165	0.2936 0.3254	0.3030	Ave		0.2942				12.0		15.0			
Ethyl ether	0.3126 0.2095	0.2942 0.2106	0.2437 0.2020	0.2310 0.2065	0.2242	Lin1	0.1507	0.2055							1.0000		0.9900
Acrolein	0.0374 0.0188	0.0295 0.0192	0.0218 0.0175	0.0220 0.0195	0.0205	Lin1	0.1027	0.0186							0.9970		0.9900
1,1-Dichloroethene	0.2892 0.2620	0.2704 0.2632	0.2874 0.2543	0.2502 0.2524	0.2640	Ave		0.2659				5.4		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1657 0.2410	0.1852 0.2419	0.2377 0.2391	0.2318 0.2379	0.2376	Ave		0.2242				13.0		15.0			
Acetone	0.4455 0.0843	0.2996 0.0791	0.1731 0.0709	0.1217 0.0734	0.0988	Lin1	0.8449	0.0721							0.9970		0.9900
Iodomethane	0.3992 0.4307	0.4544 0.4369	0.4330 0.4336	0.4210 0.4238	0.4327	Ave		0.4295				3.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 14:44 Calibration End Date: 07/10/2013 17:36 Calibration ID: 16258

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Carbon disulfide	0.5952 0.7219	0.6632 0.7421	0.6947 0.7406	0.6928 0.7446	0.7178	Ave		0.7014				6.9		15.0			
3-Chloro-1-propene	0.1337 0.1574	0.1570 0.1584	0.1548 0.1541	0.1507 0.1495	0.1534	Ave		0.1521				4.9		15.0			
Methyl acetate	0.2275 0.1861	0.2120 0.1849	0.1929 0.1782	0.1998 0.1936	0.1958	Ave		0.1968				7.6		15.0			
Methylene Chloride	+++++ 0.3106	+++++ 0.2744	0.8666 0.2564	0.4921 0.2530	0.3767	Lin1	2.9138	0.2423							0.9990		0.9900
tert-Butyl alcohol	0.0285 0.0234	0.0277 0.0234	0.0255 0.0207	0.0277 0.0252	0.0261	Ave		0.0254				9.9		15.0			
Acrylonitrile	0.0988 0.0913	0.1113 0.0909	0.0971 0.0874	0.0980 0.0934	0.0957	Ave		0.0960				7.1		15.0			
trans-1,2-Dichloroethene	0.2878 0.2817	0.3285 0.2825	0.2949 0.2756	0.2895 0.2681	0.2796	Ave		0.2876				6.0		15.0			
Methyl tert-butyl ether	0.6947 0.6744	0.6969 0.6774	0.6738 0.6572	0.6897 0.6732	0.6909	Ave		0.6809				1.9		15.0			
Hexane	0.1594 0.0841	0.1406 0.0774	0.1468 0.0742	0.0924 0.0743	0.0866	Lin1	0.1372	0.0752							0.9950		0.9900
1,1-Dichloroethane	0.4652 0.5260	0.5410 0.5289	0.5322 0.5166	0.4967 0.5132	0.5224	Ave		0.5158			0.1000	4.4		15.0			
Vinyl acetate	0.0410 0.0444	0.0416 0.0453	0.0430 0.0428	0.0451 0.0451	0.0429	Ave		0.0435				3.7		15.0			
2,2-Dichloropropane	0.2070 0.2123	0.2351 0.2149	0.2210 0.2140	0.2207 0.2018	0.2221	Ave		0.2165				4.5		15.0			
cis-1,2-Dichloroethene	0.3396 0.2994	0.3397 0.3021	0.3114 0.2945	0.3049 0.2865	0.3032	Ave		0.3090				6.0		15.0			
2-Butanone	0.1279 0.1102	0.1353 0.1104	0.1174 0.1063	0.1165 0.1179	0.1145	Ave		0.1174				7.8		15.0			
Bromochloromethane	0.1449 0.1487	0.1545 0.1483	0.1493 0.1444	0.1462 0.1425	0.1483	Ave		0.1475				2.4		15.0			
Tetrahydrofuran	0.1085 0.0738	0.0949 0.0735	0.0873 0.0707	0.0865 0.0783	0.0799	Ave		0.0837				14.0		15.0			
Chloroform	0.4687 0.4530	0.4836 0.4602	0.4735 0.4500	0.4419 0.4463	0.4535	Ave		0.4590				3.0		15.0			
1,1,1-Trichloroethane	0.2957 0.3757	0.3309 0.3819	0.3586 0.3829	0.3577 0.3753	0.3821	Ave		0.3601				8.2		15.0			
Cyclohexane	0.4516 0.6217	0.4758 0.6312	0.6257 0.6200	0.5889 0.6164	0.6124	Ave		0.5826				12.0		15.0			
1,1-Dichloropropene	0.2882 0.3475	0.3100 0.3484	0.3532 0.3378	0.3333 0.3357	0.3433	Ave		0.3331				6.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 14:44 Calibration End Date: 07/10/2013 17:36 Calibration ID: 16258

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Carbon tetrachloride	0.3017 0.3757	0.2964 0.3791	0.3556 0.3755	0.3468 0.3747	0.3610	Ave		0.3518				9.0		15.0			
Isobutyl alcohol	0.0099 0.0082	0.0084 0.0081	0.0082 0.0076	0.0102 0.0088	0.0090	Ave		0.0087				9.9		15.0			
Benzene	1.1147 1.0904	1.0810 1.0777	1.0944 1.0687	1.0429 1.0560	1.0698	Ave		1.0773				2.0		15.0			
1,2-Dichloroethane	0.3513 0.3356	0.3352 0.3352	0.3475 0.3260	0.3365 0.3289	0.3376	Ave		0.3371				2.4		15.0			
n-Heptane	0.0608 0.0865	0.0636 0.0866	0.0857 0.0832	0.0807 0.0833	0.0821	Ave		0.0792				12.0		15.0			
Trichloroethene	0.3061 0.3343	0.3223 0.3374	0.3506 0.3318	0.3182 0.3274	0.3308	Ave		0.3288				3.8		15.0			
Methylcyclohexane	0.3786 0.5304	0.4095 0.5365	0.5261 0.5193	0.4998 0.5123	0.5230	Ave		0.4928				12.0		15.0			
1,2-Dichloropropane	0.2625 0.2857	0.2790 0.2816	0.2788 0.2756	0.2715 0.2753	0.2756	Ave		0.2762				2.4		15.0			
Dibromomethane	0.1581 0.1321	0.1435 0.1313	0.1385 0.1281	0.1371 0.1298	0.1344	Ave		0.1370				6.8		15.0			
1,4-Dioxane	0.0021 0.0022	0.0026 0.0021	0.0023 0.0020	0.0025 0.0022	0.0023	Ave		0.0023				8.8		15.0			
Bromodichloromethane	0.3042 0.3258	0.3145 0.3291	0.3044 0.3272	0.3051 0.3272	0.3155	Ave		0.3170				3.4		15.0			
2-Chloroethyl vinyl ether	0.1305 0.1166	0.1072 0.1151	0.1086 0.1123	0.1136 0.1221	0.1157	Ave		0.1157				6.1		15.0			
cis-1,3-Dichloropropene	0.3341 0.3722	0.3395 0.3719	0.3508 0.3737	0.3466 0.3813	0.3576	Ave		0.3586				4.7		15.0			
4-Methyl-2-pentanone	0.3410 0.3303	0.3646 0.3312	0.3412 0.3189	0.3477 0.3442	0.3461	Ave		0.3406				3.8		15.0			
Toluene	1.6365 1.6697	1.7019 1.6753	1.6856 1.6699	1.5872 1.6295	1.6594	Ave		1.6572				2.1		15.0			
trans-1,3-Dichloropropene	0.3967 0.4181	0.4111 0.4216	0.4100 0.4112	0.3936 0.4142	0.4163	Ave		0.4103				2.3		15.0			
Ethyl methacrylate	0.3543 0.3441	0.3497 0.3424	0.3372 0.3305	0.3455 0.3447	0.3456	Ave		0.3438				2.0		15.0			
1,1,2-Trichloroethane	0.3193 0.2709	0.3094 0.2664	0.2799 0.2589	0.2794 0.2618	0.2764	Ave		0.2803				7.4		15.0			
Tetrachloroethene	0.3250 0.3593	0.3538 0.3598	0.3554 0.3490	0.3342 0.3352	0.3536	Ave		0.3472				3.6		15.0			
1,3-Dichloropropane	0.4778 0.4463	0.4696 0.4365	0.4655 0.4204	0.4579 0.4222	0.4598	Ave		0.4507				4.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 14:44 Calibration End Date: 07/10/2013 17:36 Calibration ID: 16258

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Hexanone	0.2540 0.1960	0.2248 0.1902	0.1991 0.1817	0.2071 0.2034	0.2026	Ave		0.2066				10.0		15.0			
Dibromochloromethane	0.2941 0.3469	0.3268 0.3545	0.3072 0.3496	0.3143 0.3532	0.3336	Ave		0.3311				6.6		15.0			
1,2-Dibromoethane	0.2943 0.2718	0.3014 0.2699	0.2874 0.2599	0.2738 0.2609	0.2712	Ave		0.2767				5.2		15.0			
Chlorobenzene	1.1335 1.0842	1.1310 1.0857	1.0927 1.0693	1.0559 1.0498	1.0706	Ave		1.0859			0.3000	2.7		15.0			
1,1,1,2-Tetrachloroethane	0.2988 0.4012	0.4104 0.4080	0.3850 0.3919	0.3744 0.3826	0.3946	Ave		0.3830				8.8		15.0			
Ethylbenzene	0.5577 0.5994	0.5988 0.6037	0.5969 0.5767	0.5693 0.5629	0.5897	Ave		0.5839				3.0		15.0			
m-Xylene & p-Xylene	0.6974 0.7336	0.7418 0.7309	0.7201 0.7040	0.6898 0.6901	0.7060	Ave		0.7126				2.7		15.0			
o-Xylene	0.6707 0.7256	0.7599 0.7123	0.7280 0.6814	0.7037 0.6512	0.7242	Ave		0.7063				4.7		15.0			
Styrene	1.0897 1.1365	1.1591 1.1326	1.1539 1.0957	1.1006 1.0742	1.1282	Ave		1.1190				2.7		15.0			
Bromoform	0.1715 0.1907	0.1593 0.1974	0.1735 0.1929	0.1724 0.2014	0.1802	Ave		0.1821			0.1000	7.8		15.0			
Isopropylbenzene	1.6122 1.9839	1.8542 2.0147	1.9244 1.9764	1.8796 1.9210	1.9256	Ave		1.8991				6.3		15.0			
1,1,2,2-Tetrachloroethane	0.6477 0.6132	0.7058 0.6279	0.6214 0.5982	0.6553 0.6180	0.6534	Ave		0.6379			0.3000	5.0		15.0			
Bromobenzene	1.0012 0.8822	0.9887 0.9103	0.9214 0.8798	0.8818 0.8600	0.8939	Ave		0.9133				5.4		15.0			
1,2,3-Trichloropropane	0.2029 0.1931	0.2252 0.1928	0.2011 0.1820	0.2131 0.1886	0.2020	Ave		0.2001				6.6		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1949	+++++ 0.1925	0.2032 0.1813	0.2063 0.1942	0.1969	Ave		0.1956				4.1		15.0			
n-Propylbenzene	0.9880 1.0940	1.0651 1.1372	1.0684 1.0940	1.0252 1.0630	1.0898	Ave		1.0694				4.0		15.0			
2-Chlorotoluene	0.9084 0.9328	0.9924 0.9551	0.9500 0.9203	0.8952 0.8931	0.9274	Ave		0.9305				3.4		15.0			
1,3,5-Trimethylbenzene	2.7343 3.2643	3.0997 3.4575	3.1182 3.3592	3.0747 3.2643	3.2568	Ave		3.1810				6.6		15.0			
4-Chlorotoluene	1.0269 0.8959	0.9921 0.9142	0.9279 0.8932	0.8876 0.8694	0.9117	Ave		0.9243				5.6		15.0			
tert-Butylbenzene	+++++ 3.2465	+++++ 3.4460	3.1055 3.3509	3.0173 3.2246	3.1919	Ave		3.2261				4.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 14:44 Calibration End Date: 07/10/2013 17:36 Calibration ID: 16258

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	3.0338 3.2914	3.2717 3.4587	3.2567 3.3820	3.1095 3.2994	3.2751	Ave		3.2643				3.9		15.0			
sec-Butylbenzene	3.3647 4.3024	3.6145 4.5593	4.0547 4.4512	3.9098 4.3002	4.2418	Ave		4.0887				9.7		15.0			
1,3-Dichlorobenzene	+++++ 1.7138	+++++ 1.7683	1.8578 1.6968	1.7355 1.6795	1.7749	Ave		1.7466				3.5		15.0			
p-Isopropyltoluene	3.1523 3.8015	3.2787 4.0412	3.6297 3.9326	3.4508 3.8056	3.7258	Ave		3.6465				8.2		15.0			
1,4-Dichlorobenzene	+++++ 1.7148	+++++ 1.7377	1.8860 1.6762	1.7503 1.6713	1.7270	Ave		1.7376				4.1		15.0			
n-Butylbenzene	2.7052 3.0250	2.8225 3.1984	3.0377 3.0557	2.8295 2.9969	2.9882	Ave		2.9621				5.1		15.0			
1,2-Dichlorobenzene	1.8575 1.6366	1.9666 1.6845	1.7886 1.5988	1.6648 1.5876	1.7162	Ave		1.7224				7.3		15.0			
1,2-Dibromo-3-Chloropropane	0.1396 0.1396	0.1602 0.1493	0.1363 0.1437	0.1425 0.1541	0.1494	Ave		0.1461				5.3		15.0			
1,2,4-Trichlorobenzene	+++++ 1.2191	+++++ 1.2812	1.4061 1.1599	1.2247 1.1654	1.2930	Ave		1.2499				6.9		15.0			
Hexachlorobutadiene	+++++ 0.6511	+++++ 0.6930	0.6686 0.6272	0.6189 0.6097	0.6664	Ave		0.6479				4.7		15.0			
Naphthalene	+++++ 2.7585	+++++ 2.8864	3.1022 2.7013	2.9606 2.8195	3.0059	Ave		2.8907				4.9		15.0			
1,2,3-Trichlorobenzene	+++++ 1.1370	+++++ 1.1797	1.2699 1.0781	1.1889 1.0786	1.2126	Ave		1.1635				6.1		15.0			
Dibromofluoromethane (Surr)	0.8431 0.2473	0.4864 0.2615	0.3545 0.2571	0.3224 0.2530	0.3036	Lin1	0.5598	0.2524							0.9990		0.9900
1,2-Dichloroethane-d4 (Surr)	0.8629 0.2474	0.4600 0.2578	0.3640 0.2547	0.3281 0.2587	0.2995	Lin1	0.5576	0.2533							0.9990		0.9900
Toluene-d8 (Surr)	4.3140 1.3838	2.5337 1.4598	1.9792 1.4489	1.7544 1.4065	1.6549	Lin1	2.7613	1.4132							0.9990		0.9900
4-Bromofluorobenzene (Surr)	3.2811 0.8862	1.7573 0.9569	1.3227 0.9452	1.1997 0.9340	1.1055	Lin1	2.1468	0.9259							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 14:44 Calibration End Date: 07/10/2013 17:36 Calibration ID: 16258

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-93208/11	143543.D
Level 2	IC 240-93208/10	143542.D
Level 3	IC 240-93208/9	143541.D
Level 4	IC 240-93208/8	143540.D
Level 5	IC 240-93208/7	143539.D
Level 6	ICIS 240-93208/6	143538.D
Level 7	IC 240-93208/5	143537.D
Level 8	IC 240-93208/4	143536.D
Level 9	IC 240-93208/3	143535.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Dichlorodifluoromethane	FB	Ave	7766 497326	17905 996812	53510 2010231	99709 2657241	188134	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Chloromethane	FB	Ave	12665 602087	25210 1197244	65939 2437886	124748 3098602	236272	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Vinyl chloride	FB	Ave	8739 489943	18970 976716	53990 1942950	99276 2534991	195528	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromomethane	FB	Lin1	5842 125591	6596 245390	16407 498009	27436 615805	53648	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Chloroethane	FB	Ave	3229 158573	7029 316218	18070 654538	30037 808221	60289	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Dichlorofluoromethane	FB	Ave	13076 442357	22972 886676	50114 1844725	94233 2380539	176809	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Trichlorofluoromethane	FB	Ave	6522 439548	14072 915111	43150 1867965	83471 2458465	169637	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl ether	FB	Lin1	9248 299826	16342 602821	34108 1192344	65667 1560303	125534	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Acrolein	FB	Lin1	5534 134396	8201 274349	15286 515185	31294 735304	57281	5.00 250	10.0 500	25.0 1000	50.0 1250	100
1,1-Dichloroethene	FB	Ave	8556 374851	15020 753113	40218 1500820	71114 1906818	147852	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	4903 344846	10285 692164	33261 1411484	65893 1797198	133029	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Acetone	FB	Lin1	26361 241311	33278 452976	48444 836954	69204 1109927	110674	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Iodomethane	FB	Ave	11811 616292	25241 1250257	60588 2559521	119684 3202115	242270	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Carbon disulfide	FB	Ave	17607 1032914	36837 2123780	97212 4371395	196950 5626275	401939	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 14:44 Calibration End Date: 07/10/2013 17:36 Calibration ID: 16258

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
3-Chloro-1-propene	FB	Ave	3955 225211	8720 453173	21664 909839	42837 1129366	85908	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methyl acetate	FB	Ave	33654 1331410	58872 2646372	134965 5259198	283934 7313415	548113	5.00 250	10.0 500	25.0 1000	50.0 1250	100
Methylene Chloride	FB	Lin1	+++++ 444477	+++++ 785394	121276 1513523	139902 1911312	210911	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
tert-Butyl alcohol	FB	Ave	8439 335418	15374 670418	35674 1224129	78743 1904929	146164	10.0 500	20.0 1000	50.0 2000	100 2500	200
Acrylonitrile	FB	Ave	29226 1306985	61845 2602569	135836 5161638	278571 7059253	535820	10.0 500	20.0 1000	50.0 2000	100 2500	200
trans-1,2-Dichloroethene	FB	Ave	8515 403106	18248 808537	41274 1626927	82295 2025922	156538	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methyl tert-butyl ether	FB	Ave	20553 964957	38706 1938455	94286 3879452	196062 5086208	386862	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Hexane	FB	Lin1	4717 120387	7807 221489	20538 437906	26254 561526	48484	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1-Dichloroethane	FB	Ave	13761 752629	30047 1513481	74474 3049605	141188 3877768	292524	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Vinyl acetate	FB	Ave	1164 60958	2220 124526	5774 242514	12312 327211	23041	0.960 48.0	1.92 96.0	4.80 192	9.60 240	19.2
2,2-Dichloropropane	FB	Ave	6124 303799	13058 615034	30924 1263297	62739 1524395	124357	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
cis-1,2-Dichloroethene	FB	Ave	10048 428452	18870 864478	43577 1738488	86674 2164411	169792	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Butanone	FB	Ave	7566 315237	15035 631651	32844 1255481	66258 1782237	128238	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Bromochloromethane	FB	Ave	4288 212707	8580 424426	20899 852157	41558 1076675	83030	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Tetrahydrofuran	FB	Ave	6419 211330	10539 420827	24425 834826	49199 1183128	89476	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Chloroform	FB	Ave	13866 648187	26861 1316895	66259 2656224	125630 3372175	253932	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,1-Trichloroethane	FB	Ave	8749 537488	18378 1092959	50186 2260068	101696 2835418	213957	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Cyclohexane	FB	Ave	13359 889548	26427 1806409	87565 3659651	167416 4657516	342882	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1-Dichloropropene	FB	Ave	8526 497199	17221 997115	49432 1993996	94743 2536733	192227	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Carbon tetrachloride	FB	Ave	8926 537567	16462 1084914	49761 2216687	98593 2831135	202133	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Isobutyl alcohol	FB	Ave	7340 293690	11639 581695	28839 1120809	72449 1662499	126512	25.0 1250	50.0 2500	125 5000	250 6250	500

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 14:44 Calibration End Date: 07/10/2013 17:36 Calibration ID: 16258

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Benzene	FB	Ave	32976 1560159	60043 3084218	153156 6308453	296470 7978864	599010	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloroethane	FB	Ave	10392 480113	18621 959285	48631 1924409	95668 2485486	189014	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Heptane	FB	Ave	1798 123713	3531 247816	11996 491282	22953 629138	45959	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Trichloroethene	FB	Ave	9055 478334	17900 965636	49065 1958533	90460 2473570	185237	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methylcyclohexane	FB	Ave	11201 758934	22743 1535215	73621 3065335	142077 3870590	292873	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloropropane	FB	Ave	7767 408819	15494 805751	39014 1627008	77168 2080367	154299	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Dibromomethane	FB	Ave	4677 189050	7972 375716	19384 755863	38961 980727	75245	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,4-Dioxane	FB	Ave	1218 63043	2912 122127	6377 236278	14175 336980	25768	20.0 1000	40.0 2000	100 4000	200 5000	400
Bromodichloromethane	FB	Ave	8999 466189	17467 941817	42599 1931275	86719 2472314	176681	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chloroethyl vinyl ether	FB	Ave	7723 333730	11910 658786	30392 1325911	64589 1844968	129541	2.00 100	4.00 200	10.0 400	20.0 500	40.0
cis-1,3-Dichloropropene	FB	Ave	9885 532545	18857 1064356	49092 2206082	98532 2881120	200239	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Methyl-2-pentanone	CBZ	Ave	14690 653281	25864 1293006	63473 2596749	134686 3701184	260675	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Toluene	CBZ	Ave	35255 1651263	60366 3270202	156804 6798306	307376 8759690	624901	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,3-Dichloropropene	CBZ	Ave	8546 413515	14580 822945	38139 1674108	76216 2226881	156791	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl methacrylate	CBZ	Ave	7633 340296	12403 668316	31372 1345664	66916 1852996	130144	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2-Trichloroethane	CBZ	Ave	6879 267912	10974 520057	26041 1053977	54102 1407432	104082	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Tetrachloroethene	CBZ	Ave	7001 355307	12551 702251	33063 1420714	64714 1801785	133155	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3-Dichloropropane	CBZ	Ave	10294 441374	16656 851962	43303 1711588	88676 2269863	173136	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Hexanone	CBZ	Ave	10945 387650	15946 742729	37043 1479684	80211 2186932	152622	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Dibromochloromethane	CBZ	Ave	6335 343058	11590 691983	28578 1423194	60862 1898529	125633	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dibromoethane	CBZ	Ave	6340 268764	10690 526841	26739 1057992	53031 1402520	102116	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 14:44 Calibration End Date: 07/10/2013 17:36 Calibration ID: 16258

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Chlorobenzene	CBZ	Ave	24418 1072246	40115 2119359	101656 4353425	204486 5643698	403176	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	6438 396803	14557 796477	35820 1595612	72511 2057034	148586	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethylbenzene	CBZ	Ave	12015 592792	21238 1178377	55531 2348050	110257 3025828	222066	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
m-Xylene & p-Xylene	CBZ	Ave	15023 725516	26311 1426617	66989 2865933	133583 3709684	265867	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
o-Xylene	CBZ	Ave	14449 717581	26954 1390483	67728 2774301	136279 3500682	272733	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Styrene	CBZ	Ave	23476 1123998	41113 2210819	107345 4460845	213149 5774597	424872	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromoform	CBZ	Ave	3695 188553	5649 385314	16139 785512	33392 1082604	67845	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Isopropylbenzene	CBZ	Ave	34732 1962071	65770 3932693	179027 8046236	364016 10327140	725170	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	7068 303656	12588 587254	29019 1157561	64146 1588043	121529	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromobenzene	DCB	Ave	10926 436876	17634 851350	43032 1702541	86326 2209934	166257	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,3-Trichloropropane	DCB	Ave	2214 95611	4017 180280	9392 352192	20858 484662	37575	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 96512	+++++ 180030	9488 350882	20192 498997	36615	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
n-Propylbenzene	DCB	Ave	10782 541746	18997 1063487	49895 2117219	100358 2731761	202677	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chlorotoluene	DCB	Ave	9914 461944	17701 893193	44366 1781069	87639 2295077	172485	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3,5-Trimethylbenzene	DCB	Ave	29840 1616489	55286 3233484	145623 6500912	300993 8388446	605704	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Chlorotoluene	DCB	Ave	11207 443660	17695 854978	43333 1728492	86891 2234158	169569	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
tert-Butylbenzene	DCB	Ave	+++++ 1607667	+++++ 3222690	145030 6484767	295380 8286429	593644	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
1,2,4-Trimethylbenzene	DCB	Ave	33109 1629908	58355 3234607	152090 6545037	304403 8478849	609118	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
sec-Butylbenzene	DCB	Ave	36720 2130548	64468 4263852	189358 8614123	382750 11050459	788914	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3-Dichlorobenzene	DCB	Ave	+++++ 848655	+++++ 1653724	86762 3283608	169899 4315919	330098	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
p-Isopropyltoluene	DCB	Ave	34402 1882519	58479 3779325	169509 7610456	337812 9779601	692939	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 14:44 Calibration End Date: 07/10/2013 17:36 Calibration ID: 16258

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dichlorobenzene	DCB	Ave	+++++ 849195	+++++ 1625091	88078 3243892	171340 4294845	321188	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
n-Butylbenzene	DCB	Ave	29522 1497971	50343 2991114	141862 5913496	276992 7701366	555749	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichlorobenzene	DCB	Ave	20271 810468	35076 1575374	83531 3094018	162978 4079731	319179	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	1523 69150	2858 139612	6366 278089	13947 395941	27792	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,4-Trichlorobenzene	DCB	Ave	+++++ 603721	+++++ 1198201	65666 2244667	119894 2994946	240480	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Hexachlorobutadiene	DCB	Ave	+++++ 322439	+++++ 648101	31226 1213789	60587 1566910	123947	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Naphthalene	DCB	Ave	+++++ 1366016	+++++ 2699405	144877 5227724	289831 7245588	559049	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
1,2,3-Trichlorobenzene	DCB	Ave	+++++ 563040	+++++ 1103245	59305 2086421	116383 2771651	225529	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Dibromofluoromethane (Surr)	FB	Lin1	24942 353861	27015 748410	49610 1517556	91646 1911416	170019	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Lin1	25528 353917	25552 737729	50938 1503148	93281 1954890	167691	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Toluene-d8 (Surr)	CBZ	Lin1	92935 1368515	89872 2849453	184120 5898772	339768 7561141	623232	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Bromofluorobenzene (Surr)	DCB	Lin1	35807 438861	31343 894918	61770 1829176	117443 2400162	205610	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 17:58 Calibration End Date: 07/10/2013 20:50 Calibration ID: 16260

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-93208/20	143552.D
Level 2	IC 240-93208/19	143551.D
Level 3	IC 240-93208/18	143550.D
Level 4	IC 240-93208/17	143549.D
Level 5	IC 240-93208/16	143548.D
Level 6	IC 240-93208/15	143547.D
Level 7	IC 240-93208/14	143546.D
Level 8	IC 240-93208/13	143545.D
Level 9	IC 240-93208/12	143544.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Acetonitrile	0.0423 0.0301	0.0351 0.0310	0.0337 0.0312	0.0316 0.0299	0.0290	Ave		0.0327				13.0		15.0			
2-Chloro-1,3-butadiene	0.5644 0.5480	0.4442 0.5585	0.5610 0.5771	0.5308 0.5269	0.5242	Ave		0.5372				7.3		15.0			
Diisopropyl ether	0.2676 0.2479	0.2222 0.2542	0.2566 0.2535	0.2500 0.2346	0.2384	Ave		0.2472				5.5		15.0			
Ethyl-t-butyl ether (ETBE)	0.9904 0.9647	0.8983 1.0044	0.9982 1.0285	0.9849 0.9696	0.9434	Ave		0.9758				3.9		15.0			
Propionitrile	0.0429 0.0343	0.0382 0.0357	0.0401 0.0358	0.0383 0.0352	0.0349	Ave		0.0372				7.6		15.0			
Ethyl acetate	0.2419 0.2212	0.2277 0.2320	0.2249 0.2257	0.2235 0.2361	0.2194	Ave		0.2280				3.2		15.0			
Methacrylonitrile	0.1750 0.1534	0.1577 0.1577	0.1652 0.1559	0.1602 0.1541	0.1537	Ave		0.1592				4.4		15.0			
Tert-amyl-methyl ether (TAME)	0.7746 0.6991	0.6550 0.7277	0.7431 0.7413	0.7266 0.6975	0.6928	Ave		0.7175				4.9		15.0			
n-Butanol	0.0131 0.0103	0.0133 0.0105	0.0122 0.0106	0.0106 0.0109	0.0100	Ave		0.0113				11.0		15.0			
Methyl methacrylate	0.1897 0.1971	0.1959 0.2089	0.1866 0.1966	0.1879 0.2055	0.1878	Ave		0.1951				4.1		15.0			
2-Nitropropane	0.0923 0.0517	0.0711 0.0554	0.0582 0.0553	0.0528 0.0569	0.0489	Lin1	0.0486	0.0552							0.9980		0.9900
1-Chlorohexane	0.5356 0.4817	0.4914 0.4778	0.4630 0.4751	0.4739 0.4478	0.4598	Ave		0.4785				5.2		15.0			
Cyclohexanone	0.0184 0.0120	0.0128 0.0120	0.0153 0.0122	0.0136 0.0121	0.0122	Lin1	0.0635	0.0121							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 17:58 Calibration End Date: 07/10/2013 20:50 Calibration ID: 16260

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2,3-Trimethylbenzene	3.2139 3.2891	2.8658 3.4147	3.3280 3.6601	3.2641 3.2531	3.1403	Ave		3.2699				6.5		15.0			
1,3,5-Trichlorobenzene	1.6341 1.2858	1.3396 1.3229	1.4424 1.3757	1.3889 1.2370	1.2767	Ave		1.3670				8.7		15.0			
2-Methylnaphthalene	+++++ 1.9245	+++++ 1.9798	2.3082 2.0773	2.1802 1.8078	2.0031	Ave		2.0401				8.1		15.0			
n-Butyl acetate	0.4604 0.4560	0.4376 0.4738	0.4326 0.4601	0.4413 0.4901	0.4299	Ave		0.4535				4.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 17:58 Calibration End Date: 07/10/2013 20:50 Calibration ID: 16260

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-93208/20	143552.D
Level 2	IC 240-93208/19	143551.D
Level 3	IC 240-93208/18	143550.D
Level 4	IC 240-93208/17	143549.D
Level 5	IC 240-93208/16	143548.D
Level 6	IC 240-93208/15	143547.D
Level 7	IC 240-93208/14	143546.D
Level 8	IC 240-93208/13	143545.D
Level 9	IC 240-93208/12	143544.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Acetonitrile	FB	Ave	10296 410272	19270 818493	43396 1596733	82437 2136128	154907	10.0 500	20.0 1000	50.0 2000	100 2500	200
2-Chloro-1,3-butadiene	FB	Ave	13733 747595	24377 1476322	72284 2950340	138589 3761591	279566	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Diisopropyl ether	FB	Ave	6511 338135	12193 671868	33067 1295738	65259 1674867	127128	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	24097 1316002	49294 2654996	128629 5257780	257128 6922067	503116	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Propionitrile	FB	Ave	10430 467399	20963 942421	51616 1829154	99991 2512727	186209	10.0 500	20.0 1000	50.0 2000	100 2500	200
Ethyl acetate	FB	Ave	11772 603419	24986 1226364	57965 2307531	116687 3371185	234026	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Methacrylonitrile	FB	Ave	42570 2092277	86517 4168381	212913 7970772	418117 11002261	819853	10.0 500	20.0 1000	50.0 2000	100 2500	200
Tert-amyl-methyl ether (TAME)	FB	Ave	18846 953703	35942 1923446	95749 3789822	189707 4979576	369446	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Butanol	CBZ	Ave	5034 227607	11985 465100	24860 881125	44812 1290177	86539	25.0 1250	50.0 2500	125 5000	250 6250	500
Methyl methacrylate	FB	Ave	9229 537676	21503 1104356	48079 2009741	98126 2933940	200289	2.00 100	4.00 200	10.0 400	20.0 500	40.0
2-Nitropropane	FB	Lin1	4492 141149	7807 292617	15008 565180	27549 812048	52156	2.00 100	4.00 200	10.0 400	20.0 500	40.0
1-Chlorohexane	CBZ	Ave	8259 426696	17762 844635	37835 1574390	79791 2128186	159235	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Cyclohexanone	CBZ	Lin1	2841 105989	4636 212205	12503 404412	22947 573895	42355	10.0 500	20.0 1000	50.0 2000	100 2500	200
1,2,3-Trimethylbenzene	DCB	Ave	25157 1490367	52289 3047531	136714 6044223	279065 7842321	553264	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 93208

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 07/10/2013 17:58 Calibration End Date: 07/10/2013 20:50 Calibration ID: 16260

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,3,5-Trichlorobenzene	DCB	Ave	12791 582652	24442 1180642	59252 2271860	118745 2982136	224930	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Methylnaphthalene	DCB	Ave	+++++ 1744114	+++++ 3533855	189646 6860822	372782 8716423	705804	+++++ 100	+++++ 200	10.0 400	20.0 500	40.0
n-Butyl acetate	CBZ	Ave	7100 403930	15816 837463	35349 1524649	74301 2329381	148867	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

Curve Type Legend:
Ave = Average ISTD
Linl = Linear 1/conc ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-93208/21 Calibration Date: 07/10/2013 21:11

Instrument ID: A3UX14 Calib Start Date: 07/10/2013 14:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/10/2013 17:36

Lab File ID: 143553.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3380	0.2976		1.00	0.0500	-12.0	50.0
Chloromethane	Ave	0.4307	0.4052	0.1000	1.00	0.0500	-5.9	50.0
Vinyl chloride	Ave	0.3411	0.3317		1.00	0.0500	-2.7	20.0
Bromomethane	Lin1		0.0888		1.00	0.0500	4.0	50.0
Chloroethane	Ave	0.1130	0.1050		1.00	0.0500	-7.1	50.0
Dichlorofluoromethane	Ave	0.3453	0.3113		2.00	0.0500	-9.8	50.0
Trichlorofluoromethane	Ave	0.2942	0.3018		1.00	0.0500	2.6	50.0
Ethyl ether	Lin1		0.2333		2.00	0.0500	12.1	50.0
Acrolein	Lin1		0.0166		20.0	0.300	-12.7	50.0
1,1-Dichloroethene	Ave	0.2659	0.2592		1.00	0.0500	-2.5	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2242	0.2365		1.00	0.0500	5.5	50.0
Acetone	Lin1		0.0797		10.0	0.100	-1.1	50.0
Iodomethane	Ave	0.4295	0.4675		1.00	0.0500	8.9	50.0
Carbon disulfide	Ave	0.7014	0.7345		1.00	0.0500	4.7	50.0
3-Chloro-1-propene	Ave	0.1521	0.1465		2.00	0.0500	-3.7	50.0
Methyl acetate	Ave	0.1968	0.2041		10.0	0.250	3.8	50.0
Methylene Chloride	Lin1		0.3100		1.00	0.0500	3.9	50.0
tert-Butyl alcohol	Ave	0.0254	0.0252		50.0	0.500	-0.9	50.0
Acrylonitrile	Ave	0.0960	0.0975		20.0	0.500	1.6	50.0
trans-1,2-Dichloroethene	Ave	0.2876	0.2957		1.00	0.0500	2.8	50.0
Methyl tert-butyl ether	Ave	0.6809	0.7311		1.00	0.0500	7.4	50.0
Hexane	Lin1		0.0783		1.00	0.0500	0.5	20.0
1,1-Dichloroethane	Ave	0.5158	0.5584	0.1000	1.00	0.0500	8.3	50.0
Vinyl acetate	Ave	0.0435	0.0383		2.00	0.0480	-11.8	50.0
2,2-Dichloropropane	Ave	0.2165	0.2197		1.00	0.0500	1.4	50.0
cis-1,2-Dichloroethene	Ave	0.3090	0.3167		1.00	0.0500	2.5	50.0
2-Butanone	Ave	0.1174	0.1173		10.0	0.100	-0.0	50.0
Bromochloromethane	Ave	0.1475	0.1549		1.00	0.0500	5.1	50.0
Tetrahydrofuran	Ave	0.0837	0.0809		3.00	0.100	-3.4	50.0
Chloroform	Ave	0.4590	0.4715		1.00	0.0500	2.7	20.0
1,1,1-Trichloroethane	Ave	0.3601	0.3938		1.00	0.0500	9.4	50.0
Cyclohexane	Ave	0.5826	0.6223		1.00	0.0500	6.8	50.0
1,1-Dichloropropene	Ave	0.3331	0.3755		1.00	0.0500	12.7	50.0
Carbon tetrachloride	Ave	0.3518	0.3884		1.00	0.0500	10.4	50.0
Isobutyl alcohol	Ave	0.0087	0.0089		50.0	1.25	1.6	50.0
Benzene	Ave	1.077	1.120		1.00	0.0500	4.0	50.0
1,2-Dichloroethane	Ave	0.3371	0.3588		1.00	0.0500	6.4	50.0
n-Heptane	Ave	0.0792	0.0831		1.00	0.0500	5.0	50.0
Trichloroethene	Ave	0.3288	0.3510		1.00	0.0500	6.7	50.0
Methylcyclohexane	Ave	0.4928	0.5225		1.00	0.0500	6.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-93208/21 Calibration Date: 07/10/2013 21:11

Instrument ID: A3UX14 Calib Start Date: 07/10/2013 14:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/10/2013 17:36

Lab File ID: 143553.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2762	0.2901		1.00	0.0500	5.1	20.0
Dibromomethane	Ave	0.1370	0.1392		1.00	0.0500	1.6	50.0
1,4-Dioxane	Ave	0.0023	0.0023		50.0	1.00	0.3	50.0
Bromodichloromethane	Ave	0.3170	0.3245		1.00	0.0500	2.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1157	0.1171		10.0	0.100	1.1	50.0
cis-1,3-Dichloropropene	Ave	0.3586	0.3783		1.00	0.0500	5.5	50.0
4-Methyl-2-pentanone	Ave	0.3406	0.3533		10.0	0.100	3.7	50.0
Toluene	Ave	1.657	1.698		1.00	0.0500	2.5	20.0
trans-1,3-Dichloropropene	Ave	0.4103	0.4493		1.00	0.0500	9.5	50.0
Ethyl methacrylate	Ave	0.3438	0.3454		1.00	0.0500	0.5	50.0
1,1,2-Trichloroethane	Ave	0.2803	0.2816		1.00	0.0500	0.5	50.0
Tetrachloroethene	Ave	0.3472	0.3507		1.00	0.0500	1.0	50.0
1,3-Dichloropropane	Ave	0.4507	0.4541		1.00	0.0500	0.8	50.0
2-Hexanone	Ave	0.2066	0.1961		10.0	0.100	-5.0	50.0
Dibromochloromethane	Ave	0.3311	0.3490		1.00	0.0500	5.4	50.0
1,2-Dibromoethane	Ave	0.2767	0.2705		1.00	0.0500	-2.2	50.0
Chlorobenzene	Ave	1.086	1.093	0.3000	1.00	0.0500	0.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3830	0.4179		1.00	0.0500	9.1	50.0
Ethylbenzene	Ave	0.5839	0.5959		1.00	0.0500	2.1	20.0
m-Xylene & p-Xylene	Ave	0.7126	0.7226		2.00	0.0500	1.4	50.0
o-Xylene	Ave	0.7063	0.7360		1.00	0.0500	4.2	50.0
Styrene	Ave	1.119	1.093		1.00	0.0500	-2.4	50.0
Bromoform	Ave	0.1821	0.1847	0.1000	1.00	0.0500	1.4	50.0
Isopropylbenzene	Ave	1.899	2.008		1.00	0.0500	5.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6379	0.6643	0.3000	1.00	0.0500	4.1	50.0
Bromobenzene	Ave	0.9133	0.9121		1.00	0.0500	-0.1	50.0
1,2,3-Trichloropropane	Ave	0.2001	0.2146		1.00	0.0500	7.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1956	0.1871		1.00	0.0500	-4.3	50.0
n-Propylbenzene	Ave	1.069	1.110		1.00	0.0500	3.8	50.0
2-Chlorotoluene	Ave	0.9305	0.9490		1.00	0.0500	2.0	50.0
1,3,5-Trimethylbenzene	Ave	3.181	3.360		1.00	0.0500	5.6	50.0
4-Chlorotoluene	Ave	0.9243	0.9032		1.00	0.0500	-2.3	50.0
tert-Butylbenzene	Ave	3.226	3.401		1.00	0.0500	5.4	50.0
1,2,4-Trimethylbenzene	Ave	3.264	3.303		1.00	0.0500	1.2	50.0
sec-Butylbenzene	Ave	4.089	4.421		1.00	0.0500	8.1	50.0
1,3-Dichlorobenzene	Ave	1.747	1.693		1.00	0.0500	-3.1	50.0
p-Isopropyltoluene	Ave	3.646	3.778		1.00	0.0500	3.6	50.0
1,4-Dichlorobenzene	Ave	1.738	1.642		1.00	0.0500	-5.5	50.0
n-Butylbenzene	Ave	2.962	2.874		1.00	0.0500	-3.0	50.0
1,2-Dichlorobenzene	Ave	1.722	1.685		1.00	0.0500	-2.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1461	0.1449		2.00	0.0500	-0.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-93208/21 Calibration Date: 07/10/2013 21:11

Instrument ID: A3UX14 Calib Start Date: 07/10/2013 14:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/10/2013 17:36

Lab File ID: 143553.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Ave	1.250	1.150		1.00	0.0500	-8.0	50.0
Hexachlorobutadiene	Ave	0.6479	0.6720		1.00	0.0500	3.7	50.0
Naphthalene	Ave	2.891	2.833		1.00	0.0500	-2.0	50.0
1,2,3-Trichlorobenzene	Ave	1.164	1.128		1.00	0.0500	-3.1	50.0
Dibromofluoromethane (Surr)	Lin1		0.2467		0.0466	0.0500	-6.7	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2454		0.0462	0.0500	-7.5	50.0
Toluene-d8 (Surr)	Lin1		1.377		0.0468	0.0500	-6.5	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.8849		0.0455	0.0500	-9.1	50.0

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A3UX14 Start Date: 08/14/2013 09:34

Analysis Batch Number: 97390 End Date: 08/14/2013 17:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-97390/1		08/14/2013 09:34	1	BFB14498.D	DB-624 0.18(mm)
CCVIS 240-97390/3		08/14/2013 10:17	1	144237.D	DB-624 0.18(mm)
CCV 240-97390/4		08/14/2013 10:38	1	144238.D	DB-624 0.18(mm)
ZZZZZ		08/14/2013 11:00	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 11:21	1		DB-624 0.18(mm)
LCS 240-97336/2-A		08/14/2013 12:04	1	144242.D	DB-624 0.18(mm)
MB 240-97336/1-A		08/14/2013 12:25	1	144243.D	DB-624 0.18(mm)
240-27894-1	DR-TP-A76-10	08/14/2013 12:47	1	144244.D	DB-624 0.18(mm)
240-27894-2	DR-TP-A76-11	08/14/2013 13:08	1	144245.D	DB-624 0.18(mm)
ZZZZZ		08/14/2013 13:30	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 13:51	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 14:34	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 14:56	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 15:17	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 15:39	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 16:00	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 16:22	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 16:43	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 17:05	1		DB-624 0.18(mm)
ZZZZZ		08/14/2013 17:26	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: BFB14498.D BFB Injection Date: 08/14/2013

Instrument ID: A3UX14 BFB Injection Time: 09:34

Analysis Batch No.: 97390

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.6	
75	30.0 - 60.0 % of mass 95	44.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.4	(0.4)1
174	50.0 - 120.00 % of mass 95	90.9	
175	5.0 - 9.0 % of mass 174	6.4	(7.1)1
176	95.0 - 101.0 % of mass 174	87.2	(95.8)1
177	5.0 - 9.0 % of mass 176	5.8	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97390/3	144237.D	08/14/2013	10:17
	CCV 240-97390/4	144238.D	08/14/2013	10:38
	LCS 240-97336/2-A	144242.D	08/14/2013	12:04
	MB 240-97336/1-A	144243.D	08/14/2013	12:25
DR-TP-A76-10	240-27894-1	144244.D	08/14/2013	12:47
DR-TP-A76-11	240-27894-2	144245.D	08/14/2013	13:08

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVIS 240-97390/3 Calibration Date: 08/14/2013 10:17

Instrument ID: A3UX14 Calib Start Date: 07/10/2013 14:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/10/2013 17:36

Lab File ID: 144237.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3380	0.3875		1.00	0.0500	14.6	50.0
Chloromethane	Ave	0.4307	0.5116	0.1000	1.00	0.0500	18.8	50.0
Vinyl chloride	Ave	0.3411	0.3578		1.00	0.0500	4.9	20.0
Bromomethane	Lin1		0.1292		1.00	0.0500	52.5*	50.0
Chloroethane	Ave	0.1130	0.1383		1.00	0.0500	22.3	50.0
Dichlorofluoromethane	Ave	0.3453	0.4112		2.00	0.0500	19.1	50.0
Trichlorofluoromethane	Ave	0.2942	0.4719		1.00	0.0500	60.4*	50.0
Ethyl ether	Lin1		0.2421		2.00	0.0500	16.3	50.0
Acrolein	Lin1		0.0230		20.0	0.250	21.3	50.0
1,1-Dichloroethene	Ave	0.2659	0.2731		1.00	0.0500	2.7	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2242	0.2817		1.00	0.0500	25.6	50.0
Acetone	Lin1		0.0825		10.0	0.100	2.7	50.0
Iodomethane	Ave	0.4295	0.4981		1.00	0.0500	16.0	50.0
Carbon disulfide	Ave	0.7014	0.8014		1.00	0.0500	14.3	50.0
3-Chloro-1-propene	Ave	0.1521	0.1613		2.00	0.0500	6.0	50.0
Methyl acetate	Ave	0.1968	0.2130		10.0	0.250	8.3	50.0
Methylene Chloride	Lin1		0.3334		1.00	0.0500	13.5	50.0
tert-Butyl alcohol	Ave	0.0254	0.0218		50.0	0.500	-14.0	50.0
Acrylonitrile	Ave	0.0960	0.1007		20.0	0.500	4.9	50.0
trans-1,2-Dichloroethene	Ave	0.2876	0.3166		1.00	0.0500	10.1	50.0
Methyl tert-butyl ether	Ave	0.6809	0.6910		1.00	0.0500	1.5	50.0
Hexane	Lin1		0.0817		1.00	0.0500	5.0	20.0
1,1-Dichloroethane	Ave	0.5158	0.5896	0.1000	1.00	0.0500	14.3	50.0
Vinyl acetate	Ave	0.0435	0.0352		2.00	0.0480	-19.0	50.0
2,2-Dichloropropane	Ave	0.2165	0.2668		1.00	0.0500	23.2	50.0
cis-1,2-Dichloroethene	Ave	0.3090	0.3264		1.00	0.0500	5.6	50.0
2-Butanone	Ave	0.1174	0.1131		10.0	0.100	-3.7	50.0
Bromochloromethane	Ave	0.1475	0.1647		1.00	0.0500	11.7	50.0
Tetrahydrofuran	Ave	0.0837	0.0838		3.00	0.100	0.1	50.0
Chloroform	Ave	0.4590	0.5149		1.00	0.0500	12.2	20.0
1,1,1-Trichloroethane	Ave	0.3601	0.4720		1.00	0.0500	31.1	50.0
Cyclohexane	Ave	0.5826	0.7173		1.00	0.0500	23.1	50.0
1,1-Dichloropropene	Ave	0.3331	0.3754		1.00	0.0500	12.7	50.0
Carbon tetrachloride	Ave	0.3518	0.4568		1.00	0.0500	29.8	50.0
Isobutyl alcohol	Ave	0.0087	0.0083		50.0	1.25	-4.6	50.0
Benzene	Ave	1.077	1.138		1.00	0.0500	5.6	50.0
1,2-Dichloroethane	Ave	0.3371	0.3924		1.00	0.0500	16.4	50.0
n-Heptane	Ave	0.0792	0.0962		1.00	0.0500	21.5	50.0
Trichloroethene	Ave	0.3288	0.3786		1.00	0.0500	15.2	50.0
Methylcyclohexane	Ave	0.4928	0.5752		1.00	0.0500	16.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVIS 240-97390/3 Calibration Date: 08/14/2013 10:17

Instrument ID: A3UX14 Calib Start Date: 07/10/2013 14:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/10/2013 17:36

Lab File ID: 144237.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2762	0.2922		1.00	0.0500	5.8	20.0
Dibromomethane	Ave	0.1370	0.1409		1.00	0.0500	2.9	50.0
1,4-Dioxane	Ave	0.0023	0.0020		50.0	1.00	-11.2	50.0
Bromodichloromethane	Ave	0.3170	0.3363		1.00	0.0500	6.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1157	0.1089		10.0	0.100	-5.9	50.0
cis-1,3-Dichloropropene	Ave	0.3586	0.3545		1.00	0.0500	-1.2	50.0
4-Methyl-2-pentanone	Ave	0.3406	0.3468		10.0	0.100	1.8	50.0
Toluene	Ave	1.657	1.803		1.00	0.0500	8.8	20.0
trans-1,3-Dichloropropene	Ave	0.4103	0.3874		1.00	0.0500	-5.6	50.0
Ethyl methacrylate	Ave	0.3438	0.3010		1.00	0.0500	-12.4	50.0
1,1,2-Trichloroethane	Ave	0.2803	0.2800		1.00	0.0500	-0.1	50.0
Tetrachloroethene	Ave	0.3472	0.4060		1.00	0.0500	16.9	50.0
1,3-Dichloropropane	Ave	0.4507	0.4412		1.00	0.0500	-2.1	50.0
2-Hexanone	Ave	0.2066	0.1953		10.0	0.100	-5.5	50.0
Dibromochloromethane	Ave	0.3311	0.3580		1.00	0.0500	8.1	50.0
1,2-Dibromoethane	Ave	0.2767	0.2728		1.00	0.0500	-1.4	50.0
Chlorobenzene	Ave	1.086	1.158	0.3000	1.00	0.0500	6.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3830	0.4581		1.00	0.0500	19.6	50.0
Ethylbenzene	Ave	0.5839	0.6437		1.00	0.0500	10.2	20.0
m-Xylene & p-Xylene	Ave	0.7126	0.7784		2.00	0.0500	9.2	50.0
o-Xylene	Ave	0.7063	0.7746		1.00	0.0500	9.7	50.0
Styrene	Ave	1.119	1.155		1.00	0.0500	3.2	50.0
Bromoform	Ave	0.1821	0.1809	0.1000	1.00	0.0500	-0.7	50.0
Isopropylbenzene	Ave	1.899	2.169		1.00	0.0500	14.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6379	0.5972	0.3000	1.00	0.0500	-6.4	50.0
Bromobenzene	Ave	0.9133	0.9277		1.00	0.0500	1.6	50.0
1,2,3-Trichloropropane	Ave	0.2001	0.2037		1.00	0.0500	1.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1956	0.1764		1.00	0.0500	-9.8	50.0
n-Propylbenzene	Ave	1.069	1.173		1.00	0.0500	9.7	50.0
2-Chlorotoluene	Ave	0.9305	1.022		1.00	0.0500	9.9	50.0
1,3,5-Trimethylbenzene	Ave	3.181	3.503		1.00	0.0500	10.1	50.0
4-Chlorotoluene	Ave	0.9243	0.9706		1.00	0.0500	5.0	50.0
tert-Butylbenzene	Ave	3.226	3.521		1.00	0.0500	9.1	50.0
1,2,4-Trimethylbenzene	Ave	3.264	3.540		1.00	0.0500	8.4	50.0
sec-Butylbenzene	Ave	4.089	4.582		1.00	0.0500	12.1	50.0
1,3-Dichlorobenzene	Ave	1.747	1.858		1.00	0.0500	6.4	50.0
p-Isopropyltoluene	Ave	3.646	4.142		1.00	0.0500	13.6	50.0
1,4-Dichlorobenzene	Ave	1.738	1.807		1.00	0.0500	4.0	50.0
n-Butylbenzene	Ave	2.962	3.218		1.00	0.0500	8.6	50.0
1,2-Dichlorobenzene	Ave	1.722	1.771		1.00	0.0500	2.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1461	0.1221		2.00	0.0500	-16.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVIS 240-97390/3 Calibration Date: 08/14/2013 10:17

Instrument ID: A3UX14 Calib Start Date: 07/10/2013 14:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/10/2013 17:36

Lab File ID: 144237.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Ave	1.250	1.308		1.00	0.0500	4.7	50.0
Hexachlorobutadiene	Ave	0.6479	0.7428		1.00	0.0500	14.7	50.0
Naphthalene	Ave	2.891	2.756		1.00	0.0500	-4.7	50.0
1,2,3-Trichlorobenzene	Ave	1.164	1.206		1.00	0.0500	3.7	50.0
Dibromofluoromethane (Surr)	Lin1		0.2579		0.0489	0.0500	-2.3	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2601		0.0491	0.0500	-1.7	50.0
Toluene-d8 (Surr)	Lin1		1.379		0.0468	0.0500	-6.3	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.8288		0.0424	0.0500	-15.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97390/4 Calibration Date: 08/14/2013 10:38

Instrument ID: A3UX14 Calib Start Date: 07/10/2013 14:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/10/2013 17:36

Lab File ID: 144238.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Lin1		0.2440		0.0461	0.0500	-7.8	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2498		0.0471	0.0500	-5.8	50.0
Toluene-d8 (Surr)	Lin1		1.333		0.0452	0.0500	-9.6	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.8077		0.0413	0.0500	-17.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97390/4 Calibration Date: 08/14/2013 10:38

Instrument ID: A3UX14 Calib Start Date: 07/10/2013 17:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/10/2013 20:50

Lab File ID: 144238.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0327	0.0299		20.0	0.500	-8.4	50.0
2-Chloro-1,3-butadiene	Ave	0.5372	0.5433		1.00	0.0500	1.1	50.0
Diisopropyl ether	Ave	0.2472	0.2218		10.0	0.0500	-10.3	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.9758	0.8833		5.00	0.0500	-9.5	50.0
Propionitrile	Ave	0.0372	0.0323		5.00	0.500	-13.2	50.0
Ethyl acetate	Ave	0.2280	0.1728		4.00	0.100	-24.2	50.0
Methacrylonitrile	Ave	0.1592	0.1485		2.00	0.500	-6.7	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7175	0.5726		5.00	0.0500	-20.2	50.0
n-Butanol	Ave	0.0113	0.0077		50.0	1.25	-31.7	50.0
Methyl methacrylate	Ave	0.1951	0.1718		2.00	0.100	-12.0	50.0
2-Nitropropane	Lin1		0.0361		2.00	0.100	-35.6	50.0
Cyclohexanone	Lin1		0.0098		20.0	0.500	-20.0	50.0
1,2,3-Trimethylbenzene	Ave	3.270	3.103		0.0474	0.0500	-5.1	50.0
1,3,5-Trichlorobenzene	Ave	1.367	1.349		1.00	0.0500	-1.3	50.0
2-Methylnaphthalene	Ave	2.040	1.670		5.00	0.100	-18.1	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: 144243.D Lab Sample ID: MB 240-97336/1-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX14 Date Analyzed: 08/14/2013 12:25

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97336/2-A	144242.D	08/14/2013 12:04
DR-TP-A76-10	240-27894-1	144244.D	08/14/2013 12:47
DR-TP-A76-11	240-27894-2	144245.D	08/14/2013 13:08

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97336/1-A

Matrix: Solid | Lab File ID: 144243.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 08/14/2013 12:25

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 97390 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	250	U	250	9.1
71-55-6	1,1,1-Trichloroethane	250	U	250	21
79-34-5	1,1,2,2-Tetrachloroethane	250	U	250	8.9
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	250	U	250	39
75-34-3	1,1-Dichloroethane	250	U	250	17
75-35-4	1,1-Dichloroethene	250	U	250	18
563-58-6	1,1-Dichloropropene	250	U	250	10
87-61-6	1,2,3-Trichlorobenzene	250	U	250	10
96-18-4	1,2,3-Trichloropropane	250	U	250	21
526-73-8	1,2,3-Trimethylbenzene	250	U	250	0.17
120-82-1	1,2,4-Trichlorobenzene	9.70	J	250	7.3
95-63-6	1,2,4-Trimethylbenzene	250	U	250	5.0
96-12-8	1,2-Dibromo-3-Chloropropane	500	U	500	50
95-50-1	1,2-Dichlorobenzene	250	U	250	8.6
107-06-2	1,2-Dichloroethane	250	U	250	10
78-87-5	1,2-Dichloropropane	250	U	250	8.2
541-73-1	1,3-Dichlorobenzene	250	U	250	4.8
142-28-9	1,3-Dichloropropane	250	U	250	22
106-46-7	1,4-Dichlorobenzene	250	U	250	8.0
594-20-7	2,2-Dichloropropane	250	U	250	23
110-75-8	2-Chloroethyl vinyl ether	1000	U	1000	43
95-49-8	2-Chlorotoluene	250	U	250	9.0
591-78-6	2-Hexanone	1000	U	1000	20
106-43-4	4-Chlorotoluene	250	U	250	9.9
67-64-1	Acetone	1000	U	1000	170
71-43-2	Benzene	250	U	250	12
108-86-1	Bromobenzene	250	U	250	13
74-97-5	Bromochloromethane	250	U	250	13
75-25-2	Bromoform	250	U	250	19
74-83-9	Bromomethane	250	U	250	29
75-15-0	Carbon disulfide	23.9	J	250	12
56-23-5	Carbon tetrachloride	250	U	250	6.4
108-90-7	Chlorobenzene	250	U	250	6.4
75-00-3	Chloroethane	250	U	250	61
67-66-3	Chloroform	250	U	250	8.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97336/1-A

Matrix: Solid | Lab File ID: 144243.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 08/14/2013 12:25

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 97390 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	250	U	250	14
156-59-2	cis-1,2-Dichloroethene	250	U	250	6.9
75-27-4	Bromodichloromethane	250	U	250	9.9
10061-01-5	cis-1,3-Dichloropropene	250	U	250	7.9
106-93-4	1,2-Dibromoethane	250	U	250	10
74-95-3	Dibromomethane	250	U	250	14
75-71-8	Dichlorodifluoromethane	250	U	250	16
108-20-3	Diisopropyl ether	500	U	500	50
100-41-4	Ethylbenzene	250	U	250	5.4
87-68-3	Hexachlorobutadiene	250	U	250	14
98-82-8	Isopropylbenzene	250	U	250	6.5
78-93-3	2-Butanone	1000	U	1000	43
108-10-1	4-Methyl-2-pentanone	1000	U	1000	48
179601-23-1	m-Xylene & p-Xylene	500	U	500	6.2
1634-04-4	Methyl tert-butyl ether	250	U	250	7.1
91-20-3	Naphthalene	13.2	J	250	6.7
104-51-8	n-Butylbenzene	250	U	250	8.0
75-09-2	Methylene Chloride	250	U	250	77
103-65-1	n-Propylbenzene	250	U	250	14
95-47-6	o-Xylene	250	U	250	8.5
99-87-6	p-Isopropyltoluene	250	U	250	4.8
135-98-8	sec-Butylbenzene	250	U	250	4.7
637-92-3	Ethyl-t-butyl ether (ETBE)	250	U	250	0.22
100-42-5	Styrene	250	U	250	5.6
994-05-8	Tert-amyl-methyl ether (TAME)	250	U	250	0.37
98-06-6	tert-Butylbenzene	250	U	250	6.5
127-18-4	Tetrachloroethene	250	U	250	12
108-88-3	Toluene	33.9	J	250	17
156-60-5	trans-1,2-Dichloroethene	250	U	250	9.2
10061-02-6	trans-1,3-Dichloropropene	250	U	250	20
79-01-6	Trichloroethene	250	U	250	9.7
75-69-4	Trichlorofluoromethane	250	U	250	16
75-65-0	tert-Butyl alcohol	10000	U	10000	240
108-05-4	Vinyl acetate	500	U	500	23
75-01-4	Vinyl chloride	250	U	250	18
124-48-1	Dibromochloromethane	250	U	250	12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97336/1-A

Matrix: Solid | Lab File ID: 144243.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 08/14/2013 12:25

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 97390 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	500	U	500	6.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		39-128
460-00-4	4-Bromofluorobenzene (Surr)	91		26-141
2037-26-5	Toluene-d8 (Surr)	99		33-134
1868-53-7	Dibromofluoromethane (Surr)	105		30-122

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97336/1-A

Matrix: Solid Lab File ID: 144243.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/14/2013 12:25

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Medium

Analysis Batch No.: 97390 Units: ug/Kg

Number TICs Found: 1 TIC Result Total: 113

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	5.87	113	J

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: 144242.D

Lab ID: LCS 240-97336/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	500	561	112	27-121	
1,1,1-Trichloroethane	500	604	121	38-122	
1,1,2,2-Tetrachloroethane	500	463	93	54-121	
1,1,2-Trichloro-1,2,2-trichfluoroethane	500	546	109	48-151	
1,1-Dichloroethane	500	552	110	63-117	
1,1-Dichloroethene	500	447	89	44-143	
1,1-Dichloropropene	500	579	116	60-123	
1,2,3-Trichlorobenzene	500	528	106	43-129	
1,2,3-Trichloropropane	500	535	107	74-124	
1,2,4-Trichlorobenzene	500	540	108	41-135	
1,2,4-Trimethylbenzene	500	491	98	62-133	
1,2-Dibromo-3-Chloropropane	500	386 J	77	10-129	
1,2-Dichlorobenzene	500	519	104	68-118	
1,2-Dichloroethane	500	584	117	68-119	
1,2-Dichloropropane	500	503	101	73-113	
1,3-Dichlorobenzene	500	524	105	66-121	
1,3-Dichloropropane	500	491	98	74-119	
1,4-Dichlorobenzene	500	520	104	65-119	
2,2-Dichloropropane	500	564	113	25-123	
2-Chloroethyl vinyl ether	1000	834 J	83	25-140	
2-Chlorotoluene	500	511	102	68-122	
2-Hexanone	1000	928 J	93	43-130	
4-Chlorotoluene	500	502	100	68-122	
Acetone	1000	988 J	99	16-156	
Benzene	500	519	104	70-117	
Bromobenzene	500	488	98	72-120	
Bromochloromethane	500	556	111	56-128	
Bromoform	500	410	82	10-117	
Bromomethane	500	616	123	10-114	*
Carbon disulfide	500	463	93	10-132	
Carbon tetrachloride	500	591	118	29-118	
Chlorobenzene	500	518	104	71-116	
Chloroethane	500	500	100	10-120	
Chloroform	500	552	110	63-116	
Chloromethane	500	424	85	25-110	
cis-1,2-Dichloroethene	500	514	103	60-125	
Bromodichloromethane	500	480	96	28-123	
cis-1,3-Dichloropropene	500	436	87	25-120	
1,2-Dibromoethane	500	467	93	47-123	
Dibromomethane	500	539	108	68-118	
Dichlorodifluoromethane	500	239 J	48	10-110	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: 144242.D

Lab ID: LCS 240-97336/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	500	504	101	66-119	
Hexachlorobutadiene	500	566	113	34-135	
Isopropylbenzene	500	536	107	61-123	
2-Butanone	1000	1090	109	10-199	
4-Methyl-2-pentanone	1000	1010	101	49-121	
m-Xylene & p-Xylene	500	517	103	67-118	
Methyl tert-butyl ether	500	536	107	34-157	
Naphthalene	500	485	97	37-126	
n-Butylbenzene	500	488	98	51-137	
Methylene Chloride	500	472	94	27-172	
n-Propylbenzene	500	500	100	64-130	
o-Xylene	500	522	104	68-120	
p-Isopropyltoluene	500	496	99	56-136	
sec-Butylbenzene	500	502	100	58-131	
Styrene	500	445	89	60-120	
tert-Butylbenzene	500	482	96	58-128	
Tetrachloroethene	500	588	118	58-131	
Toluene	500	577	115	66-123	
trans-1,2-Dichloroethene	500	538	108	58-121	
trans-1,3-Dichloropropene	500	429	86	22-122	
Trichloroethene	500	554	111	59-124	
Trichlorofluoromethane	500	641	128	17-145	
tert-Butyl alcohol	5000	5160 J	103	70-130	
Vinyl acetate	500	375 J	75	60-125	
Vinyl chloride	500	404	81	33-110	
Dibromochloromethane	500	462	92	22-113	
Xylenes, Total	1000	1040	104	68-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A3UX8 Start Date: 04/17/2013 23:22

Analysis Batch Number: 82425 End Date: 04/18/2013 11:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-82425/1		04/17/2013 23:22	1	BFB8265.D	DB-624 0.18(mm)
STD8260 240-82425/3 IC		04/18/2013 00:06	1	UX84674.D	DB-624 0.18(mm)
STD8260 240-82425/4 IC		04/18/2013 00:27	1	UX84675.D	DB-624 0.18(mm)
STD8260 240-82425/5 IC		04/18/2013 00:49	1	UX84676.D	DB-624 0.18(mm)
ICIS 240-82425/6		04/18/2013 01:10	1	UX84677.D	DB-624 0.18(mm)
STD8260 240-82425/7 IC		04/18/2013 01:31	1	UX84678.D	DB-624 0.18(mm)
STD8260 240-82425/8 IC		04/18/2013 01:52	1	UX84679.D	DB-624 0.18(mm)
STD8260 240-82425/9 IC		04/18/2013 02:13	1	UX84680.D	DB-624 0.18(mm)
STD8260 240-82425/10 IC		04/18/2013 02:35	1	UX84681.D	DB-624 0.18(mm)
STDA9 240-82425/11 IC		04/18/2013 02:56	1	UX84682.D	DB-624 0.18(mm)
STDA9 240-82425/12 IC		04/18/2013 03:17	1	UX84683.D	DB-624 0.18(mm)
STDA9 240-82425/13 IC		04/18/2013 03:38	1	UX84684.D	DB-624 0.18(mm)
STDA9 240-82425/14 IC		04/18/2013 04:00	1	UX84685.D	DB-624 0.18(mm)
STDA9 240-82425/15 IC		04/18/2013 04:21	1	UX84686.D	DB-624 0.18(mm)
STDA9 240-82425/16 IC		04/18/2013 04:42	1	UX84687.D	DB-624 0.18(mm)
ZZZZZ		04/18/2013 05:03	1		DB-624 0.18(mm)
ICV 240-82425/18		04/18/2013 05:24	1	UX84689.D	DB-624 0.18(mm)
ZZZZZ		04/18/2013 05:46	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 06:07	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 06:28	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 06:49	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 07:11	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 07:32	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 07:53	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 08:14	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 08:35	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 08:57	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 09:18	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 09:39	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 10:00	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 10:22	1		DB-624 0.18(mm)
ZZZZZ		04/18/2013 11:04	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: BFB8265.D BFB Injection Date: 04/17/2013

Instrument ID: A3UX8 BFB Injection Time: 23:22

Analysis Batch No.: 82425

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.1	
75	30.0 - 60.0 % of mass 95	53.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	71.1	
175	5.0 - 9.0 % of mass 174	5.1	(7.2)1
176	95.0 - 101.0 % of mass 174	68.2	(95.9)1
177	5.0 - 9.0 % of mass 176	4.5	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-82425/3	UX84674.D	04/18/2013	00:06
	STD8260 240-82425/4	UX84675.D	04/18/2013	00:27
	STD8260 240-82425/5	UX84676.D	04/18/2013	00:49
	ICIS 240-82425/6	UX84677.D	04/18/2013	01:10
	STD8260 240-82425/7	UX84678.D	04/18/2013	01:31
	STD8260 240-82425/8	UX84679.D	04/18/2013	01:52
	STD8260 240-82425/9	UX84680.D	04/18/2013	02:13
	STD8260 240-82425/10	UX84681.D	04/18/2013	02:35
	STDA9 240-82425/11	UX84682.D	04/18/2013	02:56
	STDA9 240-82425/12	UX84683.D	04/18/2013	03:17
	STDA9 240-82425/13	UX84684.D	04/18/2013	03:38
	STDA9 240-82425/14	UX84685.D	04/18/2013	04:00
	STDA9 240-82425/15	UX84686.D	04/18/2013	04:21
	STDA9 240-82425/16	UX84687.D	04/18/2013	04:42
	ICV 240-82425/18	UX84689.D	04/18/2013	05:24

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-82425/10	UX84681.D
Level 2	STD8260 240-82425/9	UX84680.D
Level 3	STD8260 240-82425/8	UX84679.D
Level 4	STD8260 240-82425/7	UX84678.D
Level 5	ICIS 240-82425/6	UX84677.D
Level 6	STD8260 240-82425/5	UX84676.D
Level 7	STD8260 240-82425/4	UX84675.D
Level 8	STD8260 240-82425/3	UX84674.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1811 0.2387	0.1889 0.2445	0.2519 0.2304	0.2507	0.2495	Ave		0.2295				12.0		15.0			
Chloromethane	0.2249 0.2429	0.2517 0.2417	0.2599 0.2220	0.2623	0.2617	Ave		0.2459			0.1000	6.5		15.0			
Vinyl chloride	0.1944 0.2136	0.2024 0.2152	0.2288 0.2027	0.2331	0.2261	Ave		0.2145				6.5		15.0			
Bromomethane	0.1285 0.1249	0.1404 0.1229	0.1468	0.1416	0.1356	Qua	0.0714	0.1284	0						1.0000		0.9900
Chloroethane	0.1242 0.1338	0.1297 0.1344	0.1463 0.1311	0.1414	0.1442	Ave		0.1356				5.6		15.0			
Trichlorofluoromethane	0.2414 0.2848	0.2401 0.2798	0.3160 0.2662	0.3071	0.3005	Ave		0.2795				10.0		15.0			
Acrolein	0.0440 0.0393	0.0446 0.0387	0.0478 0.0366	0.0408	0.0412	Ave		0.0416				8.8		15.0			
1,1-Dichloroethene	0.1913 0.2041	0.1637 0.2024	0.2002 0.2014	0.2208	0.2195	Ave		0.2004				8.9		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1461 0.1453	0.1067 0.1432	0.1489 0.1412	0.1559	0.1577	Ave		0.1431				11.0		15.0			
Acetone	+++++ 0.0783	+++++ 0.0773	0.1029 0.0730	0.0818	0.0807	Ave		0.0823				13.0		15.0			
Iodomethane	0.3032 0.3273	0.3086 0.3238	0.3127 0.3141	0.3552	0.3490	Ave		0.3242				5.8		15.0			
Carbon disulfide	0.4660 0.6404	0.5024 0.6445	0.5462 0.6510	0.6310	0.6558	Ave		0.5922				13.0		15.0			
Acetonitrile	0.0332 0.0310	0.0351 0.0308	0.0338 0.0287	0.0324	0.0323	Ave		0.0322				6.2		15.0			
Methyl acetate	0.1936 0.2003	0.1959 0.1942	0.2029 0.1894	0.1841	0.1847	Ave		0.1931				3.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Methylene Chloride	+++++ 0.2666	+++++ 0.2588	0.4599 0.2469	0.3873	0.3262	Lin1	1.2599	0.2434							0.9990		0.9900
tert-Butyl alcohol	0.0217 0.0225	0.0246 0.0207	0.0278 0.0199	0.0301	0.0227	Ave		0.0237				15.0		15.0			
Acrylonitrile	0.0873 0.0963	0.1030 0.0969	0.0989 0.0921	0.0913	0.0964	Ave		0.0953				5.1		15.0			
Methyl tert-butyl ether	0.6380 0.7277	0.6706 0.7364	0.6460 0.7278	0.7286	0.7282	Ave		0.7004				5.9		15.0			
trans-1,2-Dichloroethene	0.2387 0.2370	0.2273 0.2344	0.2318 0.2267	0.2530	0.2580	Ave		0.2384				4.8		15.0			
Hexane	0.0714 0.0605	0.0468 0.0586	0.0570 0.0620	0.0605	0.0582	Ave		0.0594				11.0		15.0			
1,1-Dichloroethane	0.3820 0.4131	0.3972 0.4151	0.3991 0.4116	0.4202	0.4364	Ave		0.4093			0.1000	4.0		15.0			
Vinyl acetate	+++++ 0.0467	0.0393 0.0505	0.0412 0.0496	0.0370	0.0400	Ave		0.0435				12.0		15.0			
2-Butanone	0.1148 0.1123	0.1166 0.1133	0.1177 0.1080	0.1003	0.1028	Ave		0.1107				5.8		15.0			
cis-1,2-Dichloroethene	0.2445 0.2601	0.2544 0.2623	0.2531 0.2547	0.2698	0.2700	Ave		0.2586				3.4		15.0			
2,2-Dichloropropane	0.1883 0.2476	0.2012 0.2446	0.2101 0.2257	0.2448	0.2528	Ave		0.2269				11.0		15.0			
Bromochloromethane	0.1075 0.1254	0.1165 0.1267	0.1274 0.1223	0.1309	0.1266	Ave		0.1229				6.1		15.0			
Tetrahydrofuran	0.0586 0.0811	0.0812 0.0763	0.0768 0.0744	0.0788	0.0669	Ave		0.0743				11.0		15.0			
Chloroform	0.3863 0.4142	0.3925 0.4165	0.3998 0.4119	0.4279	0.4207	Ave		0.4087				3.5		15.0			
1,1,1-Trichloroethane	0.2476 0.3413	0.2678 0.3441	0.2978 0.3397	0.3414	0.3518	Ave		0.3164				13.0		15.0			
Cyclohexane	0.3824 0.4152	0.2880 0.4048	0.3958 0.4068	0.4353	0.4276	Ave		0.3945				12.0		15.0			
1,1-Dichloropropene	0.2685 0.3059	0.2684 0.3063	0.2948 0.3116	0.3067	0.3091	Ave		0.2964				6.0		15.0			
Carbon tetrachloride	+++++ 0.2786	0.1951 0.2862	0.2400 0.2917	0.2682	0.2784	Ave		0.2626				13.0		15.0			
1,2-Dichloroethane	0.3793 0.3515	0.3620 0.3631	0.3464 0.3571	0.3500	0.3466	Ave		0.3570				3.1		15.0			
Benzene	0.9106 0.9315	0.9044 0.9305	0.9323 0.9142	0.9635	0.9389	Ave		0.9282				2.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Trichloroethene	0.2227 0.2297	0.2204 0.2320	0.2233 0.2317	0.2285	0.2298	Ave		0.2273				2.0		15.0			
Methylcyclohexane	0.3658 0.4295	0.2695 0.4145	0.4036 0.4206	0.4397	0.4308	Ave		0.3967				14.0		15.0			
1,2-Dichloropropane	0.2021 0.2286	0.2208 0.2323	0.2239 0.2256	0.2321	0.2322	Ave		0.2247				4.5		15.0			
1,4-Dioxane	+++++ 0.0025	0.0027 0.0023	0.0031 0.0023	0.0034	0.0027	Ave		0.0027				15.0		15.0			
Dibromomethane	0.1155 0.1435	0.1379 0.1439	0.1333 0.1434	0.1444	0.1395	Ave		0.1377				7.1		15.0			
Bromodichloromethane	0.2087 0.2861	0.2186 0.3059	0.2397 0.3132	0.2651	0.2640	Ave		0.2627				15.0		15.0			
2-Chloroethyl vinyl ether	0.1246 0.1425	0.1235 0.1479	0.1350 0.1481	0.1195	0.1314	Ave		0.1341				8.4		15.0			
cis-1,3-Dichloropropene	+++++ 0.3457	0.2445 0.3584	0.2672 0.3701	0.2902	0.3077	Ave		0.3120				15.0		15.0			
4-Methyl-2-pentanone	0.1793 0.2377	0.2098 0.2395	0.2294 0.2256	0.2015	0.2221	Ave		0.2181				9.3		15.0			
Toluene	1.8671 1.4284	1.6572 1.4300	1.5541 1.4591	1.4975	1.4350	Ave		1.5411				10.0		15.0			
trans-1,3-Dichloropropene	0.2771 0.4424	0.2782 0.4779	0.3313 0.5125	0.3716	0.3865	Lin1	-0.445	0.4894							0.9950		0.9900
Ethyl methacrylate	+++++ 0.4727	+++++ 0.4751	0.3749 0.4907	0.4227	0.4007	Ave		0.4395				11.0		15.0			
1,1,2-Trichloroethane	0.2664 0.2924	0.2996 0.2925	0.3025 0.2944	0.3009	0.2828	Ave		0.2914				4.1		15.0			
1,3-Dichloropropane	0.4978 0.5180	0.5217 0.5194	0.5302 0.5271	0.5272	0.4906	Ave		0.5165				2.8		15.0			
Tetrachloroethene	0.2311 0.2501	0.2346 0.2488	0.2567 0.2515	0.2467	0.2525	Ave		0.2465				3.6		15.0			
2-Hexanone	0.1610 0.2360	0.2057 0.2365	0.2423 0.2306	0.1959	0.2179	Ave		0.2157				13.0		15.0			
Dibromochloromethane	+++++ 0.2968	+++++ 0.3186	0.2317 0.3349	0.2594	0.2615	Ave		0.2838				14.0		15.0			
1,2-Dibromoethane	0.2373 0.2931	0.2771 0.2934	0.2738 0.2973	0.2846	0.2756	Ave		0.2790				6.8		15.0			
Chlorobenzene	0.9140 0.8933	0.9549 0.9055	0.9245 0.9053	0.9472	0.9081	Ave		0.9191			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2048 0.2957	0.2380 0.3085	0.2560 0.3136	0.2982	0.2861	Ave		0.2751				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethylbenzene	0.4469 0.4917	0.4780 0.4898	0.4726 0.4926	0.4862	0.4908	Ave		0.4811				3.2		15.0			
m-Xylene & p-Xylene	0.5287 0.5979	0.5508 0.5981	0.5781 0.5911	0.6075	0.6078	Ave		0.5825				4.9		15.0			
o-Xylene	0.5085 0.5805	0.5264 0.5793	0.5855 0.5640	0.6164	0.6016	Ave		0.5703				6.4		15.0			
Styrene	0.7162 0.9695	0.7426 1.0013	0.8327 0.9868	0.9326	0.9448	Ave		0.8908				13.0		15.0			
Bromoform	0.0828 0.1645	0.0940 0.1801	0.1225 0.1911	0.1512	0.1453	Lin1	-0.178	0.1835			0.1000				0.9950		0.9900
Isopropylbenzene	1.2300 1.4977	1.2741 1.5143	1.4714 1.5181	1.5652	1.5573	Ave		1.4535				8.8		15.0			
1,1,2,2-Tetrachloroethane	0.6834 0.8455	0.8495 0.8291	0.9900 0.8268	0.9772	0.8422	Ave		0.8555			0.3000	11.0		15.0			
Bromobenzene	0.7591 0.8023	0.7848 0.8080	0.8518 0.7963	0.8799	0.8068	Ave		0.8111				4.7		15.0			
1,2,3-Trichloropropane	0.2570 0.2769	0.2751 0.2710	0.3229 0.2652	0.3339	0.2757	Ave		0.2847				9.8		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2597	0.1975 0.2709	0.2306 0.2750	0.2462	0.2319	Ave		0.2445				11.0		15.0			
n-Propylbenzene	0.7215 0.9103	0.7754 0.9130	0.8525 0.9087	0.9283	0.9020	Ave		0.8640				8.8		15.0			
2-Chlorotoluene	0.7137 0.7759	0.7210 0.7754	0.8076 0.7753	0.8160	0.7726	Ave		0.7697				4.7		15.0			
1,3,5-Trimethylbenzene	2.0704 2.7465	2.1123 2.7513	2.5013 2.8303	2.7635	2.7227	Ave		2.5623				12.0		15.0			
4-Chlorotoluene	0.6687 0.7931	0.7490 0.8015	0.8219 0.8034	0.8726	0.8118	Ave		0.7902				7.6		15.0			
tert-Butylbenzene	2.0567 2.4267	2.2129 2.4520	2.4049 2.5107	2.5052	2.5168	Ave		2.3857				6.9		15.0			
1,2,4-Trimethylbenzene	2.0285 2.7574	2.1845 2.7404	2.5970 2.8009	2.8215	2.7579	Ave		2.5860				12.0		15.0			
sec-Butylbenzene	2.6872 3.4208	2.6225 3.3583	3.3361 3.5096	3.5540	3.4548	Ave		3.2429				11.0		15.0			
1,3-Dichlorobenzene	1.3222 1.4260	1.3845 1.4330	1.5458 1.4456	1.5821	1.4863	Ave		1.4532				5.8		15.0			
p-Isopropyltoluene	2.0913 2.7997	2.1135 2.7729	2.6464 2.8828	2.8345	2.7872	Ave		2.6160				12.0		15.0			
1,4-Dichlorobenzene	1.5977 1.4641	1.5591 1.4427	1.6647 1.4796	1.6302	1.5033	Ave		1.5427				5.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Butylbenzene	1.8992 2.5431	1.7894 2.5269	2.3620 2.6891	2.4672	2.5212	Ave		2.3498				14.0		15.0			
1,2-Dichlorobenzene	1.2983 1.3570	1.4042 1.3105	1.5341 1.3420	1.5542	1.4137	Ave		1.4018				6.9		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1176	0.0865 0.1161	0.1145 0.1271	0.1072	0.1063	Ave		0.1108				12.0		15.0			
1,3,5-Trichlorobenzene	0.8395 0.9411	0.8215 0.9022	0.9981 0.9471	1.0168	0.9675	Ave		0.9292				7.6		15.0			
1,2,4-Trichlorobenzene	0.6488 0.8193	0.7124 0.7749	0.9179 0.8138	0.9083	0.8746	Ave		0.8087				12.0		15.0			
Hexachlorobutadiene	0.3359 0.3725	0.3321 0.3416	0.4720 0.3687	0.4263	0.4197	Ave		0.3836				13.0		15.0			
Naphthalene	1.5907 2.2828	1.9524 2.1007	2.4451 2.1109	2.3638	2.2213	Ave		2.1335				13.0		15.0			
1,2,3-Trichlorobenzene	0.7687 0.7411	0.7741 0.6784	0.9198 0.6798	0.8552	0.8030	Ave		0.7775				11.0		15.0			
Dibromofluoromethane (Surr)	+++++ 0.1608	0.3347 0.1892	0.2542 0.1978	0.2338	0.2287	Qua	0.5422	0.1621	0.0002						0.9980		0.9900
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2174	0.4883 0.2656	0.3820 0.2736	0.3247	0.3168	Qua	0.7530	0.2267	0.0002						0.9980		0.9900
Toluene-d8 (Surr)	+++++ 0.9659	2.0231 1.0881	1.5292 1.1474	1.3576	1.2978	Qua	3.3362	0.9381	0.0010						0.9990		0.9900
4-Bromofluorobenzene (Surr)	+++++ 0.3594	0.8933 0.4138	0.6350 0.4270	0.5731	0.5237	Qua	1.6369	0.3547	0.0003						0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-82425/10	UX84681.D
Level 2	STD8260 240-82425/9	UX84680.D
Level 3	STD8260 240-82425/8	UX84679.D
Level 4	STD8260 240-82425/7	UX84678.D
Level 5	ICIS 240-82425/6	UX84677.D
Level 6	STD8260 240-82425/5	UX84676.D
Level 7	STD8260 240-82425/4	UX84675.D
Level 8	STD8260 240-82425/3	UX84674.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	5422 368459	11531 731657	39101 1411598	72815	142517	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chloromethane	FB	Ave	6731 374990	15369 723295	40350 1360025	76182	149500	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	5818 329850	12354 643930	35526 1241881	67713	129191	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromomethane	FB	Qua	3846 192909	8570 367617	22787	41113	77490	1.00 50.0	2.00 100	5.00	10.0	20.0
Chloroethane	FB	Ave	3719 206522	7918 402209	22717 803257	41069	82372	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Ave	7225 439691	14659 837161	49057 1631162	89189	171709	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acrolein	FB	Ave	13159 607135	27256 1157586	74180 2239539	118364	235327	10.0 500	20.0 1000	50.0 2000	100	200
1,1-Dichloroethene	FB	Ave	5727 315161	9992 605794	31087 1234070	64125	125380	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	4373 224383	6517 428643	23115 865230	45290	90088	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acetone	FB	Ave	+++++ 241786	+++++ 462436	31938 894063	47521	92249	+++++ 100	+++++ 200	10.0 400	20.0	40.0
Iodomethane	FB	Ave	9077 505391	18838 968861	48537 1924344	103176	199408	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon disulfide	FB	Ave	13948 988709	30671 1928526	84796 3988330	183265	374680	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acetonitrile	FB	Ave	9936 478393	21405 922348	52488 1755867	94242	184777	10.0 500	20.0 1000	50.0 2000	100	200
Methyl acetate	FB	Ave	11591 618410	23921 1162457	62994 2320776	106961	211053	2.00 100	4.00 200	10.0 400	20.0	40.0
Methylene Chloride	FB	Lin1	+++++ 411633	+++++ 774428	71401 1512514	112476	186367	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
tert-Butyl alcohol	FB	Ave	12981 695744	30092 1236970	86238 2437770	174666	259476	20.0 1000	40.0 2000	100 4000	200	400
Acrylonitrile	FB	Ave	5228 297278	12579 579689	30696 1128946	53010	110125	2.00 100	4.00 200	10.0 400	20.0	40.0
Methyl tert-butyl ether	FB	Ave	19096 1123571	40941 2203550	100280 4459041	211609	416021	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	7146 365960	13876 701503	35988 1388925	73496	147383	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexane	FB	Ave	2137 93477	2858 175384	8845 379628	17562	33270	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	11435 637714	24249 1242247	61957 2521667	122049	249312	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl acetate	FB	Ave	+++++ 72061	2400 151228	6396 303964	10760	22832	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
2-Butanone	FB	Ave	6874 346815	14235 678172	36536 1322987	58235	117473	2.00 100	4.00 200	10.0 400	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	7320 401557	15529 785007	39298 1560179	78362	154254	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	5636 382255	12282 731883	32611 1382872	71088	144451	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromochloromethane	FB	Ave	3217 193623	7110 379273	19784 749589	38022	72332	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Ave	1753 125286	4955 228377	11929 456114	22883	38246	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chloroform	FB	Ave	11562 639477	23960 1246204	62067 2523637	124278	240354	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	7410 526963	16347 1029729	46232 2081021	99173	200965	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexane	FB	Ave	11447 641014	17585 1211304	61452 2492534	126440	244318	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloropropene	FB	Ave	8038 472293	16387 916446	45764 1908997	89079	176588	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon tetrachloride	FB	Ave	+++++ 430122	11910 856321	37264 1787252	77894	159051	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane	FB	Ave	11354 542667	22097 1086394	53782 2188089	101656	198020	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Benzene	FB	Ave	27258 1438104	55214 2784364	144728 5601076	279861	536427	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichloroethene	FB	Ave	6665 354633	13453 694231	34667 1419540	66374	131285	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methylcyclohexane	FB	Ave	10948 663034	16450 1240233	62655 2576794	127710	246145	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2-Dichloropropane	FB	Ave	6048 353006	13481 695105	34755 1381925	67423	132687	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Ave	+++++ 191933	8103 347517	23872 704949	49572	77081	+++++ 2500	100 5000	250 10000	500	1000
Dibromomethane	FB	Ave	3458 221481	8419 430601	20694 878824	41943	79717	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromodichloromethane	FB	Ave	6247 441759	13347 915379	37219 1919006	77006	150845	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	7462 439962	15078 884902	41921 1814856	69425	150144	2.00 100	4.00 200	10.0 400	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	+++++ 533661	14929 1072568	41487 2267570	84300	175808	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	10733 733995	25611 1433219	71234 2763897	117029	253805	2.00 100	4.00 200	10.0 400	20.0	40.0
Toluene	CBZ	Ave	38774 1523476	69501 2931692	166014 5919716	305765	577902	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Lin1	5754 471839	11666 979765	35386 2079153	75866	155667	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl methacrylate	CBZ	Ave	+++++ 504183	+++++ 974028	40048 1990953	86312	161355	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	5532 311876	12566 599621	32311 1194595	61440	113892	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	10338 552486	21881 1064881	56637 2138665	107654	197587	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrachloroethene	CBZ	Ave	4800 266715	9840 510175	27423 1020317	50367	101687	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Hexanone	CBZ	Ave	6686 503331	17252 969722	51772 1870810	79998	175485	2.00 100	4.00 200	10.0 400	20.0	40.0
Dibromochloromethane	CBZ	Ave	+++++ 316523	+++++ 653242	24746 1358901	52968	105316	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	4928 312550	11621 601554	29246 1206409	58113	111004	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chlorobenzene	CBZ	Ave	18980 952781	40048 1856394	98753 3673116	193408	365683	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	4254 315343	9982 632422	27352 1272154	60880	115202	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethylbenzene	CBZ	Ave	9280 524462	20045 1004195	50489 1998521	99280	197638	1.00 50.0	2.00 100	5.00 200	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	21957 1275445	46198 2452437	123509 4796645	248105	489543	2.00 100	4.00 200	10.0 400	20.0	40.0
o-Xylene	CBZ	Ave	10559 619171	22077 1187616	62549 2288406	125862	242281	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Styrene	CBZ	Ave	14874 1033995	31144 2052734	88949 4003593	190418	380466	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromoform	CBZ	Lin1	1719 175497	3944 369142	13087 775517	30876	58517	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isopropylbenzene	CBZ	Ave	25542 1597320	53432 3104486	157183 6159136	319596	627150	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	6144 399840	15466 751377	46575 1471107	90701	157227	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromobenzene	DCB	Ave	6824 379423	14287 732224	40075 1416813	81673	150629	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	2310 130957	5008 245600	15189 471848	30996	51477	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 122828	3595 245483	10847 489326	22856	43286	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
n-Propylbenzene	DCB	Ave	6486 430504	14116 827362	40108 1616823	86171	168387	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chlorotoluene	DCB	Ave	6416 366945	13127 702711	37993 1379380	75740	144229	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	18613 1298824	38455 2493285	117675 5035897	256514	508300	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Chlorotoluene	DCB	Ave	6012 375080	13635 726300	38668 1429434	80992	151557	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butylbenzene	DCB	Ave	18490 1147598	40286 2222001	113142 4467169	232536	469859	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	18236 1303992	39770 2483357	122176 4983511	261899	514861	1.00 50.0	2.00 100	5.00 200	10.0	20.0
sec-Butylbenzene	DCB	Ave	24158 1617714	47744 3043303	156950 6244482	329885	644966	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	11887 674374	25206 1298606	72721 2572077	146857	277480	1.00 50.0	2.00 100	5.00 200	10.0	20.0
p-Isopropyltoluene	DCB	Ave	18801 1324019	38477 2512867	124500 5129186	263104	520344	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	14363 692383	28384 1307375	78317 2632525	151321	280643	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Butylbenzene	DCB	Ave	17074 1202652	32577 2289922	111121 4784566	229013	470688	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	11672 641716	25564 1187566	72173 2387853	144268	263920	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	+++++ 55614	1575 105226	5389 226187	9949	19839	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	7547 445060	14955 817545	46958 1685065	94384	180621	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trichlorobenzene	DCB	Ave	5833 387440	12969 702187	43185 1447999	84307	163277	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCB	Ave	3020 176166	6046 309559	22207 656086	39568	78350	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Naphthalene	DCB	Ave	14300 1079578	35545 1903680	115033 3755857	219409	414695	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	6911 350466	14092 614785	43271 1209562	79381	149917	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Qua	+++++ 248256	20434 566072	39469 1212111	67907	130688	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Qua	+++++ 335711	29808 794650	59309 1676131	94304	180996	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	CBZ	Qua	+++++ 1030110	84843 2230841	163355 4655412	277209	522636	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Qua	+++++ 383333	37464 848313	67832 1732566	117012	210889	+++++ 50.0	2.00 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 02:56 Calibration End Date: 04/18/2013 04:42 Calibration ID: 14626

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-82425/16	UX84687.D
Level 2	STDA9 240-82425/15	UX84686.D
Level 3	STDA9 240-82425/14	UX84685.D
Level 4	STDA9 240-82425/13	UX84684.D
Level 5	STDA9 240-82425/12	UX84683.D
Level 6	STDA9 240-82425/11	UX84682.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.3244 0.3320	0.3248	0.3201	0.3252	0.3434	Ave		0.3283				2.5		15.0			
Ethyl ether	0.1960 0.2096	0.2024	0.1952	0.2023	0.2024	Ave		0.2013				2.6		15.0			
3-Chloro-1-propene	0.0960 0.1154	0.0955	0.1031	0.1056	0.1178	Ave		0.1056				8.9		15.0			
Diisopropyl ether	0.2120 0.2134	0.2138	0.2119	0.2185	0.2244	Ave		0.2157				2.3		15.0			
2-Chloro-1,3-butadiene	0.2916 0.3666	0.3109	0.3148	0.3461	0.3588	Ave		0.3315				9.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.6212 0.7705	0.6493	0.6625	0.6914	0.7463	Ave		0.6902				8.4		15.0			
Ethyl acetate	0.1809 0.2308	0.2002	0.1863	0.2092	0.1905	Ave		0.1997				9.2		15.0			
Propionitrile	0.0351 0.0346	0.0340	0.0323	0.0324	0.0306	Ave		0.0332				5.1		15.0			
Methacrylonitrile	0.1312 0.1496	0.1378	0.1288	0.1385	0.1312	Ave		0.1362				5.6		15.0			
Isobutyl alcohol	0.0121 0.0072	0.0101	0.0069	0.0067	0.0064	Qua	0.8131	0.0052	0						1.0000		0.9900
Tert-amyl-methyl ether (TAME)	0.4979 0.6472	0.5400	0.5410	0.5700	0.6264	Ave		0.5704				9.9		15.0			
n-Heptane	0.0571 0.0642	0.0579	0.0567	0.0625	0.0614	Ave		0.0600				5.2		15.0			
n-Butanol	0.0080 0.0052	0.0066	0.0045	0.0048	0.0047	Qua	0.3821	0.0040	0						1.0000		0.9900
Ethyl acrylate	0.2251 0.3138	0.2432	0.2343	0.2773	0.2711	Ave		0.2608				13.0		15.0			
Methyl methacrylate	0.1686 0.2191	0.1872	0.1771	0.1993	0.1899	Ave		0.1902				9.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 02:56 Calibration End Date: 04/18/2013 04:42 Calibration ID: 14626

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Nitropropane	0.0290 0.0568	0.0310	0.0302	0.0381	0.0387	Qua	0.1876	0.0228	0.0001						0.9990		0.9900
Cyclohexanone	0.0132 0.0144	0.0131	0.0089	0.0103	0.0114	Qua	0.2977	0.0079	0						1.0000		0.9900
1,2,3-Trimethylbenzene	2.4868 2.6366	2.7108	2.4258	2.6782	2.6722	Ave		2.6017				4.5		15.0			
Benzyl chloride	0.1171 0.1990	0.0931	0.0878	0.1105	0.1444	Qua	-0.031	0.0866	0.0006						1.0000		0.9900
2-Methylnaphthalene	0.6131 0.8444	0.6882	0.8256	0.9956	0.9603	Qua	-7.918	1.1321	-0.001						1.0000		0.9900
n-Butyl acetate	0.2873 0.3806	0.3405	0.2931	0.3363	0.3338	Ave		0.3286				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 02:56 Calibration End Date: 04/18/2013 04:42 Calibration ID: 14626

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-82425/16	UX84687.D
Level 2	STDA9 240-82425/15	UX84686.D
Level 3	STDA9 240-82425/14	UX84685.D
Level 4	STDA9 240-82425/13	UX84684.D
Level 5	STDA9 240-82425/12	UX84683.D
Level 6	STDA9 240-82425/11	UX84682.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	48625 1904139	99280	191961	498181	971645	5.00 200	10.0	20.0	50.0	100
Ethyl ether	FB	Ave	29379 1201734	61844	117092	309902	572573	5.00 200	10.0	20.0	50.0	100
3-Chloro-1-propene	FB	Ave	14385 661636	29196	61857	161775	333222	5.00 200	10.0	20.0	50.0	100
Diisopropyl ether	FB	Ave	158867 6118025	326669	635308	1673312	3174700	25.0 1000	50.0	100	250	500
2-Chloro-1,3-butadiene	FB	Ave	43709 2102448	95005	188812	530193	1015030	5.00 200	10.0	20.0	50.0	100
Ethyl-t-butyl ether (ETBE)	FB	Ave	93105 4418682	198429	397342	1059084	2111430	5.00 200	10.0	20.0	50.0	100
Ethyl acetate	FB	Ave	54238 2647553	122396	223456	640742	1078029	10.0 400	20.0	40.0	100	200
Propionitrile	FB	Ave	10517 396459	20785	38756	99346	173325	10.0 400	20.0	40.0	100	200
Methacrylonitrile	FB	Ave	19666 858157	42121	77235	212205	371158	5.00 200	10.0	20.0	50.0	100
Isobutyl alcohol	FB	Qua	36265 827224	61771	83239	206697	362433	100 4000	200	400	1000	2000
Tert-amyl-methyl ether (TAME)	FB	Ave	74619 3711244	165030	324487	873154	1772135	5.00 200	10.0	20.0	50.0	100
n-Heptane	FB	Ave	8561 368335	17693	34034	95679	173662	5.00 200	10.0	20.0	50.0	100
n-Butanol	FB	Qua	23890 594544	40264	54159	147640	267261	100 4000	200	400	1000	2000
Ethyl acrylate	FB	Ave	33743 1799603	74313	140528	424686	766880	5.00 200	10.0	20.0	50.0	100
Methyl methacrylate	FB	Ave	25262 1256488	57215	106211	305308	537132	5.00 200	10.0	20.0	50.0	100
2-Nitropropane	FB	Qua	8689 651878	18919	36211	116696	218933	10.0 400	20.0	40.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 02:56 Calibration End Date: 04/18/2013 04:42 Calibration ID: 14626

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Cyclohexanone	CBZ	Qua	13479 578963	27601	37688	111245	227810	50.0 2000	100	200	500	1000
1,2,3-Trimethylbenzene	DCB	Ave	114079 4845342	249315	463191	1268144	2489504	5.00 200	10.0	20.0	50.0	100
Benzyl chloride	DCB	Qua	5372 365666	8562	16764	52338	134501	5.00 200	10.0	20.0	50.0	100
2-Methylnaphthalene	DCB	Qua	56254 3103537	126592	315264	942823	1789307	10.0 400	20.0	40.0	100	200
n-Butyl acetate	FB	Ave	86105 4365552	208126	351527	1030110	1888884	10.0 400	20.0	40.0	100	200

Curve Type Legend:
Ave = Average ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-82425/18 Calibration Date: 04/18/2013 05:24

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 00:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 02:35

Lab File ID: UX84689.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2295	0.1735		1.00	0.0500	-24.4	50.0
Chloromethane	Ave	0.2459	0.2154	0.1000	1.00	0.0500	-12.4	50.0
Vinyl chloride	Ave	0.2145	0.1982		1.00	0.0500	-7.6	20.0
Bromomethane	Qua		0.1046		1.00	0.0500	-18.0	50.0
Chloroethane	Ave	0.1356	0.1267		1.00	0.0500	-6.6	50.0
Trichlorofluoromethane	Ave	0.2795	0.2834		1.00	0.0500	1.4	50.0
Acrolein	Ave	0.0416	0.0513		20.0	0.150	23.3	50.0
1,1-Dichloroethene	Ave	0.2004	0.2136		1.00	0.0500	6.6	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1431	0.1596		1.00	0.0500	11.5	50.0
Acetone	Ave	0.0823	0.0847		10.0	0.100	2.9	50.0
Iodomethane	Ave	0.3242	0.3547		1.00	0.0500	9.4	50.0
Carbon disulfide	Ave	0.5922	0.6596		1.00	0.0500	11.4	50.0
Acetonitrile	Ave	0.0322	0.0339		20.0	0.150	5.4	50.0
Methyl acetate	Ave	0.1931	0.2112		10.0	0.0500	9.3	50.0
Methylene Chloride	Lin1		0.2907		1.00	0.0500	9.1	50.0
tert-Butyl alcohol	Ave	0.0237	0.0192		50.0	1.00	-19.2	50.0
Acrylonitrile	Ave	0.0953	0.0960		20.0	0.150	0.7	50.0
Methyl tert-butyl ether	Ave	0.7004	0.7403		1.00	0.0500	5.7	50.0
trans-1,2-Dichloroethene	Ave	0.2384	0.2415		1.00	0.0500	1.3	50.0
Hexane	Ave	0.0594	0.0628		1.00	0.0500	5.7	20.0
1,1-Dichloroethane	Ave	0.4093	0.4287	0.1000	1.00	0.0500	4.7	50.0
Vinyl acetate	Ave	0.0435	0.0413		2.00	0.0500	-5.1	50.0
2-Butanone	Ave	0.1107	0.1026		10.0	0.100	-7.3	50.0
cis-1,2-Dichloroethene	Ave	0.2586	0.2661		1.00	0.0500	2.9	50.0
2,2-Dichloropropane	Ave	0.2269	0.2409		1.00	0.0500	6.2	50.0
Bromochloromethane	Ave	0.1229	0.1269		1.00	0.0500	3.2	50.0
Tetrahydrofuran	Ave	0.0743	0.0689		5.00	0.0500	-7.2	50.0
Chloroform	Ave	0.4087	0.4137		1.00	0.0500	1.2	20.0
1,1,1-Trichloroethane	Ave	0.3164	0.3398		1.00	0.0500	7.4	50.0
Cyclohexane	Ave	0.3945	0.4154		1.00	0.0500	5.3	50.0
1,1-Dichloropropene	Ave	0.2964	0.3028		1.00	0.0500	2.1	50.0
Carbon tetrachloride	Ave	0.2626	0.2761		1.00	0.0500	5.1	50.0
1,2-Dichloroethane	Ave	0.3570	0.3520		1.00	0.0500	-1.4	50.0
Benzene	Ave	0.9282	0.9211		1.00	0.0500	-0.8	50.0
Trichloroethene	Ave	0.2273	0.2297		1.00	0.0500	1.1	50.0
Methylcyclohexane	Ave	0.3967	0.4320		1.00	0.0500	8.9	50.0
1,2-Dichloropropane	Ave	0.2247	0.2338		1.00	0.0500	4.1	20.0
Dibromomethane	Ave	0.1377	0.1480		1.00	0.0500	7.5	50.0
Bromodichloromethane	Ave	0.2627	0.2867		1.00	0.0500	9.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1341	0.1383		10.0	0.0500	3.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-82425/18 Calibration Date: 04/18/2013 05:24

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 00:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 02:35

Lab File ID: UX84689.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Ave	0.3120	0.3181		1.00	0.0500	2.0	50.0
4-Methyl-2-pentanone	Ave	0.2181	0.2292		10.0	0.100	5.1	50.0
Toluene	Ave	1.541	1.391		1.00	0.0500	-9.7	20.0
trans-1,3-Dichloropropene	Lin1		0.4264		1.00	0.0500	-11.1	50.0
1,1,2-Trichloroethane	Ave	0.2914	0.2981		1.00	0.0500	2.3	50.0
1,3-Dichloropropane	Ave	0.5165	0.5172		1.00	0.0500	0.1	50.0
Tetrachloroethene	Ave	0.2465	0.2441		1.00	0.0500	-1.0	50.0
2-Hexanone	Ave	0.2157	0.2164		10.0	0.100	0.3	50.0
Dibromochloromethane	Ave	0.2838	0.2892		1.00	0.0500	1.9	50.0
1,2-Dibromoethane	Ave	0.2790	0.2875		1.00	0.0500	3.0	50.0
Chlorobenzene	Ave	0.9191	0.8915	0.3000	1.00	0.0500	-3.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2751	0.2887		1.00	0.0500	4.9	50.0
Ethylbenzene	Ave	0.4811	0.4926		1.00	0.0500	2.4	20.0
m-Xylene & p-Xylene	Ave	0.5825	0.5850		2.00	0.100	0.4	50.0
o-Xylene	Ave	0.5703	0.5772		1.00	0.0500	1.2	50.0
Styrene	Ave	0.8908	0.9625		1.00	0.0500	8.0	50.0
Bromoform	Lin1		0.1514	0.1000	1.00	0.0500	-15.5	50.0
Isopropylbenzene	Ave	1.454	1.484		1.00	0.0500	2.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8555	0.8069	0.3000	1.00	0.0500	-5.7	50.0
Bromobenzene	Ave	0.8111	0.8196		1.00	0.0500	1.0	50.0
1,2,3-Trichloropropane	Ave	0.2847	0.2738		1.00	0.0500	-3.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2445	0.2500		1.00	0.100	2.2	50.0
n-Propylbenzene	Ave	0.8640	0.9180		1.00	0.0500	6.3	50.0
2-Chlorotoluene	Ave	0.7697	0.7780		1.00	0.0500	1.1	50.0
1,3,5-Trimethylbenzene	Ave	2.562	2.737		1.00	0.0500	6.8	50.0
4-Chlorotoluene	Ave	0.7902	0.8001		1.00	0.0500	1.2	50.0
tert-Butylbenzene	Ave	2.386	2.474		1.00	0.0500	3.7	50.0
1,2,4-Trimethylbenzene	Ave	2.586	2.738		1.00	0.0500	5.9	50.0
sec-Butylbenzene	Ave	3.243	3.399		1.00	0.0500	4.8	50.0
1,3-Dichlorobenzene	Ave	1.453	1.451		1.00	0.0500	-0.2	50.0
p-Isopropyltoluene	Ave	2.616	2.866		0.0548	0.0500	9.6	50.0
1,4-Dichlorobenzene	Ave	1.543	1.439		1.00	0.0500	-6.7	50.0
n-Butylbenzene	Ave	2.350	2.515		1.00	0.0500	7.0	50.0
1,2-Dichlorobenzene	Ave	1.402	1.341		1.00	0.0500	-4.4	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1108	0.1021		2.00	0.0500	-7.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8087	0.7320		1.00	0.0500	-9.5	50.0
Hexachlorobutadiene	Ave	0.3836	0.3449		1.00	0.0500	-10.1	50.0
Naphthalene	Ave	2.133	1.945		1.00	0.0500	-8.8	50.0
1,2,3-Trichlorobenzene	Ave	0.7775	0.6787		1.00	0.0500	-12.7	50.0
Dibromofluoromethane (Surr)	Qua		0.1634		0.0450	0.0500	-10.0	50.0
1,2-Dichloroethane-d4 (Surr)	Qua		0.2159		0.0425	0.0500	-14.9	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-82425/18 Calibration Date: 04/18/2013 05:24

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 00:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 02:35

Lab File ID: UX84689.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Qua		0.9791		0.0464	0.0500	-7.2	50.0
4-Bromofluorobenzene (Surr)	Qua		0.3572		0.0440	0.0500	-12.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-82425/18 Calibration Date: 04/18/2013 05:24

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 02:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 04:42

Lab File ID: UX84689.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2013	0.2246		2.00	0.0500	11.5	50.0
Diisopropyl ether	Ave	0.2157	0.2352		10.0	0.0500	9.1	50.0
Isobutyl alcohol	Qua		0.0076		50.0	2.50	12.2	50.0
Cyclohexanone	Qua		0.0081		20.0	1.00	-24.3	50.0
1,2,3-Trimethylbenzene	Ave	2.602	2.720		0.0523	0.0500	4.5	50.0

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A3UX8 Start Date: 08/15/2013 23:49

Analysis Batch Number: 97710 End Date: 08/16/2013 11:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-97710/1		08/15/2013 23:49	1	BFB8341.D	DB-624 0.18(mm)
CCV 240-97710/4		08/16/2013 00:47	1	UX86842.D	DB-624 0.18(mm)
CCVIS 240-97710/5		08/16/2013 01:08	1	UX86843.D	DB-624 0.18(mm)
LCS 240-97710/6		08/16/2013 01:30	1	UX86844.D	DB-624 0.18(mm)
ZZZZZ		08/16/2013 01:51	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 02:31	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 02:52	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 03:13	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 03:34	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 03:56	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 04:17	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 04:38	1		DB-624 0.18(mm)
MB 240-97446/1-A		08/16/2013 05:00	1	UX86853.D	DB-624 0.18(mm)
ZZZZZ		08/16/2013 05:21	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 05:42	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 06:25	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 06:46	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 07:07	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 07:28	1		DB-624 0.18(mm)
240-27894-4	DR-TP-A82-03	08/16/2013 07:50	1	UX86861.D	DB-624 0.18(mm)
240-27894-5	DR-TP-A82-03	08/16/2013 08:11	1	UX86862.D	DB-624 0.18(mm)
ZZZZZ		08/16/2013 08:32	1		DB-624 0.18(mm)
240-27900-C-3-C MS		08/16/2013 08:53	1	UX86864.D	DB-624 0.18(mm)
240-27900-C-3-D MSD		08/16/2013 09:15	1	UX86865.D	DB-624 0.18(mm)
ZZZZZ		08/16/2013 09:36	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 10:18	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 11:01	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 11:22	1		DB-624 0.18(mm)
ZZZZZ		08/16/2013 11:43	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: BFB8341.D BFB Injection Date: 08/15/2013

Instrument ID: A3UX8 BFB Injection Time: 23:49

Analysis Batch No.: 97710

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.7	
75	30.0 - 60.0 % of mass 95	46.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	75.3	
175	5.0 - 9.0 % of mass 174	5.5	(7.4)1
176	95.0 - 101.0 % of mass 174	73.0	(96.9)1
177	5.0 - 9.0 % of mass 176	4.7	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-97710/4	UX86842.D	08/16/2013	00:47
	CCVIS 240-97710/5	UX86843.D	08/16/2013	01:08
	LCS 240-97710/6	UX86844.D	08/16/2013	01:30
	MB 240-97446/1-A	UX86853.D	08/16/2013	05:00
DR-TP-A82-03	240-27894-4	UX86861.D	08/16/2013	07:50
DR-TP-A82-03	240-27894-5	UX86862.D	08/16/2013	08:11
	240-27900-C-3-C MS	UX86864.D	08/16/2013	08:53
	240-27900-C-3-D MSD	UX86865.D	08/16/2013	09:15

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97710/4 Calibration Date: 08/16/2013 00:47

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 02:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 04:42

Lab File ID: UX86842.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3283	0.2911		2.00	0.0200	-11.3	50.0
Ethyl ether	Ave	0.2013	0.2104		2.00	0.0200	4.5	50.0
3-Chloro-1-propene	Ave	0.1056	0.0985		2.00	0.0200	-6.7	50.0
Diisopropyl ether	Ave	0.2157	0.2138		10.0	0.100	-0.8	50.0
2-Chloro-1,3-butadiene	Ave	0.3315	0.3276		2.00	0.0200	-1.2	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6902	0.5902		5.00	0.0200	-14.5	50.0
Ethyl acetate	Ave	0.1997	0.2149		4.00	0.0400	7.6	50.0
Propionitrile	Ave	0.0332	0.0346		4.00	0.0400	4.4	50.0
Methacrylonitrile	Ave	0.1362	0.1400		2.00	0.0200	2.8	50.0
Isobutyl alcohol	Qua		0.0070		50.0	0.400	-7.5	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.5704	0.4926		5.00	0.0200	-13.6	50.0
n-Heptane	Ave	0.0600	0.0664		1.00	0.0200	10.8	50.0
n-Butanol	Qua		0.0047		50.0	0.400	-8.8	50.0
Methyl methacrylate	Ave	0.1902	0.1732		2.00	0.0200	-9.0	50.0
2-Nitropropane	Qua		0.0383		2.00	0.0400	24.8	50.0
Cyclohexanone	Qua		0.0176		20.0	0.200	78.1*	50.0
1,2,3-Trimethylbenzene	Ave	2.602	2.399		0.0184	0.0200	-7.8	50.0
2-Methylnaphthalene	Qua		0.4698		5.00	0.0400	-40.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVIS 240-97710/5 Calibration Date: 08/16/2013 01:08

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 00:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 02:35

Lab File ID: UX86843.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2295	0.2118		1.00	0.0200	-7.7	50.0
Chloromethane	Ave	0.2459	0.2276	0.1000	1.00	0.0200	-7.4	50.0
Vinyl chloride	Ave	0.2145	0.2013		1.00	0.0200	-6.2	20.0
Bromomethane	Qua		0.1288		1.00	0.0200	-1.5	50.0
Chloroethane	Ave	0.1356	0.1219		1.00	0.0200	-10.1	50.0
Trichlorofluoromethane	Ave	0.2795	0.2682		1.00	0.0200	-4.1	50.0
Acrolein	Ave	0.0416	0.0355		20.0	0.200	-14.7	50.0
1,1-Dichloroethene	Ave	0.2004	0.2151		1.00	0.0200	7.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1431	0.1436		1.00	0.0200	0.3	50.0
Acetone	Ave	0.0823	0.0799		10.0	0.0400	-3.0	50.0
Iodomethane	Ave	0.3242	0.3464		1.00	0.0200	6.8	50.0
Carbon disulfide	Ave	0.5922	0.6217		1.00	0.0200	5.0	50.0
Acetonitrile	Ave	0.0322	0.0321		20.0	0.200	-0.3	50.0
Methyl acetate	Ave	0.1931	0.1998		10.0	0.0400	3.4	50.0
Methylene Chloride	Lin1		0.3275		1.00	0.0200	8.7	50.0
tert-Butyl alcohol	Ave	0.0237	0.0162		50.0	0.400	-31.4	50.0
Acrylonitrile	Ave	0.0953	0.0971		20.0	0.0400	1.9	50.0
Methyl tert-butyl ether	Ave	0.7004	0.6324		1.00	0.0200	-9.7	50.0
trans-1,2-Dichloroethene	Ave	0.2384	0.2473		1.00	0.0200	3.8	50.0
Hexane	Ave	0.0594	0.0636		1.00	0.0200	7.1	20.0
1,1-Dichloroethane	Ave	0.4093	0.3916	0.1000	1.00	0.0200	-4.3	50.0
Vinyl acetate	Ave	0.0435	0.0358		2.00	0.0200	-18.9	50.0
2-Butanone	Ave	0.1107	0.1058		10.0	0.0400	-4.5	50.0
cis-1,2-Dichloroethene	Ave	0.2586	0.2687		1.00	0.0200	3.9	50.0
2,2-Dichloropropane	Ave	0.2269	0.1947		1.00	0.0200	-14.2	50.0
Bromochloromethane	Ave	0.1229	0.1270		1.00	0.0200	3.3	50.0
Tetrahydrofuran	Ave	0.0743	0.0738		5.00	0.0200	-0.6	50.0
Chloroform	Ave	0.4087	0.4029		1.00	0.0200	-1.4	20.0
1,1,1-Trichloroethane	Ave	0.3164	0.3190		1.00	0.0200	0.8	50.0
Cyclohexane	Ave	0.3945	0.3834		1.00	0.0200	-2.8	50.0
1,1-Dichloropropene	Ave	0.2964	0.2931		1.00	0.0200	-1.1	50.0
Carbon tetrachloride	Ave	0.2626	0.2548		1.00	0.0200	-3.0	50.0
1,2-Dichloroethane	Ave	0.3570	0.3139		1.00	0.0200	-12.1	50.0
Benzene	Ave	0.9282	0.9008		1.00	0.0200	-3.0	50.0
Trichloroethene	Ave	0.2273	0.2332		1.00	0.0200	2.6	50.0
Methylcyclohexane	Ave	0.3967	0.4000		1.00	0.0200	0.8	50.0
1,2-Dichloropropane	Ave	0.2247	0.2117		1.00	0.0200	-5.8	20.0
1,4-Dioxane	Ave	0.0027	0.0021		50.0	1.00	-23.3	50.0
Dibromomethane	Ave	0.1377	0.1373		1.00	0.0200	-0.2	50.0
Bromodichloromethane	Ave	0.2627	0.2569		1.00	0.0200	-2.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVIS 240-97710/5 Calibration Date: 08/16/2013 01:08

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 00:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 02:35

Lab File ID: UX86843.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1341	0.1231		10.0	0.0400	-8.2	50.0
cis-1,3-Dichloropropene	Ave	0.3120	0.2758		1.00	0.0200	-11.6	50.0
4-Methyl-2-pentanone	Ave	0.2181	0.2000		10.0	0.0400	-8.3	50.0
Toluene	Ave	1.541	1.562		1.00	0.0200	1.3	20.0
trans-1,3-Dichloropropene	Lin1		0.3563		1.00	0.0200	-22.7	50.0
Ethyl methacrylate	Ave	0.4395	0.3839		1.00	0.0200	-12.6	50.0
1,1,2-Trichloroethane	Ave	0.2914	0.3025		1.00	0.0200	3.8	50.0
1,3-Dichloropropane	Ave	0.5165	0.4915		1.00	0.0200	-4.9	50.0
Tetrachloroethene	Ave	0.2465	0.2699		1.00	0.0200	9.5	50.0
2-Hexanone	Ave	0.2157	0.2204		10.0	0.0400	2.2	50.0
Dibromochloromethane	Ave	0.2838	0.2862		1.00	0.0200	0.8	50.0
1,2-Dibromoethane	Ave	0.2790	0.2830		1.00	0.0200	1.4	50.0
Chlorobenzene	Ave	0.9191	0.9271	0.3000	1.00	0.0200	0.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2751	0.2916		1.00	0.0200	6.0	50.0
Ethylbenzene	Ave	0.4811	0.4918		1.00	0.0200	2.2	20.0
m-Xylene & p-Xylene	Ave	0.5825	0.6119		2.00	0.0400	5.0	50.0
o-Xylene	Ave	0.5703	0.5766		1.00	0.0200	1.1	50.0
Styrene	Ave	0.8908	0.9427		1.00	0.0200	5.8	50.0
Bromoform	Lin1		0.1488	0.1000	1.00	0.0200	-14.0	50.0
Isopropylbenzene	Ave	1.454	1.454		1.00	0.0200	0.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8555	0.7128	0.3000	1.00	0.0200	-16.7	50.0
Bromobenzene	Ave	0.8111	0.7843		1.00	0.0200	-3.3	50.0
1,2,3-Trichloropropane	Ave	0.2847	0.2540		1.00	0.0200	-10.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2445	0.1836		1.00	0.0200	-24.9	50.0
n-Propylbenzene	Ave	0.8640	0.8323		1.00	0.0200	-3.7	50.0
2-Chlorotoluene	Ave	0.7697	0.7279		1.00	0.0200	-5.4	50.0
1,3,5-Trimethylbenzene	Ave	2.562	2.452		1.00	0.0200	-4.3	50.0
4-Chlorotoluene	Ave	0.7902	0.7727		1.00	0.0200	-2.2	50.0
tert-Butylbenzene	Ave	2.386	2.150		1.00	0.0200	-9.9	50.0
1,2,4-Trimethylbenzene	Ave	2.586	2.487		1.00	0.0200	-3.8	50.0
sec-Butylbenzene	Ave	3.243	3.063		1.00	0.0200	-5.5	50.0
1,3-Dichlorobenzene	Ave	1.453	1.440		1.00	0.0200	-0.9	50.0
p-Isopropyltoluene	Ave	2.616	2.459		0.0188	0.0200	-6.0	50.0
1,4-Dichlorobenzene	Ave	1.543	1.481		1.00	0.0200	-4.0	50.0
n-Butylbenzene	Ave	2.350	2.267		1.00	0.0200	-3.5	50.0
1,2-Dichlorobenzene	Ave	1.402	1.335		1.00	0.0200	-4.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1108	0.0783		2.00	0.0200	-29.3	50.0
1,3,5-Trichlorobenzene	Ave	0.9292	0.8136		1.00	0.0200	-12.4	50.0
1,2,4-Trichlorobenzene	Ave	0.8087	0.5990		1.00	0.0200	-25.9	50.0
Hexachlorobutadiene	Ave	0.3836	0.3154		1.00	0.0200	-17.8	50.0
Naphthalene	Ave	2.133	1.291		1.00	0.0200	-39.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVIS 240-97710/5 Calibration Date: 08/16/2013 01:08

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 00:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 02:35

Lab File ID: UX86843.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7775	0.4929		1.00	0.0200	-36.6	50.0
Dibromofluoromethane (Surr)	Qua		0.1830		0.0505	0.0500	0.9	50.0
1,2-Dichloroethane-d4 (Surr)	Qua		0.2229		0.0440	0.0500	-12.1	50.0
Toluene-d8 (Surr)	Qua		1.184		0.0563	0.0500	12.5	50.0
4-Bromofluorobenzene (Surr)	Qua		0.4105		0.0509	0.0500	1.8	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: UX86853.D Lab Sample ID: MB 240-97446/1-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 08/16/2013 05:00

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
DR-TP-A82-03	240-27894-4	UX86861.D	08/16/2013 07:50
DR-TP-A82-03	240-27894-5	UX86862.D	08/16/2013 08:11

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97446/1-A

Matrix: Solid | Lab File ID: UX86853.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.0(g) | Date Analyzed: 08/16/2013 05:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97710 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	0.62
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.34
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	1.3
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.36
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.52
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.30
87-61-6	1,2,3-Trichlorobenzene	5.0	U	5.0	0.38
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	0.90
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.17
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	0.27
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	1.3
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.36
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.34
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.69
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.35
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.34
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.66
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.94
110-75-8	2-Chloroethyl vinyl ether	50	U	50	1.4
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.40
591-78-6	2-Hexanone	20	U	20	0.63
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.41
67-64-1	Acetone	20	U	20	6.3
71-43-2	Benzene	5.0	U	5.0	0.23
108-86-1	Bromobenzene	5.0	U	5.0	0.33
74-97-5	Bromochloromethane	5.0	U	5.0	0.71
75-25-2	Bromoform	5.0	U	5.0	0.33
74-83-9	Bromomethane	5.0	U	5.0	0.54
75-15-0	Carbon disulfide	5.0	U	5.0	0.44
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.37
108-90-7	Chlorobenzene	5.0	U	5.0	0.33
75-00-3	Chloroethane	5.0	U	5.0	0.86
67-66-3	Chloroform	5.0	U	5.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97446/1-A

Matrix: Solid | Lab File ID: UX86853.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.0(g) | Date Analyzed: 08/16/2013 05:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97710 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.0	U	5.0	0.41
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.36
75-27-4	Bromodichloromethane	5.0	U	5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.34
106-93-4	1,2-Dibromoethane	5.0	U	5.0	0.50
74-95-3	Dibromomethane	5.0	U	5.0	0.63
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	0.50
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	5.0	U	5.0	0.26
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.2
98-82-8	Isopropylbenzene	5.0	U	5.0	0.16
78-93-3	2-Butanone	20	U	20	1.4
108-10-1	4-Methyl-2-pentanone	20	U	20	0.54
179601-23-1	m-Xylene & p-Xylene	10	U	10	1.2
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.43
91-20-3	Naphthalene	0.357	J	5.0	0.19
104-51-8	n-Butylbenzene	5.0	U	5.0	0.23
75-09-2	Methylene Chloride	1.91	J	5.0	0.67
103-65-1	n-Propylbenzene	5.0	U	5.0	0.40
95-47-6	o-Xylene	5.0	U	5.0	0.35
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.21
135-98-8	sec-Butylbenzene	5.0	U	5.0	0.18
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.22
100-42-5	Styrene	5.0	U	5.0	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.37
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.29
127-18-4	Tetrachloroethene	5.0	U	5.0	0.52
108-88-3	Toluene	5.0	U	5.0	0.27
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.41
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.54
79-01-6	Trichloroethene	5.0	U	5.0	0.42
75-69-4	Trichlorofluoromethane	5.0	U	5.0	0.34
75-65-0	tert-Butyl alcohol	200	U	200	7.6
108-05-4	Vinyl acetate	10	U	10	0.25
75-01-4	Vinyl chloride	5.0	U	5.0	0.39
124-48-1	Dibromochloromethane	5.0	U	5.0	0.55

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97446/1-A

Matrix: Solid Lab File ID: UX86853.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5.0(g) Date Analyzed: 08/16/2013 05:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97710 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	10	U	10	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		58-123
460-00-4	4-Bromofluorobenzene (Surr)	96		52-136
2037-26-5	Toluene-d8 (Surr)	108		67-125
1868-53-7	Dibromofluoromethane (Surr)	97		37-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97446/1-A

Matrix: Solid | Lab File ID: UX86853.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.0(g) | Date Analyzed: 08/16/2013 05:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97710 | Units: ug/Kg

Number TICs Found: 1 | TIC Result Total: 2.55

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	4.49	2.55	J

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86844.D

Lab ID: LCS 240-97710/6 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	56.6	113	81-119	
1,1,1-Trichloroethane	50.0	50.3	101	77-126	
1,1,2,2-Tetrachloroethane	50.0	44.3	89	77-123	
1,1,2-Trichloro-1,2,2-trichfluoroethane	50.0	56.6	113	82-138	
1,1-Dichloroethane	50.0	46.8	94	76-115	
1,1-Dichloroethene	50.0	52.9	106	75-135	
1,1-Dichloropropene	50.0	49.0	98	80-120	
1,2,3-Trichlorobenzene	50.0	31.4	63	61-121	
1,2,3-Trichloropropane	50.0	44.3	89	84-126	
1,2,3-Trimethylbenzene	50.0	47.1	94	70-130	
1,2,4-Trichlorobenzene	50.0	38.9	78	64-124	
1,2,4-Trimethylbenzene	50.0	50.2	100	80-129	
1,2-Dibromo-3-Chloropropane	50.0	40.8	82	61-132	
1,2-Dichlorobenzene	50.0	47.9	96	76-110	
1,2-Dichloroethane	50.0	44.5	89	72-120	
1,2-Dichloropropane	50.0	47.3	95	87-113	
1,3-Dichlorobenzene	50.0	51.1	102	78-111	
1,3-Dichloropropane	50.0	49.2	98	82-118	
1,4-Dichlorobenzene	50.0	48.6	97	75-110	
2,2-Dichloropropane	50.0	46.7	93	69-135	
2-Chloroethyl vinyl ether	50.0	44.7 J	89	28-173	
2-Chlorotoluene	50.0	48.5	97	78-119	
2-Hexanone	100	105	105	64-136	
4-Chlorotoluene	50.0	50.3	101	79-118	
Acetone	100	96.1	96	41-137	
Benzene	50.0	47.2	94	79-112	
Bromobenzene	50.0	50.6	101	81-115	
Bromochloromethane	50.0	51.5	103	79-111	
Bromoform	50.0	48.0	96	62-133	
Bromomethane	50.0	42.3	85	42-136	
Carbon disulfide	50.0	53.5	107	62-146	
Carbon tetrachloride	50.0	49.8	100	71-129	
Chlorobenzene	50.0	50.3	101	78-110	
Chloroethane	50.0	41.4	83	58-117	
Chloroform	50.0	48.1	96	77-114	
Chloromethane	50.0	39.6	79	50-110	
cis-1,2-Dichloroethene	50.0	51.3	103	76-113	
Bromodichloromethane	50.0	52.6	105	84-122	
cis-1,3-Dichloropropene	50.0	47.9	96	74-128	
1,2-Dibromoethane	50.0	52.1	104	83-117	
Dibromomethane	50.0	51.0	102	85-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86844.D

Lab ID: LCS 240-97710/6 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	50.0	38.4	77	26-113	
Diisopropyl ether	50.0	50.7	101	82-119	
Ethylbenzene	50.0	51.9	104	79-117	
Hexachlorobutadiene	50.0	35.2	70	54-131	
Isopropylbenzene	50.0	51.9	104	76-122	
2-Butanone	100	93.7	94	52-131	
4-Methyl-2-pentanone	100	97.3	97	67-135	
m-Xylene & p-Xylene	100	106	106	80-117	
Methyl tert-butyl ether	50.0	45.4	91	49-165	
Naphthalene	50.0	34.2	68	65-123	
n-Butylbenzene	50.0	51.5	103	68-135	
Methylene Chloride	50.0	52.0	104	75-118	
n-Propylbenzene	50.0	52.1	104	81-129	
o-Xylene	50.0	51.1	102	80-120	
p-Isopropyltoluene	50.0	51.1	102	77-131	
sec-Butylbenzene	50.0	49.0	98	74-129	
Styrene	50.0	57.1	114	87-117	
tert-Butylbenzene	50.0	46.6	93	76-126	
Tetrachloroethene	50.0	56.3	113	79-114	
Toluene	50.0	48.0	96	75-111	
trans-1,2-Dichloroethene	50.0	50.1	100	78-117	
trans-1,3-Dichloropropene	50.0	42.6	85	73-131	
Trichloroethene	50.0	51.7	103	79-113	
Trichlorofluoromethane	50.0	45.3	91	57-146	
tert-Butyl alcohol	1000	758	76	60-125	
Vinyl acetate	50.0	45.7	91	70-130	
Vinyl chloride	50.0	40.6	81	57-114	
Dibromochloromethane	50.0	55.8	112	72-127	
Xylenes, Total	150	157	105	80-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86864.D

Lab ID: 240-27900-C-3-C MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	28.1	5.6 U	25.4	90	34-135	
1,1,1-Trichloroethane	28.1	5.6 U	24.0	85	51-128	
1,1,2,2-Tetrachloroethane	28.1	5.6 U	24.4	87	16-179	
1,1,2-Trichloro-1,2,2-trichfluoroethane	28.1	5.6 U	26.6	95	50-147	
1,1-Dichloroethane	28.1	5.6 U	24.4	87	54-122	
1,1-Dichloroethene	28.1	5.6 U	25.8	92	49-157	
1,1-Dichloropropene	28.1	5.6 U	22.1	79	50-122	
1,2,3-Trichlorobenzene	28.1	5.6 U	9.22	33	10-110	
1,2,3-Trichloropropane	28.1	5.6 U	25.4	90	32-174	
1,2,3-Trimethylbenzene	28.1	5.6 U	17.7	63	70-130	F
1,2,4-Trichlorobenzene	28.1	5.6 U	9.25	33	10-111	
1,2,4-Trimethylbenzene	28.1	5.6 U	16.8	60	10-173	
1,2-Dibromo-3-Chloropropane	28.1	11 U	21.6	77	10-153	
1,2-Dichlorobenzene	28.1	5.6 U	17.5	62	17-122	
1,2-Dichloroethane	28.1	5.6 U	22.8	81	49-123	
1,2-Dichloropropane	28.1	5.6 U	23.8	85	61-117	
1,3-Dichlorobenzene	28.1	5.6 U	17.1	61	16-126	
1,3-Dichloropropane	28.1	5.6 U	25.1	89	54-128	
1,4-Dichlorobenzene	28.1	5.6 U	16.2	58	15-121	
2,2-Dichloropropane	28.1	5.6 U	20.0	71	49-132	
2-Chloroethyl vinyl ether	28.1	56 U	21.0 J	75	10-162	
2-Chlorotoluene	28.1	5.6 U	18.2	65	11-162	
2-Hexanone	56.2	22 U	48.8	87	37-147	
4-Chlorotoluene	28.1	5.6 U	17.2	61	15-149	
Acetone	56.2	22 U	54.1	96	24-140	
Benzene	28.1	5.6 U	23.8	85	53-118	
Bromobenzene	28.1	5.6 U	20.0	71	24-144	
Bromochloromethane	28.1	5.6 U	27.5	98	53-116	
Bromoform	28.1	5.6 U	20.6	73	18-129	
Bromomethane	28.1	5.6 U	21.6	77	33-130	
Carbon disulfide	28.1	5.6 U	22.2	79	20-151	
Carbon tetrachloride	28.1	5.6 U	22.7	81	32-137	
Chlorobenzene	28.1	5.6 U	20.8	74	37-116	
Chloroethane	28.1	5.6 U	21.3	76	45-118	
Chloroform	28.1	5.6 U	25.0	89	53-119	
Chloromethane	28.1	5.6 U	20.0	71	34-117	
cis-1,2-Dichloroethene	28.1	5.6 U	25.9	92	50-119	
Bromodichloromethane	28.1	5.6 U	23.8	85	35-132	
cis-1,3-Dichloropropene	28.1	5.6 U	19.5	70	27-133	
1,2-Dibromoethane	28.1	5.6 U	25.4	91	45-127	
Dibromomethane	28.1	5.6 U	25.9	92	52-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86864.D

Lab ID: 240-27900-C-3-C MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	28.1	5.6 U	17.4	62	17-115	
Diisopropyl ether	28.1	11 U	26.0	92	62-128	
Ethylbenzene	28.1	5.6 U	20.3	72	30-131	
Hexachlorobutadiene	28.1	5.6 U	8.37	30	10-131	
Isopropylbenzene	28.1	5.6 U	17.9	64	21-134	
2-Butanone	56.2	22 U	51.4	92	30-143	
4-Methyl-2-pentanone	56.2	22 U	47.2	84	43-147	
m-Xylene & p-Xylene	56.2	11 U	39.9	71	29-131	
Methyl tert-butyl ether	28.1	5.6 U	23.4	83	51-157	
Naphthalene	28.1	5.6 U	10.9	39	10-124	
n-Butylbenzene	28.1	5.6 U	11.1	40	10-148	
Methylene Chloride	28.1	5.2 J	32.4	97	54-115	
n-Propylbenzene	28.1	5.6 U	16.9	60	10-178	
o-Xylene	28.1	5.6 U	20.6	73	29-134	
p-Isopropyltoluene	28.1	5.6 U	14.4	51	10-165	
sec-Butylbenzene	28.1	5.6 U	15.2	54	10-172	
Styrene	28.1	5.6 U	20.6	73	27-127	
tert-Butylbenzene	28.1	5.6 U	16.6	59	10-163	
Tetrachloroethene	28.1	5.6 U	21.8	78	31-135	
Toluene	28.1	5.6 U	22.7	81	39-129	
trans-1,2-Dichloroethene	28.1	5.6 U	24.7	88	50-123	
trans-1,3-Dichloropropene	28.1	5.6 U	17.8	64	28-137	
Trichloroethene	28.1	5.6 U	23.9	85	10-177	
Trichlorofluoromethane	28.1	0.58 J	22.9	79	36-142	
tert-Butyl alcohol	562	220 U	426	76	60-125	
Vinyl acetate	28.1	11 U	1.92 J	7	70-130	F
Vinyl chloride	28.1	5.6 U	20.3	72	42-117	
Dibromochloromethane	28.1	5.6 U	23.8	85	29-135	
Xylenes, Total	84.2	11 U	60.5	72	30-131	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86865.D

Lab ID: 240-27900-C-3-D MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	26.4	23.9	90	6	30	34-135	
1,1,1-Trichloroethane	26.4	21.5	81	11	30	51-128	
1,1,2,2-Tetrachloroethane	26.4	21.7	82	12	30	16-179	
1,1,2-Trichloro-1,2,2-trichfluoroethane	26.4	24.5	93	8	30	50-147	
1,1-Dichloroethane	26.4	21.8	82	11	30	54-122	
1,1-Dichloroethene	26.4	22.7	86	13	30	49-157	
1,1-Dichloropropene	26.4	19.9	75	10	30	50-122	
1,2,3-Trichlorobenzene	26.4	7.76	29	17	30	10-110	
1,2,3-Trichloropropane	26.4	22.8	86	11	30	32-174	
1,2,3-Trimethylbenzene	26.4	17.4	66	2	30	70-130	F
1,2,4-Trichlorobenzene	26.4	7.82	30	17	30	10-111	
1,2,4-Trimethylbenzene	26.4	16.4	62	3	30	10-173	
1,2-Dibromo-3-Chloropropane	26.4	18.3	69	17	30	10-153	
1,2-Dichlorobenzene	26.4	16.3	62	7	30	17-122	
1,2-Dichloroethane	26.4	20.8	79	9	30	49-123	
1,2-Dichloropropane	26.4	21.8	82	9	30	61-117	
1,3-Dichlorobenzene	26.4	15.9	60	7	30	16-126	
1,3-Dichloropropane	26.4	23.0	87	9	30	54-128	
1,4-Dichlorobenzene	26.4	15.0	57	8	30	15-121	
2,2-Dichloropropane	26.4	19.1	72	5	30	49-132	
2-Chloroethyl vinyl ether	26.4	19.8 J	75	6	30	10-162	
2-Chlorotoluene	26.4	18.0	68	1	30	11-162	
2-Hexanone	52.9	37.4	71	27	30	37-147	
4-Chlorotoluene	26.4	16.6	63	3	30	15-149	
Acetone	52.9	43.4	82	22	30	24-140	
Benzene	26.4	22.2	84	7	30	53-118	
Bromobenzene	26.4	20.2	77	1	30	24-144	
Bromochloromethane	26.4	24.1	91	13	30	53-116	
Bromoform	26.4	17.4	66	16	30	18-129	
Bromomethane	26.4	20.7	78	4	30	33-130	
Carbon disulfide	26.4	19.8	75	11	30	20-151	
Carbon tetrachloride	26.4	20.6	78	10	30	32-137	
Chlorobenzene	26.4	19.5	74	6	30	37-116	
Chloroethane	26.4	20.3	77	5	30	45-118	
Chloroform	26.4	22.3	84	11	30	53-119	
Chloromethane	26.4	18.5	70	7	30	34-117	
cis-1,2-Dichloroethene	26.4	23.3	88	11	30	50-119	
Bromodichloromethane	26.4	22.2	84	7	30	35-132	
cis-1,3-Dichloropropene	26.4	18.9	71	3	30	27-133	
1,2-Dibromoethane	26.4	22.6	86	12	30	45-127	
Dibromomethane	26.4	22.8	86	13	30	52-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86865.D

Lab ID: 240-27900-C-3-D MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dichlorodifluoromethane	26.4	15.9	60	9	30	17-115	
Diisopropyl ether	26.4	24.1	91	7	30	62-128	
Ethylbenzene	26.4	19.0	72	6	30	30-131	
Hexachlorobutadiene	26.4	7.74	29	8	30	10-131	
Isopropylbenzene	26.4	17.1	65	5	30	21-134	
2-Butanone	52.9	40.8	77	23	30	30-143	
4-Methyl-2-pentanone	52.9	36.8	70	25	30	43-147	
m-Xylene & p-Xylene	52.9	38.4	73	4	30	29-131	
Methyl tert-butyl ether	26.4	20.5	77	13	30	51-157	
Naphthalene	26.4	8.84	33	21	30	10-124	
n-Butylbenzene	26.4	10.4	39	7	30	10-148	
Methylene Chloride	26.4	29.8	93	8	30	54-115	
n-Propylbenzene	26.4	16.5	63	2	30	10-178	
o-Xylene	26.4	19.5	74	5	30	29-134	
p-Isopropyltoluene	26.4	14.0	53	3	30	10-165	
sec-Butylbenzene	26.4	15.0	57	1	30	10-172	
Styrene	26.4	19.1	72	8	30	27-127	
tert-Butylbenzene	26.4	16.8	63	1	30	10-163	
Tetrachloroethene	26.4	20.8	79	5	30	31-135	
Toluene	26.4	21.5	81	5	30	39-129	
trans-1,2-Dichloroethene	26.4	21.9	83	12	30	50-123	
trans-1,3-Dichloropropene	26.4	17.4	66	3	30	28-137	
Trichloroethene	26.4	21.7	82	9	30	10-177	
Trichlorofluoromethane	26.4	20.9	77	9	30	36-142	
tert-Butyl alcohol	529	331	63	25	30	60-125	
Vinyl acetate	26.4	11 U	0	NC	30	70-130	F
Vinyl chloride	26.4	19.4	73	5	30	42-117	
Dibromochloromethane	26.4	22.3	84	6	30	29-135	
Xylenes, Total	79.3	57.9	73	4	30	30-131	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: STD8260 240-97870/4 Date Analyzed: 08/16/2013 16:14

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3344.D Heated Purge: (Y/N) N

Calibration ID: 16865

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1950817	5.47	1433793	8.15	447870	10.40
UPPER LIMIT		3901634	5.97	2867586	8.65	895740	10.90
LOWER LIMIT		975409	4.97	716897	7.65	223935	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-97870/14		1860770	5.47	1316767	8.15	441226	10.40
CCVIS 240-98342/2		1776866	5.47	1238771	8.15	455518	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: CCVIS 240-98342/2 Date Analyzed: 08/21/2013 10:29

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3471.D Heated Purge: (Y/N) N

Calibration ID: 16867

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1776866	5.47	1238771	8.15	455518	10.40
UPPER LIMIT		3553732	5.97	2477542	8.65	911036	10.90
LOWER LIMIT		888433	4.97	619386	7.65	227759	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-98342/4		1740717	5.47	1295067	8.15	446011	10.40
CCV 240-98342/3		1819802	5.47	1283703	8.15	359269	10.40
MB 240-98342/6		1645514	5.47	1194199	8.15	326451	10.40
240-27894-3	TB-081213	1580895	5.47	1156120	8.15	314717	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: ICIS 240-93208/6 Date Analyzed: 07/10/2013 15:49

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 143538.D Heated Purge: (Y/N) Y

Calibration ID: 16258

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1430810	6.78	988987	9.49	495203	11.47
UPPER LIMIT		2861620	7.28	1977974	9.99	990406	11.97
LOWER LIMIT		715405	6.28	494494	8.99	247602	10.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-93208/21		1326347	6.78	901089	9.49	437703	11.47
CCVIS 240-97390/3		1016086	6.78	689060	9.49	349784	11.47

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: CCVIS 240-97390/3 Date Analyzed: 08/14/2013 10:17

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 144237.D Heated Purge: (Y/N) Y

Calibration ID: 16260

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1016086	6.78	689060	9.49	349784	11.47
UPPER LIMIT		2032172	7.28	1378120	9.99	699568	11.97
LOWER LIMIT		508043	6.28	344530	8.99	174892	10.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-97390/4		1118563	6.78	711520	9.49	366511	11.47
LCS 240-97336/2-A		993867	6.78	658927	9.49	346816	11.47
MB 240-97336/1-A		1110368	6.78	710348	9.49	368731	11.47
240-27894-1	DR-TP-A76-10	933353	6.78	605688	9.49	326219	11.47
240-27894-2	DR-TP-A76-11	1023966	6.78	703922	9.49	377408	11.47

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: CCVIS 240-97710/5 Date Analyzed: 08/16/2013 01:08

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX86843.D Heated Purge: (Y/N) Y

Calibration ID: 14626

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1356685	5.16	864084	7.68	409732	9.88
UPPER LIMIT		2713370	5.66	1728168	8.18	819464	10.38
LOWER LIMIT		678343	4.66	432042	7.18	204866	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
240-27894-4	DR-TP-A82-03	1314350	5.16	750286	7.68	230233	9.88
240-27894-5	DR-TP-A82-03	1263305	5.16	712971	7.68	214066	9.87
240-27900-C-3-C MS		1343363	5.16	817530	7.68	363166	9.88
240-27900-C-3-D MSD		1412416	5.16	862585	7.68	357205	9.88

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Batch Number: 97336 Batch Start Date: 08/14/13 02:09 Batch Analyst: Lata, Todd

Batch Method: 5035 Batch End Date: 08/14/13 02:57

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount	VMENCORESS 00214	VMENFAS 00195
MB 240-97336/1		5035, 8260B		0 g	5 g	5 g	5 mL	5 uL	
LCS 240-97336/2		5035, 8260B		0 g	5 g	5 g	5 mL	5 uL	100 uL
240-27894-A-1	DR-TP-A76-10	5035, 8260B	T	32.95 g	38.45 g	5.5 g	5 mL	5 uL	
240-27894-A-2	DR-TP-A76-11	5035, 8260B	T	33.06 g	39.20 g	6.14 g	5 mL	5 uL	

Batch Notes	
Balance ID	B050
Methanol Lot Number	124454

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Batch Number: 97446 Batch Start Date: 08/14/13 12:13 Batch Analyst: Macenczak, Steven

Batch Method: 5035 Batch End Date: 08/14/13 13:43

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
MB 240-97446/1		5035, 8260B				5.0 g	5 mL		
240-27894-B-4	DR-TP-A82-03	5035, 8260B	T	33.51 g	39.69 g	6.18 g	5 mL		
240-27894-B-5	DR-TP-A82-03	5035, 8260B	T	34.92 g	39.78 g	4.86 g	5 mL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Batch Number: 97718 Batch Start Date: 08/16/13 03:02 Batch Analyst: Lata, Todd

Batch Method: 5030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
240-27900-C-3 MS		5030B, 8260B	T	5.01 g	5 mL				
240-27900-C-3 MSD		5030B, 8260B	T	5.32 g	5 mL				

Batch Notes	
Balance ID	B035

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SDG 27984

SAMPLE ID DR-TP-A76-10

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST	IS AMOUNT (NG)	Final Volume (ML)	AVE RRF	CONCENTRATION PPB
326219	1	164760	50	250	1.7220	782.38
		% Solids		**Sample Volume (Grams)**		
		0.852		5.5		

1,2-Dichlorobenzene = 780 ug/kg

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 | Lab Sample ID: 240-27894-1

Matrix: Solid | Lab File ID: 144244.D

Analysis Method: 8260B | Date Collected: 08/12/2013 10:50

Sample wt/vol: 5.5(g) | Date Analyzed: 08/14/2013 12:47

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.8 | Level: (low/med) Medium

Analysis Batch No.: 97390 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	270	U	270	9.7
71-55-6	1,1,1-Trichloroethane	270	U	270	22
79-34-5	1,1,2,2-Tetrachloroethane	270	U	270	9.5
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	270	U	270	42
75-34-3	1,1-Dichloroethane	270	U	270	18
75-35-4	1,1-Dichloroethene	270	U	270	19
563-58-6	1,1-Dichloropropene	270	U	270	11
87-61-6	1,2,3-Trichlorobenzene	270	U	270	11
96-18-4	1,2,3-Trichloropropane	270	U	270	22
526-73-8	1,2,3-Trimethylbenzene	160	J	270	0.18
120-82-1	1,2,4-Trichlorobenzene	27	J B	270	7.8
95-63-6	1,2,4-Trimethylbenzene	31	J	270	5.3
96-12-8	1,2-Dibromo-3-Chloropropane	530	U	530	53
106-93-4	1,2-Dibromoethane	270	U	270	11
95-50-1	1,2-Dichlorobenzene	780		270	9.2
107-06-2	1,2-Dichloroethane	64	J	270	11
78-87-5	1,2-Dichloropropane	270	U	270	8.7
541-73-1	1,3-Dichlorobenzene	22	J	270	5.1
142-28-9	1,3-Dichloropropane	270	U	270	23
106-46-7	1,4-Dichlorobenzene	79	J	270	8.5
594-20-7	2,2-Dichloropropane	270	U	270	25
78-93-3	2-Butanone	1100	U	1100	46
110-75-8	2-Chloroethyl vinyl ether	1100	U	1100	46
95-49-8	2-Chlorotoluene	270	U	270	9.6
591-78-6	2-Hexanone	1100	U	1100	21
106-43-4	4-Chlorotoluene	270	U	270	11
108-10-1	4-Methyl-2-pentanone	1100	U	1100	51
67-64-1	Acetone	1100	U	1100	180
71-43-2	Benzene	13	J	270	13
108-86-1	Bromobenzene	270	U	270	14
74-97-5	Bromochloromethane	270	U	270	14
75-27-4	Bromodichloromethane	270	U	270	11
75-25-2	Bromoform	270	U	270	20
74-83-9	Bromomethane	270	U *	270	31
75-15-0	Carbon disulfide	54	J B	270	13

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\NCChrom\ChromData\A3UX14\20130814-22475.b\144244.D		
Lims ID:	240-27894-A-1-A	Client ID:	DR-TP-A76-10
Inject. Date:	14-Aug-2013 12:47:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-27894-a-1-a		
Misc. Info.:	240-0022475-010 =240-0022475-010		
Operator:	002808	Instrument ID:	A3UX14
Purge Vol:	5.000 mL	ALS Bottle#:	9
Lims Batch ID:	97390	Lims Sample ID:	10
Detector:	MS SCAN		
Method:	\\NCChrom\ChromData\A3UX14\20130814-22475.b\8260_14.m		
Last Update:	15-Aug-2013 09:42:37	Calib Date:	10-Jul-2013 20:50:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\NCChrom\ChromData\A3UX14\20130710-21544.b\143552.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK029		
First Level Reviewer: macenczaks		Date:	15-Aug-2013 09:16:40

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.783	6.782	0.001	100	933353	50.0	
* 2 Chlorobenzene-d5	117	9.492	9.492	0.0	88	605688	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.468	11.468	0.0	99	326219	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.084	6.084	0.0	59	226633	45.9	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.428	6.427	0.001	94	233606	47.2	
$ 7 Toluene-d8 (Surr)	98	8.250	8.250	0.0	94	751634	42.0	
$ 8 4-Bromofluorobenzene (Surr)	95	10.486	10.486	0.0	92	245753	38.4	
17 Dichlorodifluoromethane	85		1.387					9
18 Chloromethane	50		1.552					9
19 Vinyl chloride	62		1.671					9
20 Bromomethane	94		1.990					9
21 Chloroethane	64		2.097					
23 Trichlorofluoromethane	101		2.416					
27 1,1-Dichloroethene	96		3.043					
28 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.079					
29 Acetone	43		3.126					
31 Carbon disulfide	76	3.304	3.304	0.0	94	13381	1.02	
35 Methylene Chloride	84		3.741					
36 2-Methyl-2-propanol	59		4.049					
38 trans-1,2-Dichloroethene	96		4.179					
39 Methyl tert-butyl ether	73		4.215					
41 1,1-Dichloroethane	63		4.783					
43 Vinyl acetate	86		4.913					
44 Isopropyl ether	87		4.948					
45 Tert-butyl ethyl ether	59		5.410					
47 2,2-Dichloropropane	77		5.528					9
48 cis-1,2-Dichloroethene	96		5.528					9
49 2-Butanone (MEK)	43		5.576					9
53 Chlorobromomethane	128		5.800					
55 Chloroform	83		5.919					9

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
56 1,1,1-Trichloroethane	97		6.096					
59 Carbon tetrachloride	117		6.274					
58 1,1-Dichloropropene	75		6.274					
61 Benzene	78	6.487	6.487	0.0	40	4868	0.2421	
62 1,2-Dichloroethane	62	6.510	6.510	0.0	74	7553	1.20	
63 Tert-amyl methyl ether	73		6.640					
67 Trichloroethene	130	7.138	7.137	0.001	52	2052	0.3344	
69 1,2-Dichloropropane	63		7.339					9
70 Dibromomethane	93		7.445					
73 Dichlorobromomethane	83		7.599					9
75 2-Chloroethyl vinyl ether	63		7.883					
76 cis-1,3-Dichloropropene	75		8.013					
77 4-Methyl-2-pentanone (MIBK)	43		8.155					
78 Toluene	91	8.309	8.309	0.0	95	34046	1.70	
79 trans-1,3-Dichloropropene	75		8.498					
82 Tetrachloroethene	164		8.794					9
83 1,3-Dichloropropane	76		8.806					
84 2-Hexanone	43		8.877					
86 Chlorodibromomethane	129		8.995					
87 Ethylene Dibromide	107		9.090					
89 Chlorobenzene	112	9.516	9.516	0.0	60	5515	0.4193	
90 1,1,1,2-Tetrachloroethane	131		9.587					
91 Ethylbenzene	106	9.611	9.611	0.0	97	17169	2.43	
92 m-Xylene & p-Xylene	106	9.717	9.717	0.0	92	7935	0.9192	
93 o-Xylene	106	10.048	10.048	0.0	89	6244	0.7297	
94 Styrene	104		10.060					9
95 Bromoform	173		10.214					
96 Isopropylbenzene	105	10.356	10.356	0.0	76	11292	0.4908	
98 1,1,2,2-Tetrachloroethane	83		10.604					9
99 Bromobenzene	156		10.616					
101 1,2,3-Trichloropropane	110		10.640					9
102 N-Propylbenzene	120	10.711	10.711	0.0	84	5135	0.7360	
103 2-Chlorotoluene	126		10.782					9
105 4-Chlorotoluene	126		10.877					
106 tert-Butylbenzene	119		11.125					
107 1,2,4-Trimethylbenzene	105	11.173	11.172	0.001	81	12472	0.5856	
108 sec-Butylbenzene	105	11.315	11.314	0.001	76	14228	0.5334	
109 1,3-Dichlorobenzene	146	11.409	11.409	0.0	4	4655	0.4085	
110 4-Isopropyltoluene	119	11.397	11.433	-0.036	55	3549	0.1492	
111 1,4-Dichlorobenzene	146	11.480	11.480	0.0	68	16835	1.48	
112 1,2,3-Trimethylbenzene	105	11.528	11.527	0.001	92	64600	3.03	
113 n-Butylbenzene	91	11.776	11.776	0.0	57	13890	0.7187	
114 1,2-Dichlorobenzene	146	11.800	11.800	0.0	98	164760	14.7	
115 1,2-Dibromo-3-Chloropropane	157		12.450					
117 1,2,4-Trichlorobenzene	180	13.137	13.137	0.0	55	4165	0.5107	
118 Hexachlorobutadiene	225		13.279					
119 Naphthalene	128	13.338	13.338	0.0	96	617334	32.7	
120 1,2,3-Trichlorobenzene	180		13.527					9
S 127 Xylenes, Total	106				0		1.65	

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
DR-TP-A76-10	240-27894-1	64	68	66	68	69	86
DR-TP-A76-11	240-27894-2	65	67	59	64	57	87
DR-TP-A82-03	240-27894-4	64	66	56	67	63	84
DR-TP-A82-03	240-27894-5	68	72	61	63	61	83
	MB 240-97388/13-A	56	66	63	66	40	88
	LCS 240-97388/14-A	65	66	64	65	42	82

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	24-110
PHL = Phenol-d5 (Surr)	26-110
NBZ = Nitrobenzene-d5 (Surr)	20-110
FBP = 2-Fluorobiphenyl (Surr)	24-110
TBP = 2,4,6-Tribromophenol (Surr)	10-110
TPH = Terphenyl-d14 (Surr)	36-110

Column to be used to flag recovery values

FORM II 8270D

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A4HP9 Start Date: 08/26/2013 10:48

Analysis Batch Number: 98897 End Date: 08/26/2013 19:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-98897/1		08/26/2013 10:48	1	30826001.D	RXI-5SILMS 0.45(mm)
STD5 240-98897/2 IC		08/26/2013 11:16	1	30826002.D	RXI-5SILMS 0.45(mm)
STD4 240-98897/3 IC		08/26/2013 11:43	1	30826003.D	RXI-5SILMS 0.45(mm)
STD3 240-98897/4 IC		08/26/2013 12:08	1	30826004.D	RXI-5SILMS 0.45(mm)
STD2 240-98897/5 IC		08/26/2013 12:34	1	30826005.D	RXI-5SILMS 0.45(mm)
STD1 240-98897/6 IC		08/26/2013 13:00	1	30826006.D	RXI-5SILMS 0.45(mm)
STD9 240-98897/7 IC		08/26/2013 13:26	1	30826007.D	RXI-5SILMS 0.45(mm)
STD8 240-98897/8 IC		08/26/2013 13:51	1	30826008.D	RXI-5SILMS 0.45(mm)
STD7 240-98897/9 IC		08/26/2013 14:17	1	30826009.D	RXI-5SILMS 0.45(mm)
STD6 240-98897/10 ICIS		08/26/2013 14:43	1	30826010.D	RXI-5SILMS 0.45(mm)
ICV 240-98897/11		08/26/2013 15:09	1	30826011.D	RXI-5SILMS 0.45(mm)
STD5 240-98897/12 IC		08/26/2013 15:34	1		RXI-5SILMS 0.45(mm)
STD4 240-98897/13 IC		08/26/2013 16:00	1		RXI-5SILMS 0.45(mm)
STD3 240-98897/14 IC		08/26/2013 16:26	1		RXI-5SILMS 0.45(mm)
STD2 240-98897/15 IC		08/26/2013 16:52	1		RXI-5SILMS 0.45(mm)
STD6 240-98897/16 IC		08/26/2013 17:17	1		RXI-5SILMS 0.45(mm)
STD7 240-98897/17 IC		08/26/2013 17:43	1		RXI-5SILMS 0.45(mm)
STD8 240-98897/18 IC		08/26/2013 18:09	1		RXI-5SILMS 0.45(mm)
STD9 240-98897/19 IC		08/26/2013 18:35	1		RXI-5SILMS 0.45(mm)
ICV 240-98897/20		08/26/2013 19:00	1		RXI-5SILMS 0.45(mm)

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: 30826001.D DFTPP Injection Date: 08/26/2013

Instrument ID: A4HP9 DFTPP Injection Time: 10:48

Analysis Batch No.: 98897

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	47.0	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	69.2	
70	Less than 2.0% of mass 69	0.4	(0.5)1
127	25.0 - 75.0% of mass 198	53.1	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.9	
275	10.0- 30.0% of mass 198	24.1	
365	Greater than 0.75% of mass 198	2.9	
441	Present, but less than mass 443	1.5	
442	40.0 - 110.0% of mass 198	61.9	
443	15.0 - 24.0% of mass 442	11.8	(19.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-98897/2	30826002.D	08/26/2013	11:16
	STD4 240-98897/3	30826003.D	08/26/2013	11:43
	STD3 240-98897/4	30826004.D	08/26/2013	12:08
	STD2 240-98897/5	30826005.D	08/26/2013	12:34
	STD1 240-98897/6	30826006.D	08/26/2013	13:00
	STD9 240-98897/7	30826007.D	08/26/2013	13:26
	STD8 240-98897/8	30826008.D	08/26/2013	13:51
	STD7 240-98897/9	30826009.D	08/26/2013	14:17
	STD6 240-98897/10	30826010.D	08/26/2013	14:43
	ICV 240-98897/11	30826011.D	08/26/2013	15:09

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98897

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2013 11:16 Calibration End Date: 08/26/2013 14:43 Calibration ID: 17048

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98897/6	30826006.D
Level 2	STD2 240-98897/5	30826005.D
Level 3	STD3 240-98897/4	30826004.D
Level 4	STD4 240-98897/3	30826003.D
Level 5	STD5 240-98897/2	30826002.D
Level 6	STD6 240-98897/10	30826010.D
Level 7	STD7 240-98897/9	30826009.D
Level 8	STD8 240-98897/8	30826008.D
Level 9	STD9 240-98897/7	30826007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.9212	0.7235 0.9597	0.8535 1.0353	0.8751 1.0291	0.9383	Ave		0.9170				11.0		20.0			
N-Nitrosodimethylamine	1.5366	1.1329 1.6051	1.2491 1.7095	1.2760 1.6786	1.3622	Ave		1.4438				15.0		20.0			
Pyridine	2.4782	1.9595 2.4169	2.1116 2.7004	2.1108 2.6652	2.2686	Ave		2.3389				12.0		20.0			
Benzaldehyde	1.8448 1.7709	1.7673 1.7651	1.8255 1.7972	1.8582 1.6642	1.8612	Ave		1.7949			0.0100	3.5		20.0			
Phenol	2.5670	2.5361 2.5216	2.6128 2.6870	2.5977 2.5677	2.4875	Ave		2.5722			0.8000	2.4		20.0			
Aniline	2.9386	3.1037 2.9716	3.0062 3.0857	3.0685 2.9798	2.8151	Ave		2.9961				3.1		20.0			
Bis(2-chloroethyl)ether	2.1293	2.1600 2.1136	2.1075 2.2707	2.1718 2.1237	2.0653	Ave		2.1427			0.7000	2.9		20.0			
2-Chlorophenol	1.2964	1.2860 1.3120	1.2998 1.3489	1.2985 1.3030	1.2825	Ave		1.3034			0.8000	1.6		20.0			
1,3-Dichlorobenzene	1.3060	1.3943 1.3176	1.3777 1.3828	1.3569 1.3208	1.3443	Ave		1.3500				2.5		20.0			
1,4-Dichlorobenzene	1.3081	1.3813 1.3221	1.3907 1.4135	1.4087 1.3377	1.3469	Ave		1.3636				3.0		20.0			
Benzyl alcohol	1.2193	1.1923 1.2394	1.1757 1.3035	1.2544 1.2379	1.1797	Ave		1.2252				3.5		20.0			
1,2-Dichlorobenzene	1.2603	1.3300 1.2652	1.3435 1.3297	1.2934 1.2719	1.2941	Ave		1.2985				2.5		20.0			
2-Methylphenol	1.6498	1.6614 1.6584	1.6969 1.7562	1.7131 1.6723	1.6169	Ave		1.6781			0.7000	2.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98897

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2013 11:16 Calibration End Date: 08/26/2013 14:43 Calibration ID: 17048

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,2'-oxybis[1-chloropropane]	1.9552	2.0746 1.9078	2.1315 1.9915	2.1160 1.8427	1.9132	Ave		1.9916				5.3		20.0			
Indene	2.5924	2.7536 2.5888	2.7813 2.7180	2.8147 2.4759	2.6551	Ave		2.6725				4.3		20.0			
3 & 4 Methylphenol	1.7747	1.6892 1.7520	1.6950 1.8373	1.7579 1.7405	1.6733	Ave		1.7400				3.1		20.0			
N-Nitrosodi-n-propylamine	1.6828	1.7241 1.6724	1.6668 1.7393	1.7065 1.6317	1.6490	Ave		1.6841			0.5000	2.2		20.0			
Acetophenone	2.4514	2.4560 2.4689	2.5400 2.5859	2.5412 2.4530	2.4182	Ave		2.4893			0.0100	2.3		20.0			
Hexachloroethane	0.6493	0.6902 0.6591	0.6610 0.6906	0.6883 0.6675	0.6564	Ave		0.6703			0.3000	2.5		20.0			
Nitrobenzene	0.6318	0.6143 0.6515	0.6266 0.6880	0.6323 0.6722	0.6499	Ave		0.6458			0.2000	3.8		20.0			
Isophorone	1.1274	1.1035 1.1596	1.1293 1.2089	1.1384 1.1251	1.1581	Ave		1.1438			0.4000	2.8		20.0			
2-Nitrophenol	0.1626	0.1507 0.1578	0.1677 0.1658	0.1722 0.1622	0.1738	Ave		0.1641			0.1000	4.6		20.0			
2,4-Dimethylphenol	0.3515	0.3996 0.3435	0.4025 0.3519	0.3599 0.3382	0.3726	Ave		0.3650			0.2000	6.7		20.0			
Benzoic acid	0.1973	+++++ 0.2186	0.1045 0.2276	0.1463 0.2244	0.1758	Lin1	-0.306	0.2277							0.9980		0.9900
Bis(2-chloroethoxy)methane	0.6007	0.6103 0.5934	0.6346 0.6011	0.6083 0.5742	0.6138	Ave		0.6046			0.3000	2.9		20.0			
2,4-Dichlorophenol	0.2500	0.2480 0.2517	0.2664 0.2651	0.2665 0.2563	0.2676	Ave		0.2590			0.2000	3.2		20.0			
1,2,4-Trichlorobenzene	0.2713	0.2993 0.2763	0.3089 0.2876	0.2951 0.2833	0.2963	Ave		0.2898				4.3		20.0			
Naphthalene	1.1549 0.9685	1.0411 0.9552	1.0173 1.0098	1.0035 0.9555	1.0010	Ave		1.0119			0.7000	6.0		20.0			
4-Chloroaniline	0.4113	0.3857 0.3872	0.3819 0.4115	0.3940 0.3947	0.3903	Ave		0.3946			0.0100	2.8		20.0			
Hexachlorobutadiene	0.1817	0.1870 0.1799	0.1887 0.1900	0.1958 0.1886	0.1978	Ave		0.1887			0.0100	3.3		20.0			
Caprolactam	0.1289	0.1244 0.1336	0.1315 0.1331	0.1241 0.1349	0.1321	Ave		0.1303			0.0100	3.2		20.0			
4-Chloro-3-methylphenol	0.3911	0.3571 0.3954	0.4034 0.4164	0.3931 0.4017	0.4064	Ave		0.3956			0.2000	4.4		20.0			
2-Methylnaphthalene	0.7080 0.5801	0.6521 0.5928	0.6321 0.6098	0.6329 0.6010	0.6314	Ave		0.6267			0.4000	6.1		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98897

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2013 11:16 Calibration End Date: 08/26/2013 14:43 Calibration ID: 17048

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.7343 0.5462	0.6045 0.5540	0.6049 0.5750	0.5935 0.5634	0.5988	Ave		0.5972				9.4		20.0			
Hexachlorocyclopentadiene	0.2851	0.2896 0.3108	0.2840 0.3417	0.3003 0.3289	0.3376	Ave		0.3098			0.0500	7.7		20.0			
1,2,4,5-Tetrachlorobenzene	0.4773	0.5028 0.4495	0.5167 0.4848	0.5173 0.4668	0.5133	Ave		0.4911			0.0100	5.2		20.0			
2,4,6-Trichlorophenol	0.3319	0.3110 0.3199	0.3171 0.3469	0.3360 0.3321	0.3424	Ave		0.3297			0.2000	3.8		20.0			
2,4,5-Trichlorophenol	0.3545	0.3219 0.3386	0.3470 0.3678	0.3472 0.3382	0.3642	Ave		0.3474			0.2000	4.3		20.0			
1,1'-Biphenyl	1.6376 1.2884	1.3568 1.2423	1.4055 1.3480	1.3450 1.2778	1.3545	Ave		1.3618			0.0100	8.4		20.0			
2-Chloronaphthalene	1.1347 0.9493	1.0309 0.9177	1.0389 1.0002	1.0021 0.9475	0.9924	Ave		1.0015			0.8000	6.4		20.0			
2-Nitroaniline	0.5454	0.3885 0.5201	0.4531 0.5570	0.4873 0.5234	0.5265	Ave		0.5001			0.0100	11.0		20.0			
Dimethyl phthalate	1.0864	1.1431 1.0235	1.1619 1.0891	1.1355 1.0278	1.1339	Ave		1.1002			0.0100	4.8		20.0			
1,3-Dinitrobenzene	0.2006	0.1381 0.1989	0.1556 0.2116	0.1794 0.2021	0.1967	Ave		0.1854				14.0		20.0			
2,6-Dinitrotoluene	0.2558	0.2051 0.2403	0.2430 0.2547	0.2360 0.2351	0.2572	Ave		0.2409				7.0		20.0			
Acenaphthylene	1.9783 1.6677	1.6956 1.6412	1.7483 1.7650	1.7441 1.6538	1.7459	Ave		1.7378			0.9000	5.8		20.0			
3-Nitroaniline	0.2838	0.2381 0.2653	0.2763 0.2895	0.2739 0.2742	0.2895	Ave		0.2738			0.0100	6.1		20.0			
2,4-Dinitrophenol	0.1573	+++++ 0.1537	0.0948 0.1701	0.1100 0.1554	0.1507	Ave		0.1417			0.0100	20.0		20.0			
Acenaphthene	1.2800 0.9452	1.0908 0.8939	1.0528 0.9635	1.0260 0.9196	1.0303	Ave		1.0225			0.9000	11.0		20.0			
4-Nitrophenol	0.2178	0.1856 0.2132	0.1927 0.2304	0.1777 0.2251	0.2098	Ave		0.2065				9.3		20.0			
2,4-Dinitrotoluene	0.3249	0.2519 0.3165	0.2983 0.3405	0.3209 0.3186	0.3254	Ave		0.3121			0.2000	8.6		20.0			
Dibenzofuran	1.8079 1.4997	1.5132 1.4406	1.6134 1.5655	1.5423 1.4794	1.5524	Ave		1.5572			0.8000	6.9		20.0			
2,3,4,6-Tetrachlorophenol	0.2732	0.2774 0.2745	0.2897 0.2917	0.2946 0.2793	0.3102	Ave		0.2863			0.0100	4.4		20.0			
Diethyl phthalate	0.9727	1.1667 0.9367	1.1891 1.0027	1.1571 0.9563	1.1059	Ave		1.0609			0.0100	9.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98897

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2013 11:16 Calibration End Date: 08/26/2013 14:43 Calibration ID: 17048

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chlorophenyl phenyl ether		0.6565	0.6467	0.6270	0.6428	Ave		0.6104			0.4000	6.3		20.0			
	0.5949	0.5638	0.5953	0.5560													
4-Nitroaniline		0.2369	0.2570	0.2006	0.2392	Ave		0.2352			0.0100	7.4		20.0			
	0.2522	0.2375	0.2344	0.2242													
Fluorene	1.3382	1.1636	1.2208	1.1350	1.1430	Ave		1.1191			0.9000	10.0		20.0			
	1.0662	0.9890	1.0356	0.9802													
4,6-Dinitro-2-methylphenol		+++++	0.0805	0.0890	0.1099	Ave		0.1083			0.0100	16.0		20.0			
	0.1170	0.1165	0.1241	0.1210													
N-Nitrosodiphenylamine		0.5043	0.5208	0.5149	0.5321	Ave		0.4810			0.0100	8.5		20.0			
	0.4454	0.4285	0.4540	0.4482													
1,2-Diphenylhydrazine(as Azobenzene)		1.2325	1.3008	1.3279	1.4208	Ave		1.2859				6.9		20.0			
	1.3637	1.2698	1.2464	1.1292													
Azobenzene		1.2314	1.3008	1.3245	1.4209	Ave		1.2859				6.9		20.0			
	1.3639	1.2698	1.2464	1.1292													
4-Bromophenyl phenyl ether		0.1886	0.1882	0.1975	0.2068	Ave		0.1867			0.1000	6.1		20.0			
	0.1837	0.1714	0.1801	0.1770													
Hexachlorobenzene	0.2166	0.1975	0.1971	0.1980	0.2052	Ave		0.1944			0.1000	6.2		20.0			
	0.1860	0.1772	0.1881	0.1839													
Atrazine		0.1567	0.1483	0.1523	0.1660	Ave		0.1525			0.0100	5.0		20.0			
	0.1587	0.1455	0.1499	0.1430													
Pentachlorophenol		0.0978	0.1076	0.1166	0.1214	Ave		0.1139			0.0500	6.9		20.0			
	0.1200	0.1126	0.1188	0.1167													
Phenanthrene	1.0910	0.9488	0.9453	0.9491	0.9207	Ave		0.9396			0.7000	6.7		20.0			
	0.8920	0.8705	0.9274	0.9114													
Anthracene	1.0211	0.9317	0.9894	0.9515	0.9329	Ave		0.9458			0.7000	4.1		20.0			
	0.9167	0.8931	0.9476	0.9283													
Carbazole		0.9146	0.8757	0.7826	0.7952	Ave		0.8275			0.0100	5.6		20.0			
	0.8159	0.7870	0.8173	0.8318													
Di-n-butyl phthalate		0.8667	0.9231	1.0368	1.1890	Ave		1.0917			0.0100	13.0		20.0			
	1.1965	1.1804	1.2330	1.1081													
Fluoranthene	1.2663	1.0481	1.0277	1.0569	1.2414	Ave		1.1594			0.6000	8.1		20.0			
	1.2050	1.1787	1.2583	1.1522													
Benzidine		0.1044	0.1406	0.1330	0.1391	Ave		0.1261				22.0	*	20.0			
	0.1780	0.1123	0.1134	0.0879													
Pyrene	1.1503	0.9027	0.9006	0.9377	1.0055	Ave		0.9948			0.6000	7.8		20.0			
	1.0135	1.0032	1.0443	0.9955													
Butyl benzyl phthalate		0.3852	0.4107	0.4273	0.4443	Ave		0.4398			0.0100	7.0		20.0			
	0.4512	0.4521	0.4810	0.4667													
Bis(2-ethylhexyl) phthalate		0.5225	0.5799	0.6080	0.6469	Ave		0.6136			0.0100	7.4		20.0			
	0.6275	0.6173	0.6656	0.6413													

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98897

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2013 11:16 Calibration End Date: 08/26/2013 14:43 Calibration ID: 17048

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
3,3'-Dichlorobenzidine		0.2671	0.2714	0.2582	0.2662	Ave		0.2897			0.0100	9.5		20.0			
	0.2996	0.3050	0.3275	0.3230													
Benzo[a]anthracene	1.1800	0.9305	0.9844	0.9897	0.9908	Ave		1.0248			0.8000	7.2		20.0			
	1.0037	1.0001	1.0902	1.0539													
Chrysene	1.2592	0.9755	0.9871	0.9629	0.9653	Ave		1.0088			0.7000	9.6		20.0			
	0.9565	0.9518	1.0197	1.0014													
Di-n-octyl phthalate		0.8862	1.0688	1.2166	1.2611	Ave		1.2146			0.0100	14.0		20.0			
	1.2532	1.2850	1.4047	1.3411													
Benzo[b]fluoranthene	1.1714	0.9769	1.0140	1.0317	1.0711	Ave		1.0844			0.7000	6.9		20.0			
	1.0668	1.0908	1.2114	1.1253													
Benzo[k]fluoranthene	1.2239	1.0338	1.1719	1.1033	1.1182	Ave		1.1372			0.7000	6.0		20.0			
	1.0776	1.0933	1.1840	1.2289													
Benzo[a]pyrene	1.0180	0.9235	0.9738	0.9635	1.0029	Ave		1.0140			0.7000	6.0		20.0			
	1.0225	1.0090	1.1196	1.0928													
Indeno[1,2,3-cd]pyrene	1.0847	0.9945	1.0545	1.0751	1.1031	Ave		1.0961			0.5000	5.5		20.0			
	1.0888	1.0935	1.1988	1.1722													
Dibenzo(a,h)anthracene	0.9621	0.7961	0.8710	0.8913	0.9283	Ave		0.9145			0.4000	6.7		20.0			
	0.9059	0.9038	1.0060	0.9662													
Benzo[g,h,i]perylene	0.9821	0.8814	0.8925	0.9327	0.9250	Ave		0.9481			0.5000	5.2		20.0			
	0.9367	0.9460	1.0273	1.0095													
2-Fluorophenol (Surr)		1.7059	1.6706	1.6994	1.6790	Ave		1.7087				3.0		20.0			
	1.6757	1.6634	1.8057	1.7700													
Phenol-d5 (Surr)		2.4362	2.4398	2.3644	2.2619	Ave		2.3409				3.3		20.0			
	2.2903	2.2737	2.3924	2.2689													
Nitrobenzene-d5 (Surr)	0.7074	0.6270	0.6529	0.6486	0.6686	Ave		0.6708				4.3		20.0			
	0.6561	0.6686	0.7125	0.6953													
2-Fluorobiphenyl (Surr)	1.4760	1.2699	1.2854	1.2652	1.2710	Ave		1.2632				7.2		20.0			
	1.2018	1.1555	1.2560	1.1883													
2,4,6-Tribromophenol (Surr)		0.1501	0.1336	0.1371	0.1482	Ave		0.1400				4.9		20.0			
	0.1324	0.1344	0.1451	0.1390													
Terphenyl-d14 (Surr)	0.6528	0.5634	0.6013	0.5978	0.6032	Ave		0.6090				4.7		20.0			
	0.5917	0.5935	0.6464	0.6312													

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98897

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2013 11:16 Calibration End Date: 08/26/2013 14:43 Calibration ID: 17048

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98897/6	30826006.D
Level 2	STD2 240-98897/5	30826005.D
Level 3	STD3 240-98897/4	30826004.D
Level 4	STD4 240-98897/3	30826003.D
Level 5	STD5 240-98897/2	30826002.D
Level 6	STD6 240-98897/10	30826010.D
Level 7	STD7 240-98897/9	30826009.D
Level 8	STD8 240-98897/8	30826008.D
Level 9	STD9 240-98897/7	30826007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	805580	27105 1215196	61471 1492222	108535 1856777	284303	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	1343791	42444 2032485	89957 2464030	158258 3028585	412731	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	2167306	73410 3060486	152075 3892254	261783 4808655	687365	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Ave	29984 3097502	132421 4470153	262937 5180903	460922 6005163	1127809	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenol	DCB	Ave	2244908	95009 3192980	188172 3872873	322179 4632853	753675	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	2569915	116275 3762829	216503 4447580	380565 5376376	852935	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	1862180	80922 2676442	151780 3272878	269351 3831618	625745	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	1133754	48178 1661393	93608 1944259	161049 2350872	388595	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	1142123	52234 1668430	99221 1993133	168281 2383044	407293	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCB	Ave	1143973	51748 1674079	100159 2037325	174710 2413480	408085	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzyl alcohol	DCB	Ave	1066280	44666 1569360	84672 1878745	155572 2233405	357419	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCB	Ave	1102154	49825 1602072	96759 1916514	160409 2294871	392085	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCB	Ave	1442822	62243 2100014	122210 2531323	212466 3017176	489890	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,2'-oxybis[1-chloropropane]	DCB	Ave	1709890	77723 2415795	153508 2870492	262437 3324724	579687	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98897

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2013 11:16 Calibration End Date: 08/26/2013 14:43 Calibration ID: 17048

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Indene	DCB	Ave		206318	400617	698178	1608920		1.00	2.00	4.00	10.0
			4534365	6556164	7835266	8934399		20.0	30.0	40.0	50.0	
3 & 4 Methylphenol	DCB	Ave		63282	122071	218017	506986		0.500	1.00	2.00	5.00
			1552058	2218524	2648142	3140247		10.0	15.0	20.0	25.0	
N-Nitrosodi-n-propylamine	DCB	Ave		64589	120044	211646	499626		0.500	1.00	2.00	5.00
			1471684	2117706	2507012	2943961		10.0	15.0	20.0	25.0	
Acetophenone	DCB	Ave		92010	182928	315162	732694		0.500	1.00	2.00	5.00
			2143836	3126292	3727177	4425832		10.0	15.0	20.0	25.0	
Hexachloroethane	DCB	Ave		25856	47606	85366	198887		0.500	1.00	2.00	5.00
			567830	834618	995458	1204321		10.0	15.0	20.0	25.0	
Nitrobenzene	NPT	Ave		88654	173297	309881	735570		0.500	1.00	2.00	5.00
			2192119	3256968	3933108	4697557		10.0	15.0	20.0	25.0	
Isophorone	NPT	Ave		159240	312304	557957	1310763		0.500	1.00	2.00	5.00
			3911810	5796919	6911076	7861861		10.0	15.0	20.0	25.0	
2-Nitrophenol	NPT	Ave		21753	46385	84420	196760		0.500	1.00	2.00	5.00
			564109	788749	947570	1133454		10.0	15.0	20.0	25.0	
2,4-Dimethylphenol	NPT	Ave		57668	111307	176385	421749		0.500	1.00	2.00	5.00
			1219813	1717289	2011555	2363022		10.0	15.0	20.0	25.0	
Benzoic acid	NPT	Lin1		+++++	57816	143400	397873		+++++	2.00	4.00	10.0
			1369134	2185867	2601710	3136466		20.0	30.0	40.0	50.0	
Bis(2-chloroethoxy)methane	NPT	Ave		88076	175498	298150	694726		0.500	1.00	2.00	5.00
			2084428	2966469	3436009	4012572		10.0	15.0	20.0	25.0	
2,4-Dichlorophenol	NPT	Ave		35792	73676	130607	302881		0.500	1.00	2.00	5.00
			867625	1258496	1515368	1790879		10.0	15.0	20.0	25.0	
1,2,4-Trichlorobenzene	NPT	Ave		43189	85433	144637	335345		0.500	1.00	2.00	5.00
			941359	1381383	1643872	1979805		10.0	15.0	20.0	25.0	
Naphthalene	NPT	Ave	36108	150236	281341	491845	1133032	0.100	0.500	1.00	2.00	5.00
			3360578	4775211	5772574	6677164		10.0	15.0	20.0	25.0	
4-Chloroaniline	NPT	Ave		55663	105626	193109	441761		0.500	1.00	2.00	5.00
			1427033	1935537	2352641	2758202		10.0	15.0	20.0	25.0	
Hexachlorobutadiene	NPT	Ave		26987	52189	95984	223832		0.500	1.00	2.00	5.00
			630546	899407	1086435	1317715		10.0	15.0	20.0	25.0	
Caprolactam	NPT	Ave		35907	72734	121601	299001		1.00	2.00	4.00	10.0
			894554	1335887	1521695	1885152		20.0	30.0	40.0	50.0	
4-Chloro-3-methylphenol	NPT	Ave		51539	111557	192672	459959		0.500	1.00	2.00	5.00
			1356903	1976518	2380252	2806840		10.0	15.0	20.0	25.0	
2-Methylnaphthalene	NPT	Ave	22136	94106	174792	310177	714657	0.100	0.500	1.00	2.00	5.00
			2012732	2963610	3485851	4199691		10.0	15.0	20.0	25.0	
1-Methylnaphthalene	NPT	Ave	22957	87232	167283	290896	677763	0.100	0.500	1.00	2.00	5.00
			1895142	2769499	3286809	3936718		10.0	15.0	20.0	25.0	
Hexachlorocyclopentadiene	ANT	Ave		24447	46438	87231	225106		0.500	1.00	2.00	5.00
			571019	939724	1135821	1366636		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98897

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2013 11:16 Calibration End Date: 08/26/2013 14:43 Calibration ID: 17048

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,2,4,5-Tetrachlorobenzene	ANT	Ave		42450	84479	150295	342253		0.500	1.00	2.00	5.00
			955918	1359027	1611591	1939455		10.0	15.0	20.0	25.0	
2,4,6-Trichlorophenol	ANT	Ave		26258	51847	97618	228314		0.500	1.00	2.00	5.00
			664780	967244	1152948	1380087		10.0	15.0	20.0	25.0	
2,4,5-Trichlorophenol	ANT	Ave		27178	56738	100868	242866		0.500	1.00	2.00	5.00
			710009	1023626	1222520	1405124		10.0	15.0	20.0	25.0	
1,1'-Biphenyl	ANT	Ave	29575	114548	229790	390745	903129	0.100	0.500	1.00	2.00	5.00
			2580473	3755972	4480770	5309277		10.0	15.0	20.0	25.0	
2-Chloronaphthalene	ANT	Ave	20493	87037	169850	291115	661741	0.100	0.500	1.00	2.00	5.00
			1901244	2774624	3324696	3936986		10.0	15.0	20.0	25.0	
2-Nitroaniline	ANT	Ave		32796	74074	141559	351035		0.500	1.00	2.00	5.00
			1092253	1572541	1851565	2174583		10.0	15.0	20.0	25.0	
Dimethyl phthalate	ANT	Ave		96503	189957	329892	756084		0.500	1.00	2.00	5.00
			2175948	3094415	3620095	4270755		10.0	15.0	20.0	25.0	
1,3-Dinitrobenzene	ANT	Ave		11661	25441	52109	131181		0.500	1.00	2.00	5.00
			401710	601430	703277	839632		10.0	15.0	20.0	25.0	
2,6-Dinitrotoluene	ANT	Ave		17315	39737	68571	171465		0.500	1.00	2.00	5.00
			512228	726597	846577	976951		10.0	15.0	20.0	25.0	
Acenaphthylene	ANT	Ave	35727	143151	285844	506697	1164129	0.100	0.500	1.00	2.00	5.00
			3340046	4961801	5866933	6871630		10.0	15.0	20.0	25.0	
3-Nitroaniline	ANT	Ave		20098	45172	79583	193005		0.500	1.00	2.00	5.00
			568419	801993	962233	1139291		10.0	15.0	20.0	25.0	
2,4-Dinitrophenol	ANT	Ave		+++++	31012	63914	200936		+++++	2.00	4.00	10.0
			629974	929419	1130683	1291702		20.0	30.0	40.0	50.0	
Acenaphthene	ANT	Ave	23116	92093	172126	298072	687006	0.100	0.500	1.00	2.00	5.00
			1893043	2702433	3202596	3821097		10.0	15.0	20.0	25.0	
4-Nitrophenol	ANT	Ave		31334	63027	103248	279775		1.00	2.00	4.00	10.0
			872426	1289176	1532016	1870412		20.0	30.0	40.0	50.0	
2,4-Dinitrotoluene	ANT	Ave		21270	48768	93239	216981		0.500	1.00	2.00	5.00
			650624	956818	1131855	1323779		10.0	15.0	20.0	25.0	
Dibenzofuran	ANT	Ave	32651	127756	263782	448072	1035096	0.100	0.500	1.00	2.00	5.00
			3003678	4355431	5203539	6147045		10.0	15.0	20.0	25.0	
2,3,4,6-Tetrachlorophenol	ANT	Ave		23418	47367	85575	206844		0.500	1.00	2.00	5.00
			547077	829916	969473	1160710		10.0	15.0	20.0	25.0	
Diethyl phthalate	ANT	Ave		98499	194412	336152	737383		0.500	1.00	2.00	5.00
			1948255	2831852	3332857	3973608		10.0	15.0	20.0	25.0	
4-Chlorophenyl phenyl ether	ANT	Ave		55422	105724	182158	428586		0.500	1.00	2.00	5.00
			1191508	1704486	1978778	2310382		10.0	15.0	20.0	25.0	
4-Nitroaniline	ANT	Ave		19997	42015	58263	159526		0.500	1.00	2.00	5.00
			505049	717955	779280	931652		10.0	15.0	20.0	25.0	
Fluorene	ANT	Ave	24168	98237	199598	329748	762141	0.100	0.500	1.00	2.00	5.00
			2135455	2990032	3442390	4072610		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98897

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2013 11:16 Calibration End Date: 08/26/2013 14:43 Calibration ID: 17048

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4,6-Dinitro-2-methylphenol	PHN	Ave		+++++	47324	89360	243751		+++++	2.00	4.00	10.0
			793962	1188522	1411153	1680710		20.0	30.0	40.0	50.0	
N-Nitrosodiphenylamine	PHN	Ave		156571	306074	517125	1180553		1.00	2.00	4.00	10.0
			3022731	4372873	5161220	6227385		20.0	30.0	40.0	50.0	
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave		191347	382258	666764	1576131		0.500	1.00	2.00	5.00
			4627276	6479208	7084289	7844368		10.0	15.0	20.0	25.0	
Azobenzene	PHN	Ave		191164	382261	665085	1576292		0.500	1.00	2.00	5.00
			4628197	6479379	7084289	7844368		10.0	15.0	20.0	25.0	
4-Bromophenyl phenyl ether	PHN	Ave		29278	55304	99190	229415		0.500	1.00	2.00	5.00
			623292	874383	1023534	1229723		10.0	15.0	20.0	25.0	
Hexachlorobenzene	PHN	Ave	7389	30668	57914	99445	227652	0.100	0.500	1.00	2.00	5.00
			631087	904100	1068983	1277498		10.0	15.0	20.0	25.0	
Atrazine	PHN	Ave		48662	87133	152942	368287		1.00	2.00	4.00	10.0
			1077145	1484388	1704441	1986537		20.0	30.0	40.0	50.0	
Pentachlorophenol	PHN	Ave		30355	63256	117113	269328		1.00	2.00	4.00	10.0
			814454	1149497	1350178	1621741		20.0	30.0	40.0	50.0	
Phenanthrene	PHN	Ave	37216	147297	277794	476588	1021312	0.100	0.500	1.00	2.00	5.00
			3026600	4441733	5271480	6331236		10.0	15.0	20.0	25.0	
Anthracene	PHN	Ave	34830	144650	290758	477794	1034946	0.100	0.500	1.00	2.00	5.00
			3110680	4557047	5386354	6448821		10.0	15.0	20.0	25.0	
Carbazole	PHN	Ave		141988	257337	392963	882185		0.500	1.00	2.00	5.00
			2768532	4015718	4645752	5778635		10.0	15.0	20.0	25.0	
Di-n-butyl phthalate	PHN	Ave		134552	271273	520591	1318988		0.500	1.00	2.00	5.00
			4059929	6023225	7008192	7698312		10.0	15.0	20.0	25.0	
Fluoranthene	PHN	Ave	43196	162707	302015	530697	1377075	0.100	0.500	1.00	2.00	5.00
			4088713	6014292	7152469	8004471		10.0	15.0	20.0	25.0	
Benzidine	CRY	Ave		37502	97913	163388	399213		1.00	2.00	4.00	10.0
			1497596	1400738	1552570	1464034		20.0	30.0	40.0	50.0	
Pyrene	CRY	Ave	43437	162168	313623	575760	1443292	0.100	0.500	1.00	2.00	5.00
			4264388	6259027	7146312	8292630		10.0	15.0	20.0	25.0	
Butyl benzyl phthalate	CRY	Ave		69198	143044	262368	637714		0.500	1.00	2.00	5.00
			1898642	2820669	3291424	3887758		10.0	15.0	20.0	25.0	
Bis(2-ethylhexyl) phthalate	CRY	Ave		93862	201961	373360	928551		0.500	1.00	2.00	5.00
			2640426	3851289	4555155	5342063		10.0	15.0	20.0	25.0	
3,3'-Dichlorobenzidine	CRY	Ave		95981	189028	317057	764061		1.00	2.00	4.00	10.0
			2521443	3805306	4482244	5380838		20.0	30.0	40.0	50.0	
Benzo[a]anthracene	CRY	Ave	44557	167164	342831	607723	1422154	0.100	0.500	1.00	2.00	5.00
			4223184	6239916	7460289	8779721		10.0	15.0	20.0	25.0	
Chrysene	CRY	Ave	47549	175263	343772	591256	1385601	0.100	0.500	1.00	2.00	5.00
			4024480	5938173	6978160	8342018		10.0	15.0	20.0	25.0	
Di-n-octyl phthalate	PRY	Ave		141484	323936	667062	1623041		0.500	1.00	2.00	5.00
			4797338	7276835	8634213	10067057		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98897

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2013 11:16 Calibration End Date: 08/26/2013 14:43 Calibration ID: 17048

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Benzo[b]fluoranthene	PRY	Ave	40011 4083636	155959 6177066	307331 7445764	565674 8447134	1378582	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	41804 4125016	165050 6191581	355184 7277749	604945 9225251	1439172	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Ave	34772 3914371	147432 5714239	295164 6881761	528306 8203179	1290837	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	37050 4168014	158774 6192593	319609 7368799	589494 8799216	1419688	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzo(a,h)anthracene	PRY	Ave	32863 3467927	127092 5118313	264005 6183528	488715 7253413	1194768	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	33545 3585633	140713 5357395	270508 6314495	511375 7578081	1190463	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCB	Ave	 1465427	63907 2106336	120315 2602685	210761 3193485	508699	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCB	Ave	 2002949	91270 2879116	175710 3448281	293240 4093587	685315	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	22116 2276703	90480 3342466	180545 4072879	317870 4858897	756776	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	26657 2407082	107208 3493328	210158 4174748	367557 4937669	847506	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	 265102	12669 406204	21837 482421	39830 577463	98804	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	24651 2489733	101223 3702833	209413 4423486	367069 5258284	865780	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

Curve Type Legend:
Ave = Average ISTD
Linl = Linear 1/conc ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-98897/11 Calibration Date: 08/26/2013 15:09

Instrument ID: A4HP9 Calib Start Date: 08/26/2013 11:16

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 08/26/2013 14:43

Lab File ID: 30826011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9170	0.9642		10.5	10.0	5.2	30.0
N-Nitrosodimethylamine	Ave	1.444	1.607		11.1	10.0	11.3	30.0
Pyridine	Ave	2.339	2.736		11.7	10.0	17.0	30.0
Benzaldehyde	Ave	1.795	2.063	0.0100	23.0	20.0	14.9	30.0
Phenol	Ave	2.572	2.692	0.8000	10.5	10.0	4.7	30.0
Aniline	Ave	2.996	3.392		11.3	10.0	13.2	30.0
Bis(2-chloroethyl)ether	Ave	2.143	2.202	0.7000	10.3	10.0	2.8	30.0
2-Chlorophenol	Ave	1.303	1.364	0.8000	10.5	10.0	4.6	30.0
1,3-Dichlorobenzene	Ave	1.350	1.402		10.4	10.0	3.8	30.0
1,4-Dichlorobenzene	Ave	1.364	1.403		10.3	10.0	2.9	30.0
Benzyl alcohol	Ave	1.225	1.321		10.8	10.0	7.8	30.0
1,2-Dichlorobenzene	Ave	1.298	1.312		10.1	10.0	1.0	30.0
2-Methylphenol	Ave	1.678	1.833	0.7000	10.9	10.0	9.2	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.992	2.196		7.94	7.20	10.2	30.0
Indene	Ave	2.672	2.771		20.7	20.0	3.7	30.0
3 & 4 Methylphenol	Ave	1.740	1.888		10.9	10.0	8.5	30.0
N-Nitrosodi-n-propylamine	Ave	1.684	1.772	0.5000	10.5	10.0	5.2	30.0
Acetophenone	Ave	2.489	2.594	0.0100	10.4	10.0	4.2	30.0
Hexachloroethane	Ave	0.6703	0.6990	0.3000	10.4	10.0	4.3	30.0
Nitrobenzene	Ave	0.6458	0.6788	0.2000	10.5	10.0	5.1	30.0
Isophorone	Ave	1.144	1.256	0.4000	11.0	10.0	9.8	30.0
2-Nitrophenol	Ave	0.1641	0.1679	0.1000	10.2	10.0	2.3	30.0
2,4-Dimethylphenol	Ave	0.3650	0.4436	0.2000	12.2	10.0	21.5	30.0
Benzoic acid	Lin1		0.2243		21.0	20.0	5.2	30.0
Bis(2-chloroethoxy)methane	Ave	0.6046	0.6212	0.3000	10.3	10.0	2.7	30.0
2,4-Dichlorophenol	Ave	0.2590	0.2679	0.2000	10.3	10.0	3.4	30.0
1,2,4-Trichlorobenzene	Ave	0.2898	0.2995		10.3	10.0	3.3	30.0
Naphthalene	Ave	1.012	1.016	0.7000	10.0	10.0	0.4	30.0
4-Chloroaniline	Ave	0.3946	0.4164	0.0100	10.6	10.0	5.5	30.0
Hexachlorobutadiene	Ave	0.1887	0.1919	0.0100	10.2	10.0	1.7	30.0
Caprolactam	Ave	0.1303	0.1443	0.0100	22.1	20.0	10.7	30.0
4-Chloro-3-methylphenol	Ave	0.3956	0.4157	0.2000	10.5	10.0	5.1	30.0
2-Methylnaphthalene	Ave	0.6267	0.6155	0.4000	9.82	10.0	-1.8	30.0
1-Methylnaphthalene	Ave	0.5972	0.5813		9.73	10.0	-2.7	30.0
Hexachlorocyclopentadiene	Ave	0.3098	0.3520	0.0500	11.4	10.0	13.6	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4911	0.5022	0.0100	10.2	10.0	2.3	30.0
2,4,6-Trichlorophenol	Ave	0.3297	0.3532	0.2000	10.7	10.0	7.1	30.0
2,4,5-Trichlorophenol	Ave	0.3474	0.3740	0.2000	10.8	10.0	7.7	30.0
1,1'-Biphenyl	Ave	1.362	1.353	0.0100	9.94	10.0	-0.6	30.0
2-Chloronaphthalene	Ave	1.002	1.016	0.8000	10.1	10.0	1.5	30.0
2-Nitroaniline	Ave	0.5001	0.5792	0.0100	11.6	10.0	15.8	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-98897/11 Calibration Date: 08/26/2013 15:09

Instrument ID: A4HP9 Calib Start Date: 08/26/2013 11:16

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 08/26/2013 14:43

Lab File ID: 30826011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.100	1.150	0.0100	10.5	10.0	4.5	30.0
1,3-Dinitrobenzene	Ave	0.1854	0.2101		11.3	10.0	13.4	30.0
2,6-Dinitrotoluene	Ave	0.2409	0.2733		11.3	10.0	13.4	30.0
Acenaphthylene	Ave	1.738	1.814	0.9000	10.4	10.0	4.4	30.0
3-Nitroaniline	Ave	0.2738	0.2929	0.0100	10.7	10.0	7.0	30.0
2,4-Dinitrophenol	Ave	0.1417	0.1642	0.0100	23.2	20.0	15.9	30.0
Acenaphthene	Ave	1.022	1.022	0.9000	10.0	10.0	-0.0	30.0
4-Nitrophenol	Ave	0.2065	0.2248		21.8	20.0	8.8	30.0
2,4-Dinitrotoluene	Ave	0.3121	0.3407	0.2000	10.9	10.0	9.2	30.0
Dibenzofuran	Ave	1.557	1.583	0.8000	10.2	10.0	1.7	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.2863	0.2843	0.0100	9.93	10.0	-0.7	30.0
Diethyl phthalate	Ave	1.061	1.020	0.0100	9.62	10.0	-3.8	30.0
4-Chlorophenyl phenyl ether	Ave	0.6104	0.6383	0.4000	10.5	10.0	4.6	30.0
4-Nitroaniline	Ave	0.2352	0.2806	0.0100	11.9	10.0	19.3	30.0
Fluorene	Ave	1.119	1.123	0.9000	10.0	10.0	0.4	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1083	0.1245	0.0100	23.0	20.0	15.0	30.0
N-Nitrosodiphenylamine	Ave	0.4810	0.4922	0.0100	20.5	20.0	2.3	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.286	1.500		11.7	10.0	16.7	30.0
4-Bromophenyl phenyl ether	Ave	0.1867	0.2032	0.1000	10.9	10.0	8.8	30.0
Hexachlorobenzene	Ave	0.1944	0.2079	0.1000	10.7	10.0	6.9	30.0
Atrazine	Ave	0.1525	0.1807	0.0100	23.7	20.0	18.4	30.0
Pentachlorophenol	Ave	0.1139	0.1319	0.0500	23.1	20.0	15.7	30.0
Phenanthrene	Ave	0.9396	0.9721	0.7000	10.3	10.0	3.5	30.0
Anthracene	Ave	0.9458	1.010	0.7000	10.7	10.0	6.8	30.0
Carbazole	Ave	0.8275	0.8305	0.0100	10.0	10.0	0.4	30.0
Di-n-butyl phthalate	Ave	1.092	1.291	0.0100	11.8	10.0	18.3	30.0
Fluoranthene	Ave	1.159	1.295	0.6000	11.2	10.0	11.7	30.0
Benzidine	Ave	0.1261	0.3950		62.7	20.0	213.3*	30.0
Pyrene	Ave	0.9948	1.104	0.6000	11.1	10.0	11.0	30.0
Butyl benzyl phthalate	Ave	0.4398	0.5042	0.0100	11.5	10.0	14.6	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.6136	0.6919	0.0100	11.3	10.0	12.8	30.0
3,3'-Dichlorobenzidine	Ave	0.2897	0.3310	0.0100	22.9	20.0	14.3	30.0
Benzo[a]anthracene	Ave	1.025	1.108	0.8000	10.8	10.0	8.1	30.0
Chrysene	Ave	1.009	1.104	0.7000	10.9	10.0	9.4	30.0
Di-n-octyl phthalate	Ave	1.215	1.437	0.0100	11.8	10.0	18.3	30.0
Benzo[b]fluoranthene	Ave	1.084	1.123	0.7000	10.4	10.0	3.6	30.0
Benzo[k]fluoranthene	Ave	1.137	1.250	0.7000	11.0	10.0	9.9	30.0
Benzo[a]pyrene	Ave	1.014	1.104	0.7000	10.9	10.0	8.8	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.096	1.151	0.5000	10.5	10.0	5.0	30.0
Dibenzo(a,h)anthracene	Ave	0.9145	1.004	0.4000	11.0	10.0	9.8	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-98897/11 Calibration Date: 08/26/2013 15:09

Instrument ID: A4HP9 Calib Start Date: 08/26/2013 11:16

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 08/26/2013 14:43

Lab File ID: 30826011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[g,h,i]perylene	Ave	0.9481	1.019	0.5000	10.7	10.0	7.4	30.0
2-Fluorophenol (Surr)	Ave	1.709	1.714		10.0	10.0	0.3	30.0
Phenol-d5 (Surr)	Ave	2.341	2.354		10.1	10.0	0.5	30.0
Nitrobenzene-d5 (Surr)	Ave	0.6708	0.6919		10.3	10.0	3.1	30.0
2-Fluorobiphenyl (Surr)	Ave	1.263	1.238		9.80	10.0	-2.0	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1400	0.1313		9.38	10.0	-6.2	30.0
Terphenyl-d14 (Surr)	Ave	0.6090	0.6602		10.8	10.0	8.4	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A4HP9 Start Date: 08/27/2013 10:45

Analysis Batch Number: 99099 End Date: 08/27/2013 21:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-99099/1		08/27/2013 10:45	1	30827001.D	RXI-5SILMS 0.45(mm)
CCV 240-99099/2 CCVIS		08/27/2013 11:07	1	30827002.D	RXI-5SILMS 0.45(mm)
MB 240-97388/13-A		08/27/2013 11:36	1	30827003.D	RXI-5SILMS 0.45(mm)
LCS 240-97388/14-A		08/27/2013 12:02	1	30827004.D	RXI-5SILMS 0.45(mm)
240-27894-2	DR-TP-A76-11	08/27/2013 20:41	50	30827024.D	RXI-5SILMS 0.45(mm)
240-27894-1	DR-TP-A76-10	08/27/2013 21:07	10	30827025.D	RXI-5SILMS 0.45(mm)
240-27894-4	DR-TP-A82-03	08/27/2013 21:33	6.667	30827026.D	RXI-5SILMS 0.45(mm)
240-27894-5	DR-TP-A82-03	08/27/2013 21:58	1	30827027.D	RXI-5SILMS 0.45(mm)

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: 30827001.D DFTPP Injection Date: 08/27/2013

Instrument ID: A4HP9 DFTPP Injection Time: 10:45

Analysis Batch No.: 99099

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	42.6	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	62.8	
70	Less than 2.0% of mass 69	0.2	(0.3)1
127	25.0 - 75.0% of mass 198	48.3	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	24.7	
365	Greater than 0.75% of mass 198	3.4	
441	Present, but less than mass 443	2.4	
442	40.0 - 110.0% of mass 198	72.6	
443	15.0 - 24.0% of mass 442	14.0	(19.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-99099/2	30827002.D	08/27/2013	11:07
	MB 240-97388/13-A	30827003.D	08/27/2013	11:36
	LCS 240-97388/14-A	30827004.D	08/27/2013	12:02
DR-TP-A76-11	240-27894-2	30827024.D	08/27/2013	20:41
DR-TP-A76-10	240-27894-1	30827025.D	08/27/2013	21:07
DR-TP-A82-03	240-27894-4	30827026.D	08/27/2013	21:33
DR-TP-A82-03	240-27894-5	30827027.D	08/27/2013	21:58

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99099/2 Calibration Date: 08/27/2013 11:07

Instrument ID: A4HP9 Calib Start Date: 08/26/2013 11:16

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 08/26/2013 14:43

Lab File ID: 30827002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9170	0.8884		9.69	10.0	-3.1	20.0
N-Nitrosodimethylamine	Ave	1.444	1.554		10.8	10.0	7.7	20.0
Pyridine	Ave	2.339	2.562		11.0	10.0	9.5	20.0
Benzaldehyde	Ave	1.795	1.828	0.0100	20.4	20.0	1.8	20.0
Phenol	Ave	2.572	2.612	0.8000	10.2	10.0	1.6	20.0
Aniline	Ave	2.996	3.014		10.1	10.0	0.6	20.0
Bis(2-chloroethyl)ether	Ave	2.143	2.148	0.7000	10.0	10.0	0.2	20.0
2-Chlorophenol	Ave	1.303	1.310	0.8000	10.0	10.0	0.5	20.0
1,3-Dichlorobenzene	Ave	1.350	1.312		9.71	10.0	-2.9	20.0
1,4-Dichlorobenzene	Ave	1.364	1.321		9.69	10.0	-3.1	20.0
Benzyl alcohol	Ave	1.225	1.250		10.2	10.0	2.0	20.0
1,2-Dichlorobenzene	Ave	1.298	1.268		9.77	10.0	-2.3	20.0
2-Methylphenol	Ave	1.678	1.672	0.7000	9.96	10.0	-0.4	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.992	1.943		9.76	10.0	-2.4	20.0
Indene	Ave	2.672	2.575		19.3	20.0	-3.7	20.0
3 & 4 Methylphenol	Ave	1.740	1.772		10.2	10.0	1.9	20.0
N-Nitrosodi-n-propylamine	Ave	1.684	1.683	0.5000	10.0	10.0	-0.0	20.0
Acetophenone	Ave	2.489	2.508	0.0100	10.1	10.0	0.8	20.0
Hexachloroethane	Ave	0.6703	0.6700	0.3000	10.0	10.0	-0.0	20.0
Nitrobenzene	Ave	0.6458	0.6575	0.2000	10.2	10.0	1.8	20.0
Isophorone	Ave	1.144	1.164	0.4000	10.2	10.0	1.8	20.0
2-Nitrophenol	Ave	0.1641	0.1597	0.1000	9.73	10.0	-2.7	20.0
2,4-Dimethylphenol	Ave	0.3650	0.3607	0.2000	9.88	10.0	-1.2	20.0
Benzoic acid	Lin1		0.2147		20.2	20.0	1.0	20.0
Bis(2-chloroethoxy)methane	Ave	0.6046	0.6181	0.3000	10.2	10.0	2.2	20.0
2,4-Dichlorophenol	Ave	0.2590	0.2577	0.2000	9.95	10.0	-0.5	20.0
1,2,4-Trichlorobenzene	Ave	0.2898	0.2827		9.76	10.0	-2.4	20.0
Naphthalene	Ave	1.012	0.9516	0.7000	9.40	10.0	-6.0	20.0
4-Chloroaniline	Ave	0.3946	0.4051	0.0100	10.3	10.0	2.7	20.0
Hexachlorobutadiene	Ave	0.1887	0.1819	0.0100	9.64	10.0	-3.6	20.0
Caprolactam	Ave	0.1303	0.1292	0.0100	19.8	20.0	-0.9	20.0
4-Chloro-3-methylphenol	Ave	0.3956	0.4049	0.2000	10.2	10.0	2.4	20.0
2-Methylnaphthalene	Ave	0.6267	0.5993	0.4000	9.56	10.0	-4.4	20.0
1-Methylnaphthalene	Ave	0.5972	0.5539		9.28	10.0	-7.2	20.0
Hexachlorocyclopentadiene	Ave	0.3098	0.3144	0.0500	10.1	10.0	1.5	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4911	0.4762	0.0100	9.70	10.0	-3.0	20.0
2,4,6-Trichlorophenol	Ave	0.3297	0.3384	0.2000	10.3	10.0	2.6	20.0
2,4,5-Trichlorophenol	Ave	0.3474	0.3639	0.2000	10.5	10.0	4.7	20.0
1,1'-Biphenyl	Ave	1.362	1.300	0.0100	9.55	10.0	-4.5	20.0
2-Chloronaphthalene	Ave	1.002	0.9689	0.8000	9.67	10.0	-3.3	20.0
2-Nitroaniline	Ave	0.5001	0.5498	0.0100	11.0	10.0	9.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99099/2 Calibration Date: 08/27/2013 11:07

Instrument ID: A4HP9 Calib Start Date: 08/26/2013 11:16

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 08/26/2013 14:43

Lab File ID: 30827002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.100	1.084	0.0100	9.86	10.0	-1.4	20.0
1,3-Dinitrobenzene	Ave	0.1854	0.2005		10.8	10.0	8.1	20.0
2,6-Dinitrotoluene	Ave	0.2409	0.2603		10.8	10.0	8.0	20.0
Acenaphthylene	Ave	1.738	1.689	0.9000	9.72	10.0	-2.8	20.0
3-Nitroaniline	Ave	0.2738	0.2936	0.0100	10.7	10.0	7.2	20.0
2,4-Dinitrophenol	Ave	0.1417	0.1456	0.0100	20.6	20.0	2.8	20.0
Acenaphthene	Ave	1.022	0.9608	0.9000	9.40	10.0	-6.0	20.0
4-Nitrophenol	Ave	0.2065	0.2343		22.7	20.0	13.5	20.0
2,4-Dinitrotoluene	Ave	0.3121	0.3214	0.2000	10.3	10.0	3.0	20.0
Dibenzofuran	Ave	1.557	1.523	0.8000	9.78	10.0	-2.2	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2863	0.2826	0.0100	9.87	10.0	-1.3	20.0
Diethyl phthalate	Ave	1.061	0.9711	0.0100	9.15	10.0	-8.5	20.0
4-Chlorophenyl phenyl ether	Ave	0.6104	0.6002	0.4000	9.83	10.0	-1.7	20.0
4-Nitroaniline	Ave	0.2352	0.2784	0.0100	11.8	10.0	18.3	20.0
Fluorene	Ave	1.119	1.074	0.9000	9.60	10.0	-4.0	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1083	0.1127	0.0100	20.8	20.0	4.1	20.0
N-Nitrosodiphenylamine	Ave	0.4810	0.4585	0.0100	19.1	20.0	-4.7	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.286	1.373		10.7	10.0	6.8	20.0
4-Bromophenyl phenyl ether	Ave	0.1867	0.1891	0.1000	10.1	10.0	1.3	20.0
Hexachlorobenzene	Ave	0.1944	0.1899	0.1000	9.77	10.0	-2.3	20.0
Atrazine	Ave	0.1525	0.1624	0.0100	21.3	20.0	6.5	20.0
Pentachlorophenol	Ave	0.1139	0.1235	0.0500	21.7	20.0	8.3	20.0
Phenanthrene	Ave	0.9396	0.8879	0.7000	9.45	10.0	-5.5	20.0
Anthracene	Ave	0.9458	0.9120	0.7000	9.64	10.0	-3.6	20.0
Carbazole	Ave	0.8275	0.8936	0.0100	10.8	10.0	8.0	20.0
Di-n-butyl phthalate	Ave	1.092	1.233	0.0100	11.3	10.0	12.9	20.0
Fluoranthene	Ave	1.159	1.213	0.6000	10.5	10.0	4.6	20.0
Benzidine	Ave	0.1261	0.1365		21.6	20.0	8.2	20.0
Pyrene	Ave	0.9948	1.028	0.6000	10.3	10.0	3.3	20.0
Butyl benzyl phthalate	Ave	0.4398	0.4655	0.0100	10.6	10.0	5.8	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6136	0.6363	0.0100	10.4	10.0	3.7	20.0
3,3'-Dichlorobenzidine	Ave	0.2897	0.3349	0.0100	23.1	20.0	15.6	20.0
Benzo[a]anthracene	Ave	1.025	1.005	0.8000	9.81	10.0	-1.9	20.0
Chrysene	Ave	1.009	0.9557	0.7000	9.47	10.0	-5.3	20.0
Di-n-octyl phthalate	Ave	1.215	1.289	0.0100	10.6	10.0	6.1	20.0
Benzo[b]fluoranthene	Ave	1.084	1.063	0.7000	9.81	10.0	-1.9	20.0
Benzo[k]fluoranthene	Ave	1.137	1.102	0.7000	9.69	10.0	-3.1	20.0
Benzo[a]pyrene	Ave	1.014	1.023	0.7000	10.1	10.0	0.9	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.096	1.076	0.5000	9.82	10.0	-1.8	20.0
Dibenzo(a,h)anthracene	Ave	0.9145	0.8920	0.4000	9.75	10.0	-2.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99099/2 Calibration Date: 08/27/2013 11:07

Instrument ID: A4HP9 Calib Start Date: 08/26/2013 11:16

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 08/26/2013 14:43

Lab File ID: 30827002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[g,h,i]perylene	Ave	0.9481	0.9107	0.5000	9.61	10.0	-3.9	20.0
2-Fluorophenol (Surr)	Ave	1.709	1.714		10.0	10.0	0.3	20.0
Phenol-d5 (Surr)	Ave	2.341	2.363		10.1	10.0	1.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.6708	0.6814		10.2	10.0	1.6	20.0
2-Fluorobiphenyl (Surr)	Ave	1.263	1.213		9.60	10.0	-4.0	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1400	0.1327		9.48	10.0	-5.2	20.0
Terphenyl-d14 (Surr)	Ave	0.6090	0.5986		9.83	10.0	-1.7	20.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab File ID: 30827003.D Lab Sample ID: MB 240-97388/13-A

Matrix: Solid Date Extracted: 08/14/2013 09:20

Instrument ID: A4HP9 Date Analyzed: 08/27/2013 11:36

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97388/14-A	30827004.D	08/27/2013 12:02
DR-TP-A76-11	240-27894-2	30827024.D	08/27/2013 20:41
DR-TP-A76-10	240-27894-1	30827025.D	08/27/2013 21:07
DR-TP-A82-03	240-27894-4	30827026.D	08/27/2013 21:33
DR-TP-A82-03	240-27894-5	30827027.D	08/27/2013 21:58

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97388/13-A

Matrix: Solid | Lab File ID: 30827003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.0(g) | Date Analyzed: 08/27/2013 11:36

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	50	U	50	3.5
123-91-1	1,4-Dioxane	100	U	100	22
88-06-2	2,4,6-Trichlorophenol	150	U	150	8.9
95-95-4	2,4,5-Trichlorophenol	150	U	150	25
120-83-2	2,4-Dichlorophenol	150	U	150	20
105-67-9	2,4-Dimethylphenol	150	U	150	20
51-28-5	2,4-Dinitrophenol	330	U	330	21
121-14-2	2,4-Dinitrotoluene	200	U	200	17
91-58-7	2-Chloronaphthalene	50	U	50	0.45
95-57-8	2-Chlorophenol	50	U	50	8.2
91-57-6	2-Methylnaphthalene	6.7	U	6.7	0.50
95-48-7	2-Methylphenol	200	U	200	11
88-74-4	2-Nitroaniline	200	U	200	9.1
88-75-5	2-Nitrophenol	50	U	50	8.3
15831-10-4	3 & 4 Methylphenol	400	U	400	20
91-94-1	3,3'-Dichlorobenzidine	100	U	100	18
99-09-2	3-Nitroaniline	200	U	200	16
534-52-1	4,6-Dinitro-2-methylphenol	150	U	150	9.2
101-55-3	4-Bromophenyl phenyl ether	50	U	50	13
59-50-7	4-Chloro-3-methylphenol	150	U	150	21
106-47-8	4-Chloroaniline	150	U	150	17
7005-72-3	4-Chlorophenyl phenyl ether	50	U	50	13
100-01-6	4-Nitroaniline	200	U	200	26
83-32-9	Acenaphthene	6.7	U	6.7	0.76
208-96-8	Acenaphthylene	6.7	U	6.7	0.35
98-86-2	Acetophenone	100	U	100	9.2
120-12-7	Anthracene	6.7	U	6.7	0.78
1912-24-9	Atrazine	200	U	200	9.1
100-52-7	Benzaldehyde	100	U	100	12
56-55-3	Benzo[a]anthracene	6.7	U	6.7	0.63
50-32-8	Benzo[a]pyrene	6.7	U	6.7	0.64
205-99-2	Benzo[b]fluoranthene	6.7	U	6.7	0.59
191-24-2	Benzo[g,h,i]perylene	6.7	U	6.7	0.35
207-08-9	Benzo[k]fluoranthene	6.7	U	6.7	0.68

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97388/13-A

Matrix: Solid | Lab File ID: 30827003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.0(g) | Date Analyzed: 08/27/2013 11:36

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	100	U	100	22
111-44-4	Bis(2-chloroethyl)ether	100	U	100	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	70	U	70	19
85-68-7	Butyl benzyl phthalate	70	U	70	10
105-60-2	Caprolactam	330	U	330	37
86-74-8	Carbazole	50	U	50	27
218-01-9	Chrysene	6.7	U	6.7	1.1
84-74-2	Di-n-butyl phthalate	70	U	70	15
117-84-0	Di-n-octyl phthalate	70	U	70	7.9
53-70-3	Dibenzo(a,h)anthracene	6.7	U	6.7	0.66
132-64-9	Dibenzofuran	50	U	50	0.66
84-66-2	Diethyl phthalate	70	U	70	16
131-11-3	Dimethyl phthalate	70	U	70	17
206-44-0	Fluoranthene	6.7	U	6.7	0.55
86-73-7	Fluorene	6.7	U	6.7	0.53
118-74-1	Hexachlorobenzene	6.7	U	6.7	2.1
87-68-3	Hexachlorobutadiene	50	U	50	5.6
77-47-4	Hexachlorocyclopentadiene	330	U	330	8.1
67-72-1	Hexachloroethane	50	U	50	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	6.7	U	6.7	0.35
78-59-1	Isophorone	50	U	50	13
621-64-7	N-Nitrosodi-n-propylamine	50	U	50	6.3
62-75-9	N-Nitrosodimethylamine	100	U	100	16
86-30-6	N-Nitrosodiphenylamine	50	U	50	21
91-20-3	Naphthalene	6.7	U	6.7	0.82
98-95-3	Nitrobenzene	100	U	100	2.2
87-86-5	Pentachlorophenol	150	U	150	9.1
85-01-8	Phenanthrene	6.7	U	6.7	0.73
108-95-2	Phenol	50	U	50	7.3
129-00-0	Pyrene	6.7	U	6.7	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	100	U	100	9.5
606-20-2	2,6-Dinitrotoluene	200	U	200	21
100-02-7	4-Nitrophenol	330	U	330	17

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97388/13-A

Matrix: Solid | Lab File ID: 30827003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 30.0(g) | Date Analyzed: 08/27/2013 11:36

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	88		36-110
4165-62-2	Phenol-d5 (Surr)	66		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	63		20-110
367-12-4	2-Fluorophenol (Surr)	56		24-110
321-60-8	2-Fluorobiphenyl (Surr)	66		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	40		10-110

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 30827004.D

Lab ID: LCS 240-97388/14-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	667	430	65	35-110	
1,4-Dioxane	667	230	35	10-110	
2,4,6-Trichlorophenol	667	299	45	12-110	
2,4,5-Trichlorophenol	667	384	58	25-110	
2,4-Dichlorophenol	667	433	65	39-110	
2,4-Dimethylphenol	667	454	68	29-110	
2,4-Dinitrophenol	1330	694	52	10-110	
2,4-Dinitrotoluene	667	484	73	48-110	
2-Chloronaphthalene	667	439	66	32-110	
2-Chlorophenol	667	438	66	37-110	
2-Methylnaphthalene	667	421	63	36-110	
2-Methylphenol	667	433	65	41-110	
2-Nitroaniline	667	476	71	45-110	
2-Nitrophenol	667	431	65	34-110	
3 & 4 Methylphenol	667	448	67	40-110	
3,3'-Dichlorobenzidine	1330	912	68	28-110	
3-Nitroaniline	667	460	69	44-110	
4,6-Dinitro-2-methylphenol	1330	844	63	10-110	
4-Bromophenyl phenyl ether	667	447	67	39-110	
4-Chloro-3-methylphenol	667	431	65	48-110	
4-Chloroaniline	667	365	55	30-110	
4-Chlorophenyl phenyl ether	667	439	66	40-110	
4-Nitroaniline	667	567	85	48-110	
Acenaphthene	667	423	63	38-110	
Acenaphthylene	667	405	61	40-110	
Acetophenone	667	374	56	40-110	
Anthracene	667	462	69	48-110	
Atrazine	1330	991	74	66-127	
Benzaldehyde	1330	353	26	32-110	*
Benzo[a]anthracene	667	466	70	50-110	
Benzo[a]pyrene	667	475	71	44-110	
Benzo[b]fluoranthene	667	454	68	43-110	
Benzo[g,h,i]perylene	667	477	72	51-110	
Benzo[k]fluoranthene	667	495	74	38-105	
Bis(2-chloroethoxy)methane	667	432	65	32-110	
Bis(2-chloroethyl)ether	667	432	65	34-110	
Bis(2-ethylhexyl) phthalate	667	510	77	50-110	
Butyl benzyl phthalate	667	500	75	51-110	
Caprolactam	1330	952	71	44-114	
Carbazole	667	541	81	50-110	
Chrysene	667	459	69	50-110	
Di-n-butyl phthalate	667	534	80	51-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 30827004.D

Lab ID: LCS 240-97388/14-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	667	494	74	48-110	
Dibenzo(a,h)anthracene	667	468	70	51-110	
Dibenzofuran	667	420	63	43-110	
Diethyl phthalate	667	468	70	52-110	
Dimethyl phthalate	667	446	67	50-110	
Fluoranthene	667	493	74	51-110	
Fluorene	667	433	65	46-110	
Hexachlorobenzene	667	446	67	43-110	
Hexachlorobutadiene	667	417	63	29-110	
Hexachlorocyclopentadiene	667	410	62	12-110	
Hexachloroethane	667	405	61	30-110	
Indeno[1,2,3-cd]pyrene	667	475	71	50-110	
Isophorone	667	399	60	36-110	
N-Nitrosodi-n-propylamine	667	437	65	38-110	
N-Nitrosodimethylamine	667	444	67	31-110	
N-Nitrosodiphenylamine	1330	894	67	46-110	
Naphthalene	667	414	62	36-110	
Nitrobenzene	667	435	65	32-110	
Pentachlorophenol	1330	788	59	10-110	
Phenanthrene	667	448	67	49-110	
Phenol	667	454	68	38-110	
Pyrene	667	485	73	49-110	
2,2'-oxybis[1-chloropropane]	667	436	65	29-110	
2,6-Dinitrotoluene	667	479	72	45-110	
4-Nitrophenol	1330	1020	77	28-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: STD6 240-98897/10 Date Analyzed: 08/26/2013 14:43

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30826010.D Heated Purge: (Y/N) N

Calibration ID: 17048

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		349814	6.34	1387935	7.45	801136	8.94
UPPER LIMIT		699628	6.84	2775870	7.95	1602272	9.44
LOWER LIMIT		174907	5.84	693968	6.95	400568	8.44
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-98897/11		311537	6.34	1222995	7.45	708935	8.95
CCV 240-99099/2 CCVIS		296702	6.32	1161675	7.43	681428	8.93

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: STD6 240-98897/10 Date Analyzed: 08/26/2013 14:43

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30826010.D Heated Purge: (Y/N) N

Calibration ID: 17048

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1357293	10.21	1683071	12.50	1531241	14.26
UPPER LIMIT		2714586	10.71	3366142	13.00	3062482	14.76
LOWER LIMIT		678647	9.71	841536	12.00	765621	13.76
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-98897/11		1160053	10.21	1433780	12.50	1294390	14.26
CCV 240-99099/2 CCVIS		1157911	10.19	1450561	12.47	1327381	14.22

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: CCV 240-99099/2 Date Analyzed: 08/27/2013 11:07

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30827002.D Heated Purge: (Y/N) N

Calibration ID: 17052

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		296702	6.32	1161675	7.43	681428	8.93
UPPER LIMIT		593404	6.82	2323350	7.93	1362856	9.43
LOWER LIMIT		148351	5.82	580838	6.93	340714	8.43
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-97388/13-A		232570	6.32	874132	7.43	517200	8.93
LCS 240-97388/14-A		232494	6.33	915042	7.43	516952	8.93
240-27894-2	DR-TP-A76-11	244466	6.32	964483	7.43	596399	8.93
240-27894-1	DR-TP-A76-10	249507	6.32	963710	7.43	594188	8.93
240-27894-4	DR-TP-A82-03	281314	6.32	1082966	7.43	671573	8.93
240-27894-5	DR-TP-A82-03	266405	6.32	1037797	7.43	652681	8.92

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: CCV 240-99099/2 Date Analyzed: 08/27/2013 11:07

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30827002.D Heated Purge: (Y/N) N

Calibration ID: 17052

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1157911	10.19	1450561	12.47	1327381	14.22
UPPER LIMIT		2315822	10.69	2901122	12.97	2654762	14.72
LOWER LIMIT		578956	9.69	725281	11.97	663691	13.72
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-97388/13-A		966145	10.19	1058683	12.47	948130	14.22
LCS 240-97388/14-A		905674	10.20	1125040	12.47	1008378	14.22
240-27894-2	DR-TP-A76-11	1099340	10.19	1261298	12.47	1224099	14.22
240-27894-1	DR-TP-A76-10	1066308	10.19	1300660	12.47	1261306	14.22
240-27894-4	DR-TP-A82-03	1253068	10.19	1440280	12.47	1372307	14.22
240-27894-5	DR-TP-A82-03	1184304	10.19	1418072	12.47	1313969	14.22

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Batch Number: 97388 Batch Start Date: 08/14/13 13:55 Batch Analyst: Matthews, Brandon

Batch Method: 3540C Batch End Date: 08/15/13 05:55

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EXBNASPIKE 00002	EXBNASURR W 00002		
240-27894-F-1	DR-TP-A76-10	3540C, 8270D	T	29.75 g	2.0 mL		1 mL		
240-27894-F-2	DR-TP-A76-11	3540C, 8270D	T	30.50 g	2.0 mL		1 mL		
240-27894-F-4	DR-TP-A82-03	3540C, 8270D	T	30.39 g	2.0 mL		1 mL		
240-27894-F-5	DR-TP-A82-03	3540C, 8270D	T	30.32 g	2.0 mL		1 mL		
MB 240-97388/13		3540C, 8270D		30.0 g	2.0 mL		1 mL		
LCS 240-97388/14		3540C, 8270D		30.0 g	2.0 mL	1 mL	1 mL		

Batch Notes	
Balance ID	b037
Na2SO4 Lot Number	963863
Prep Solvent Lot #	1115254

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SAMPLE ID DR-TP-A76-10

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST	IS AMOUNT (NG)	Final Extract Volume (UL)	AVE RRF	CONCENTRATION PPB
1261306	10	1523822	4	2000	1.0840	3517.61
		% Solids	Amt inj (ul)	**Sample Volume (Grams)**		
		0.852	1	29.75		

Benzo(b)fluoranthene = 3,500 ug/kg

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 | Lab Sample ID: 240-27894-1

Matrix: Solid | Lab File ID: 30827025.D

Analysis Method: 8270D | Date Collected: 08/12/2013 10:50

Extract. Method: 3540C | Date Extracted: 08/14/2013 09:20

Sample wt/vol: 29.75(g) | Date Analyzed: 08/27/2013 21:07

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99099 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	370	J	590	41
123-91-1	1,4-Dioxane	1200	U	1200	260
88-06-2	2,4,6-Trichlorophenol	1800	U	1800	110
95-95-4	2,4,5-Trichlorophenol	1800	U	1800	300
120-83-2	2,4-Dichlorophenol	1800	U	1800	240
105-67-9	2,4-Dimethylphenol	1800	U	1800	240
51-28-5	2,4-Dinitrophenol	3900	U	3900	250
121-14-2	2,4-Dinitrotoluene	2400	U	2400	200
91-58-7	2-Chloronaphthalene	590	U	590	5.3
95-57-8	2-Chlorophenol	590	U	590	97
91-57-6	2-Methylnaphthalene	1300		79	5.9
95-48-7	2-Methylphenol	2400	U	2400	130
88-74-4	2-Nitroaniline	2400	U	2400	110
88-75-5	2-Nitrophenol	590	U	590	98
15831-10-4	3 & 4 Methylphenol	4700	U	4700	240
91-94-1	3,3'-Dichlorobenzidine	1200	U	1200	210
99-09-2	3-Nitroaniline	2400	U	2400	190
534-52-1	4,6-Dinitro-2-methylphenol	1800	U	1800	110
101-55-3	4-Bromophenyl phenyl ether	590	U	590	150
59-50-7	4-Chloro-3-methylphenol	1800	U	1800	250
106-47-8	4-Chloroaniline	1800	U	1800	200
7005-72-3	4-Chlorophenyl phenyl ether	590	U	590	150
100-01-6	4-Nitroaniline	2400	U	2400	310
83-32-9	Acenaphthene	920		79	9.0
208-96-8	Acenaphthylene	630		79	4.1
98-86-2	Acetophenone	1200	U	1200	110
120-12-7	Anthracene	1400		79	9.2
1912-24-9	Atrazine	2400	U	2400	110
100-52-7	Benzaldehyde	1200	U *	1200	140
56-55-3	Benzo[a]anthracene	3100		79	7.5
50-32-8	Benzo[a]pyrene	2400		79	7.6
205-99-2	Benzo[b]fluoranthene	3500		79	7.0
191-24-2	Benzo[g,h,i]perylene	1400		79	4.1
207-08-9	Benzo[k]fluoranthene	1200		79	8.0

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A4HP9\20130827-22891.b\30827025.D		
Lims ID:	240-27894-F-1-A	Client ID:	DR-TP-A76-10
Inject. Date:	27-Aug-2013 21:07:30	Dil. Factor:	10.0000
Sample Type:	Client		
Sample ID:	240-0022891-025		
Misc. Info.:	240-27894-F-1-A =240-27894-F-1-A		
Operator:	001574	Instrument ID:	A4HP9
Injection Vol:	1.0 ul	ALS Bottle#:	25
Lims Batch ID:	99099	Lims Sample ID:	25
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A4HP9\20130827-22891.b\8270 _9.m		
Last Update:	28-Aug-2013 10:46:37	Calib Date:	26-Aug-2013 18:35:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A4HP9\20130826-22844.b\30826019.D		
Limit Group:	MSS 8270D ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	5% phenyl	Column Dia:	0.18 mm
Process Host:	XAWRK020		
First Level Reviewer: ulmanm		Date:	28-Aug-2013 10:09:50

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.322	6.323	-0.001	95	249507	4.00	
* 2 Naphthalene-d8	136	7.428	7.429	-0.001	98	963710	4.00	
* 3 Acenaphthene-d10	164	8.929	8.929	-0.001	89	594188	4.00	
* 4 Phenanthrene-d10	188	10.193	10.194	-0.001	97	1066308	4.00	
* 5 Chrysene-d12	240	12.473	12.474	-0.001	97	1300660	4.00	
* 6 Perylene-d12	264	14.223	14.219	0.004	98	1261306	4.00	
$ 7 2-Fluorophenol	112	5.115	5.102	0.013	91	68439	0.6421	
$ 8 Phenol-d5	99	5.957	5.953	0.004	92	99838	0.6837	
$ 9 Nitrobenzene-d5	82	6.793	6.794	-0.001	80	106831	0.6611	
$ 10 2-Fluorobiphenyl (Surr)	172	8.332	8.328	0.004	95	128471	0.6846	
$ 11 2,4,6-Tribromophenol	330	9.592	9.593	-0.001	31	14429	0.6940	
$ 12 Terphenyl-d14	244	11.516	11.517	-0.001	94	170951	0.8632	
25 1,4-Dioxane	88		3.077					
26 N-Nitrosodimethylamine	74		3.563					
41 Benzaldehyde	77		5.934					
43 Phenol	94		5.962					
69 Bis(2-chloroethyl)ether	93		6.063					9
46 2-Chlorophenol	128		6.131					
51 2-Methylphenol	108		6.501					9
53 2,2'-oxybis[1-chloropropane]	45		6.539					9
21 3 & 4 Methylphenol	108		6.631					
57 N-Nitrosodi-n-propylamine	70		6.650					
58 Acetophenone	105		6.660					
61 Hexachloroethane	117		6.775					
62 Nitrobenzene	77		6.814					
64 Isophorone	82		7.016					
66 2-Nitrophenol	139		7.088					9
65 2,4-Dimethylphenol	107		7.093					
70 Bis(2-chloroethoxy)methane	93		7.179					9
73 2,4-Dichlorophenol	162		7.290					9

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
75 Naphthalene	128	7.447	7.448	-0.001	97	1953516	8.01	
76 4-Chloroaniline	127		7.468					
79 Hexachlorobutadiene	225		7.545					
84 Caprolactam	113		7.761					
86 4-Chloro-3-methylphenol	107		7.857					
87 2-Methylnaphthalene	142	8.034	8.035	-0.001	84	239871	1.59	
89 Hexachlorocyclopentadiene	237		8.170					
92 2,4,6-Trichlorophenol	196		8.261					
93 2,4,5-Trichlorophenol	196		8.295					
98 1,1'-Biphenyl	154	8.424	8.420	0.004	89	94189	0.4656	
100 2-Chloronaphthalene	162		8.453					
102 2-Nitroaniline	65		8.516					
105 Dimethyl phthalate	163		8.651					
107 2,6-Dinitrotoluene	165		8.708					
109 Acenaphthylene	152	8.813	8.809	0.004	97	204590	0.7926	
110 3-Nitroaniline	138		8.857					9
111 2,4-Dinitrophenol	184		8.944					
112 Acenaphthene	153	8.957	8.958	-0.001	96	177034	1.17	
113 4-Nitrophenol	109		8.963					9
114 2,4-Dinitrotoluene	165		9.054					
116 Dibenzofuran	168	9.102	9.098	0.004	86	348730	1.51	
121 Diethyl phthalate	149		9.242					
123 4-Chlorophenyl phenyl ether	204		9.372					9
125 4-Nitroaniline	138		9.377					
126 Fluorene	166	9.390	9.391	-0.001	88	339392	2.04	
128 4,6-Dinitro-2-methylphenol	198		9.406					
131 N-Nitrosodiphenylamine	169		9.463					
139 4-Bromophenyl phenyl ether	248		9.790					
141 Hexachlorobenzene	284		9.867					
142 Atrazine	200		9.891					
143 Pentachlorophenol	266		10.016					
148 Phenanthrene	178	10.217	10.213	0.004	98	1894041	7.56	
149 Anthracene	178	10.261	10.262	-0.001	99	436777	1.73	
151 Carbazole	167	10.376	10.372	0.004	76	433437	1.96	
154 Di-n-butyl phthalate	149		10.622					
159 Fluoranthene	202	11.232	11.228	0.004	97	3147587	10.2	
161 Pyrene	202	11.429	11.425	0.004	97	2592850	8.02	
168 Butyl benzyl phthalate	149		11.896					9
173 Bis(2-ethylhexyl) phthalate	149	12.376	12.382	-0.006	70	179447	0.8993	
175 3,3'-Dichlorobenzidine	252		12.397					
177 Benzo[a]anthracene	228	12.463	12.459	0.004	99	1314752	3.95	
178 Chrysene	228	12.497	12.498	-0.001	92	1313307	4.00	
180 Di-n-octyl phthalate	149		13.041					
182 Benzo[b]fluoranthene	252	13.680	13.676	0.004	95	1523822	4.46	
183 Benzo[k]fluoranthene	252	13.708	13.709	-0.001	1	536676	1.50	M
184 Benzo[a]pyrene	252	14.141	14.142	-0.001	73	987628	3.09	
188 Indeno[1,2,3-cd]pyrene	276	16.132	16.143	-0.011	98	577905	1.67	
189 Dibenz(a,h)anthracene	278	16.137	16.157	-0.020	31	140034	0.4856	
190 Benzo[g,h,i]perylene	276	16.724	16.725	-0.001	94	527524	1.76	

Method 8015B - GRO

Gasoline Range Organics (GC) by Method 8015B

FORM II
GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
DR-TP-A76-10	240-27894-1	32
DR-TP-A76-11	240-27894-2	30
DR-TP-A82-03	240-27894-4	26
DR-TP-A82-03	240-27894-5	28
	MB 240-98584/1-A	87
	LCS 240-98584/2-A	102
DR-TP-A82-03 MS	240-27894-4 MS	54
DR-TP-A82-03 MSD	240-27894-4 MSD	34

	QC LIMITS
TFT = Trifluorotoluene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8015B

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: YPID Start Date: 08/21/2013 11:53

Analysis Batch Number: 98315 End Date: 08/23/2013 06:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-98315/5 IC		08/21/2013 11:53	1	YF082105.D	RTX-VRX 0.45(mm)
STD2 240-98315/6 IC		08/21/2013 12:34	1	YF082106.D	RTX-VRX 0.45(mm)
STD3 240-98315/7 IC		08/21/2013 13:16	1	YF082107.D	RTX-VRX 0.45(mm)
STD4 240-98315/8 ICRT		08/21/2013 13:57	1	YF082108.D	RTX-VRX 0.45(mm)
STD5 240-98315/9 IC		08/21/2013 14:38	1	YF082109.D	RTX-VRX 0.45(mm)
STD6 240-98315/10 IC		08/21/2013 15:19	1	YF082110.D	RTX-VRX 0.45(mm)
ICV 240-98315/11		08/21/2013 16:00	1	YF082111.D	RTX-VRX 0.45(mm)
ZZZZZ		08/21/2013 17:00	1		RTX-VRX 0.45(mm)
ZZZZZ		08/21/2013 17:40	1		RTX-VRX 0.45(mm)
ZZZZZ		08/21/2013 18:20	1		RTX-VRX 0.45(mm)
ZZZZZ		08/21/2013 19:01	1		RTX-VRX 0.45(mm)
ZZZZZ		08/21/2013 19:41	1		RTX-VRX 0.45(mm)
ZZZZZ		08/21/2013 20:22	1		RTX-VRX 0.45(mm)
ZZZZZ		08/21/2013 21:03	1		RTX-VRX 0.45(mm)
ZZZZZ		08/21/2013 21:43	1		RTX-VRX 0.45(mm)
CCV 240-98315/20		08/21/2013 22:24	1		RTX-VRX 0.45(mm)
ZZZZZ		08/21/2013 23:04	1		RTX-VRX 0.45(mm)
ZZZZZ		08/21/2013 23:46	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 00:27	1		RTX-VRX 0.45(mm)
CCV 240-98315/24		08/22/2013 01:09	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 01:51	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 02:34	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 03:16	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 03:58	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 04:40	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 05:22	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 06:03	1		RTX-VRX 0.45(mm)
CCV 240-98315/32		08/22/2013 06:43	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 07:24	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 08:04	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 08:45	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 09:26	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 10:07	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 10:49	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 11:30	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 12:13	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 12:56	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 13:39	1		RTX-VRX 0.45(mm)
CCV 240-98315/43		08/22/2013 14:22	1	YF082143.D	RTX-VRX 0.45(mm)
MB 240-98584/1-A		08/22/2013 15:05	1	YF082144.D	RTX-VRX 0.45(mm)
LCS 240-98584/2-A		08/22/2013 15:47	1	YF082145.D	RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 16:30	1		RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 17:12	1		RTX-VRX 0.45(mm)
CCV 240-98315/48		08/22/2013 17:54	1	YF082148.D	RTX-VRX 0.45(mm)

8015B

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: YPID Start Date: 08/21/2013 11:53

Analysis Batch Number: 98315 End Date: 08/23/2013 06:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
240-27894-1	DR-TP-A76-10	08/22/2013 18:36	1	YF082149.D	RTX-VRX 0.45(mm)
240-27894-2	DR-TP-A76-11	08/22/2013 19:18	1	YF082150.D	RTX-VRX 0.45(mm)
240-27894-5	DR-TP-A82-03	08/22/2013 20:00	1	YF082151.D	RTX-VRX 0.45(mm)
240-27894-4	DR-TP-A82-03	08/22/2013 20:43	1	YF082152.D	RTX-VRX 0.45(mm)
240-27894-4 MS	DR-TP-A82-03 MS	08/22/2013 21:24	1	YF082153.D	RTX-VRX 0.45(mm)
240-27894-4 MSD	DR-TP-A82-03 MSD	08/22/2013 22:06	1	YF082154.D	RTX-VRX 0.45(mm)
CCV 240-98315/55		08/22/2013 22:48	1	YF082155.D	RTX-VRX 0.45(mm)
ZZZZZ		08/22/2013 23:31	1		RTX-VRX 0.45(mm)
ZZZZZ		08/23/2013 00:13	1		RTX-VRX 0.45(mm)
ZZZZZ		08/23/2013 00:54	1		RTX-VRX 0.45(mm)
ZZZZZ		08/23/2013 01:36	1		RTX-VRX 0.45(mm)
ZZZZZ		08/23/2013 02:17	1		RTX-VRX 0.45(mm)
ZZZZZ		08/23/2013 02:59	1		RTX-VRX 0.45(mm)
ZZZZZ		08/23/2013 03:40	1		RTX-VRX 0.45(mm)
ZZZZZ		08/23/2013 04:22	1		RTX-VRX 0.45(mm)
ZZZZZ		08/23/2013 05:03	1		RTX-VRX 0.45(mm)
ZZZZZ		08/23/2013 05:44	1		RTX-VRX 0.45(mm)
CCV 240-98315/66		08/23/2013 06:24	1		RTX-VRX 0.45(mm)

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98315

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/21/2013 11:53 Calibration End Date: 08/21/2013 15:19 Calibration ID: 17010

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98315/5	YF082105.D
Level 2	STD2 240-98315/6	YF082106.D
Level 3	STD3 240-98315/7	YF082107.D
Level 4	STD4 240-98315/8	YF082108.D
Level 5	STD5 240-98315/9	YF082109.D
Level 6	STD6 240-98315/10	YF082110.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.970	11.970	11.970	11.970	11.970	11.970					5.055 - 18.885	11.970
C6-C12	13.527	13.527	13.527	13.527	13.527	13.527					5.055 - 22.000	13.527
Trifluorotoluene (Surr)	9.802	9.805	9.800	9.803	9.802	9.802					9.553 - 10.053	9.802

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98315

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/21/2013 11:53 Calibration End Date: 08/21/2013 15:19 Calibration ID: 17010

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98315/5	YF082105.D
Level 2	STD2 240-98315/6	YF082106.D
Level 3	STD3 240-98315/7	YF082107.D
Level 4	STD4 240-98315/8	YF082108.D
Level 5	STD5 240-98315/9	YF082109.D
Level 6	STD6 240-98315/10	YF082110.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	218793 178073	200683 168402	185221	179733	Ave		188484.161				9.7		20.0			
C6-C12	253410 192449	217081 182497	201115	194347	Ave		206816.484				12.0		20.0			
Trifluorotoluene (Surr)	208336 165275	165005 153793	163672	170026	Ave		171017.973				11.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 98315

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/21/2013 11:53 Calibration End Date: 08/21/2013 15:19 Calibration ID: 17010

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98315/5	YF082105.D
Level 2	STD2 240-98315/6	YF082106.D
Level 3	STD3 240-98315/7	YF082107.D
Level 4	STD4 240-98315/8	YF082108.D
Level 5	STD5 240-98315/9	YF082109.D
Level 6	STD6 240-98315/10	YF082110.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Total Petroleum Hydrocarbons (C6-C10)	Ave	21879324 269443328	40136556	74088424	143786198	213687668	100 1600	200	400	800	1200
C6-C12	Ave	25341049 291995584	43416109	80445864	155477876	230938349	100 1600	200	400	800	1200
Trifluorotoluene (Surr)	Ave	208336 7689657	330010	818361	1700262	3305506	1.00 50.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-98315/11 Calibration Date: 08/21/2013 16:00

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082111.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	170634		724	800	-9.5	20.0
C6-C12	Ave	206816	191323		740	800	-7.5	20.0
Trifluorotoluene (Surr)	Ave	171018	169240		9.90	10.0	-1.0	20.0

FORM VII

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-98315/11 Calibration Date: 08/21/2013 16:00

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082111.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.97	5.06	18.89
C6-C12	13.53	5.06	22.00
Trifluorotoluene (Surr)	9.80	9.55	10.05

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-98315/43 Calibration Date: 08/22/2013 14:22

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082143.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	168416		715	800	-10.6	15.0
C6-C12	Ave	206816	181523		702	800	-12.2	15.0
Trifluorotoluene (Surr)	Ave	171018	163238		9.55	10.0	-4.5	15.0

FORM VII

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-98315/43 Calibration Date: 08/22/2013 14:22

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082143.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.97	5.06	18.89
C6-C12	13.53	5.06	22.00
Trifluorotoluene (Surr)	9.80	9.55	10.05

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-98315/48 Calibration Date: 08/22/2013 17:54

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082148.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	173786		738	800	-7.8	15.0
C6-C12	Ave	206816	189163		732	800	-8.5	15.0
Trifluorotoluene (Surr)	Ave	171018	103966		6.08	10.0	-39.2*	15.0

FORM VII

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-98315/48 Calibration Date: 08/22/2013 17:54

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082148.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.97	5.06	18.89
C6-C12	13.53	5.06	22.00
Trifluorotoluene (Surr)	9.80	9.55	10.05

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-98315/55 Calibration Date: 08/22/2013 22:48

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082155.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	163835		695	800	-13.1	15.0
C6-C12	Ave	206816	177027		685	800	-14.4	15.0
Trifluorotoluene (Surr)	Ave	171018	63841		3.73	10.0	-62.7*	15.0

FORM VII

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-98315/55 Calibration Date: 08/22/2013 22:48

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082155.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.97	5.06	18.89
C6-C12	13.53	5.06	22.00
Trifluorotoluene (Surr)	9.81	9.55	10.05

FORM VIII
GASOLINE RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: STD4 240-98315/8 Date Analyzed: 08/21/2013 13:57

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF082108.D Heated Purge: (Y/N) N

Calibration ID: 17010

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
INITIAL CALIBRATION SURROGATE				9.80		
UPPER LIMIT				9.90		
LOWER LIMIT				9.70		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD4 240-98315/8 ICRT		08/21/2013 13:57	YF082108.D	9.80		
CCV 240-98315/43		08/22/2013 14:22	YF082143.D	9.80		
MB 240-98584/1-A		08/22/2013 15:05	YF082144.D	9.79		
LCS 240-98584/2-A		08/22/2013 15:47	YF082145.D	9.80		
CCV 240-98315/48		08/22/2013 17:54	YF082148.D	9.80		
240-27894-1	DR-TP-A76-10	08/22/2013 18:36	YF082149.D	9.80		
240-27894-2	DR-TP-A76-11	08/22/2013 19:18	YF082150.D	9.80		
240-27894-5	DR-TP-A82-03	08/22/2013 20:00	YF082151.D	9.80		
240-27894-4	DR-TP-A82-03	08/22/2013 20:43	YF082152.D	9.79		
240-27894-4 MS	DR-TP-A82-03 MS	08/22/2013 21:24	YF082153.D	9.80		
240-27894-4 MSD	DR-TP-A82-03 MSD	08/22/2013 22:06	YF082154.D	9.80		
CCV 240-98315/55		08/22/2013 22:48	YF082155.D	9.81		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015B

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: MB 240-98584/1-A

Matrix: Solid Date Extracted: 08/22/2013 14:08

Lab File ID:(1) YF082144.D Lab File ID:(2)

Date Analyzed:(1) 08/22/2013 15:05 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-98584/2-A	08/22/2013 15:47	
DR-TP-A76-10	240-27894-1	08/22/2013 18:36	
DR-TP-A76-11	240-27894-2	08/22/2013 19:18	
DR-TP-A82-03	240-27894-5	08/22/2013 20:00	
DR-TP-A82-03	240-27894-4	08/22/2013 20:43	
DR-TP-A82-03 MS	240-27894-4 MS	08/22/2013 21:24	
DR-TP-A82-03 MSD	240-27894-4 MSD	08/22/2013 22:06	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98584/1-A

Matrix: Solid Lab File ID: YF082144.D

Analysis Method: 8015B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/22/2013 15:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98315 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	100	U	100	46

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	87		10-150

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF082145.D

Lab ID: LCS 240-98584/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	694	87	60-142	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF082153.D

Lab ID: 240-27894-4 MS Client ID: DR-TP-A82-03 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	929	110 U	533	57	10-142	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF082154.D

Lab ID: 240-27894-4 MSD Client ID: DR-TP-A82-03 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	866	208	24	88	94	10-142	

Column to be used to flag recovery and RPD values

FORM III 8015B

GASOLINE RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Batch Number: 98584 Batch Start Date: 08/22/13 14:08 Batch Analyst: Shock, Ray

Batch Method: 5030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 240-98584/1		5030B, 8015B		5 g	5 mL				
LCS 240-98584/2		5030B, 8015B		5 g	5 mL				
240-27894-E-1	DR-TP-A76-10	5030B, 8015B	T	0.57 g	5 mL				
240-27894-E-2	DR-TP-A76-11	5030B, 8015B	T	5.03 g	5 mL				
240-27894-E-5	DR-TP-A82-03	5030B, 8015B	T	4.96 g	5 mL				
240-27894-E-4	DR-TP-A82-03	5030B, 8015B	T	5.25 g	5 mL				
240-27894-E-4 MS	DR-TP-A82-03	5030B, 8015B	T	4.81 g	5 mL				
240-27894-E-4 MSD	DR-TP-A82-03	5030B, 8015B	T	5.16 g	5 mL				

Batch Notes	
Balance ID	b045
Batch Comment	instrument Y

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SDG 240-27984
SAMPLE ID DR-TP-A76-10

SAMPLE CALC

INITIAL CF	DILUTION	COMPOUND OF INTEREST	Final Volume (UL)	CONCENTRATION PPB
188484	1	103267539	5000	5640.85
		% Solids	**Sample Volume (Grams)**	
		0.852	0.57	

TPH GRO 5,600 ug/kg

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 | Lab Sample ID: 240-27894-1

Matrix: Solid | Lab File ID: YF082149.D

Analysis Method: 8015B | Date Collected: 08/12/2013 10:50

Sample wt/vol: 0.57(g) | Date Analyzed: 08/22/2013 18:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.8 | Level: (low/med) Low

Analysis Batch No.: 98315 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	5600		1000	470

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	32		10-150

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\YPID\20130821-22702.b\YF082149.D		
Lims ID:	240-27894-E-1-B	Client ID:	DR-TP-A76-10
Inject. Date:	22-Aug-2013 18:36:41	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0022702-049		
Misc. Info.:			
Operator:	1765	Instrument ID:	YPID
Purge Vol:	5.000 mL	ALS Bottle#:	1
Lims Batch ID:	98315	Lims Sample ID:	49
Detector 1 :	GC ELC2B		
Detector 2 :	GC FID1A		
Method:	\\Ncchrom\ChromData\YPID\20130821-22702.b\Y80158021.m		
Last Update:	23-Aug-2013 11:27:40	Calib Date:	21-Aug-2013 15:19:55
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\YPID\20130821-22702.b\YF082110.D		
Limit Group:	GCV 8015B GRO ICAL		
Integrator:	Falcon		
Column Type:		Column Dia:	
Process Host:	XAWRK034		
First Level Reviewer: shockr		Date:	22-Aug-2013 20:48:07

Compound	Det	RT	EXP RT	DLT RT	Response	On-Col Amt ug/l	Flags
$ 16 Trifluorotoluene (Surr)	2	9.795	9.803	-0.008	555407	3.25	
A 5 C6-C10	2	11.970	5.055 - 18.885		103267539	547.9	

Method 8015C - DRO

Nonhalogenated Organics using GC/FID - Modified (Diesel Range Organics) by Method 8015C

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ID:

Client Sample ID	Lab Sample ID	C91 #
DR-TP-A76-10	240-27894-1	50
DR-TP-A76-11	240-27894-2	59
DR-TP-A82-03	240-27894-4	46
DR-TP-A82-03	240-27894-5	60
	MB 240-97392/13-A	51
	LCS 240-97392/14-A	51

	QC LIMITS
C9 = n-Nonane	10-110

Column to be used to flag recovery values

FORM II 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A2HP5F Start Date: 06/26/2013 13:29

Analysis Batch Number: 91464 End Date: 06/27/2013 01:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-91464/4 IC		06/26/2013 13:29	1	P5F26004.D	
STD2 240-91464/5 IC		06/26/2013 14:00	1	P5F26005.D	
ICRT 240-91464/6		06/26/2013 14:30	1	P5F26006.D	
STD4 240-91464/7 IC		06/26/2013 15:01	1	P5F26007.D	
STD5 240-91464/8 IC		06/26/2013 15:32	1	P5F26008.D	
ICV 240-91464/9		06/26/2013 16:02	1	P5F26009.D	
CCV 240-91464/14		06/26/2013 18:36	1		
ZZZZZ		06/26/2013 19:07	1		
ZZZZZ		06/26/2013 19:38	1		
CCV 240-91464/23		06/26/2013 23:12	1		
ZZZZZ		06/26/2013 23:43	1		
ZZZZZ		06/27/2013 00:13	1		
ZZZZZ		06/27/2013 00:44	1		
CCV 240-91464/27		06/27/2013 01:14	1		

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 91464

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2013 13:29 Calibration End Date: 06/26/2013 15:32 Calibration ID: 16081

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-91464/4	P5F26004.D
Level 2	STD2 240-91464/5	P5F26005.D
Level 3	ICRT 240-91464/6	P5F26006.D
Level 4	STD4 240-91464/7	P5F26007.D
Level 5	STD5 240-91464/8	P5F26008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel Range Organics [C10 - C28]	9.524	9.524	9.524	9.524	9.524						5.396 - 13.651	9.524
n-Nonane	4.472	4.472	4.473	4.474	4.479						4.402 - 4.542	4.474

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 91464

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2013 13:29 Calibration End Date: 06/26/2013 15:32 Calibration ID: 16081

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-91464/4	P5F26004.D
Level 2	STD2 240-91464/5	P5F26005.D
Level 3	ICRT 240-91464/6	P5F26006.D
Level 4	STD4 240-91464/7	P5F26007.D
Level 5	STD5 240-91464/8	P5F26008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	227190 217346	220410	224053	201530	Ave		218105.829				4.6		20.0			
n-Nonane	240993 238004	241267	245720	222332	Ave		237662.940				3.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 91464

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2013 13:29 Calibration End Date: 06/26/2013 15:32 Calibration ID: 16081

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-91464/4	P5F26004.D
Level 2	STD2 240-91464/5	P5F26005.D
Level 3	ICRT 240-91464/6	P5F26006.D
Level 4	STD4 240-91464/7	P5F26007.D
Level 5	STD5 240-91464/8	P5F26008.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel Range Organics [C10 - C28]	Ave	22721409	44086493	112038242	201550730	434737579	100	200	500	1000	2000
n-Nonane	Ave	2409929	4825336	12285979	22233159	47600766	10.0	20.0	50.0	100	200

Curve Type Legend:
Ave = Average

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-91464/9 Calibration Date: 06/26/2013 16:02

Instrument ID: A2HP5F Calib Start Date: 06/26/2013 13:29

GC Column: ID: Calib End Date: 06/26/2013 15:32

Lab File ID: P5F26009.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	218106	208672		479	501	-4.3	20.0

FORM VII 8015C

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-91464/9 Calibration Date: 06/26/2013 16:02

Instrument ID: A2HP5F Calib Start Date: 06/26/2013 13:29

GC Column: ID: Calib End Date: 06/26/2013 15:32

Lab File ID: P5F26009.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.52	5.40	13.65

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A2HP5F Start Date: 08/15/2013 18:47

Analysis Batch Number: 97627 End Date: 08/16/2013 09:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-97627/4 CCVRT		08/15/2013 18:47	1	P5F81504.D	
CCV 240-97627/18		08/16/2013 01:47	1	P5F81518.D	
MB 240-97392/13-A		08/16/2013 02:17	1	P5F81519.D	
LCS 240-97392/14-A		08/16/2013 02:47	1	P5F81520.D	
CCV 240-97627/29		08/16/2013 07:17	1	P5F81529.D	
ZZZZZ		08/16/2013 07:47	10		
ZZZZZ		08/16/2013 08:17	10		
ZZZZZ		08/16/2013 08:47	10		
240-27894-5	DR-TP-A82-03	08/16/2013 09:17	1	P5F81533.D	
CCV 240-97627/34		08/16/2013 09:47	1	P5F81534.D	

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97627/4 Calibration Date: 08/15/2013 18:47

Instrument ID: A2HP5F Calib Start Date: 06/26/2013 13:29

GC Column: ID: Calib End Date: 06/26/2013 15:32

Lab File ID: P5F81504.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	218106	259950		596	500	19.2	20.0
n-Nonane	Ave	237663	277320		58.3	50.0	16.7	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97627/4 Calibration Date: 08/15/2013 18:47

Instrument ID: A2HP5F Calib Start Date: 06/26/2013 13:29

GC Column: ID: Calib End Date: 06/26/2013 15:32

Lab File ID: P5F81504.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.52	5.39	13.64
n-Nonane	4.47	4.40	4.54

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97627/18 Calibration Date: 08/16/2013 01:47

Instrument ID: A2HP5F Calib Start Date: 06/26/2013 13:29

GC Column: ID: Calib End Date: 06/26/2013 15:32

Lab File ID: P5F81518.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	218106	259183		594	500	18.8	20.0
n-Nonane	Ave	237663	280745		59.1	50.0	18.1	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97627/18 Calibration Date: 08/16/2013 01:47

Instrument ID: A2HP5F Calib Start Date: 06/26/2013 13:29

GC Column: ID: Calib End Date: 06/26/2013 15:32

Lab File ID: P5F81518.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.52	5.39	13.64
n-Nonane	4.47	4.40	4.54

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97627/29 Calibration Date: 08/16/2013 07:17

Instrument ID: A2HP5F Calib Start Date: 06/26/2013 13:29

GC Column: ID: Calib End Date: 06/26/2013 15:32

Lab File ID: P5F81529.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	218106	274944		630	500	26.1*	20.0
n-Nonane	Ave	237663	293607		61.8	50.0	23.5*	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97627/29 Calibration Date: 08/16/2013 07:17

Instrument ID: A2HP5F Calib Start Date: 06/26/2013 13:29

GC Column: ID: Calib End Date: 06/26/2013 15:32

Lab File ID: P5F81529.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.52	5.39	13.64
n-Nonane	4.47	4.40	4.54

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97627/34 Calibration Date: 08/16/2013 09:47

Instrument ID: A2HP5F Calib Start Date: 06/26/2013 13:29

GC Column: ID: Calib End Date: 06/26/2013 15:32

Lab File ID: P5F81534.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	218106	292262		670	500	34.0*	20.0
n-Nonane	Ave	237663	312656		65.8	50.0	31.6*	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97627/34 Calibration Date: 08/16/2013 09:47

Instrument ID: A2HP5F Calib Start Date: 06/26/2013 13:29

GC Column: ID: Calib End Date: 06/26/2013 15:32

Lab File ID: P5F81534.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.52	5.39	13.64
n-Nonane	4.47	4.40	4.54

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A2HP5F Start Date: 08/16/2013 17:57

Analysis Batch Number: 97853 End Date: 08/17/2013 02:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-97853/4 IC		08/16/2013 17:57	1	P5F81604.D	
STD2 240-97853/5 IC		08/16/2013 18:27	1	P5F81605.D	
STD3 240-97853/6 ICRT		08/16/2013 18:56	1	P5F81606.D	
STD4 240-97853/7 IC		08/16/2013 19:26	1	P5F81607.D	
STD5 240-97853/8 IC		08/16/2013 19:56	1	P5F81608.D	
ICV 240-97853/9		08/16/2013 20:26	1	P5F81609.D	
CCV 240-97853/11		08/16/2013 21:26	1	P5F81611.D	
240-27894-1	DR-TP-A76-10	08/17/2013 00:56	10	P5F81618.D	
240-27894-2	DR-TP-A76-11	08/17/2013 01:26	10	P5F81619.D	
240-27894-4	DR-TP-A82-03	08/17/2013 01:56	10	P5F81620.D	
CCV 240-97853/21		08/17/2013 02:26	1	P5F81621.D	

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97853

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:57 Calibration End Date: 08/16/2013 19:56 Calibration ID: 16920

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97853/4	P5F81604.D
Level 2	STD2 240-97853/5	P5F81605.D
Level 3	STD3 240-97853/6	P5F81606.D
Level 4	STD4 240-97853/7	P5F81607.D
Level 5	STD5 240-97853/8	P5F81608.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel Range Organics [C10 - C28]	9.514	9.514	9.514	9.514	9.514						5.389 - 13.640	9.514
n-Nonane	4.464	4.463	4.465	4.466	4.467						4.394 - 4.534	4.465

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97853

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:57 Calibration End Date: 08/16/2013 19:56 Calibration ID: 16920

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97853/4	P5F81604.D
Level 2	STD2 240-97853/5	P5F81605.D
Level 3	STD3 240-97853/6	P5F81606.D
Level 4	STD4 240-97853/7	P5F81607.D
Level 5	STD5 240-97853/8	P5F81608.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	269681 248497	248694	258362	251168	Ave		255280.261				3.5		20.0			
n-Nonane	270628 268675	257877	275540	269926	Ave		268529.330				2.4		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97853

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:57 Calibration End Date: 08/16/2013 19:56 Calibration ID: 16920

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97853/4	P5F81604.D
Level 2	STD2 240-97853/5	P5F81605.D
Level 3	STD3 240-97853/6	P5F81606.D
Level 4	STD4 240-97853/7	P5F81607.D
Level 5	STD5 240-97853/8	P5F81608.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel Range Organics [C10 - C28]	Ave	26970925	49743880	129194445	251194030	497044961	100	200	500	1000	2000
n-Nonane	Ave	2706284	5157538	13777022	26992553	53735076	10.0	20.0	50.0	100	200

Curve Type Legend:
Ave = Average

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-97853/9 Calibration Date: 08/16/2013 20:26

Instrument ID: A2HP5F Calib Start Date: 08/16/2013 17:57

GC Column: ID: Calib End Date: 08/16/2013 19:56

Lab File ID: P5F81609.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	255280	224331		440	501	-12.1	20.0

FORM VII 8015C

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-97853/9 Calibration Date: 08/16/2013 20:26

Instrument ID: A2HP5F Calib Start Date: 08/16/2013 17:57

GC Column: ID: Calib End Date: 08/16/2013 19:56

Lab File ID: P5F81609.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.51	5.39	13.64

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97853/11 Calibration Date: 08/16/2013 21:26

Instrument ID: A2HP5F Calib Start Date: 08/16/2013 17:57

GC Column: ID: Calib End Date: 08/16/2013 19:56

Lab File ID: P5F81611.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	255280	271270		531	500	6.3	20.0
n-Nonane	Ave	268529	293766		54.7	50.0	9.4	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97853/11 Calibration Date: 08/16/2013 21:26

Instrument ID: A2HP5F Calib Start Date: 08/16/2013 17:57

GC Column: ID: Calib End Date: 08/16/2013 19:56

Lab File ID: P5F81611.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.51	5.39	13.64
n-Nonane	4.46	4.40	4.54

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97853/21 Calibration Date: 08/17/2013 02:26

Instrument ID: A2HP5F Calib Start Date: 08/16/2013 17:57

GC Column: ID: Calib End Date: 08/16/2013 19:56

Lab File ID: P5F81621.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	255280	276467		542	500	8.3	20.0
n-Nonane	Ave	268529	307010		57.2	50.0	14.3	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-97853/21 Calibration Date: 08/17/2013 02:26

Instrument ID: A2HP5F Calib Start Date: 08/16/2013 17:57

GC Column: ID: Calib End Date: 08/16/2013 19:56

Lab File ID: P5F81621.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.51	5.39	13.64
n-Nonane	4.47	4.40	4.54

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: MB 240-97392/13-A

Matrix: Solid Date Extracted: 08/14/2013 09:25

Lab File ID:(1) P5F81519.D Lab File ID:(2)

Date Analyzed:(1) 08/16/2013 02:17 Date Analyzed:(2)

Instrument ID:(1) A2HP5F Instrument ID:(2)

GC Column:(1) ID: GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-97392/14-A	08/16/2013 02:47	
DR-TP-A82-03	240-27894-5	08/16/2013 09:17	
DR-TP-A76-10	240-27894-1	08/17/2013 00:56	
DR-TP-A76-11	240-27894-2	08/17/2013 01:26	
DR-TP-A82-03	240-27894-4	08/17/2013 01:56	

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97392/13-A

Matrix: Solid Lab File ID: P5F81519.D

Analysis Method: 8015C Date Collected:

Extraction Method: 3540C Date Extracted: 08/14/2013 09:25

Sample wt/vol: 30(g) Date Analyzed: 08/16/2013 02:17

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 97627 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	17	U	17	9.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	51		10-110

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5F81520.D

Lab ID: LCS 240-97392/14-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Diesel	83.3	62.8	75	47-138	

Column to be used to flag recovery and RPD values

FORM III 8015C

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Batch Number: 97392 Batch Start Date: 08/14/13 13:55 Batch Analyst: Matthews, Brandon

Batch Method: 3540C Batch End Date: 08/15/13 05:55

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EXDIESELSPKW 00032	EXTPHSURR 00020		
240-27894-F-1	DR-TP-A76-10	3540C, 8015C	T	30.00 g	5 mL		1 mL		
240-27894-F-2	DR-TP-A76-11	3540C, 8015C	T	29.57 g	5 mL		1 mL		
240-27894-F-4	DR-TP-A82-03	3540C, 8015C	T	30.06 g	5 mL		1 mL		
240-27894-F-5	DR-TP-A82-03	3540C, 8015C	T	29.84 g	5 mL		1 mL		
MB 240-97392/13		3540C, 8015C		30 g	5 mL		1 mL		
LCS 240-97392/14		3540C, 8015C		30 g	5 mL	1 mL	1 mL		

Batch Notes	
Balance ID	b037
Na2SO4 Lot Number	963867
Prep Solvent Lot #	1115251

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SDG 240-27894
SAMPLE ID DR-TP-A76-10

SAMPLE CALC

INITIAL CF	DILUTION	COMPOUND OF INTEREST	Final Extract Volume (UL)	CONCENTRATION PPM
255280	10	154368107	5000	1182.91
		% Solids	**Sample Volume (Grams)**	
		0.852	30	

TPH DRO 1,200 mg/kg

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 Lab Sample ID: 240-27894-1

Matrix: Solid Lab File ID: P5F81618.D

Analysis Method: 8015C Date Collected: 08/12/2013 10:50

Extraction Method: 3540C Date Extracted: 08/14/2013 09:25

Sample wt/vol: 30.00(g) Date Analyzed: 08/17/2013 00:56

Con. Extract Vol.: 5(mL) Dilution Factor: 10

Injection Volume: 1(uL) GC Column: ID:

% Moisture: 14.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 97853 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	1200		200	110

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	50		10-110

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A2HP5F\20130816-22578.b\P5F81618.D		
Lims ID:	240-27894-F-1-B	Client ID:	DR-TP-A76-10
Inject. Date:	17-Aug-2013 00:56:15	Dil. Factor:	10.0000
Sample Type:	Client		
Sample ID:	240-0022578-018		
Misc. Info.:			
Operator:	402582	Instrument ID:	A2HP5F
Injection Vol:	1.0 ul	ALS Bottle#:	18
Lims Batch ID:	97853	Lims Sample ID:	18
Detector:	GC FID1A		
Method:	\\Ncchrom\ChromData\A2HP5F\20130816-22578.b\TPH5F.m		
Last Update:	19-Aug-2013 08:59:37	Calib Date:	16-Aug-2013 19:56:53
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A2HP5F\20130816-22578.b\P5F81608.D		
Limit Group:	GC 8015C TPH ICAL		
Integrator:	Falcon		
Column Type:		Column Dia:	
Process Host:	XAWRK015		

RT	EXP RT	DLT RT	Response	On-Col Amt ng/ul	Flags
$ 8 n-Nonane					
4.465	4.465	0.000	1342194	5.00	
A 15 Diesel					
9.514	5.389 - 13.640		119981373	470.0	
A 17 C10-C32					
10.111	5.389 - 14.834		154368107	604.7	

Method 8082A

Polychlorinated Biphenyls (PCBs) (GC) by Method 8082A

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm) GC Column (2): CLP-1 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1	#	TCX2	#	DCB1	#	DCB2	#
DR-TP-A76-10	240-27894-1	119		213	X	188	X	213	X
DR-TP-A76-11	240-27894-2	63		109		0	X	0	X
DR-TP-A82-03	240-27894-4	98		174	X	146		77	
DR-TP-A82-03	240-27894-5	58		49		74		67	
	MB 240-98905/8-A	113		55		82		91	
	LCS 240-98905/9-A	87		69		85		83	

	QC LIMITS
TCX = Tetrachloro-m-xylene	29-151
DCB = Decachlorobiphenyl	14-163

Column to be used to flag recovery values

FORM II 8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A2HP11 Start Date: 08/16/2013 17:36

Analysis Batch Number: 97817 End Date: 08/17/2013 05:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD05 240-97817/21 IC		08/16/2013 21:51	1	P1100021.D	CLP-1 0.53(mm)
STD05 240-97817/21 IC		08/16/2013 21:51	1	P1100021.D	CLP-2 0.53(mm)
STD1 240-97817/22 IC		08/16/2013 22:05	1	P1100022.D	CLP-1 0.53(mm)
STD1 240-97817/22 IC		08/16/2013 22:05	1	P1100022.D	CLP-2 0.53(mm)
STD2 240-97817/23 IC		08/16/2013 22:20	1	P1100023.D	CLP-1 0.53(mm)
STD2 240-97817/23 IC		08/16/2013 22:20	1	P1100023.D	CLP-2 0.53(mm)
STD0025 240-97817/24 IC		08/16/2013 22:33	1	P1100024.D	CLP-1 0.53(mm)
STD0025 240-97817/24 IC		08/16/2013 22:33	1	P1100024.D	CLP-2 0.53(mm)
STD005 240-97817/25 IC		08/16/2013 22:47	1	P1100025.D	CLP-1 0.53(mm)
STD005 240-97817/25 IC		08/16/2013 22:47	1	P1100025.D	CLP-2 0.53(mm)
STD01 240-97817/26 IC		08/16/2013 23:02	1	P1100026.D	CLP-1 0.53(mm)
STD01 240-97817/26 IC		08/16/2013 23:02	1	P1100026.D	CLP-2 0.53(mm)
STD02 240-97817/27 IC		08/16/2013 23:16	1	P1100027.D	CLP-1 0.53(mm)
STD02 240-97817/27 IC		08/16/2013 23:16	1	P1100027.D	CLP-2 0.53(mm)
STD05 240-97817/28 IC		08/16/2013 23:30	1	P1100028.D	CLP-1 0.53(mm)
STD05 240-97817/28 IC		08/16/2013 23:30	1	P1100028.D	CLP-2 0.53(mm)
STD1 240-97817/29 IC		08/16/2013 23:44	1	P1100029.D	CLP-1 0.53(mm)
STD1 240-97817/29 IC		08/16/2013 23:44	1	P1100029.D	CLP-2 0.53(mm)
STD2 240-97817/30 IC		08/16/2013 23:58	1	P1100030.D	CLP-1 0.53(mm)
STD2 240-97817/30 IC		08/16/2013 23:58	1	P1100030.D	CLP-2 0.53(mm)
STD0025 240-97817/31 IC		08/17/2013 00:12	1	P1100031.D	CLP-1 0.53(mm)
STD0025 240-97817/31 IC		08/17/2013 00:12	1	P1100031.D	CLP-2 0.53(mm)
STD005 240-97817/32 IC		08/17/2013 00:26	1	P1100032.D	CLP-1 0.53(mm)
STD005 240-97817/32 IC		08/17/2013 00:26	1	P1100032.D	CLP-2 0.53(mm)
STD01 240-97817/33 IC		08/17/2013 00:40	1	P1100033.D	CLP-1 0.53(mm)
STD01 240-97817/33 IC		08/17/2013 00:40	1	P1100033.D	CLP-2 0.53(mm)
STD02 240-97817/34 IC		08/17/2013 00:54	1	P1100034.D	CLP-1 0.53(mm)
STD02 240-97817/34 IC		08/17/2013 00:54	1	P1100034.D	CLP-2 0.53(mm)
STD05 240-97817/35 ICRT		08/17/2013 01:07	1	P1100035.D	CLP-1 0.53(mm)
STD05 240-97817/35 ICRT		08/17/2013 01:07	1	P1100035.D	CLP-2 0.53(mm)
STD1 240-97817/36 IC		08/17/2013 01:21	1	P1100036.D	CLP-1 0.53(mm)
STD1 240-97817/36 IC		08/17/2013 01:21	1	P1100036.D	CLP-2 0.53(mm)
STD2 240-97817/37 IC		08/17/2013 01:35	1	P1100037.D	CLP-1 0.53(mm)
STD2 240-97817/37 IC		08/17/2013 01:35	1	P1100037.D	CLP-2 0.53(mm)
STD0025 240-97817/38 IC		08/17/2013 01:49	1		CLP-1 0.53(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A2HP11 Start Date: 08/16/2013 17:36

Analysis Batch Number: 97817 End Date: 08/17/2013 05:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD0025 240-97817/38 IC		08/17/2013 01:49	1		CLP-2 0.53(mm)
STD005 240-97817/39 IC		08/17/2013 02:03	1		CLP-1 0.53(mm)
STD005 240-97817/39 IC		08/17/2013 02:03	1		CLP-2 0.53(mm)
STD01 240-97817/40 IC		08/17/2013 02:17	1		CLP-1 0.53(mm)
STD01 240-97817/40 IC		08/17/2013 02:17	1		CLP-2 0.53(mm)
STD02 240-97817/41 IC		08/17/2013 02:32	1		CLP-1 0.53(mm)
STD02 240-97817/41 IC		08/17/2013 02:32	1		CLP-2 0.53(mm)
STD05 240-97817/42 IC		08/17/2013 02:45	1		CLP-1 0.53(mm)
STD05 240-97817/42 IC		08/17/2013 02:45	1		CLP-2 0.53(mm)
STD1 240-97817/43 IC		08/17/2013 03:00	1		CLP-1 0.53(mm)
STD1 240-97817/43 IC		08/17/2013 03:00	1		CLP-2 0.53(mm)
STD2 240-97817/44 IC		08/17/2013 03:14	1		CLP-1 0.53(mm)
STD2 240-97817/44 IC		08/17/2013 03:14	1		CLP-2 0.53(mm)
STD0025 240-97817/45 IC		08/17/2013 03:27	1		CLP-1 0.53(mm)
STD0025 240-97817/45 IC		08/17/2013 03:27	1		CLP-2 0.53(mm)
STD005 240-97817/46 IC		08/17/2013 03:41	1		CLP-1 0.53(mm)
STD005 240-97817/46 IC		08/17/2013 03:41	1		CLP-2 0.53(mm)
STD01 240-97817/47 IC		08/17/2013 03:55	1		CLP-1 0.53(mm)
STD01 240-97817/47 IC		08/17/2013 03:55	1		CLP-2 0.53(mm)
STD02 240-97817/48 IC		08/17/2013 04:09	1		CLP-1 0.53(mm)
STD02 240-97817/48 IC		08/17/2013 04:09	1		CLP-2 0.53(mm)
STD05 240-97817/49 IC		08/17/2013 04:24	1		CLP-1 0.53(mm)
STD05 240-97817/49 IC		08/17/2013 04:24	1		CLP-2 0.53(mm)
STD1 240-97817/50 IC		08/17/2013 04:38	1		CLP-1 0.53(mm)
STD1 240-97817/50 IC		08/17/2013 04:38	1		CLP-2 0.53(mm)
STD2 240-97817/51 IC		08/17/2013 04:52	1		CLP-1 0.53(mm)
STD2 240-97817/51 IC		08/17/2013 04:52	1		CLP-2 0.53(mm)
ICV 240-97817/52		08/17/2013 05:06	1	P1100052.D	CLP-1 0.53(mm)
ICV 240-97817/52		08/17/2013 05:06	1	P1100052.D	CLP-2 0.53(mm)

8082A

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:36 Calibration End Date: 08/16/2013 19:02 Calibration ID: 16873

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/3	P1100003.D
Level 2	STD005 240-97817/4	P1100004.D
Level 3	STD01 240-97817/5	P1100005.D
Level 4	STD02 240-97817/6	P1100006.D
Level 5	STD05 240-97817/7	P1100007.D
Level 6	STD1 240-97817/8	P1100008.D
Level 7	STD2 240-97817/9	P1100009.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1232 Peak 1	2.221	2.220	2.222	2.221	2.222	2.220	2.220				2.171 - 2.271	2.221
PCB-1232 Peak 2	2.546	2.544	2.548	2.547	2.547	2.545	2.545				2.496 - 2.596	2.546
PCB-1232 Peak 3	2.970	2.968	2.969	2.970	2.971	2.969	2.970				2.920 - 3.020	2.970
PCB-1232 Peak 4	3.093	3.091	3.096	3.094	3.094	3.092	3.093				3.043 - 3.143	3.093
PCB-1232 Peak 5	3.149	3.149	3.151	3.149	3.151	3.149	3.150				3.099 - 3.199	3.150

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:36 Calibration End Date: 08/16/2013 19:02 Calibration ID: 16873

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/3	P1100003.D
Level 2	STD005 240-97817/4	P1100004.D
Level 3	STD01 240-97817/5	P1100005.D
Level 4	STD02 240-97817/6	P1100006.D
Level 5	STD05 240-97817/7	P1100007.D
Level 6	STD1 240-97817/8	P1100008.D
Level 7	STD2 240-97817/9	P1100009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1232 Peak 1	19652960 17711196	19014980 17184177	19331980 16409346	18262205	Ave		18223834.9				6.5		20.0			
PCB-1232 Peak 2	15229120 12997136	14445580 12780316	13406230 11489063	13154085	Ave		13357361.4				9.0		20.0			
PCB-1232 Peak 3	32665720 27719356	27947860 25613267	27277290 24528181	26999995	Ave		27535952.7				9.3		20.0			
PCB-1232 Peak 4	9503000 10759892	10757120 10675375	10489560 9763715	10333415	Ave		10326011.0				4.9		20.0			
PCB-1232 Peak 5	6234120 7457728	6652100 7280188	6650010 6328922	6476520	Ave		6725655.43				7.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:36 Calibration End Date: 08/16/2013 19:02 Calibration ID: 16873

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/3	P1100003.D
Level 2	STD005 240-97817/4	P1100004.D
Level 3	STD01 240-97817/5	P1100005.D
Level 4	STD02 240-97817/6	P1100006.D
Level 5	STD05 240-97817/7	P1100007.D
Level 6	STD1 240-97817/8	P1100008.D
Level 7	STD2 240-97817/9	P1100009.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	Ave	491324 17184177	950749 32818692	1933198	3652441	8855598	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1232 Peak 2	Ave	380728 12780316	722279 22978126	1340623	2630817	6498568	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1232 Peak 3	Ave	816643 25613267	1397393 49056362	2727729	5399999	13859678	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1232 Peak 4	Ave	237575 10675375	537856 19527430	1048956	2066683	5379946	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1232 Peak 5	Ave	155853 7280188	332605 12657844	665001	1295304	3728864	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:36 Calibration End Date: 08/16/2013 19:02 Calibration ID: 16874

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/3	P1100003.D
Level 2	STD005 240-97817/4	P1100004.D
Level 3	STD01 240-97817/5	P1100005.D
Level 4	STD02 240-97817/6	P1100006.D
Level 5	STD05 240-97817/7	P1100007.D
Level 6	STD1 240-97817/8	P1100008.D
Level 7	STD2 240-97817/9	P1100009.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1232 Peak 1	2.968	2.967	2.970	2.969	2.969	2.967	2.968				2.918 - 3.018	2.968
PCB-1232 Peak 2	3.376	3.376	3.379	3.379	3.379	3.377	3.377				3.326 - 3.426	3.378
PCB-1232 Peak 3	3.826	3.826	3.829	3.828	3.828	3.828	3.827				3.776 - 3.876	3.827
PCB-1232 Peak 4	3.961	3.962	3.963	3.963	3.962	3.961	3.961				3.911 - 4.011	3.962
PCB-1232 Peak 5	4.423	4.424	4.425	4.424	4.424	4.423	4.424				4.373 - 4.473	4.424

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:36 Calibration End Date: 08/16/2013 19:02 Calibration ID: 16874

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/3	P1100003.D
Level 2	STD005 240-97817/4	P1100004.D
Level 3	STD01 240-97817/5	P1100005.D
Level 4	STD02 240-97817/6	P1100006.D
Level 5	STD05 240-97817/7	P1100007.D
Level 6	STD1 240-97817/8	P1100008.D
Level 7	STD2 240-97817/9	P1100009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1232 Peak 1	28254040 23947886	26448100 23441863	25815420 22018706	24589635	Ave		24930807.1				8.3		20.0			
PCB-1232 Peak 2	25621560 18497556	21973840 17962935	20610100 16885552	19645565	Ave		20171015.4				15.0		20.0			
PCB-1232 Peak 3	43140000 37421192	39023580 37095616	39945690 35971385	37831430	Ave		38632698.9				6.1		20.0			
PCB-1232 Peak 4	18805360 16205362	16810540 15922662	17102990 15252713	16537680	Ave		16662472.4				6.7		20.0			
PCB-1232 Peak 5	13232480 10652850	12087420 10546406	11145900 10074202	10921785	Ave		11237291.9				9.6		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:36 Calibration End Date: 08/16/2013 19:02 Calibration ID: 16874

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/3	P1100003.D
Level 2	STD005 240-97817/4	P1100004.D
Level 3	STD01 240-97817/5	P1100005.D
Level 4	STD02 240-97817/6	P1100006.D
Level 5	STD05 240-97817/7	P1100007.D
Level 6	STD1 240-97817/8	P1100008.D
Level 7	STD2 240-97817/9	P1100009.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	Ave	706351 23441863	1322405 44037411	2581542	4917927	11973943	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1232 Peak 2	Ave	640539 17962935	1098692 33771104	2061010	3929113	9248778	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1232 Peak 3	Ave	1078500 37095616	1951179 71942769	3994569	7566286	18710596	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1232 Peak 4	Ave	470134 15922662	840527 30505425	1710299	3307536	8102681	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1232 Peak 5	Ave	330812 10546406	604371 20148404	1114590	2184357	5326425	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 19:16 Calibration End Date: 08/16/2013 20:41 Calibration ID: 16879

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/10	P1100010.D
Level 2	STD005 240-97817/11	P1100011.D
Level 3	STD01 240-97817/12	P1100012.D
Level 4	STD02 240-97817/13	P1100013.D
Level 5	STD05 240-97817/14	P1100014.D
Level 6	STD1 240-97817/15	P1100015.D
Level 7	STD2 240-97817/16	P1100016.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1242 Peak 1	2.224	2.220	2.222	2.221	2.221	2.221	2.222				2.174 - 2.274	2.222
PCB-1242 Peak 2	2.546	2.543	2.547	2.543	2.545	2.545	2.548				2.496 - 2.596	2.545
PCB-1242 Peak 3	2.970	2.969	2.969	2.969	2.970	2.970	2.971				2.920 - 3.020	2.970
PCB-1242 Peak 4	3.095	3.092	3.094	3.092	3.093	3.093	3.095				3.045 - 3.145	3.093
PCB-1242 Peak 5	3.150	3.149	3.149	3.148	3.149	3.149	3.151				3.100 - 3.200	3.149

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 19:16 Calibration End Date: 08/16/2013 20:41 Calibration ID: 16879

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/10	P1100010.D
Level 2	STD005 240-97817/11	P1100011.D
Level 3	STD01 240-97817/12	P1100012.D
Level 4	STD02 240-97817/13	P1100013.D
Level 5	STD05 240-97817/14	P1100014.D
Level 6	STD1 240-97817/15	P1100015.D
Level 7	STD2 240-97817/16	P1100016.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1242 Peak 1	15149600 11998144	13147480 12055840	13480720 11620629	12461955	Ave		12844909.6				9.4		20.0			
PCB-1242 Peak 2	27074600 22734824	25807380 22981704	25279680 21727636	23884765	Ave		24212941.2				7.9		20.0			
PCB-1242 Peak 3	53657480 47985786	51591880 48760014	54544810 47605344	48567190	Ave		50387500.6				5.7		20.0			
PCB-1242 Peak 4	19777960 20414496	19338360 19771213	21746540 19083738	20659180	Ave		20113069.6				4.5		20.0			
PCB-1242 Peak 5	12387480 13507738	11899860 12688915	13882970 12355250	13485900	Ave		12886873.3				5.7		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 19:16 Calibration End Date: 08/16/2013 20:41 Calibration ID: 16879

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/10	P1100010.D
Level 2	STD005 240-97817/11	P1100011.D
Level 3	STD01 240-97817/12	P1100012.D
Level 4	STD02 240-97817/13	P1100013.D
Level 5	STD05 240-97817/14	P1100014.D
Level 6	STD1 240-97817/15	P1100015.D
Level 7	STD2 240-97817/16	P1100016.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	Ave	378740 12055840	657374 23241257	1348072	2492391	5999072	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1242 Peak 2	Ave	676865 22981704	1290369 43455271	2527968	4776953	11367412	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1242 Peak 3	Ave	1341437 48760014	2579594 95210688	5454481	9713438	23992893	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1242 Peak 4	Ave	494449 19771213	966918 38167476	2174654	4131836	10207248	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1242 Peak 5	Ave	309687 12688915	594993 24710500	1388297	2697180	6753869	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 19:16 Calibration End Date: 08/16/2013 20:41 Calibration ID: 16880

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/10	P1100010.D
Level 2	STD005 240-97817/11	P1100011.D
Level 3	STD01 240-97817/12	P1100012.D
Level 4	STD02 240-97817/13	P1100013.D
Level 5	STD05 240-97817/14	P1100014.D
Level 6	STD1 240-97817/15	P1100015.D
Level 7	STD2 240-97817/16	P1100016.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1242 Peak 1	2.968	2.964	2.968	2.965	2.967	2.966	2.967				2.918 - 3.018	2.966
PCB-1242 Peak 2	3.378	3.374	3.378	3.375	3.377	3.375	3.378				3.328 - 3.428	3.376
PCB-1242 Peak 3	3.826	3.824	3.826	3.825	3.826	3.826	3.826				3.776 - 3.876	3.826
PCB-1242 Peak 4	3.961	3.959	3.960	3.960	3.961	3.960	3.961				3.911 - 4.011	3.960
PCB-1242 Peak 5	4.423	4.420	4.423	4.422	4.423	4.422	4.423				4.373 - 4.473	4.422

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 19:16 Calibration End Date: 08/16/2013 20:41 Calibration ID: 16880

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/10	P1100010.D
Level 2	STD005 240-97817/11	P1100011.D
Level 3	STD01 240-97817/12	P1100012.D
Level 4	STD02 240-97817/13	P1100013.D
Level 5	STD05 240-97817/14	P1100014.D
Level 6	STD1 240-97817/15	P1100015.D
Level 7	STD2 240-97817/16	P1100016.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1242 Peak 1	19898320 16796436	19616800 17090135	18688740 15615610	17390200	Ave		17870891.5				8.8		20.0			
PCB-1242 Peak 2	38896000 34106178	42266160 32506719	35204920 30104165	36559835	Ave		35663425.2				11.0		20.0			
PCB-1242 Peak 3	79198440 70908610	81249860 71625005	74463800 69110747	72286555	Ave		74120430.9				6.1		20.0			
PCB-1242 Peak 4	33095800 30811770	34314100 30444174	31517320 29221993	31542130	Ave		31563898.1				5.4		20.0			
PCB-1242 Peak 5	26012720 22662732	25871560 22448547	24179450 21932831	23481440	Ave		23798468.5				6.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 19:16 Calibration End Date: 08/16/2013 20:41 Calibration ID: 16880

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/10	P1100010.D
Level 2	STD005 240-97817/11	P1100011.D
Level 3	STD01 240-97817/12	P1100012.D
Level 4	STD02 240-97817/13	P1100013.D
Level 5	STD05 240-97817/14	P1100014.D
Level 6	STD1 240-97817/15	P1100015.D
Level 7	STD2 240-97817/16	P1100016.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	Ave	497458 17090135	980840 31231219	1868874	3478040	8398218	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1242 Peak 2	Ave	972400 32506719	2113308 60208329	3520492	7311967	17053089	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1242 Peak 3	Ave	1979961 71625005	4062493 138221493	7446380	14457311	35454305	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1242 Peak 4	Ave	827395 30444174	1715705 58443985	3151732	6308426	15405885	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1242 Peak 5	Ave	650318 22448547	1293578 43865661	2417945	4696288	11331366	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 20:55 Calibration End Date: 08/16/2013 22:20 Calibration ID: 16885

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD025 240-97817/17	P1100017.D
Level 2	STD005 240-97817/18	P1100018.D
Level 3	STD01 240-97817/19	P1100019.D
Level 4	STD02 240-97817/20	P1100020.D
Level 5	STD05 240-97817/21	P1100021.D
Level 6	STD1 240-97817/22	P1100022.D
Level 7	STD2 240-97817/23	P1100023.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1248 Peak 1	2.968	2.966	2.967	2.969	2.968	2.967	2.968				2.918 - 3.018	2.968
PCB-1248 Peak 2	3.274	3.273	3.280	3.274	3.274	3.273	3.276				3.224 - 3.324	3.275
PCB-1248 Peak 3	3.473	3.473	3.474	3.474	3.474	3.473	3.474				3.423 - 3.523	3.474
PCB-1248 Peak 4	4.037	4.038	4.038	4.038	4.037	4.037	4.038				3.987 - 4.087	4.038
PCB-1248 Peak 5	4.447	4.444	4.445	4.445	4.445	4.444	4.445				4.397 - 4.497	4.445

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 20:55 Calibration End Date: 08/16/2013 22:20 Calibration ID: 16885

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD025 240-97817/17	P1100017.D
Level 2	STD005 240-97817/18	P1100018.D
Level 3	STD01 240-97817/19	P1100019.D
Level 4	STD02 240-97817/20	P1100020.D
Level 5	STD05 240-97817/21	P1100021.D
Level 6	STD1 240-97817/22	P1100022.D
Level 7	STD2 240-97817/23	P1100023.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1248 Peak 1	31440920 31426558	32297580 30911806	31947400 29836581	31285320	Ave		31306595.0				2.5		20.0			
PCB-1248 Peak 2	36641640 35829284	37580100 34944866	37714040 33843045	36746585	Ave		36185651.4				3.9		20.0			
PCB-1248 Peak 3	43162640 35269124	37489820 34940184	37379230 33572245	36435960	Ave		36892743.3				8.4		20.0			
PCB-1248 Peak 4	14202760 15908896	14488280 17569202	13700290 17377616	14634275	Ave		15411617.0				10.0		20.0			
PCB-1248 Peak 5	17012720 16435814	16198260 17316603	16331090 17192644	16220875	Ave		16672572.3				2.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 20:55 Calibration End Date: 08/16/2013 22:20 Calibration ID: 16885

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD025 240-97817/17	P1100017.D
Level 2	STD005 240-97817/18	P1100018.D
Level 3	STD01 240-97817/19	P1100019.D
Level 4	STD02 240-97817/20	P1100020.D
Level 5	STD05 240-97817/21	P1100021.D
Level 6	STD1 240-97817/22	P1100022.D
Level 7	STD2 240-97817/23	P1100023.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	Ave	786023 30911806	1614879 59673162	3194740	6257064	15713279	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1248 Peak 2	Ave	916041 34944866	1879005 67686090	3771404	7349317	17914642	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1248 Peak 3	Ave	1079066 34940184	1874491 67144490	3737923	7287192	17634562	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1248 Peak 4	Ave	355069 17569202	724414 34755232	1370029	2926855	7954448	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1248 Peak 5	Ave	425318 17316603	809913 34385288	1633109	3244175	8217907	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 20:55 Calibration End Date: 08/16/2013 22:20 Calibration ID: 16886

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD025 240-97817/17	P1100017.D
Level 2	STD005 240-97817/18	P1100018.D
Level 3	STD01 240-97817/19	P1100019.D
Level 4	STD02 240-97817/20	P1100020.D
Level 5	STD05 240-97817/21	P1100021.D
Level 6	STD1 240-97817/22	P1100022.D
Level 7	STD2 240-97817/23	P1100023.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1248 Peak 1	3.822	3.825	3.824	3.824	3.824	3.823	3.824				3.772 - 3.872	3.824
PCB-1248 Peak 2	4.157	4.158	4.158	4.157	4.157	4.158	4.157				4.107 - 4.207	4.157
PCB-1248 Peak 3	4.422	4.424	4.424	4.423	4.423	4.423	4.423				4.372 - 4.472	4.423
PCB-1248 Peak 4	4.892	4.892	4.892	4.893	4.892	4.892	4.892				4.842 - 4.942	4.892
PCB-1248 Peak 5	5.592	5.592	5.593	5.594	5.593	5.593	5.592				5.542 - 5.642	5.593

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 20:55 Calibration End Date: 08/16/2013 22:20 Calibration ID: 16886

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD025 240-97817/17	P1100017.D
Level 2	STD005 240-97817/18	P1100018.D
Level 3	STD01 240-97817/19	P1100019.D
Level 4	STD02 240-97817/20	P1100020.D
Level 5	STD05 240-97817/21	P1100021.D
Level 6	STD1 240-97817/22	P1100022.D
Level 7	STD2 240-97817/23	P1100023.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1248 Peak 1	49493680 46930464	50536320 45624611	52384090 43519368	47329120	Ave		47973950.4				6.3		20.0			
PCB-1248 Peak 2	33366400 28511828	32440560 27339410	32310280 26048027	30289600	Ave		30043729.3				9.4		20.0			
PCB-1248 Peak 3	43292480 39283832	41906780 37944968	42800810 36079245	40735970	Ave		40292012.1				6.6		20.0			
PCB-1248 Peak 4	55093840 53528812	56214900 52266325	56830840 49174259	54070940	Ave		53882845.1				4.8		20.0			
PCB-1248 Peak 5	24812680 26584388	25497640 26370272	28649670 25349104	26052630	Ave		26188054.9				4.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 20:55 Calibration End Date: 08/16/2013 22:20 Calibration ID: 16886

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD025 240-97817/17	P1100017.D
Level 2	STD005 240-97817/18	P1100018.D
Level 3	STD01 240-97817/19	P1100019.D
Level 4	STD02 240-97817/20	P1100020.D
Level 5	STD05 240-97817/21	P1100021.D
Level 6	STD1 240-97817/22	P1100022.D
Level 7	STD2 240-97817/23	P1100023.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	Ave	1237342 45624611	2526816 87038736	5238409	9465824	23465232	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1248 Peak 2	Ave	834160 27339410	1622028 52096054	3231028	6057920	14255914	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1248 Peak 3	Ave	1082312 37944968	2095339 72158490	4280081	8147194	19641916	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1248 Peak 4	Ave	1377346 52266325	2810745 98348518	5683084	10814188	26764406	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1248 Peak 5	Ave	620317 26370272	1274882 50698208	2864967	5210526	13292194	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 22:33 Calibration End Date: 08/16/2013 23:58 Calibration ID: 16891

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/24	P1100024.D
Level 2	STD005 240-97817/25	P1100025.D
Level 3	STD01 240-97817/26	P1100026.D
Level 4	STD02 240-97817/27	P1100027.D
Level 5	STD05 240-97817/28	P1100028.D
Level 6	STD1 240-97817/29	P1100029.D
Level 7	STD2 240-97817/30	P1100030.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1221 Peak 1	2.054	2.053	2.056	2.056	2.055	2.055	2.055				2.004 - 2.104	2.055
PCB-1221 Peak 2	2.185	2.185	2.186	2.186	2.185	2.185	2.185				2.135 - 2.235	2.185
PCB-1221 Peak 3	2.220	2.220	2.221	2.221	2.221	2.221	2.220				2.170 - 2.270	2.221
PCB-1254 Peak 1	3.827	3.827	3.828	3.827	3.827	3.826	3.827				3.777 - 3.877	3.827
PCB-1254 Peak 2	4.072	4.072	4.073	4.073	4.072	4.072	4.072				4.022 - 4.122	4.072
PCB-1254 Peak 3	4.444	4.445	4.446	4.444	4.445	4.444	4.444				4.394 - 4.494	4.445
PCB-1254 Peak 4	4.739	4.739	4.741	4.741	4.739	4.737	4.737				4.689 - 4.789	4.739
PCB-1254 Peak 5	5.241	5.241	5.242	5.242	5.242	5.240	5.240				5.191 - 5.291	5.241

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 22:33 Calibration End Date: 08/16/2013 23:58 Calibration ID: 16891

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/24	P1100024.D
Level 2	STD005 240-97817/25	P1100025.D
Level 3	STD01 240-97817/26	P1100026.D
Level 4	STD02 240-97817/27	P1100027.D
Level 5	STD05 240-97817/28	P1100028.D
Level 6	STD1 240-97817/29	P1100029.D
Level 7	STD2 240-97817/30	P1100030.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1221 Peak 1	9139240 8214660	8533320 7708156	8315830 7464794	8309875	Ave		8240839.29				6.6		20.0			
PCB-1221 Peak 2	4629080 3607626	4149860 3934235	3741360 3105944	4034055	Ave		3886022.86				12.0		20.0			
PCB-1221 Peak 3	23262600 22013900	22782260 20094632	23032730 19925015	22183075	Ave		21899173.1				6.2		20.0			
PCB-1254 Peak 1	32640920 26939544	30946660 27072310	29437540 26373294	28667975	Ave		28868320.4				8.0		20.0			
PCB-1254 Peak 2	47854760 38575908	44593940 41373499	43001290 41025829	42238200	Ave		42666203.6				6.9		20.0			
PCB-1254 Peak 3	60321960 53562274	57819960 54012849	56430580 53314795	59595505	Ave		56436846.2				5.2		20.0			
PCB-1254 Peak 4	38722720 38124064	38904400 50630720	37221430 50264435	46072175	Ave		42848563.5				14.0		20.0			
PCB-1254 Peak 5	53225040 57371026	53560540 62597532	53600510 61412032	58839660	Ave		57229477.1				6.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 22:33 Calibration End Date: 08/16/2013 23:58 Calibration ID: 16891

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/24	P1100024.D
Level 2	STD005 240-97817/25	P1100025.D
Level 3	STD01 240-97817/26	P1100026.D
Level 4	STD02 240-97817/27	P1100027.D
Level 5	STD05 240-97817/28	P1100028.D
Level 6	STD1 240-97817/29	P1100029.D
Level 7	STD2 240-97817/30	P1100030.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	Ave	228481 7708156	426666 14929588	831583	1661975	4107330	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1221 Peak 2	Ave	115727 3934235	207493 6211888	374136	806811	1803813	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1221 Peak 3	Ave	581565 20094632	1139113 39850030	2303273	4436615	11006950	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1254 Peak 1	Ave	816023 27072310	1547333 52746587	2943754	5733595	13469772	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1254 Peak 2	Ave	1196369 41373499	2229697 82051657	4300129	8447640	19287954	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1254 Peak 3	Ave	1508049 54012849	2890998 106629591	5643058	11919101	26781137	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1254 Peak 4	Ave	968068 50630720	1945220 100528871	3722143	9214435	19062032	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1254 Peak 5	Ave	1330626 62597532	2678027 122824064	5360051	11767932	28685513	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 22:33 Calibration End Date: 08/16/2013 23:58 Calibration ID: 16892

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/24	P1100024.D
Level 2	STD005 240-97817/25	P1100025.D
Level 3	STD01 240-97817/26	P1100026.D
Level 4	STD02 240-97817/27	P1100027.D
Level 5	STD05 240-97817/28	P1100028.D
Level 6	STD1 240-97817/29	P1100029.D
Level 7	STD2 240-97817/30	P1100030.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1221 Peak 1	2.761	2.762	2.764	2.763	2.763	2.761	2.763				2.711 - 2.811	2.762
PCB-1221 Peak 2	2.906	2.906	2.907	2.906	2.907	2.904	2.906				2.856 - 2.956	2.906
PCB-1221 Peak 3	2.966	2.968	2.969	2.968	2.968	2.966	2.968				2.916 - 3.016	2.968
PCB-1254 Peak 1	4.888	4.887	4.888	4.887	4.887	4.886	4.887				4.838 - 4.938	4.887
PCB-1254 Peak 2	5.099	5.099	5.101	5.100	5.099	5.098	5.099				5.049 - 5.149	5.099
PCB-1254 Peak 3	5.593	5.593	5.594	5.593	5.592	5.591	5.591				5.543 - 5.643	5.592
PCB-1254 Peak 4	5.824	5.824	5.825	5.823	5.823	5.822	5.822				5.774 - 5.874	5.823
PCB-1254 Peak 5	6.341	6.341	6.341	6.342	6.341	6.341	6.339				6.291 - 6.391	6.341

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 22:33 Calibration End Date: 08/16/2013 23:58 Calibration ID: 16892

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/24	P1100024.D
Level 2	STD005 240-97817/25	P1100025.D
Level 3	STD01 240-97817/26	P1100026.D
Level 4	STD02 240-97817/27	P1100027.D
Level 5	STD05 240-97817/28	P1100028.D
Level 6	STD1 240-97817/29	P1100029.D
Level 7	STD2 240-97817/30	P1100030.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1221 Peak 1	14152960 12185916	12617760 11397948	12607370 10820073	12634380	Ave		12345201.0				8.6		20.0			
PCB-1221 Peak 2	9411680 7962178	8793520 7354623	8383170 6693669	8063770	Ave		8094658.57				11.0		20.0			
PCB-1221 Peak 3	35623640 29978654	33410340 27651156	31796800 25622915	30609285	Ave		30670398.6				11.0		20.0			
PCB-1254 Peak 1	50176160 48637224	52217100 44179891	49983660 42611630	48481345	Ave		48041001.4				7.1		20.0			
PCB-1254 Peak 2	53820920 52019758	55343660 48353358	52822560 46603536	50655690	Ave		51374211.7				6.0		20.0			
PCB-1254 Peak 3	91224280 85948002	86574140 82957839	84112870 80201045	86086310	Ave		85300640.8				4.0		20.0			
PCB-1254 Peak 4	52966720 56445850	51997420 57457564	53660480 55599616	56754335	Ave		54983140.7				3.8		20.0			
PCB-1254 Peak 5	128240320 83767052	93662860 81822269	91498970 78463757	87125465	Ave		92082956.1				18.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 22:33 Calibration End Date: 08/16/2013 23:58 Calibration ID: 16892

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/24	P1100024.D
Level 2	STD005 240-97817/25	P1100025.D
Level 3	STD01 240-97817/26	P1100026.D
Level 4	STD02 240-97817/27	P1100027.D
Level 5	STD05 240-97817/28	P1100028.D
Level 6	STD1 240-97817/29	P1100029.D
Level 7	STD2 240-97817/30	P1100030.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	Ave	353824 11397948	630888 21640146	1260737	2526876	6092958	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1221 Peak 2	Ave	235292 7354623	439676 13387338	838317	1612754	3981089	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1221 Peak 3	Ave	890591 27651156	1670517 51245831	3179680	6121857	14989327	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1254 Peak 1	Ave	1254404 44179891	2610855 85223260	4998366	9696269	24318612	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1254 Peak 2	Ave	1345523 48353358	2767183 93207072	5282256	10131138	26009879	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1254 Peak 3	Ave	2280607 82957839	4328707 160402089	8411287	17217262	42974001	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1254 Peak 4	Ave	1324168 57457564	2599871 111199232	5366048	11350867	28222925	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1254 Peak 5	Ave	3206008 81822269	4683143 156927513	9149897	17425093	41883526	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 00:12 Calibration End Date: 08/17/2013 01:35 Calibration ID: 16897

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/31	P1100031.D
Level 2	STD005 240-97817/32	P1100032.D
Level 3	STD01 240-97817/33	P1100033.D
Level 4	STD02 240-97817/34	P1100034.D
Level 5	STD05 240-97817/35	P1100035.D
Level 6	STD1 240-97817/36	P1100036.D
Level 7	STD2 240-97817/37	P1100037.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1016 Peak 1	2.222	2.221	2.221	2.221	2.220	2.220	2.220				2.170 - 2.270	2.221
PCB-1016 Peak 2	2.547	2.545	2.544	2.545	2.545	2.544	2.544				2.495 - 2.595	2.545
PCB-1016 Peak 3	2.969	2.969	2.969	2.969	2.969	2.968	2.969				2.919 - 3.019	2.969
PCB-1016 Peak 4	3.093	3.093	3.093	3.093	3.092	3.092	3.092				3.042 - 3.142	3.093
PCB-1016 Peak 5	3.475	3.474	3.473	3.473	3.473	3.473	3.473				3.423 - 3.523	3.473
PCB-1260 Peak 1	4.634	4.634	4.633	4.631	4.631	4.632	4.630				4.581 - 4.681	4.632
PCB-1260 Peak 2	4.943	4.944	4.943	4.941	4.940	4.940	4.940				4.890 - 4.990	4.942
PCB-1260 Peak 3	5.361	5.361	5.360	5.360	5.359	5.359	5.358				5.309 - 5.409	5.360
PCB-1260 Peak 4	5.919	5.919	5.919	5.917	5.917	5.917	5.915				5.867 - 5.967	5.918
PCB-1260 Peak 5	6.184	6.185	6.185	6.184	6.184	6.183	6.181				6.134 - 6.234	6.184
Tetrachloro-m-xylene	1.896	1.897	1.897	1.896	1.896	1.896	1.896				1.846 - 1.946	1.896
Decachlorobiphenyl	7.160	7.162	7.160	7.160	7.160	7.159	7.159				7.110 - 7.210	7.160

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 00:12 Calibration End Date: 08/17/2013 01:35 Calibration ID: 16897

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/31	P1100031.D
Level 2	STD005 240-97817/32	P1100032.D
Level 3	STD01 240-97817/33	P1100033.D
Level 4	STD02 240-97817/34	P1100034.D
Level 5	STD05 240-97817/35	P1100035.D
Level 6	STD1 240-97817/36	P1100036.D
Level 7	STD2 240-97817/37	P1100037.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1016 Peak 1	17073240 15146596	16800000 14874811	16024270 14710106	15625445	Ave		15750638.3				5.9		20.0			
PCB-1016 Peak 2	31646880 28116388	32235080 28014544	30396600 27148019	28956430	Ave		29501991.6				6.6		20.0			
PCB-1016 Peak 3	65421400 59647074	67857600 61481098	62361910 60741704	60034470	Ave		62506465.1				4.9		20.0			
PCB-1016 Peak 4	23637200 25139876	23578980 25587175	25755690 25359624	25667455	Ave		24960857.1				3.8		20.0			
PCB-1016 Peak 5	35752280 25741614	28434940 26290921	27412820 25954302	25960780	Ave		27935379.6				13.0		20.0			
PCB-1260 Peak 1	47291760 44587418	47408700 44979585	46661150 44411239	43753000	Ave		45584693.1				3.3		20.0			
PCB-1260 Peak 2	98773760 98408260	101151240 100357592	99617700 99632422	96851400	Ave		99256053.4				1.4		20.0			
PCB-1260 Peak 3	52164320 54299130	49062460 55711829	54098240 56059439	53376480	Ave		53538842.6				4.4		20.0			
PCB-1260 Peak 4	109500400 124041548	113908620 127091347	116115240 129683082	118106665	Ave		119778129				6.2		20.0			
PCB-1260 Peak 5	44718240 47619432	45916720 50237078	43239930 53154750	43303850	Ave		46884285.6				7.9		20.0			
Tetrachloro-m-xylene	689170400 895466520	1097654800 863021240	906346600 638779100	894662600	Ave		855014466				18.0		20.0			
Decachlorobiphenyl	1091779200 933248320	1133913600 960020220	904029600 963885670	918352300	Ave		986461273				9.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 00:12 Calibration End Date: 08/17/2013 01:35 Calibration ID: 16897

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/31	P1100031.D
Level 2	STD005 240-97817/32	P1100032.D
Level 3	STD01 240-97817/33	P1100033.D
Level 4	STD02 240-97817/34	P1100034.D
Level 5	STD05 240-97817/35	P1100035.D
Level 6	STD1 240-97817/36	P1100036.D
Level 7	STD2 240-97817/37	P1100037.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	426831 14874811	840000 29420212	1602427	3125089	7573298	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1016 Peak 2	Ave	791172 28014544	1611754 54296038	3039660	5791286	14058194	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1016 Peak 3	Ave	1635535 61481098	3392880 121483407	6236191	12006894	29823537	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1016 Peak 4	Ave	590930 25587175	1178949 50719248	2575569	5133491	12569938	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1016 Peak 5	Ave	893807 26290921	1421747 51908604	2741282	5192156	12870807	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1260 Peak 1	Ave	1182294 44979585	2370435 88822477	4666115	8750600	22293709	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1260 Peak 2	Ave	2469344 100357592	5057562 199264844	9961770	19370280	49204130	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1260 Peak 3	Ave	1304108 55711829	2453123 112118878	5409824	10675296	27149565	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1260 Peak 4	Ave	2737510 127091347	5695431 259366163	11611524	23621333	62020774	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1260 Peak 5	Ave	1117956 50237078	2295836 106309499	4323993	8660770	23809716	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
Tetrachloro-m-xylene	Ave	861463 43151062	2744137 63877910	4531733	8946626	22386663	0.00125 0.0500	0.00250 0.100	0.00500	0.0100	0.0250
Decachlorobiphenyl	Ave	1364724 48001011	2834784 96388567	4520148	9183523	23331208	0.00125 0.0500	0.00250 0.100	0.00500	0.0100	0.0250

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 00:12 Calibration End Date: 08/17/2013 01:35 Calibration ID: 16898

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/31	P1100031.D
Level 2	STD005 240-97817/32	P1100032.D
Level 3	STD01 240-97817/33	P1100033.D
Level 4	STD02 240-97817/34	P1100034.D
Level 5	STD05 240-97817/35	P1100035.D
Level 6	STD1 240-97817/36	P1100036.D
Level 7	STD2 240-97817/37	P1100037.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1016 Peak 1	2.968	2.968	2.967	2.969	2.968	2.966	2.967				2.918 - 3.018	2.968
PCB-1016 Peak 2	3.377	3.378	3.375	3.379	3.377	3.376	3.377				3.327 - 3.427	3.377
PCB-1016 Peak 3	3.828	3.826	3.826	3.828	3.827	3.825	3.827				3.777 - 3.877	3.827
PCB-1016 Peak 4	3.961	3.961	3.961	3.962	3.961	3.960	3.960				3.911 - 4.011	3.961
PCB-1016 Peak 5	4.159	4.158	4.156	4.158	4.158	4.156	4.157				4.108 - 4.208	4.157
PCB-1260 Peak 1	5.789	5.789	5.790	5.790	5.788	5.788	5.788				5.738 - 5.838	5.789
PCB-1260 Peak 2	5.995	5.997	5.997	5.996	5.994	5.994	5.994				5.944 - 6.044	5.995
PCB-1260 Peak 3	6.339	6.339	6.340	6.341	6.338	6.339	6.339				6.288 - 6.388	6.339
PCB-1260 Peak 4	6.919	6.919	6.920	6.920	6.918	6.918	6.918				6.868 - 6.968	6.919
PCB-1260 Peak 5	7.243	7.240	7.242	7.241	7.240	7.239	7.239				7.190 - 7.290	7.241
Tetrachloro-m-xylene	2.458	2.458	2.457	2.459	2.458	2.457	2.458				2.408 - 2.508	2.458
Decachlorobiphenyl	8.255	8.253	8.255	8.255	8.253	8.252	8.252				8.203 - 8.303	8.254

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 00:12 Calibration End Date: 08/17/2013 01:35 Calibration ID: 16898

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/31	P1100031.D
Level 2	STD005 240-97817/32	P1100032.D
Level 3	STD01 240-97817/33	P1100033.D
Level 4	STD02 240-97817/34	P1100034.D
Level 5	STD05 240-97817/35	P1100035.D
Level 6	STD1 240-97817/36	P1100036.D
Level 7	STD2 240-97817/37	P1100037.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1016 Peak 1	23860960 20368268	23858160 20414302	22859850 18745944	21018490	Ave		21589424.9				9.1		20.0			
PCB-1016 Peak 2	53502480 39870438	50986580 38089613	48085800 37816037	43854600	Ave		44600792.6				14.0		20.0			
PCB-1016 Peak 3	99615160 86051692	99586340 84729250	95654100 83883064	89708860	Ave		91318352.2				7.5		20.0			
PCB-1016 Peak 4	42893440 36154634	42755880 34319773	42444080 35086621	39381080	Ave		39005072.6				9.7		20.0			
PCB-1016 Peak 5	22971960 18152384	22642360 18582119	22217720 17388362	20173915	Ave		20304117.1				11.0		20.0			
PCB-1260 Peak 1	71383680 63844472	74779760 63188784	69190330 61187214	65761525	Ave		67047966.4				7.3		20.0			
PCB-1260 Peak 2	95357040 78860120	90283100 83346179	85360170 79214916	81331015	Ave		84821791.4				7.2		20.0			
PCB-1260 Peak 3	161255120 111903940	138611180 117113030	125765010 113508768	113960165	Ave		126016745				14.0		20.0			
PCB-1260 Peak 4	142853000 145124842	159527600 146345616	153235650 147292444	140039495	Ave		147774092				4.5		20.0			
PCB-1260 Peak 5	101815280 94323462	108177860 96872571	100653750 97436101	91297395	Ave		98653774.1				5.6		20.0			
Tetrachloro-m-xylene	1564636800 1256427960	1561681600 1306223900	1305361800 1237883420	1273589700	Ave		1357972169				10.0		20.0			
Decachlorobiphenyl	1670880000 1242131800	1620198400 1243629100	1273987000 1225529640	1263764500	Ave		1362874349				14.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27894-1 Analy Batch No.: 97817

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 00:12 Calibration End Date: 08/17/2013 01:35 Calibration ID: 16898

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-97817/31	P1100031.D
Level 2	STD005 240-97817/32	P1100032.D
Level 3	STD01 240-97817/33	P1100033.D
Level 4	STD02 240-97817/34	P1100034.D
Level 5	STD05 240-97817/35	P1100035.D
Level 6	STD1 240-97817/36	P1100036.D
Level 7	STD2 240-97817/37	P1100037.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	596524 20414302	1192908 37491888	2285985	4203698	10184134	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1016 Peak 2	Ave	1337562 38089613	2549329 75632074	4808580	8770920	19935219	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1016 Peak 3	Ave	2490379 84729250	4979317 167766127	9565410	17941772	43025846	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1016 Peak 4	Ave	1072336 34319773	2137794 70173242	4244408	7876216	18077317	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1016 Peak 5	Ave	574299 18582119	1132118 34776724	2221772	4034783	9076192	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1260 Peak 1	Ave	1784592 63188784	3738988 122374427	6919033	13152305	31922236	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1260 Peak 2	Ave	2383926 83346179	4514155 158429831	8536017	16266203	39430060	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1260 Peak 3	Ave	4031378 117113030	6930559 227017536	12576501	22792033	55951970	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1260 Peak 4	Ave	3571325 146345616	7976380 294584887	15323565	28007899	72562421	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
PCB-1260 Peak 5	Ave	2545382 96872571	5408893 194872201	10065375	18259479	47161731	0.0250 1.00	0.0500 2.00	0.100	0.200	0.500
Tetrachloro-m-xylene	Ave	1955796 65311195	3904204 123788342	6526809	12735897	31410699	0.00125 0.0500	0.00250 0.100	0.00500	0.0100	0.0250
Decachlorobiphenyl	Ave	2088600 62181455	4050496 122552964	6369935	12637645	31053295	0.00125 0.0500	0.00250 0.100	0.00500	0.0100	0.0250

Curve Type Legend:
Ave = Average

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-97817/52 Calibration Date: 08/17/2013 05:06

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100052.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15750638	15619209		0.992	1.00	-0.8	20.0
PCB-1016 Peak 2	Ave	29501992	29592482		1.00	1.00	0.3	20.0
PCB-1016 Peak 3	Ave	62506465	64407187		1.03	1.00	3.0	20.0
PCB-1016 Peak 4	Ave	24960857	27113031		1.09	1.00	8.6	20.0
PCB-1016 Peak 5	Ave	27935380	27667858		0.990	1.00	-1.0	20.0
PCB-1260 Peak 1	Ave	45584693	46129663		1.01	1.00	1.2	20.0
PCB-1260 Peak 2	Ave	99256053	103156314		1.04	1.00	3.9	20.0
PCB-1260 Peak 3	Ave	53538843	66705953		1.25	1.00	24.6*	20.0
PCB-1260 Peak 4	Ave	119778129	152034782		1.27	1.00	26.9*	20.0
PCB-1260 Peak 5	Ave	46884286	55873734		1.19	1.00	19.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-97817/52 Calibration Date: 08/17/2013 05:06

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100052.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.22	2.17	2.27
PCB-1016 Peak 2	2.55	2.50	2.60
PCB-1016 Peak 3	2.97	2.92	3.02
PCB-1016 Peak 4	3.09	3.04	3.14
PCB-1016 Peak 5	3.47	3.42	3.52
PCB-1260 Peak 1	4.63	4.58	4.68
PCB-1260 Peak 2	4.94	4.89	4.99
PCB-1260 Peak 3	5.36	5.31	5.41
PCB-1260 Peak 4	5.92	5.87	5.97
PCB-1260 Peak 5	6.18	6.13	6.23

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-97817/52 Calibration Date: 08/17/2013 05:06

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100052.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21589425	20854338		0.966	1.00	-3.4	20.0
PCB-1016 Peak 2	Ave	44600793	40303862		0.904	1.00	-9.6	20.0
PCB-1016 Peak 3	Ave	91318352	89397932		0.979	1.00	-2.1	20.0
PCB-1016 Peak 4	Ave	39005073	37261453		0.955	1.00	-4.5	20.0
PCB-1016 Peak 5	Ave	20304117	18222127		0.897	1.00	-10.3	20.0
PCB-1260 Peak 1	Ave	67047966	60218810		0.898	1.00	-10.2	20.0
PCB-1260 Peak 2	Ave	84821791	82058636		0.967	1.00	-3.3	20.0
PCB-1260 Peak 3	Ave	126016745	107426411		0.852	1.00	-14.8	20.0
PCB-1260 Peak 4	Ave	147774092	172387764		1.17	1.00	16.7	20.0
PCB-1260 Peak 5	Ave	98653774	107148770		1.09	1.00	8.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICV 240-97817/52 Calibration Date: 08/17/2013 05:06

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100052.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.97	2.92	3.02
PCB-1016 Peak 2	3.38	3.33	3.43
PCB-1016 Peak 3	3.83	3.78	3.88
PCB-1016 Peak 4	3.96	3.91	4.01
PCB-1016 Peak 5	4.16	4.11	4.21
PCB-1260 Peak 1	5.79	5.74	5.84
PCB-1260 Peak 2	6.00	5.94	6.04
PCB-1260 Peak 3	6.34	6.29	6.39
PCB-1260 Peak 4	6.92	6.87	6.97
PCB-1260 Peak 5	7.24	7.19	7.29

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A2HP11 Start Date: 08/28/2013 01:26

Analysis Batch Number: 99249 End Date: 08/28/2013 06:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-99249/3 CCVRT		08/28/2013 01:26	1	P1100003.D	CLP-1 0.53(mm)
CCV 240-99249/3 CCVRT		08/28/2013 01:26	1	P1100003.D	CLP-2 0.53(mm)
ZZZZZ		08/28/2013 05:33	2		CLP-1 0.53(mm)
ZZZZZ		08/28/2013 05:33	2		CLP-2 0.53(mm)
240-27894-2	DR-TP-A76-11	08/28/2013 05:47	5	P1100018.D	CLP-1 0.53(mm)
240-27894-2	DR-TP-A76-11	08/28/2013 05:47	5	P1100018.D	CLP-2 0.53(mm)
240-27894-4	DR-TP-A82-03	08/28/2013 06:01	5	P1100019.D	CLP-1 0.53(mm)
240-27894-4	DR-TP-A82-03	08/28/2013 06:01	5	P1100019.D	CLP-2 0.53(mm)
240-27894-5	DR-TP-A82-03	08/28/2013 06:15	1	P1100020.D	CLP-1 0.53(mm)
240-27894-5	DR-TP-A82-03	08/28/2013 06:15	1	P1100020.D	CLP-2 0.53(mm)
MB 240-98905/8-A		08/28/2013 06:30	1	P1100021.D	CLP-1 0.53(mm)
MB 240-98905/8-A		08/28/2013 06:30	1	P1100021.D	CLP-2 0.53(mm)
LCS 240-98905/9-A		08/28/2013 06:44	1	P1100022.D	CLP-1 0.53(mm)
LCS 240-98905/9-A		08/28/2013 06:44	1	P1100022.D	CLP-2 0.53(mm)
CCV 240-99249/23		08/28/2013 06:59	1	P1100023.D	CLP-1 0.53(mm)
CCV 240-99249/23		08/28/2013 06:59	1	P1100023.D	CLP-2 0.53(mm)

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: CCV 240-99249/3 Date Analyzed: 08/28/2013 01:26

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P1100003.D Heated Purge: (Y/N) N

Calibration ID: 16897

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.90	7.16	
UPPER LIMIT				2.00	7.26	
LOWER LIMIT				1.80	7.06	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-99249/3 CCVRT		08/28/2013 01:26	P1100003.D	1.90	7.16	
240-27894-2	DR-TP-A76-11	08/28/2013 05:47	P1100018.D	1.90		
240-27894-4	DR-TP-A82-03	08/28/2013 06:01	P1100019.D	1.90	7.16	
240-27894-5	DR-TP-A82-03	08/28/2013 06:15	P1100020.D	1.90	7.16	
MB 240-98905/8-A		08/28/2013 06:30	P1100021.D	1.90	7.16	
LCS 240-98905/9-A		08/28/2013 06:44	P1100022.D	1.90	7.16	
CCV 240-99249/23		08/28/2013 06:59	P1100023.D	1.90	7.16	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: CCV 240-99249/3 Date Analyzed: 08/28/2013 01:26

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1100003.D Heated Purge: (Y/N) N

Calibration ID: 16898

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				2.46	8.26	
UPPER LIMIT				2.56	8.36	
LOWER LIMIT				2.36	8.16	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-99249/3 CCVRT		08/28/2013 01:26	P1100003.D	2.46	8.26	
240-27894-2	DR-TP-A76-11	08/28/2013 05:47	P1100018.D	2.46		
240-27894-4	DR-TP-A82-03	08/28/2013 06:01	P1100019.D	2.46	8.26	
240-27894-5	DR-TP-A82-03	08/28/2013 06:15	P1100020.D	2.46	8.25	
MB 240-98905/8-A		08/28/2013 06:30	P1100021.D	2.46	8.26	
LCS 240-98905/9-A		08/28/2013 06:44	P1100022.D	2.46	8.26	
CCV 240-99249/23		08/28/2013 06:59	P1100023.D	2.46	8.26	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99249/3 Calibration Date: 08/28/2013 01:26

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15750638	17328948		0.550	0.500	10.0	20.0
PCB-1016 Peak 2	Ave	29501992	31624756		0.536	0.500	7.2	20.0
PCB-1016 Peak 3	Ave	62506465	69800544		0.558	0.500	11.7	20.0
PCB-1016 Peak 4	Ave	24960857	28799170		0.577	0.500	15.4	20.0
PCB-1016 Peak 5	Ave	27935380	29322914		0.525	0.500	5.0	20.0
PCB-1260 Peak 1	Ave	45584693	50446158		0.553	0.500	10.7	20.0
PCB-1260 Peak 2	Ave	99256053	112679192		0.568	0.500	13.5	20.0
PCB-1260 Peak 3	Ave	53538843	61297454		0.572	0.500	14.5	20.0
PCB-1260 Peak 4	Ave	119778129	141328832		0.590	0.500	18.0	20.0
PCB-1260 Peak 5	Ave	46884286	58627362		0.625	0.500	25.0*	20.0
Tetrachloro-m-xylene	Ave	855014466	696382640		0.0204	0.0250	-18.6	20.0
Decachlorobiphenyl	Ave	986461273	1009738720		0.0256	0.0250	2.4	20.0

Aroclor-1260
Avg %D
16.34

FORM VII 8082A

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99249/3 Calibration Date: 08/28/2013 01:26

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100003.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.22	2.17	2.27
PCB-1016 Peak 2	2.54	2.49	2.59
PCB-1016 Peak 3	2.97	2.92	3.02
PCB-1016 Peak 4	3.09	3.04	3.14
PCB-1016 Peak 5	3.47	3.42	3.52
PCB-1260 Peak 1	4.63	4.58	4.68
PCB-1260 Peak 2	4.94	4.89	4.99
PCB-1260 Peak 3	5.36	5.31	5.41
PCB-1260 Peak 4	5.92	5.87	5.97
PCB-1260 Peak 5	6.18	6.13	6.23
Tetrachloro-m-xylene	1.90	1.85	1.95
Decachlorobiphenyl	7.16	7.11	7.21

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99249/3 Calibration Date: 08/28/2013 01:26

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21589425	20343414		0.471	0.500	-5.8	20.0
PCB-1016 Peak 2	Ave	44600793	39986878		0.448	0.500	-10.3	20.0
PCB-1016 Peak 3	Ave	91318352	89843776		0.492	0.500	-1.6	20.0
PCB-1016 Peak 4	Ave	39005073	38034108		0.488	0.500	-2.5	20.0
PCB-1016 Peak 5	Ave	20304117	19167822		0.472	0.500	-5.6	20.0
PCB-1260 Peak 1	Ave	67047966	64658348		0.482	0.500	-3.6	20.0
PCB-1260 Peak 2	Ave	84821791	82312300		0.485	0.500	-3.0	20.0
PCB-1260 Peak 3	Ave	126016745	116548280		0.462	0.500	-7.5	20.0
PCB-1260 Peak 4	Ave	147774092	146037022		0.494	0.500	-1.2	20.0
PCB-1260 Peak 5	Ave	98653774	96188164		0.488	0.500	-2.5	20.0
Tetrachloro-m-xylene	Ave	1357972169	1271207560		0.0234	0.0250	-6.4	20.0
Decachlorobiphenyl	Ave	1362874349	1243017880		0.0228	0.0250	-8.8	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99249/3 Calibration Date: 08/28/2013 01:26

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100003.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.97	2.92	3.02
PCB-1016 Peak 2	3.38	3.33	3.43
PCB-1016 Peak 3	3.83	3.78	3.88
PCB-1016 Peak 4	3.97	3.92	4.02
PCB-1016 Peak 5	4.16	4.11	4.21
PCB-1260 Peak 1	5.79	5.74	5.84
PCB-1260 Peak 2	6.00	5.95	6.05
PCB-1260 Peak 3	6.34	6.29	6.39
PCB-1260 Peak 4	6.92	6.87	6.97
PCB-1260 Peak 5	7.25	7.20	7.30
Tetrachloro-m-xylene	2.46	2.41	2.51
Decachlorobiphenyl	8.26	8.21	8.31

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99249/23 Calibration Date: 08/28/2013 06:59

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100023.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15750638	17182270		0.545	0.500	9.1	20.0
PCB-1016 Peak 2	Ave	29501992	31778140		0.539	0.500	7.7	20.0
PCB-1016 Peak 3	Ave	62506465	70678252		0.565	0.500	13.1	20.0
PCB-1016 Peak 4	Ave	24960857	29201788		0.585	0.500	17.0	20.0
PCB-1016 Peak 5	Ave	27935380	29620366		0.530	0.500	6.0	20.0
PCB-1260 Peak 1	Ave	45584693	50784652		0.557	0.500	11.4	20.0
PCB-1260 Peak 2	Ave	99256053	113387616		0.571	0.500	14.2	20.0
PCB-1260 Peak 3	Ave	53538843	62097360		0.580	0.500	16.0	20.0
PCB-1260 Peak 4	Ave	119778129	142110906		0.593	0.500	18.6	20.0
PCB-1260 Peak 5	Ave	46884286	52845610		0.564	0.500	12.7	20.0
Tetrachloro-m-xylene	Ave	855014466	933712200		0.0273	0.0250	9.2	20.0
Decachlorobiphenyl	Ave	986461273	1009667720		0.0256	0.0250	2.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99249/23 Calibration Date: 08/28/2013 06:59

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100023.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.22	2.17	2.27
PCB-1016 Peak 2	2.55	2.50	2.60
PCB-1016 Peak 3	2.97	2.92	3.02
PCB-1016 Peak 4	3.09	3.04	3.14
PCB-1016 Peak 5	3.47	3.42	3.52
PCB-1260 Peak 1	4.63	4.58	4.68
PCB-1260 Peak 2	4.94	4.89	4.99
PCB-1260 Peak 3	5.36	5.31	5.41
PCB-1260 Peak 4	5.92	5.87	5.97
PCB-1260 Peak 5	6.18	6.13	6.23
Tetrachloro-m-xylene	1.90	1.85	1.95
Decachlorobiphenyl	7.16	7.11	7.21

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99249/23 Calibration Date: 08/28/2013 06:59

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100023.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21589425	20688504		0.479	0.500	-4.2	20.0
PCB-1016 Peak 2	Ave	44600793	40621298		0.455	0.500	-8.9	20.0
PCB-1016 Peak 3	Ave	91318352	91881684		0.503	0.500	0.6	20.0
PCB-1016 Peak 4	Ave	39005073	38716916		0.496	0.500	-0.7	20.0
PCB-1016 Peak 5	Ave	20304117	19304356		0.475	0.500	-4.9	20.0
PCB-1260 Peak 1	Ave	67047966	65496952		0.488	0.500	-2.3	20.0
PCB-1260 Peak 2	Ave	84821791	83489016		0.492	0.500	-1.6	20.0
PCB-1260 Peak 3	Ave	126016745	117320424		0.465	0.500	-6.9	20.0
PCB-1260 Peak 4	Ave	147774092	147801404		0.500	0.500	0.0	20.0
PCB-1260 Peak 5	Ave	98653774	98176720		0.498	0.500	-0.5	20.0
Tetrachloro-m-xylene	Ave	1357972169	1300633640		0.0239	0.0250	-4.2	20.0
Decachlorobiphenyl	Ave	1362874349	1267341480		0.0232	0.0250	-7.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99249/23 Calibration Date: 08/28/2013 06:59

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100023.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.97	2.92	3.02
PCB-1016 Peak 2	3.38	3.33	3.43
PCB-1016 Peak 3	3.83	3.78	3.88
PCB-1016 Peak 4	3.97	3.92	4.02
PCB-1016 Peak 5	4.16	4.11	4.21
PCB-1260 Peak 1	5.79	5.74	5.84
PCB-1260 Peak 2	6.00	5.95	6.05
PCB-1260 Peak 3	6.34	6.29	6.39
PCB-1260 Peak 4	6.92	6.87	6.97
PCB-1260 Peak 5	7.24	7.19	7.29
Tetrachloro-m-xylene	2.46	2.41	2.51
Decachlorobiphenyl	8.26	8.21	8.31

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: A2HP11 Start Date: 08/30/2013 00:07

Analysis Batch Number: 99637 End Date: 08/30/2013 03:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-99637/3		08/30/2013 00:07	1	P1100003.D	CLP-1 0.53(mm)
CCVRT 240-99637/3		08/30/2013 00:07	1	P1100003.D	CLP-2 0.53(mm)
240-27894-1	DR-TP-A76-10	08/30/2013 03:30	1	P1100004.D	CLP-1 0.53(mm)
240-27894-1	DR-TP-A76-10	08/30/2013 03:30	1	P1100004.D	CLP-2 0.53(mm)
CCV 240-99637/6		08/30/2013 03:58	1	P1100006.D	CLP-1 0.53(mm)
CCV 240-99637/6		08/30/2013 03:58	1	P1100006.D	CLP-2 0.53(mm)

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: CCVRT 240-99637/3 Date Analyzed: 08/30/2013 00:07

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P1100003.D Heated Purge: (Y/N) N

Calibration ID: 16897

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.90	7.16	
UPPER LIMIT				2.00	7.26	
LOWER LIMIT				1.80	7.06	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-99637/3		08/30/2013 00:07	P1100003.D	1.90	7.16	
240-27894-1	DR-TP-A76-10	08/30/2013 03:30	P1100004.D	1.90	7.19	
CCV 240-99637/6		08/30/2013 03:58	P1100006.D	1.90	7.16	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Sample No.: CCVRT 240-99637/3 Date Analyzed: 08/30/2013 00:07

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1100003.D Heated Purge: (Y/N) N

Calibration ID: 16898

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				2.46	8.26	
UPPER LIMIT				2.56	8.36	
LOWER LIMIT				2.36	8.16	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-99637/3		08/30/2013 00:07	P1100003.D	2.46	8.26	
240-27894-1	DR-TP-A76-10	08/30/2013 03:30	P1100004.D	2.46	8.25	
CCV 240-99637/6		08/30/2013 03:58	P1100006.D	2.46	8.26	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVRT 240-99637/3 Calibration Date: 08/30/2013 00:07

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15750638	15309720		0.486	0.500	-2.8	20.0
PCB-1016 Peak 2	Ave	29501992	28630008		0.485	0.500	-3.0	20.0
PCB-1016 Peak 3	Ave	62506465	62854782		0.503	0.500	0.6	20.0
PCB-1016 Peak 4	Ave	24960857	26101034		0.523	0.500	4.6	20.0
PCB-1016 Peak 5	Ave	27935380	27970780		0.501	0.500	0.1	20.0
PCB-1260 Peak 1	Ave	45584693	45489588		0.499	0.500	-0.2	20.0
PCB-1260 Peak 2	Ave	99256053	101366510		0.511	0.500	2.1	20.0
PCB-1260 Peak 3	Ave	53538843	55665888		0.520	0.500	4.0	20.0
PCB-1260 Peak 4	Ave	119778129	125811552		0.525	0.500	5.0	20.0
PCB-1260 Peak 5	Ave	46884286	49460302		0.527	0.500	5.5	20.0
Tetrachloro-m-xylene	Ave	855014466	662573200		0.0194	0.0250	-22.5*	20.0
Decachlorobiphenyl	Ave	986461273	911124040		0.0231	0.0250	-7.6	20.0

FORM VII 8082A

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVRT 240-99637/3 Calibration Date: 08/30/2013 00:07

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100003.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.22	2.17	2.27
PCB-1016 Peak 2	2.55	2.50	2.60
PCB-1016 Peak 3	2.97	2.92	3.02
PCB-1016 Peak 4	3.09	3.04	3.14
PCB-1016 Peak 5	3.47	3.42	3.52
PCB-1260 Peak 1	4.63	4.58	4.68
PCB-1260 Peak 2	4.94	4.89	4.99
PCB-1260 Peak 3	5.36	5.31	5.41
PCB-1260 Peak 4	5.92	5.87	5.97
PCB-1260 Peak 5	6.18	6.13	6.23
Tetrachloro-m-xylene	1.90	1.85	1.95
Decachlorobiphenyl	7.16	7.11	7.21

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVRT 240-99637/3 Calibration Date: 08/30/2013 00:07

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21589425	19609480		0.454	0.500	-9.2	20.0
PCB-1016 Peak 2	Ave	44600793	38493462		0.432	0.500	-13.7	20.0
PCB-1016 Peak 3	Ave	91318352	86450208		0.473	0.500	-5.3	20.0
PCB-1016 Peak 4	Ave	39005073	36677324		0.470	0.500	-6.0	20.0
PCB-1016 Peak 5	Ave	20304117	18308320		0.451	0.500	-9.8	20.0
PCB-1260 Peak 1	Ave	67047966	62901842		0.469	0.500	-6.2	20.0
PCB-1260 Peak 2	Ave	84821791	79586158		0.469	0.500	-6.2	20.0
PCB-1260 Peak 3	Ave	126016745	111608706		0.443	0.500	-11.4	20.0
PCB-1260 Peak 4	Ave	147774092	138161624		0.467	0.500	-6.5	20.0
PCB-1260 Peak 5	Ave	98653774	95363322		0.483	0.500	-3.3	20.0
Tetrachloro-m-xylene	Ave	1357972169	1227277560		0.0226	0.0250	-9.6	20.0
Decachlorobiphenyl	Ave	1362874349	1174339000		0.0215	0.0250	-13.8	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCVRT 240-99637/3 Calibration Date: 08/30/2013 00:07

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100003.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.97	2.92	3.02
PCB-1016 Peak 2	3.38	3.33	3.43
PCB-1016 Peak 3	3.83	3.78	3.88
PCB-1016 Peak 4	3.97	3.92	4.02
PCB-1016 Peak 5	4.16	4.11	4.21
PCB-1260 Peak 1	5.79	5.74	5.84
PCB-1260 Peak 2	6.00	5.95	6.05
PCB-1260 Peak 3	6.34	6.29	6.39
PCB-1260 Peak 4	6.92	6.87	6.97
PCB-1260 Peak 5	7.24	7.19	7.29
Tetrachloro-m-xylene	2.46	2.41	2.51
Decachlorobiphenyl	8.26	8.21	8.31

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99637/6 Calibration Date: 08/30/2013 03:58

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100006.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15750638	15879558		0.504	0.500	0.8	20.0
PCB-1016 Peak 2	Ave	29501992	29430862		0.499	0.500	-0.2	20.0
PCB-1016 Peak 3	Ave	62506465	64995540		0.520	0.500	4.0	20.0
PCB-1016 Peak 4	Ave	24960857	26708332		0.535	0.500	7.0	20.0
PCB-1016 Peak 5	Ave	27935380	27465962		0.492	0.500	-1.7	20.0
PCB-1260 Peak 1	Ave	45584693	46594498		0.511	0.500	2.2	20.0
PCB-1260 Peak 2	Ave	99256053	104274624		0.525	0.500	5.1	20.0
PCB-1260 Peak 3	Ave	53538843	56691620		0.529	0.500	5.9	20.0
PCB-1260 Peak 4	Ave	119778129	128308206		0.536	0.500	7.1	20.0
PCB-1260 Peak 5	Ave	46884286	52662684		0.562	0.500	12.3	20.0
Tetrachloro-m-xylene	Ave	855014466	682594000		0.0200	0.0250	-20.2*	20.0
Decachlorobiphenyl	Ave	986461273	929563600		0.0236	0.0250	-5.8	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99637/6 Calibration Date: 08/30/2013 03:58

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100006.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.22	2.17	2.27
PCB-1016 Peak 2	2.55	2.50	2.60
PCB-1016 Peak 3	2.97	2.92	3.02
PCB-1016 Peak 4	3.09	3.04	3.14
PCB-1016 Peak 5	3.47	3.42	3.52
PCB-1260 Peak 1	4.63	4.58	4.68
PCB-1260 Peak 2	4.94	4.89	4.99
PCB-1260 Peak 3	5.36	5.31	5.41
PCB-1260 Peak 4	5.92	5.87	5.97
PCB-1260 Peak 5	6.18	6.13	6.23
Tetrachloro-m-xylene	1.90	1.85	1.95
Decachlorobiphenyl	7.16	7.11	7.21

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99637/6 Calibration Date: 08/30/2013 03:58

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100006.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21589425	19943418		0.462	0.500	-7.6	20.0
PCB-1016 Peak 2	Ave	44600793	39302630		0.441	0.500	-11.9	20.0
PCB-1016 Peak 3	Ave	91318352	88135376		0.483	0.500	-3.5	20.0
PCB-1016 Peak 4	Ave	39005073	37155228		0.476	0.500	-4.7	20.0
PCB-1016 Peak 5	Ave	20304117	18566158		0.457	0.500	-8.6	20.0
PCB-1260 Peak 1	Ave	67047966	61825496		0.461	0.500	-7.8	20.0
PCB-1260 Peak 2	Ave	84821791	79058410		0.466	0.500	-6.8	20.0
PCB-1260 Peak 3	Ave	126016745	111574130		0.443	0.500	-11.5	20.0
PCB-1260 Peak 4	Ave	147774092	140844862		0.477	0.500	-4.7	20.0
PCB-1260 Peak 5	Ave	98653774	89236050		0.452	0.500	-9.5	20.0
Tetrachloro-m-xylene	Ave	1357972169	1257902840		0.0232	0.0250	-7.4	20.0
Decachlorobiphenyl	Ave	1362874349	1183495520		0.0217	0.0250	-13.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: CCV 240-99637/6 Calibration Date: 08/30/2013 03:58

Instrument ID: A2HP11 Calib Start Date: 08/17/2013 00:12

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 08/17/2013 01:35

Lab File ID: P1100006.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.97	2.92	3.02
PCB-1016 Peak 2	3.38	3.33	3.43
PCB-1016 Peak 3	3.83	3.78	3.88
PCB-1016 Peak 4	3.97	3.92	4.02
PCB-1016 Peak 5	4.16	4.11	4.21
PCB-1260 Peak 1	5.79	5.74	5.84
PCB-1260 Peak 2	6.00	5.95	6.05
PCB-1260 Peak 3	6.34	6.29	6.39
PCB-1260 Peak 4	6.92	6.87	6.97
PCB-1260 Peak 5	7.24	7.19	7.29
Tetrachloro-m-xylene	2.46	2.41	2.51
Decachlorobiphenyl	8.26	8.21	8.31

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: MB 240-98905/8-A

Matrix: Solid Date Extracted: 08/26/2013 10:17

Lab File ID:(1) P1100021.D Lab File ID:(2) P1100021.D

Date Analyzed:(1) 08/28/2013 06:30 Date Analyzed:(2) 08/28/2013 06:30

Instrument ID:(1) A2HP11 Instrument ID:(2) A2HP11

GC Column:(1) CLP-2 ID: 0.53(mm) GC Column:(2) CLP-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
DR-TP-A76-11	240-27894-2	08/28/2013 05:47	08/28/2013 05:47
DR-TP-A82-03	240-27894-4	08/28/2013 06:01	08/28/2013 06:01
DR-TP-A82-03	240-27894-5	08/28/2013 06:15	08/28/2013 06:15
	LCS 240-98905/9-A	08/28/2013 06:44	08/28/2013 06:44
DR-TP-A76-10	240-27894-1	08/30/2013 03:30	08/30/2013 03:30

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98905/8-A

Matrix: Solid Lab File ID: P1100021.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3540C Date Extracted: 08/26/2013 10:17

Sample wt/vol: 30.00(g) Date Analyzed: 08/28/2013 06:30

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 99249 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	55		29-151
2051-24-3	Decachlorobiphenyl	91		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98905/8-A

Matrix: Solid | Lab File ID: P1100021.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3540C | Date Extracted: 08/26/2013 10:17

Sample wt/vol: 30.00(g) | Date Analyzed: 08/28/2013 06:30

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99249 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	33	U	33	21
11104-28-2	Aroclor-1221	33	U	33	16
11141-16-5	Aroclor-1232	33	U	33	14
53469-21-9	Aroclor-1242	33	U	33	13
12672-29-6	Aroclor-1248	33	U	33	17
11097-69-1	Aroclor-1254	33	U	33	17
11096-82-5	Aroclor-1260	33	U	33	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	113		29-151
2051-24-3	Decachlorobiphenyl	82		14-163

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P1100022.D

Lab ID: LCS 240-98905/9-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Aroclor-1016	333	269	81	62-120	
Aroclor-1260	333	272	82	56-122	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A76-10 Lab Sample ID: 240-27894-1

Instrument ID (1): A2HP11 Instrument ID (2): A2HP11

Date Analyzed (1): 08/30/2013 03:30 Date Analyzed (2): 08/30/2013 03:30

GC Column (1): CLP-2 ID: 0.53(mm) GC Column (2): CLP-1 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor-1260	1	1	5.79	5.74	5.84	32.5	39	23.2
		2	6.00	5.95	6.05	43.9		
		3	6.34	6.29	6.39	51.8		
		4	6.92	6.87	6.97	32.8		
		5	7.24	7.19	7.29	32.5		
	2	1	4.64	4.58	4.68	30.8	31	
		2	4.95	4.89	4.99	31.3		
		3	5.37	5.31	5.41	32.4		
		4	5.92	5.87	5.97	31.2		
		5	6.19	6.13	6.23	27.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 Lab Sample ID: 240-27894-4

Instrument ID (1): A2HP11 Instrument ID (2): A2HP11

Date Analyzed (1): 08/28/2013 06:01 Date Analyzed (2): 08/28/2013 06:01

GC Column (1): CLP-2 ID: 0.53(mm) GC Column (2): CLP-1 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor-1248	1	1	3.83	3.78	3.88	412	370	15.9
		2	4.16	4.11	4.21	262		
		3	4.43	4.38	4.48	230		
		4	4.90	4.85	4.95	295		
		5	5.60	5.55	5.65	643		
	2	1	2.97	2.92	3.02	536	430	
		2	3.28	3.22	3.32	211		
		3	3.47	3.42	3.52	296		
		4	4.04	3.99	4.09	406		
		5	4.44	4.39	4.49	711		
Aroclor-1260	1	1	5.79	5.74	5.84	176	150	10.3
		2	6.00	5.95	6.05	146		
		3	6.34	6.29	6.39	181		
		4	6.92	6.87	6.97	121		
		5	7.24	7.20	7.30	120		
	2	1	4.63	4.58	4.68	145	130	
		2	4.94	4.89	4.99	137		
		3	5.36	5.31	5.41	125		
		4	5.91	5.87	5.97	111		
		5	6.18	6.13	6.23	152		

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Batch Number: 98905 Batch Start Date: 08/26/13 13:15 Batch Analyst: Moore, Matthew

Batch Method: 3540C Batch End Date: 08/27/13 05:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EX10PPMSPK 00009	EX2/.2SURRW 00027	AnalysisComment	
MB 240-98905/8		3540C, 8082A		30.00 g	10 mL		1 mL	assoc. w/ 98908	
LCS 240-98905/9		3540C, 8082A		30.00 g	10 mL	1 mL	1 mL		
240-27894-G-1	DR-TP-A76-10	3540C, 8082A	T	30.40 g	10.0 mL		1 mL		
240-27894-G-2	DR-TP-A76-11	3540C, 8082A	T	30.23 g	10.0 mL		1 mL		
240-27894-G-4	DR-TP-A82-03	3540C, 8082A	T	30.14 g	10.0 mL		1 mL		
240-27894-F-5	DR-TP-A82-03	3540C, 8082A	T	30.43 g	10.0 mL		1 mL		

Batch Notes	
Acid used for Clean Up Reagent	1115285
Balance ID	b037
Person's name who did the concentration	se/bm
Exchange Solvent Lot #	1037686
Na2SO4 Lot Number	963860
Prep Solvent Lot #	1131846

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Client Sample ID: DR-TP-A82-03 Lab Sample ID: 240-27894-4

Matrix: Solid Lab File ID: P1100019.D

Analysis Method: 8082A Date Collected: 08/12/2013 14:30

Extraction Method: 3540C Date Extracted: 08/26/2013 15:43

Sample wt/vol: 30.14(g) Date Analyzed: 08/28/2013 06:01

Con. Extract Vol.: 10.0(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 10.5 GPC Cleanup:(Y/N) N

Analysis Batch No.: 99249 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	180	U	180	120
11104-28-2	Aroclor-1221	180	U	180	89
11141-16-5	Aroclor-1232	180	U	180	78
53469-21-9	Aroclor-1242	180	U	180	72
12672-29-6	Aroclor-1248	370		180	95
11097-69-1	Aroclor-1254	180	U	180	95
11096-82-5	Aroclor-1260	150	J	180	95

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	98		29-151
2051-24-3	Decachlorobipheny1	146		14-163

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A2HP11\20130828-22935.b\P1100019.D		
Lims ID:	240-27894-G-4-A	Client ID:	DR-TP-A82-03
Inject. Date:	28-Aug-2013 06:01:57	Dil. Factor:	5.0000
Sample Type:	Client		
Sample ID:	240-0022935-019		
Misc. Info.:			
Operator:		Instrument ID:	A2HP11
Injection Vol:	1.0 uL	ALS Bottle#:	19
Lims Batch ID:	99249	Lims Sample ID:	19
Detector 1 :	GC ECD1A		
Detector 2 :	GC ecd2b		
Method:	\\Ncchrom\ChromData\A2HP11\20130828-22935.b\PCB11.m		
Last Update:	28-Aug-2013 08:47:53	Calib Date:	17-Aug-2013 04:52:43
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A2HP11\20130816-22567.b\P1100051.D		
Limit Group:	GC 8082A ICAL		
Integrator:	Falcon		
Column Type:		Column Dia:	
Process Host:	XAWRK014		

First Level Reviewer: hassl Date: 28-Aug-2013 07:55:19

Det	Sig	RT	EXP RT	DLT RT	Response	On-Col Amt ng/ul	Ratio Range	Ratio	Flags
$ 2 Tetrachloro-m-xylene									
1	44	1.897	1.896	0.001	5959191	0.006970			
2	2	2.464	2.461	0.003	5325870	0.003922			
						RPD = 55.97			
3 PCB-1221									
1	2		2.054						
1	3		2.184						
1	4		2.220						
2	4		2.768						
2	5		2.911						
2	6		2.973						
5 PCB-1242									
1	100		2.221						
1	2		2.546						
1	3		2.970						
1	4		3.093						
1	5		3.149						
2	6		2.972						
2	7		3.382						
2	8		3.832						
2	9		3.966						
2	10		4.428						

Det	Sig	RT	EXP RT	DLT RT	Response	On-Col Amt ng/ul	Ratio Range	Ratio	Flags
4 PCB-1232									
1	100		2.221						
1	2		2.545						
1	3		2.969						
1	4		3.092						
1	5		3.149						
2	6		2.972						
2	7		3.382						
2	8		3.832						
2	9		3.966						
2	10		4.427						
6 PCB-1016									
1	100		2.220						
1	2		2.544						
1	3		2.969						
1	4		3.092						
1	5		3.473						
2	6		2.971						
2	7		3.382						
2	8		3.831						
2	9		3.966						
2	10		4.162						
7 PCB-1248									
1	86	2.970	2.967	0.003	9051444	0.2891		100.0	
1	2	3.281	3.273	0.008	4114866	0.1137	89.0- 139.0	45.5	
1	3	3.474	3.473	0.001	5900195	0.1599	87.2- 137.2	65.2	
1	4	4.035	4.036	-0.001	3375882	0.2190	25.6- 75.6	37.3	
1	5	4.443	4.443	0.000	6398656	0.3838	27.3- 77.3	70.7	
			Average of Peak Amounts =			0.2331			
2	6	3.833	3.828	0.005	10665519	0.2223		100.0	
2	7	4.163	4.162	0.001	4248777	0.1414	30.8- 90.8	39.8	
2	8	4.428	4.428	0.000	5008514	0.1243	53.7- 113.7	47.0	
2	9	4.896	4.898	-0.002	8564284	0.1589	84.1- 144.1	80.3	
2	10	5.596	5.597	-0.001	9078556	0.3467	26.6- 86.6	85.1	
			Average of Peak Amounts =			(0.1987)			
						RPD = 15.93			
8 PCB-1254									
1	100		3.827						
1	2		4.073						
1	3		4.444						
1	4		4.737						
1	5		5.239						
2	6		4.892						
2	7		5.104						
2	8		5.597						
2	9		5.827						
2	10		6.344						

$$\frac{0.1987 \times 10ml \times 5dil \times 1000ug}{30.14 \times 1ml \times 0.895 \times 1Kg} = 365\ ug/Kg$$

Aroclor-1248

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-27894-1

SDG No.:

Project: Dump Road Test Pits

Client Sample ID	Lab Sample ID
DR-TP-A76-10	240-27894-1
DR-TP-A76-11	240-27894-2
DR-TP-A82-03	240-27894-4
DR-TP-A82-03	240-27894-5

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

ICV Source: MT6500ICV_00012 Concentration Units: ug/L

CCV Source: MTICPCCV_00005

Analyte	ICV 240-98850/4 08/23/2013 13:01				CCV 240-98850/18 08/23/2013 13:57				CCV 240-98850/30 08/23/2013 14:45			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	380		375	101	514		500	103	518		500	104
Arsenic	383		375	102	517		500	103	520		500	104
Barium	1520		1500	101	2020		2000	101	2020		2000	101
Beryllium	1530		1500	102	2000		2000	100	2020		2000	101
Cadmium	377		375	101	510		500	102	512		500	102
Chromium	1510		1500	101	2030		2000	101	2040		2000	102
Cobalt	1480		1500	99	2040		2000	102	2050		2000	103
Copper	1510		1500	101	2030		2000	101	2030		2000	101
Lead	370		375	99	496		500	99	499		500	100
Molybdenum	1500		1500	100	2060		2000	103	2080		2000	104
Nickel	1500		1500	100	2020		2000	101	2030		2000	102
Selenium	376		375	100	511		500	102	513		500	103
Silver	772		750	103	1030		1000	103	1040		1000	104
Thallium	746		750	99	1020		1000	102	1030		1000	103
Vanadium	1530		1500	102	2050		2000	103	2070		2000	103
Zinc	1510		1500	101	2070		2000	104	2090		2000	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

ICV Source: MT6500ICV_00012 Concentration Units: ug/L

CCV Source: MTICPCCV_00005

Analyte	CCV 240-98850/54 08/23/2013 16:26				CCV 240-98850/66 08/23/2013 17:15							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	539		500	108	521		500	104				
Arsenic	543		500	109	527		500	105				
Barium	2060		2000	103	2030		2000	102				
Beryllium	2060		2000	103	2040		2000	102				
Cadmium	534		500	107	518		500	104				
Chromium	2120		2000	106	2080		2000	104				
Cobalt	2150		2000	107	2080		2000	104				
Copper	2110		2000	105	2070		2000	103				
Lead	520		500	104	505		500	101				
Molybdenum	2170		2000	109	2110		2000	106				
Nickel	2120		2000	106	2060		2000	103				
Selenium	532		500	106	517		500	103				
Silver	1080		1000	108	1060		1000	106				
Thallium	1070		1000	107	1040		1000	104				
Vanadium	2130		2000	107	2110		2000	106				
Zinc	2180		2000	109	2120		2000	106				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00444

Analyte	ICV 240-97952/8-A 08/19/2013 10:01				CCV 240-97952/13-A 08/19/2013 10:07				CCV 240-97952/13-A 08/19/2013 10:32			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.49		5.00	110	10.6		10.0	106	10.5		10.0	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-98850/20 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00015

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	22.4		112	70-130
Arsenic	15.0	15.6		104	70-130
Barium	200	206		103	70-130
Beryllium	5.00	4.94	J	99	70-130
Cadmium	5.00	5.25		105	70-130
Chromium	10.0	10.5		105	70-130
Cobalt	10.0	9.98	J	100	70-130
Copper	20.0	21.3	J	107	70-130
Lead	10.0	10.2		102	70-130
Molybdenum	40.0	41.3		103	70-130
Nickel	40.0	40.3		101	70-130
Selenium	20.0	19.6	J	98	70-130
Silver	10.0	10.8		108	70-130
Thallium	20.0	19.2	J	96	70-130
Vanadium	10.0	9.79	J	98	70-130
Zinc	50.0	51.0		102	70-130

Lab Sample ID: CRI 240-98850/62 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00015

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	23.8		119	70-130
Arsenic	15.0	16.4		109	70-130
Barium	200	208		104	70-130
Beryllium	5.00	4.94	J	99	70-130
Cadmium	5.00	5.38		108	70-130
Chromium	10.0	10.9		109	70-130
Cobalt	10.0	9.89	J	99	70-130
Copper	20.0	20.8	J	104	70-130
Lead	10.0	10.4		104	70-130
Molybdenum	40.0	41.6		104	70-130
Nickel	40.0	40.7		102	70-130
Selenium	20.0	20.9		105	70-130
Silver	10.0	11.1		111	70-130
Thallium	20.0	21.1		106	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-98850/62 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00015

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	10.0	11.2		<112>	70-130
Zinc	50.0	51.9		104	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Method: 7471B Instrument ID: H4

Lab Sample ID: CRA 240-97952/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00444

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.199	J	99	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-98850/5 08/23/2013 13:05		CCB 240-98850/19 08/23/2013 14:01		CCB 240-98850/31 08/23/2013 14:49		CCB 240-98850/55 08/23/2013 16:30	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	3.28	J	3.32	J	2.25	J
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	200	U	200	U
Beryllium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Lead	10	10	U	10	U	10	U	10	U
Molybdenum	40	40	U	40	U	40	U	40	U
Nickel	40	40	U	40	U	40	U	40	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	10	U	10	U	10	U	10	U
Zinc	50	50	U	50	U	50	U	50	U

Not used Not used

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-98850/67 08/23/2013 17:19							
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U						
Arsenic	15	15	U						
Barium	200	200	U						
Beryllium	5.0	5.0	U						
Cadmium	5.0	5.0	U						
Chromium	10	10	U						
Cobalt	10	10	U						
Copper	25	25	U						
Lead	10	10	U						
Molybdenum	40	40	U						
Nickel	40	40	U						
Selenium	20	20	U						
Silver	10	10	U						
Thallium	20	20	U						
Vanadium	10	10	U						
Zinc	50	50	U						

N/A used

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-97952/9-A 08/19/2013 10:03		CCB 240-97952/12-A 08/19/2013 10:09		CCB 240-97952/12-A 08/19/2013 10:34			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.60	0.60	U	0.60	U	0.60	U		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-97808/1-A

Instrument Code: I9 Batch No.: 98850

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6010C
7440-38-2	Arsenic	1.5	U		6010C
7440-39-3	Barium	20	U		6010C
7440-41-7	Beryllium	0.50	U		6010C
7440-43-9	Cadmium	0.50	U		6010C
7440-47-3	Chromium	1.0	U		6010C
7440-48-4	Cobalt	1.0	U		6010C
7440-50-8	Copper	2.5	U		6010C
7439-92-1	Lead	1.0	U		6010C
7439-98-7	Molybdenum	4.0	U		6010C
7440-02-0	Nickel	4.0	U		6010C
7782-49-2	Selenium	2.0	U		6010C
7440-22-4	Silver	1.0	U		6010C
7440-28-0	Thallium	2.0	U		6010C
7440-62-2	Vanadium	1.0	U		6010C
7440-66-6	Zinc	5.0	U		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-97818/1-A

Instrument Code: H4 Batch No.: 98071

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.10	U		7471B

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICSA 240-98850/8 Instrument ID: I9

Lab File ID: I9082313A.asc ICS Source: MTTRICSAW_00019

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-5.36**	
Arsenic		**-1.62**	
Barium		**0.203**	
Beryllium		**-0.387**	
Cadmium		**0.855**	
Chromium		**3.15**	
Cobalt		**-1.30**	
Copper		**0.0738**	
Lead		**-2.28**	
Molybdenum		**-3.20**	
Nickel		**2.47**	
Selenium		**1.74**	
Silver		**0.747**	
Thallium		**3.13**	
Vanadium		**-1.25**	
Zinc		**9.74**	
Aluminum	*500000*	*501100*	*100*
Boron		*-3.54*	
Calcium	*500000*	*471730*	*94*
Iron	*200000*	*188760*	*94*
Lithium		*-30.1*	
Magnesium	*500000*	*499080*	*100*
Manganese		*2.34*	
Potassium		*43.8*	
Silicon		*-11.0*	
Sodium		*235*	
Strontium		*8.55*	
Tin		*1.66*	
Titanium		*0.0326*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Lab Sample ID: ICSAB 240-98850/9 Instrument ID: I9

Lab File ID: I9082313A.asc ICS Source: MTICPICSABW_00001

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**1000**	**1001**	**100**
Arsenic	**1000**	**1014**	**101**
Barium	**500**	**497**	**99**
Beryllium	**500**	**483**	**97**
Cadmium	**1000**	**1029**	**103**
Chromium	**500**	**490**	**98**
Cobalt	**500**	**497**	**99**
Copper	**500**	**523**	**105**
Lead	**1000**	**900**	**90**
Molybdenum	**1000**	**956**	**96**
Nickel	**1000**	**982**	**98**
Selenium	**1000**	**1015**	**102**
Silver	**1000**	**1080**	**108**
Thallium	**1000**	**964**	**96**
Vanadium	**500**	**489**	**98**
Zinc	**1000**	**1002**	**100**
Aluminum	*500000*	*508500*	*102*
Boron	*500*	*499*	*100*
Calcium	*500000*	*480020*	*96*
Iron	*200000*	*191610*	*96*
Lithium	*500*	*500*	*100*
Magnesium	*500000*	*502000*	*100*
Manganese	*500*	*499*	*100*
Potassium	*10000*	*10531*	*105*
Silicon	*10000*	*9746*	*97*
Sodium	*10000*	*10764*	*108*
Strontium	*1500*	*1447*	*96*
Tin	*500*	*505*	*101*
Titanium	*500*	*508*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-TP-A76-10 MS
Lab ID: 240-27894-1 MS
Lab Name: TestAmerica Canton
Job No.: 240-27894-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 85.2

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	26.8		1.3	J	57.0	45	75-125	F	6010C
Arsenic	199		5.8		228	85	75-125		6010C
Barium	449		42		228	179	75-125	F	6010C
Beryllium	5.46		0.77		5.70	82	75-125		6010C
Cadmium	30.0		20		5.70	179	75-125	F	6010C
Chromium	252		270		22.8	-86	75-125	4	6010C
Cobalt	58.9		7.5		57.0	90	75-125		6010C
Copper	55.0		46		28.5	33	75-125	F	6010C
Lead	90.5		45		57.0	80	75-125		6010C
Molybdenum	95.2		3.1	J	114	81	75-125		6010C
Nickel	71.6		18		57.0	95	75-125		6010C
Selenium	187		2.3	U	228	82	75-125		6010C
Silver	5.78		0.62	J	5.70	91	75-125		6010C
Thallium	209		2.3	U	228	92	75-125		6010C
Vanadium	87.5		38		57.0	88	75-125		6010C
Zinc	325		280		57.0	83	75-125	4	6010C
Mercury	0.270		0.079	J	0.217	88	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-TP-A76-10 PDS Lab ID: 240-27894-1 PDS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	17.0		1.3	J	17.1	91	80-120		6010C
Barium	45.8		42		5.70	69	80-120	W	6010C
Cadmium	56.9		20		39.9	93	80-120		6010C
Copper	94.1		46		51.3	95	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: DR-TP-A76-10 DU | Lab ID: 240-27894-1 DU

Lab Name: TestAmerica Canton | Job No.: 240-27894-1

SDG No.:

% Solids for Sample: 85.2 | % Solids for Duplicate: 85.2

Matrix: Solid | Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	2.3	1.3	J	0.648	J	70		6010C
Arsenic	1.7	5.8		6.16		6		6010C
Barium	23	42		31.9		27		6010C
Beryllium	0.57	0.77		0.876		13		6010C
Cadmium	0.57	20		32.1		47		6010C
Chromium	1.1	270		224		19		6010C
Cobalt	1.1	7.5		7.33		2		6010C
Copper	2.8	46		1090		184		6010C
Lead	1.1	45		30.1		40		6010C
Molybdenum	4.6	3.1	J	1.85	J	49		6010C
Nickel	4.6	18		18.8		7		6010C
Selenium	2.3	2.3	U	2.3	U	NC		6010C
Silver	1.1	0.62	J	0.515	J	19		6010C
Thallium	2.3	2.3	U	2.3	U	NC		6010C
Vanadium	1.1	38		37.0		2		6010C
Zinc	5.7	280		581		71		6010C
Mercury	0.13	0.079	J	0.0651	J	19		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-97808/2-A

Lab Name: TestAmerica Canton Job No.: 240-27894-1

Sample Matrix: Solid LCS Source: MTICP1_00023

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	46.8		94	80	120		6010C
Arsenic	200	190		95	80	120		6010C
Barium	200	184		92	80	120		6010C
Beryllium	5.00	4.42		88	80	120		6010C
Cadmium	5.00	4.77		95	80	120		6010C
Chromium	20.0	18.4		92	80	120		6010C
Cobalt	50.0	45.3		91	80	120		6010C
Copper	25.0	23.2		93	80	120		6010C
Lead	50.0	46.2		92	80	120		6010C
Molybdenum	100	93.1		93	80	120		6010C
Nickel	50.0	45.8		92	80	120		6010C
Selenium	200	190		95	80	120		6010C
Silver	5.00	4.93		99	80	120		6010C
Thallium	200	190		95	80	120		6010C
Vanadium	50.0	45.9		92	80	120		6010C
Zinc	50.0	47.8		96	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-97818/2-A

Lab Name: TestAmerica Canton Job No.: 240-27894-1

Sample Matrix: Solid LCS Source: MTHGCALW_00443

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.855		103	80	120		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-27894-1

SDG No:

Lab Name: TestAmerica Canton Job No: 240-27894-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	1.3	J	2.23	J	NC		6010C
Arsenic	5.8		6.51	J	NC		6010C
Barium	42		45.4	J	8.3		6010C
Beryllium	0.77		0.767	J	NC		6010C
Cadmium	20		21.8		10		6010C
Chromium	270		302		11	V	6010C
Cobalt	7.5		7.45		NC		6010C
Copper	46		49.3		8.3		6010C
Lead	45		51.1		14	V	6010C
Molybdenum	3.1	J	2.75	J	NC		6010C
Nickel	18		17.5	J	0.1		6010C
Selenium	2.3	U	11	U	NC		6010C
Silver	0.62	J	0.658	J	NC		6010C
Thallium	2.3	U	11	U	NC		6010C
Vanadium	38		39.9		6.3		6010C
Zinc	280		277		0.32		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-27894-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010C MDL Date: 03/01/2011 14:59

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Antimony	206.838	2	0.39
Arsenic	189.042	1.5	0.3
Barium	493.409	20	0.071
Beryllium	313.042	0.5	0.043
Cadmium	226.502	0.5	0.036
Chromium	267.716	1	0.2
Cobalt	228.616	1	0.16
Copper	324.753	2.5	0.74
Lead	220.353	1	0.19
Molybdenum	202.030	4	0.27
Nickel	231.604	4	0.27
Selenium	196.026	2	0.45
Silver	328.068	1	0.1
Thallium	190.864	2	0.55
Vanadium	292.402	1	0.12
Zinc	213.856	5	1

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-27894-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010C XMDL Date: 03/01/2011 15:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-27894-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471B MDL Date: 02/16/2010 09:48

Prep Method: 7471B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury	253.7	0.1	0.015

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS

Lab Name: TestAmerica Canton Job Number: 240-27894-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471B XMDL Date: 02/16/2010 09:48

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.6	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-27894-1

SDG No.:

Instrument ID: I9 Date: 04/04/2013 11:44

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		10000	6010C
Arsenic		5000	6010C
Barium		25000	6010C
Beryllium		4000	6010C
Cadmium		2000	6010C
Chromium		20000	6010C
Cobalt		10000	6010C
Copper		30000	6010C
Lead		15000	6010C
Molybdenum		10000	6010C
Nickel		30000	6010C
Selenium		10000	6010C
Silver		2000	6010C
Thallium		10000	6010C
Vanadium		5000	6010C
Zinc		10000	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-27894-1

SDG No.:

Instrument ID: H4 Date: 04/01/2011 10:50

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		50	7471B

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-97808/1-A	08/16/2013 11:37	97808	1.00		100
LCS 240-97808/2-A	08/16/2013 11:37	97808	1.00		100
240-27894-1	08/16/2013 11:37	97808	1.03		100
240-27894-1 DU	08/16/2013 11:37	97808	1.03		100
240-27894-1 MS	08/16/2013 11:37	97808	1.03		100
240-27894-2	08/16/2013 11:37	97808	1.11		100
240-27894-4	08/16/2013 11:37	97808	1.08		100
240-27894-5	08/16/2013 11:37	97808	1.12		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Prep Method: 7471B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-97818/1-A	08/16/2013 14:30	97818	0.60		100
LCS 240-97818/2-A	08/16/2013 14:30	97818	0.60		100
240-27894-1	08/16/2013 14:30	97818	0.54		100
240-27894-1 DU	08/16/2013 14:30	97818	0.54		100
240-27894-1 MS	08/16/2013 14:30	97818	0.54		100
240-27894-2	08/16/2013 14:30	97818	0.65		100
240-27894-4	08/16/2013 14:30	97818	0.51		100
240-27894-5	08/16/2013 14:30	97818	0.52		100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 08/23/2013 12:49 End Date: 08/23/2013 22:24

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ICIS 240-98850/1	1		12:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-98850/2 IC			12:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-98850/3 IC			12:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-98850/4	1		13:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICB 240-98850/5	1		13:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-98850/6			13:09																				
ZZZZZZ			13:13																				
ICSA 240-98850/8	1		13:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-98850/9	1		13:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-98850/10			13:25																				
CCB 240-98850/11			13:29																				
ZZZZZZ			13:33																				
ZZZZZZ			13:37																				
ZZZZZZ			13:41																				
ZZZZZZ			13:45																				
ZZZZZZ			13:49																				
ZZZZZZ			13:53																				
CCV 240-98850/18	1		13:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-98850/19	1		14:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-98850/20	1		14:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MB 240-97808/1-A	1	T	14:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-97808/2-A	1	T	14:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-27894-1	1	T	14:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-27894-1 SD	5	T	14:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-27894-1 DU	1	T	14:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-27894-1 MS	1	T	14:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-27894-2	1	T	14:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-27894-4	1	T	14:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-27894-5	1	T	14:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-98850/30	1		14:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-98850/31	1		14:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			14:53																				
ZZZZZZ			14:57																				
ZZZZZZ			15:01																				
ZZZZZZ			15:05																				
ZZZZZZ			15:09																				
ZZZZZZ			15:13																				
ZZZZZZ			15:17																				
ZZZZZZ			15:21																				
ZZZZZZ			15:25																				
ZZZZZZ			15:29																				
CCV 240-98850/42			15:37																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 08/23/2013 12:49 End Date: 08/23/2013 22:24

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCB 240-98850/43			15:41																				
ZZZZZZ			15:45																				
ZZZZZZ			15:49																				
ZZZZZZ			15:53																				
ZZZZZZ			15:57																				
ZZZZZZ			16:01																				
ZZZZZZ			16:05																				
ZZZZZZ			16:10																				
ZZZZZZ			16:14																				
ZZZZZZ			16:18																				
ZZZZZZ			16:22																				
CCV 240-98850/54	1		16:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-98850/55	1		16:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			16:34																				
ZZZZZZ			16:38																				
ZZZZZZ			16:43																				
ZZZZZZ			16:47																				
ZZZZZZ			16:51																				
240-27894-1 PDS	1	T	16:55			X		X			X				X								
CRI 240-98850/62	1		16:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-98850/63			17:03																				
ZZZZZZ			17:07																				
ZZZZZZ			17:11																				
CCV 240-98850/66	1		17:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-98850/67	1		17:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			17:23																				
ZZZZZZ			17:27																				
ZZZZZZ			17:31																				
ZZZZZZ			17:35																				
ZZZZZZ			17:40																				
ZZZZZZ			17:44																				
ZZZZZZ			17:48																				
ZZZZZZ			17:52																				
ZZZZZZ			17:56																				
ZZZZZZ			18:01																				
CCV 240-98850/78			18:05																				
CCB 240-98850/79			18:09																				
ZZZZZZ			18:13																				
ZZZZZZ			18:17																				
ZZZZZZ			18:21																				
ZZZZZZ			18:25																				
ZZZZZZ			18:29																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 08/23/2013 12:49 End Date: 08/23/2013 22:24

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			18:33																				
ZZZZZZ			18:37																				
ZZZZZZ			18:41																				
ZZZZZZ			18:45																				
ZZZZZZ			18:49																				
CCV 240-98850/90			18:53																				
CCB 240-98850/91			18:57																				
ZZZZZZ			19:01																				
ZZZZZZ			19:05																				
ZZZZZZ			19:09																				
ZZZZZZ			19:13																				
ZZZZZZ			19:17																				
ZZZZZZ			19:21																				
ZZZZZZ			19:25																				
ZZZZZZ			19:29																				
ZZZZZZ			19:33																				
ZZZZZZ			19:37																				
CCV 240-98850/102			19:40																				
CCB 240-98850/103			19:44																				
ZZZZZZ			19:48																				
ZZZZZZ			19:52																				
ZZZZZZ			19:56																				
ZZZZZZ			20:00																				
ZZZZZZ			20:04																				
ZZZZZZ			20:08																				
ZZZZZZ			20:12																				
ZZZZZZ			20:16																				
ZZZZZZ			20:20																				
ZZZZZZ			20:24																				
CCV 240-98850/114			20:28																				
CCB 240-98850/115			20:32																				
ZZZZZZ			20:36																				
ZZZZZZ			20:40																				
ZZZZZZ			20:44																				
ZZZZZZ			20:48																				
ZZZZZZ			20:52																				
ZZZZZZ			20:56																				
ZZZZZZ			21:00																				
ZZZZZZ			21:04																				
ZZZZZZ			21:08																				
ZZZZZZ			21:12																				
CCV 240-98850/126			21:16																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 08/23/2013 12:49 End Date: 08/23/2013 22:24

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCB 240-98850/127			21:20																				
ZZZZZZ			21:24																				
ZZZZZZ			21:28																				
ZZZZZZ			21:32																				
ZZZZZZ			21:36																				
ZZZZZZ			21:40																				
ZZZZZZ			21:44																				
ZZZZZZ			21:48																				
ZZZZZZ			21:52																				
ZZZZZZ			21:56																				
ZZZZZZ			22:00																				
CCV 240-98850/138			22:04																				
CCB 240-98850/139			22:08																				
ICSA 240-98850/140			22:12																				
ICSAB 240-98850/141			22:16																				
CCV 240-98850/142			22:20																				
CCB 240-98850/143			22:24																				

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 08/19/2013 09:27 End Date: 08/19/2013 12:06

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-97952/1-A			09:27	X																				
IC 240-97952/1-A			09:29	X																				
IC 240-97952/2-A			09:32	X																				
IC 240-97952/2-A			09:34	X																				
IC 240-97952/3-A			09:36	X																				
IC 240-97952/3-A			09:38	X																				
IC 240-97952/4-A			09:39	X																				
IC 240-97952/4-A			09:42	X																				
IC 240-97952/5-A			09:44	X																				
IC 240-97952/5-A			09:46	X																				
IC 240-97952/6-A			09:48	X																				
IC 240-97952/6-A			09:51	X																				
IC 240-97952/7-A			09:53	X																				
IC 240-97952/7-A			09:57	X																				
ICV 240-97952/8-A	1		10:01	X																				
ICB 240-97952/9-A	1		10:03	X																				
CRA 240-97952/10-A	1		10:05	X																				
CCV 240-97952/13-A	1		10:07	X																				
CCB 240-97952/12-A	1		10:09	X																				
MB 240-97818/1-A	1	T	10:12	X																				
LCS 240-97818/2-A	1	T	10:14	X																				
240-27894-1	1	T	10:16	X																				
240-27894-1 DU	1	T	10:18	X																				
240-27894-1 MS	1	T	10:20	X																				
240-27894-2	1	T	10:22	X																				
240-27894-4	1	T	10:24	X																				
240-27894-5	1	T	10:26	X																				
ZZZZZZ			10:28																					
ZZZZZZ			10:30																					
CCV 240-97952/13-A	1		10:32	X																				
CCB 240-97952/12-A	1		10:34	X																				
ZZZZZZ			10:36																					
ZZZZZZ			10:38																					
ZZZZZZ			10:41																					
ZZZZZZ			10:43																					
ZZZZZZ			10:45																					
ZZZZZZ			10:47																					
ZZZZZZ			10:49																					
ZZZZZZ			10:52																					
ZZZZZZ			10:54																					
ZZZZZZ			10:56																					
CCV 240-97952/13-A			10:58																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-27894-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 08/19/2013 09:27 End Date: 08/19/2013 12:06

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
CCB 240-97952/12-A			11:00																				
ZZZZZZ			11:02																				
ZZZZZZ			11:04																				
ZZZZZZ			11:06																				
ZZZZZZ			11:08																				
ZZZZZZ			11:10																				
ZZZZZZ			11:12																				
ZZZZZZ			11:14																				
ZZZZZZ			11:16																				
ZZZZZZ			11:19																				
ZZZZZZ			11:21																				
CCV 240-97952/13-A			11:23																				
CCB 240-97952/12-A			11:25																				
ZZZZZZ			11:28																				
ZZZZZZ			11:30																				
ZZZZZZ			11:32																				
ZZZZZZ			11:34																				
ZZZZZZ			11:37																				
ZZZZZZ			11:39																				
CCV 240-97952/13-A			11:41																				
CCB 240-97952/12-A			11:43																				
CCV 240-97952/13-A			11:50																				
CCB 240-97952/12-A			11:52																				
ZZZZZZ			11:54																				
ZZZZZZ			11:56																				
ZZZZZZ			11:59																				
ZZZZZZ			12:01																				
CCV 240-97952/13-A			12:04																				
CCB 240-97952/12-A			12:06																				

Prep Types
T = Total/NA

DR-TP-ATC-10

Sample Name: 240-27894-f-1-c Acquired: 8/23/2013 14:17:19 Type: Unk
Method: Standard Method + IEC Checks(v228) Mode: CONC Corr. Factor: 1.000000
User: Roger Method: 6010B/6010C Method: 200.7 :
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3.3117**	**30.551**	**971.44**	**1.2306**	**329.98**	**2442.2**	**3234.9**
Stddev	1.1939	.515	1.61	1.2309	2.01	4.4	13.7
%RSD	36.051	1.6849	.16606	100.02	.60973	.17868	.42476
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	**129.00**
Stddev	3.39
%RSD	2.6267
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5586.1**	**7332.0**	**91332.**	**11994.**
Stddev	2.7	20.8	62.	15.
%RSD	.04802	.28355	.06809	.12500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.625%	107.64%	107.09%	109.59%
Range				

$$\frac{2442.2}{L} \times \frac{0.1\,L}{1.039} \times \frac{1\,mg}{1000\,ug} \times \frac{1000\,g}{1\,Kg} \times \frac{1}{0.852} = 278.3\ mg/Kg$$

$$Zn = 280\ mg/Kg$$

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. AVANAVAGE** **DATE:** **SEPTEMBER 26, 2013**

FROM: **A. COGNETTI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION- VOC / SVOC/ PCB/ GRO / DRO / METALS**
DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-28322-1

SAMPLES: 4/Soil/VOC SVOC/PCBGRO/DRO/Metals

DR-SB-190-18-20 DR-SB-190-28-30 DR-SB-190-8-10 DR-SB-191-22-28

1/Aqueous/VOC

TB-082313

Overview

The sample set for Dump Road Source Areas, SDG 240-28322-1 consisted of four (4) soil environmental samples and a trip blank analyzed for volatile organic compounds (VOCs). Four (4) soil environmental samples were also analyzed for semivolatile organic compounds (SVOCs). total petroleum hydrocarbons (TPH) gasoline and total petroleum hydrocarbons (TPH) diesel, polychlorinated biphenyls and metals.

The samples were collected on August 23, 2013 and analyzed by Test America Laboratories Inc. All analyses were conducted in accordance with SW-846 Methods 8260B for VOCs, 8270D for SVOCs, 8015C for TPH (gasoline and diesel), 8082A for PCBs, 6010C for metals, and 7471B for mercury analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method /preparation blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate, internal standard recoveries, chromatographic resolution, ICP interference results, ICP serial dilution results, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major

- The VOC relative response factors (RRFs) for tert-butyl alcohol and vinyl acetate were less than the lower quality control limit in the initial calibration on August 17, 2013 and the continuing calibration on August 30, 2013 @ 10:39 for instrument A3UX17. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected in the affected sample TB-082313.

- The VOC RRFs for tert-butyl alcohol and vinyl acetate were less than 0.05 quality control limit in the initial calibration on April 18, 2013 and the continuing calibration on August 29, 2013 @ 2:42 on instrument A3UX8. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR) in the affected samples.

Minor

- The continuing calibration percent differences (%Ds) for several compounds were greater than the 20% quality control limit and less than 50% on August 29, 2013 @ 2:42 on instrument A3UX8. The compounds were carbon disulfide, methylene chloride, tert-butyl alcohol, trans-1,3-dichloropropene, 1,1,2,2-

tetrachloroethane, 1,2,3-trichloropropane, 1,2-dibromo-3-chloropropane, naphthalene, and 1,2,3-trichlorobenzene. The detected carbon disulfide, methylene chloride, and 1,2,3-trichlorobenzene results were qualified as estimated (J). No action was taken on the detected results qualified due to blank contamination or the nondetected results of the aforementioned compounds.

- Contamination was detected in the VOC laboratory method blank associated with batch 240-99442/6 analyzed on August 29, 2013 on instrument A3UX8 affecting the soil samples.

Contaminant	Maximum Concentration (ug/kg)	Action Level (mg/kg)
1,2,4-trichlorobenzene	0.389	1.945
Acetone	6.77	67.7
Naphthalene	0.636	3.18
Methylene chloride	1.06	10.6
Toluene	0.513	2.565

An action level of 10X the maximum concentrations of common laboratory contaminants, acetone and methylene chloride, and 5X the concentration of 1,2,4-trichlorobenzene, naphthalene and toluene was established in order to evaluate samples for blank contamination. Sample aliquot, percent solids and dilution factors were taken into consideration when applying the action level. Detected results less than the action level were qualified as (B).

- Tentatively identified compounds (TIC) were detected in the trip blank and sample DR-SB-191-22-28 were qualified as presumptively present (NJ).

- The laboratory control sample (LCS) percent recovery (%R) of benzaldehyde was less than the lower quality control limit in batch 240-100222/24. The nondetected benzaldehyde results were qualified as biased low (UL) in the affected samples.

- The CRDL %Rs of copper and lead were greater than the 110% quality control limit. The detected lead result less than 2X CRDL was qualified as estimated (J) due to conflicting directional bias in sample DR-DB-190-8-10.

- The CRDL %R of mercury was less than the lower 80% quality control limit. The detected mercury result less than 2X the CRDL was qualified as estimated (J) due to conflicting directional bias in sample DR-DB-190-18-20.

- Contamination was detected in a continuing calibration blank in the metals fraction.

Contaminant	Maximum Concentration (ug/L)	Action Level (mg/kg)
Barium	0.744	0.372
Molybdenum	2.36	1.18

An action level of 5X the maximum concentration was established in order to evaluate samples for blank contamination. Sample aliquot, percent solids and dilution factors were taken into account when applying the action level. Positive results less than the action level were qualified as (B).

- The matrix spike (MS) %R of antimony was less than the lower quality control limit in sample DR-DB-190-18-20. The detected and nondetected antimony results were qualified as biased low (L) and (UL), respectively.

- The serial dilution %Ds for barium, chromium, cobalt, lead, nickel, vanadium and zinc were greater than 10% in sample DR-SB-190-18-20. The detected barium, chromium, cobalt, lead, nickel, vanadium and zinc results were qualified as estimated (J).

- Positive results reported below the quantitation limit but above the method detection limit (MDL) were qualified as estimated, (J).

Notes

The continuing calibration %Ds for 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene and 1,2,3-trichlorobenzene were greater than the 20% quality control limit and less than 50% on August 30, 2013 @ 10:39 on instrument A3UX17. No action was taken on the nondetected 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene and 1,2,3-trichlorobenzene results in the affected sample TB-082313.

Contamination was detected in the VOC laboratory method blank associated with batch 240-99702/6 analyzed on August 30, 2013 affecting the sample TB-082313.

Contaminant	Maximum Concentration (ug/L)
Benzene	0.148
Methylene chloride	0.854

No action was taken on the nondetected benzene and methylene chloride results in the affected sample.

The matrix spike/ matrix spike duplicate (MS/MSD) percent recoveries (%Rs) of vinyl acetate were less than the lower quality control limit in sample DR-SB-190-18-20. No action was taken on the nondetected vinyl acetate results which were qualified as rejected due to a more severe noncompliance.

The trip blank, TB-082313, contained chloromethane and bromomethane. No action was taken on the nondetected chloromethane and bromomethane results in the soil samples.

In the initial calibration of instrument A4HP7 on September 5, 2013, pentachlorophenol and di-n-octyl phthalate had relative standard deviations (RSDs) greater than the 15% quality control limit and less than 50%. No action was taken on the nondetected pentachlorophenol and di-n-octyl phthalate results in the affected samples.

The RPD for TPH as diesel was greater than the quality control limit in the MS/MSD %Rs in sample 240-28436-4. No action was taken since the MS/MSD %Rs were within quality control limits and this sample is not included in this SDG.

The surrogate recoveries of tetrachloro-m-xylene and decachlorobiphenyl were greater than the upper quality control limit on column CLP-1 in sample DR-SB-191-22-24. This sample was diluted 5X for analysis. The detected Aroclor 1254 result was reported from column CLP-2. No action was taken.

Naphthalene and hexachlorobutadiene were reported in both the VOC and the SVOC fractions.

Nondetected results were reported to the MDL.

Executive Summary

Laboratory Performance: The VOC RRFs for tert-butyl alcohol and vinyl acetate were less than the quality control limit resulting in the rejection of nondetected results. The continuing calibration %Ds for several VOC compounds were greater than the 20% quality control limit and less than 50%. VOC and metals results were qualified due to blank contamination. The CRDL %Rs of copper, lead and mercury were outside quality control limits.

Other Factors Affecting Data Quality: TICs were detected in trip blank and DR-SB-191-22-28. The MS %R of antimony was less than the lower quality control limit. The serial dilution %Ds for barium, chromium, cobalt, lead, nickel, vanadium and zinc were greater than 10% in sample DR-SB-190-18-20. Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994) and U.S. EPA National Functional Guidelines for Inorganic Data Validation (April 1993). The text of this report has been formulated to address only those problem areas affecting data quality.

Ann Cognetti

Tetra Tech
Ann Cognetti
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-SB-190-18-20			DR-SB-190-28-30			DR-SB-190-8-10			DR-SB-191-22-24		
SDG: 240-28322-1	LAB_ID	240-28322-1			240-28322-4			240-28322-2			240-28322-5		
FRACTION: M	SAMP_DATE	8/23/2013			8/23/2013			8/23/2013			8/23/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	61.8			84.1			81.5			86.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.6	UL	D	0.43	UL	D	0.43	UL	D	11	L	D
ARSENIC		10			0.7	J	P	0.65	J	P	5.1		
BARIUM		25	J	IP	4.1	J	IP	1.6	J	IP	190	J	I
BERYLLIUM		1.3			0.15	J	P	0.048	U		0.63		
CADMIUM		0.37	J	P	0.36	J	P	2			28		
CHROMIUM		50	J	I	5.5	J	I	85	J	I	100	J	I
COBALT		27	J	I	2	J	I	0.74	J	IP	7.2	J	I
COPPER		17			5.4			18			1100		
LEAD		16	J	I	9.2	J	I	1.1	J	CI	470	J	I
MERCURY		0.028	J	CP	0.019	U		0.017	U		0.73		
MOLYBDENUM		1.3	B	A	0.45	B	A	0.3	U		5.5		
NICKEL		31	J	I	2.5	J	IP	0.83	J	IP	38	J	I
SELENIUM		0.79	J	P	0.49	U		0.5	U		0.47	J	P
SILVER		0.15	U		0.11	U		0.11	U		4.5		
THALLIUM		0.85	U		0.6	U		0.61	U		0.53	U	
VANADIUM		51	J	I	5.1	J	I	4.3	J	I	41	J	I
ZINC		85	J	I	17	J	I	6.1	J	I	880	J	I

PROJ_NO: 04882	NSAMPLE	DR-SB-190-18-20			DR-SB-190-28-30			DR-SB-190-8-10			DR-SB-191-22-24		
SDG: 240-28322-1	LAB_ID	240-28322-1			240-28322-4			240-28322-2			240-28322-5		
FRACTION: OV	SAMP_DATE	8/23/2013			8/23/2013			8/23/2013			8/23/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	61.8			84.1			81.5			86.3		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
.ALPHA.-PINENE												
1,1,1,2-TETRACHLOROETHANE	0.99	U		1.8	U		0.72	U		0.72	U	
1,1,1-TRICHLOROETHANE	0.89	U		1.6	U		0.65	U		0.65	U	
1,1,2,2-TETRACHLOROETHANE	0.54	U		0.96	U		0.39	U		0.39	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	2.1	U		3.7	U		1.5	U		1.5	U	
1,1-DICHLOROETHANE	0.57	U		1	U		0.42	U		0.42	U	
1,1-DICHLOROETHENE	0.83	U		1.5	U		0.6	U		0.6	U	
1,1-DICHLOROPROPENE	0.48	U		0.85	U		0.35	U		0.35	U	
1,2,3-TRICHLOROBENZENE	0.6	U		28	J	C	0.44	U		0.44	U	
1,2,3-TRICHLOROPROPANE	1.4	U		2.5	U		1	U		1	U	
1,2,3-TRIMETHYLBENZENE	0.27	U		0.48	U		0.2	U		5.1	J	P
1,2,4-TRICHLOROBENZENE	1.5	B	A	220			0.93	B	A	0.31	U	
1,2,4-TRIMETHYLBENZENE	1	U		1.8	U		0.75	U		4.4	J	P
1,2-DIBROMO-3-CHLOROPROPANE	2.1	U		3.7	U		1.5	U		1.5	U	
1,2-DIBROMOETHANE	0.8	U		1.4	U		0.58	U		0.58	U	
1,2-DICHLOROBENZENE	0.57	U		1.7	J	P	0.71	J	P	0.42	U	
1,2-DICHLOROETHANE	0.54	U		1	J	P	0.39	U		2	J	P
1,2-DICHLOROPROPANE	1.1	U		2	U		0.8	U		0.8	U	
1,3,5-TRIMETHYLBENZENE												
1,3-DICHLOROBENZENE	0.56	U		0.99	U		0.5	J	P	0.4	U	
1,3-DICHLOROPROPANE	0.54	U		0.96	U		0.39	U		0.39	U	
1,4-DICHLOROBENZENE	1.1	U		1.9	U		3.7	J	P	0.76	U	
2,2-DICHLOROPROPANE	1.5	U		2.7	U		1.1	U		1.1	U	
2-BUTANONE	3.1	J	P	4	U		1.6	U		1.6	U	
2-CHLOROETHYL VINYL ETHER	2.2	U		4	U		1.6	U		1.6	U	
2-CHLOROTOLUENE	0.64	U		1.1	U		0.46	U		0.46	U	
2-HEXANONE	1	U		1.8	U		0.73	U		0.73	U	
4-CHLOROTOLUENE	0.65	U		1.2	U		0.47	U		0.47	U	
4-ISOPROPYLTOLUENE	0.33	U		0.59	U		0.24	U		2.1	J	P
4-METHYL-2-PENTANONE	0.86	U		1.5	U		0.63	U		0.62	U	
ACETONE	31	B	A	24	B	A	16	B	A	22	B	A
BENZENE	0.37	U		0.65	U		0.27	U		0.27	U	
BROMOBENZENE	0.53	U		0.93	U		0.38	U		0.38	U	
BROMOCHLOROMETHANE	1.1	U		2	U		0.82	U		0.82	U	
BROMODICHLOROMETHANE	0.45	U		0.79	U		0.32	U		0.32	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-191-22-24
SDG: 240-28322-1	LAB_ID	240-28322-5
FRACTION: OV	SAMP_DATE	8/23/2013
MEDIA: SOIL	QC_TYPE	TIC
	UNITS	UG/KG
	PCT_SOLIDS	86.3
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
.ALPHA.-PINENE	19	NJ	Z1
1,1,1,2-TETRACHLOROETHANE			
1,1,1-TRICHLOROETHANE			
1,1,2,2-TETRACHLOROETHANE			
1,1,2-TRICHLOROTRIFLUOROETHANE			
1,1-DICHLOROETHANE			
1,1-DICHLOROETHENE			
1,1-DICHLOROPROPENE			
1,2,3-TRICHLOROBENZENE			
1,2,3-TRICHLOROPROPANE			
1,2,3-TRIMETHYLBENZENE			
1,2,4-TRICHLOROBENZENE			
1,2,4-TRIMETHYLBENZENE			
1,2-DIBROMO-3-CHLOROPROPANE			
1,2-DIBROMOETHANE			
1,2-DICHLOROBENZENE			
1,2-DICHLOROETHANE			
1,2-DICHLOROPROPANE			
1,3,5-TRIMETHYLBENZENE	4.7	NJ	Z1
1,3-DICHLOROBENZENE			
1,3-DICHLOROPROPANE			
1,4-DICHLOROBENZENE			
2,2-DICHLOROPROPANE			
2-BUTANONE			
2-CHLOROETHYL VINYL ETHER			
2-CHLOROTOLUENE			
2-HEXANONE			
4-CHLOROTOLUENE			
4-ISOPROPYLTOLUENE			
4-METHYL-2-PENTANONE			
ACETONE			
BENZENE			
BROMOBENZENE			
BROMOCHLOROMETHANE			
BROMODICHLOROMETHANE			

PROJ_NO: 04882	NSAMPLE	DR-SB-190-18-20			DR-SB-190-28-30			DR-SB-190-8-10			DR-SB-191-22-24		
SDG: 240-28322-1	LAB_ID	240-28322-1			240-28322-4			240-28322-2			240-28322-5		
FRACTION: OV	SAMP_DATE	8/23/2013			8/23/2013			8/23/2013			8/23/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	61.8			84.1			81.5			86.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		0.53	U		0.93	U		0.38	U		0.38	U	
BROMOMETHANE		0.86	U		1.5	U		0.63	U		0.62	U	
CARBON DISULFIDE		0.7	U		1.2	U		1.9	J	CP	2.3	J	CP
CARBON TETRACHLORIDE		0.59	U		1	U		0.43	U		0.43	U	
CHLOROBENZENE		0.53	U		0.93	U		0.69	J	P	0.38	U	
CHLORODIBROMOMETHANE		0.88	U		1.6	U		0.64	U		0.63	U	
CHLOROETHANE		1.4	U		2.4	U		1	U		0.99	U	
CHLOROFORM		0.46	U		0.82	U		0.34	U		0.33	U	
CHLOROMETHANE		0.65	U		1.2	U		0.47	U		0.47	U	
CIS-1,2-DICHLOROETHENE		0.57	U		14			34			5.5	J	P
CIS-1,3-DICHLOROPROPENE		0.54	U		0.96	U		0.39	U		0.39	U	
CYCLOHEXANE													
DIBROMOMETHANE		1	U		1.8	U		0.73	U		0.73	U	
DICHLORODIFLUOROMETHANE		0.8	U		1.4	U		0.58	U		0.58	U	
DIISOPROPYL ETHER		2.4	U		4.2	U		1.7	U		1.7	U	
ETHYL TERT-BUTYL ETHER		0.35	U		0.62	U		0.25	U		0.25	U	
ETHYLBENZENE		0.41	U		0.74	U		0.3	U		1.2	J	P
HEXACHLOROBUTADIENE		1.9	U		3.4	U		1.4	U		1.4	U	
ISOPROPYLBENZENE		0.25	U		0.45	U		0.19	U		0.18	U	
M+P-XYLENES		1.9	U		3.4	U		1.4	U		4.3	J	P
METHYL TERT-BUTYL ETHER		0.68	U		1.2	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		4.7	B	A	16	J	C	4	B	A	3.4	B	A
NAPHTHALENE		0.3	U		1.3	B	A	0.95	B	A	10	B	A
N-BUTYLBENZENE		0.37	U		0.65	U		0.27	U		0.95	J	P
N-PROPYLBENZENE		0.64	U		1.1	U		0.46	U		0.46	U	
O-XYLENE		0.56	U		0.99	U		0.41	U		5.7	J	P
SEC-BUTYLBENZENE		0.29	U		0.51	U		0.21	U		0.21	U	
STYRENE		0.24	U		0.42	U		0.17	U		0.17	U	
TERT-AMYL METHYL ETHER		0.59	U		1	U		0.43	U		0.43	U	
TERT-BUTYLBENZENE		0.46	U		0.82	U		0.34	U		0.33	U	
TERTIARY-BUTYL ALCOHOL		12	UR	C	22	UR	C	8.8	UR	C	8.8	UR	C
TETRACHLOROETHENE		0.83	U		3.7	J	P	0.6	U		1.5	J	P
TOLUENE		0.43	U		2	B	A	1.6	B	A	7.8	B	A
TOTAL XYLENES		0.56	U		0.99	U		0.41	U		10	J	P
TRANS-1,2-DICHLOROETHENE		0.65	U		1.2	U		0.47	U		0.47	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-191-22-24
SDG: 240-28322-1	LAB_ID	240-28322-5
FRACTION: OV	SAMP_DATE	8/23/2013
MEDIA: SOIL	QC_TYPE	TIC
	UNITS	UG/KG
	PCT_SOLIDS	86.3
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
BROMOFORM			
BROMOMETHANE			
CARBON DISULFIDE			
CARBON TETRACHLORIDE			
CHLOROBENZENE			
CHLORODIBROMOMETHANE			
CHLOROETHANE			
CHLOROFORM			
CHLOROMETHANE			
CIS-1,2-DICHLOROETHENE			
CIS-1,3-DICHLOROPROPENE			
CYCLOHEXANE	2	NJ	Z1
DIBROMOMETHANE			
DICHLORODIFLUOROMETHANE			
DIISOPROPYL ETHER			
ETHYL TERT-BUTYL ETHER			
ETHYLBENZENE			
HEXACHLOROBUTADIENE			
ISOPROPYLBENZENE			
M+P-XYLENES			
METHYL TERT-BUTYL ETHER			
METHYLENE CHLORIDE			
NAPHTHALENE			
N-BUTYLBENZENE			
N-PROPYLBENZENE			
O-XYLENE			
SEC-BUTYLBENZENE			
STYRENE			
TERT-AMYL METHYL ETHER			
TERT-BUTYLBENZENE			
TERTIARY-BUTYL ALCOHOL			
TETRACHLOROETHENE			
TOLUENE			
TOTAL XYLENES			
TRANS-1,2-DICHLOROETHENE			

PROJ_NO: 04882	NSAMPLE	DR-SB-190-18-20			DR-SB-190-28-30			DR-SB-190-8-10			DR-SB-191-22-24		
SDG: 240-28322-1	LAB_ID	240-28322-1			240-28322-4			240-28322-2			240-28322-5		
FRACTION: OV	SAMP_DATE	8/23/2013			8/23/2013			8/23/2013			8/23/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	61.8			84.1			81.5			86.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRANS-1,3-DICHLOROPROPENE		0.86	U		1.5	U		0.63	U		0.62	U	
TRICHLOROETHENE		0.67	U		220			0.49	U		14		
TRICHLOROFLUOROMETHANE		0.54	U		0.96	U		0.39	U		0.39	U	
VINYL ACETATE		0.4	UR	C	0.71	UR	C	0.29	UR	C	0.29	UR	C
VINYL CHLORIDE		0.62	U		1.1	U		8.8			4.2	J	P

PROJ_NO: 04882	NSAMPLE	DR-SB-191-22-24		
SDG: 240-28322-1	LAB_ID	240-28322-5		
FRACTION: OV	SAMP_DATE	8/23/2013		
MEDIA: SOIL	QC_TYPE	TIC		
	UNITS	UG/KG		
	PCT_SOLIDS	86.3		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
TRANS-1,3-DICHLOROPROPENE				
TRICHLOROETHENE				
TRICHLOROFLUOROMETHANE				
VINYL ACETATE				
VINYL CHLORIDE				

PROJ_NO: 04882	NSAMPLE	TB-082313					
SDG: 240-28322-1	LAB_ID	240-28322-3					
FRACTION: OV	SAMP_DATE	8/23/2013					
MEDIA: WATER	QC_TYPE	TB			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						

PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U				
1,1,1-TRICHLOROETHANE	0.22	U				
1,1,2,2-TETRACHLOROETHANE	0.18	U				
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U				
1,1-DICHLOROETHANE	0.15	U				
1,1-DICHLOROETHENE	0.19	U				
1,1-DICHLOROPROPENE	0.13	U				
1,2,3-TRICHLOROBENZENE	0.17	U				
1,2,3-TRICHLOROPROPANE	0.43	U				
1,2,3-TRIMETHYLBENZENE	0.0059	U				
1,2,4-TRICHLOROBENZENE	0.15	U				
1,2,4-TRIMETHYLBENZENE	0.12	U				
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U				
1,2-DIBROMOETHANE	0.24	U				
1,2-DICHLOROBENZENE	0.13	U				
1,2-DICHLOROETHANE	0.22	U				
1,2-DICHLOROPROPANE	0.18	U				
1,3-DICHLOROBENZENE	0.14	U				
1,3-DICHLOROPROPANE	0.16	U				
1,4-DICHLOROBENZENE	0.13	U				
1,4-DIOXANE				580	NJ	Z1
2,2-DICHLOROPROPANE	0.13	U				
2-BUTANONE	0.57	U				
2-CHLOROETHYL VINYL ETHER	0.99	U				
2-CHLOROTOLUENE	0.11	U				
2-HEXANONE	0.41	U				
4-CHLOROTOLUENE	0.18	U				
4-ISOPROPYLTOLUENE	0.12	U				
4-METHYL-2-PENTANONE	0.32	U				
ACETONE	1.1	U				
BENZENE	0.13	U				
BROMOBENZENE	0.13	U				
BROMOCHLOROMETHANE	0.29	U				
BROMODICHLOROMETHANE	0.15	U				
BROMOFORM	0.64	U				

PROJ_NO: 04882	NSAMPLE	TB-082313					
SDG: 240-28322-1	LAB_ID	240-28322-3					
FRACTION: OV	SAMP_DATE	8/23/2013					
MEDIA: WATER	QC_TYPE	TB			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOMETHANE		0.72	J	P			
CARBON DISULFIDE		0.13	U				
CARBON TETRACHLORIDE		0.13	U				
CHLOROBENZENE		0.15	U				
CHLORODIBROMOMETHANE		0.18	U				
CHLOROETHANE		0.29	U				
CHLOROFORM		0.16	U				
CHLOROMETHANE		1.4					
CIS-1,2-DICHLOROETHENE		0.17	U				
CIS-1,3-DICHLOROPROPENE		0.14	U				
DIBROMOMETHANE		0.28	U				
DICHLORODIFLUOROMETHANE		0.31	U				
DIISOPROPYL ETHER		1.5	U				
ETHYL TERT-BUTYL ETHER		0.11	U				
ETHYLBENZENE		0.17	U				
HEXACHLOROBUTADIENE		0.3	U				
ISOPROPYLBENZENE		0.13	U				
M+P-XYLENES		0.24	U				
METHYL TERT-BUTYL ETHER		0.17	U				
METHYLENE CHLORIDE		0.33	U				
NAPHTHALENE		0.24	U				
N-BUTYLBENZENE		0.12	U				
N-PROPYLBENZENE		0.14	U				
O-XYLENE		0.14	U				
SEC-BUTYLBENZENE		0.13	U				
STYRENE		0.11	U				
TERT-AMYL METHYL ETHER		0.067	U				
TERT-BUTYLBENZENE		0.13	U				
TERTIARY-BUTYL ALCOHOL		3.9	UR	C			
TETRACHLOROETHENE		0.29	U				
TOLUENE		0.13	U				
TOTAL XYLENES		0.14	U				
TRANS-1,2-DICHLOROETHENE		0.19	U				
TRANS-1,3-DICHLOROPROPENE		0.19	U				
TRICHLOROETHENE		0.17	U				

PROJ_NO: 04882	NSAMPLE	TB-082313					
SDG: 240-28322-1	LAB_ID	240-28322-3					
FRACTION: OV	SAMP_DATE	8/23/2013					
MEDIA: WATER	QC_TYPE	TB			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.21	U				
VINYL ACETATE		0.19	UR	C			
VINYL CHLORIDE		0.22	U				

PROJ_NO: 04882	NSAMPLE	TB-082313		
SDG: 240-28322-1	LAB_ID	240-28322-3		
FRACTION: TICOV	SAMP_DATE	8/23/2013		
MEDIA: WATER	QC_TYPE	TIC		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
IODOMETHANE		0.37	NJ	Z1

PROJ_NO: 04882	NSAMPLE	DR-SB-190-18-20			DR-SB-190-28-30			DR-SB-190-8-10			DR-SB-191-22-24		
SDG: 240-28322-1	LAB_ID	240-28322-1			240-28322-4			240-28322-2			240-28322-5		
FRACTION: OS	SAMP_DATE	8/23/2013			8/23/2013			8/23/2013			8/23/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	61.8			84.1			81.5			86.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		5.6	U		7.5	J	P	4.2	U		120	J	P
1,4-DIOXANE		35	U		26	U		27	U		250	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		15	U		11	U		11	U		110	U	
2,4,5-TRICHLOROPHENOL		40	U		30	U		30	U		290	U	
2,4,6-TRICHLOROPHENOL		14	U		11	U		11	U		100	U	
2,4-DICHLOROPHENOL		32	U		24	U		24	U		230	U	
2,4-DIMETHYLPHENOL		32	U		24	U		24	U		230	U	
2,4-DINITROPHENOL		34	U		25	U		25	U		240	U	
2,4-DINITROTOLUENE		27	U		20	U		21	U		190	U	
2,6-DINITROTOLUENE		34	U		25	U		25	U		240	U	
2-CHLORONAPHTHALENE		0.72	U		0.54	U		0.54	U		5.2	U	
2-CHLOROPHENOL		13	U		9.8	U		9.9	U		94	U	
2-METHYLNAPHTHALENE		8.6	J	P	26			0.61	U		410		
2-METHYLPHENOL		18	U		13	U		13	U		130	U	
2-NITROANILINE		15	U		11	U		11	U		100	U	
2-NITROPHENOL		13	U		9.9	U		10	U		95	U	
3&4-METHYLPHENOL		32	U		24	U		24	U		230	U	
3,3'-DICHLOROBENZIDINE		29	U		21	U		22	U		210	U	
3-NITROANILINE		26	U		19	U		19	U		180	U	
4,6-DINITRO-2-METHYLPHENOL		15	U		11	U		11	U		110	U	
4-BROMOPHENYL PHENYL ETHER		21	U		15	U		16	U		150	U	
4-CHLORO-3-METHYLPHENOL		34	U		25	U		25	U		240	U	
4-CHLOROANILINE		27	U		20	U		21	U		190	U	
4-CHLOROPHENYL PHENYL ETHER		21	U		15	U		16	U		150	U	
4-NITROANILINE		42	U		31	U		31	U		300	U	
4-NITROPHENOL		27	U		20	U		21	U		190	U	
ACENAPHTHENE		19			35			0.92	U		930		
ACENAPHTHYLENE		5.7	J	P	23			0.42	U		81		
ACETOPHENONE		15	U		11	U		11	U		110	U	
ANTHRACENE		58			94			0.94	U		1700		
ATRAZINE		15	U		11	U		11	U		100	U	
BENZALDEHYDE		19	UL	E	14	UL	E	15	UL	E	140	UL	E
BENZO(A)ANTHRACENE		220			300			0.76	U		6900		
BENZO(A)PYRENE		190			290			0.77	U		6400		
BENZO(B)FLUORANTHENE		170			380			0.71	U		9400		

PROJ_NO: 04882	NSAMPLE	DR-SB-190-18-20			DR-SB-190-28-30			DR-SB-190-8-10			DR-SB-191-22-24		
SDG: 240-28322-1	LAB_ID	240-28322-1			240-28322-4			240-28322-2			240-28322-5		
FRACTION: OS	SAMP_DATE	8/23/2013			8/23/2013			8/23/2013			8/23/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	61.8			84.1			81.5			86.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		90			220			0.42	U		3800		
BENZO(K)FLUORANTHENE		64			140			0.82	U		3200		
BIS(2-CHLOROETHOXY)METHANE		35	U		26	U		27	U		250	U	
BIS(2-CHLOROETHYL)ETHER		3.2	U		2.4	U		2.4	U		23	U	
BIS(2-ETHYLHEXYL)PHTHALATE		35	J	P	36	J	P	36	J	P	310	J	P
BUTYL BENZYL PHTHALATE		16	U		12	U		12	U		110	U	
CAPROLACTAM		59	U		44	U		45	U		420	U	
CARBAZOLE		43	U		32	U		33	U		990		
CHRYSENE		210			320			1.3	U		7600		
DIBENZO(A,H)ANTHRACENE		25			46			0.8	U		1200		
DIBENZOFURAN		1.1	U		33	J	P	0.8	U		620		
DIETHYL PHTHALATE		26	U		19	U		19	U		180	U	
DIMETHYL PHTHALATE		27	U		20	U		21	U		190	U	
DI-N-BUTYL PHTHALATE		24	U		18	U		18	U		170	U	
DI-N-OCTYL PHTHALATE		13	U		9.4	U		9.6	U		91	U	
FLUORANTHENE		250			740			0.67	U		13000		
FLUORENE		36			61			0.64	U		990		
HEXACHLOROBENZENE		3.4	U		2.5	U		2.5	U		24	U	
HEXACHLOROBUTADIENE		9	U		6.7	U		6.8	U		64	U	
HEXACHLOROCYCLOPENTADIENE		13	U		9.6	U		9.8	U		93	U	
HEXACHLOROETHANE		14	U		11	U		11	U		100	U	
INDENO(1,2,3-CD)PYRENE		77			180			0.42	U		3600		
ISOPHORONE		21	U		15	U		16	U		150	U	
NAPHTHALENE		13			42			0.99	U		680		
NITROBENZENE		3.5	U		2.6	U		2.7	U		25	U	
N-NITROSODIMETHYLAMINE		26	U		19	U		19	U		180	U	
N-NITROSO-DI-N-PROPYLAMINE		10	U		7.5	U		7.6	U		72	U	
N-NITROSODIPHENYLAMINE		34	U		25	U		25	U		240	U	
PENTACHLOROPHENOL		15	U		11	U		11	U		100	U	
PHENANTHRENE		200			300			0.88	U		6900		
PHENOL		12	U		8.7	U		12	J	P	84	U	
PYRENE		360			720			0.53	U		10000		

PROJ_NO: 04882	NSAMPLE	DR-SB-190-18-20						DR-SB-190-28-30					
SDG: 240-28322-1	LAB_ID	240-28322-1						240-28322-4					
FRACTION: PET	SAMP_DATE	8/23/2013						8/23/2013					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	61.8			61.8			84.1			84.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					72	U					69	J	P
TPH (C10-C32)		15	U					14	J	P			

PROJ_NO: 04882	NSAMPLE	DR-SB-190-8-10						DR-SB-191-22-24					
SDG: 240-28322-1	LAB_ID	240-28322-2						240-28322-5					
FRACTION: PET	SAMP_DATE	8/23/2013						8/23/2013					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	81.5			81.5			86.3			86.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					56	U					330		
TPH (C10-C32)		11	U					430					

PROJ_NO: 04882	NSAMPLE	DR-SB-190-18-20			DR-SB-190-28-30			DR-SB-190-8-10			DR-SB-191-22-24		
SDG: 240-28322-1	LAB_ID	240-28322-1			240-28322-4			240-28322-2			240-28322-5		
FRACTION: PCB	SAMP_DATE	8/23/2013			8/23/2013			8/23/2013			8/23/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	61.8			84.1			81.5			86.3		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		34	U		25	U		26	U		120	U	
AROCLOR-1221		26	U		19	U		20	U		94	U	
AROCLOR-1232		23	U		17	U		17	U		82	U	
AROCLOR-1242		21	U		16	U		16	U		77	U	
AROCLOR-1248		28	U		20	U		21	U		100	U	
AROCLOR-1254		28	U		20	U		21	U		710		
AROCLOR-1260		28	U		20	U		21	U		100	U	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 | Lab Sample ID: 240-28322-1

Matrix: Solid | Lab File ID: UX87060.D

Analysis Method: 8260B | Date Collected: 08/23/2013 11:10

Sample wt/vol: 5.08(g) | Date Analyzed: 08/29/2013 05:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 38.2 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	8.0	U	8.0	0.99
71-55-6	1,1,1-Trichloroethane	8.0	U	8.0	0.89
79-34-5	1,1,2,2-Tetrachloroethane	8.0	U	8.0	0.54
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	8.0	U	8.0	2.1
75-34-3	1,1-Dichloroethane	8.0	U	8.0	0.57
75-35-4	1,1-Dichloroethene	8.0	U	8.0	0.83
563-58-6	1,1-Dichloropropene	8.0	U	8.0	0.48
87-61-6	1,2,3-Trichlorobenzene	8.0	U	8.0	0.60
96-18-4	1,2,3-Trichloropropane	8.0	U	8.0	1.4
526-73-8	1,2,3-Trimethylbenzene	8.0	U	8.0	0.27
120-82-1	1,2,4-Trichlorobenzene	1.5	J B	8.0	0.43
95-63-6	1,2,4-Trimethylbenzene	8.0	U	8.0	1.0
96-12-8	1,2-Dibromo-3-Chloropropane	16	U	16	2.1
95-50-1	1,2-Dichlorobenzene	8.0	U	8.0	0.57
107-06-2	1,2-Dichloroethane	8.0	U	8.0	0.54
78-87-5	1,2-Dichloropropane	8.0	U	8.0	1.1
541-73-1	1,3-Dichlorobenzene	8.0	U	8.0	0.56
142-28-9	1,3-Dichloropropane	8.0	U	8.0	0.54
106-46-7	1,4-Dichlorobenzene	8.0	U	8.0	1.1
594-20-7	2,2-Dichloropropane	8.0	U	8.0	1.5
110-75-8	2-Chloroethyl vinyl ether	80	U	80	2.2
95-49-8	2-Chlorotoluene	8.0	U	8.0	0.64
591-78-6	2-Hexanone	32	U	32	1.0
108-86-1	Bromobenzene	8.0	U	8.0	0.53
74-97-5	Bromochloromethane	8.0	U	8.0	1.1
106-43-4	4-Chlorotoluene	8.0	U	8.0	0.65
99-87-6	p-Isopropyltoluene	8.0	U	8.0	0.33
67-64-1	Acetone	31	J B	32	10
71-43-2	Benzene	8.0	U	8.0	0.37
75-25-2	Bromoform	8.0	U	8.0	0.53
74-83-9	Bromomethane	8.0	U	8.0	0.86
75-15-0	Carbon disulfide	8.0	U	8.0	0.70
56-23-5	Carbon tetrachloride	8.0	U	8.0	0.59
108-90-7	Chlorobenzene	8.0	U	8.0	0.53
75-00-3	Chloroethane	8.0	U	8.0	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 | Lab Sample ID: 240-28322-1

Matrix: Solid | Lab File ID: UX87060.D

Analysis Method: 8260B | Date Collected: 08/23/2013 11:10

Sample wt/vol: 5.08(g) | Date Analyzed: 08/29/2013 05:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 38.2 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	8.0	U	8.0	0.46
74-87-3	Chloromethane	8.0	U	8.0	0.65
156-59-2	cis-1,2-Dichloroethene	8.0	U	8.0	0.57
10061-01-5	cis-1,3-Dichloropropene	8.0	U	8.0	0.54
87-68-3	Hexachlorobutadiene	8.0	U	8.0	1.9
74-95-3	Dibromomethane	8.0	U	8.0	1.0
75-27-4	Bromodichloromethane	8.0	U	8.0	0.45
75-71-8	Dichlorodifluoromethane	8.0	U	8.0	0.80
100-41-4	Ethylbenzene	8.0	U	8.0	0.41
106-93-4	1,2-Dibromoethane	8.0	U	8.0	0.80
108-20-3	Diisopropyl ether	16	U	16	2.4
91-20-3	Naphthalene	8.0	U	8.0	0.30
179601-23-1	m-Xylene & p-Xylene	16	U	16	1.9
104-51-8	n-Butylbenzene	8.0	U	8.0	0.37
98-82-8	Isopropylbenzene	8.0	U	8.0	0.25
103-65-1	n-Propylbenzene	8.0	U	8.0	0.64
78-93-3	2-Butanone	3.1	J	32	2.2
108-10-1	4-Methyl-2-pentanone	32	U	32	0.86
135-98-8	sec-Butylbenzene	8.0	U	8.0	0.29
1634-04-4	Methyl tert-butyl ether	8.0	U	8.0	0.68
994-05-8	Tert-amyl-methyl ether (TAME)	8.0	U	8.0	0.59
75-09-2	Methylene Chloride	4.7	J B	8.0	1.1
95-47-6	o-Xylene	8.0	U	8.0	0.56
100-42-5	Styrene	8.0	U	8.0	0.24
637-92-3	Ethyl-t-butyl ether (ETBE)	8.0	U	8.0	0.35
98-06-6	tert-Butylbenzene	8.0	U	8.0	0.46
127-18-4	Tetrachloroethene	8.0	U	8.0	0.83
108-88-3	Toluene	8.0	U	8.0	0.43
156-60-5	trans-1,2-Dichloroethene	8.0	U	8.0	0.65
10061-02-6	trans-1,3-Dichloropropene	8.0	U	8.0	0.86
79-01-6	Trichloroethene	8.0	U	8.0	0.67
75-69-4	Trichlorofluoromethane	8.0	U	8.0	0.54
108-05-4	Vinyl acetate	16	U	16	0.40
75-01-4	Vinyl chloride	8.0	U	8.0	0.62
75-65-0	tert-Butyl alcohol	320	U	320	12
1330-20-7	Xylenes, Total	16	U	16	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 Lab Sample ID: 240-28322-1

Matrix: Solid Lab File ID: UX87060.D

Analysis Method: 8260B Date Collected: 08/23/2013 11:10

Sample wt/vol: 5.08(g) Date Analyzed: 08/29/2013 05:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 38.2 Level: (low/med) Low

Analysis Batch No.: 99442 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	8.0	U	8.0	0.88

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73		58-123
460-00-4	4-Bromofluorobenzene (Surr)	79		52-136
2037-26-5	Toluene-d8 (Surr)	99		67-125
1868-53-7	Dibromofluoromethane (Surr)	83		37-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 Lab Sample ID: 240-28322-1

Matrix: Solid Lab File ID: UX87060.D

Analysis Method: 8260B Date Collected: 08/23/2013 11:10

Sample wt/vol: 5.08(g) Date Analyzed: 08/29/2013 05:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 38.2 Level: (low/med) Low

Analysis Batch No.: 99442 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 | Lab Sample ID: 240-28322-4

Matrix: Solid | Lab File ID: UX87059.D

Analysis Method: 8260B | Date Collected: 08/23/2013 11:20

Sample wt/vol: 2.10(g) | Date Analyzed: 08/29/2013 04:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	14	U	14	1.8
71-55-6	1,1,1-Trichloroethane	14	U	14	1.6
79-34-5	1,1,2,2-Tetrachloroethane	14	U	14	0.96
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	14	U	14	3.7
75-34-3	1,1-Dichloroethane	14	U	14	1.0
75-35-4	1,1-Dichloroethene	14	U	14	1.5
563-58-6	1,1-Dichloropropene	14	U	14	0.85
87-61-6	1,2,3-Trichlorobenzene	28		14	1.1
96-18-4	1,2,3-Trichloropropane	14	U	14	2.5
526-73-8	1,2,3-Trimethylbenzene	14	U	14	0.48
120-82-1	1,2,4-Trichlorobenzene	220	B	14	0.76
95-63-6	1,2,4-Trimethylbenzene	14	U	14	1.8
96-12-8	1,2-Dibromo-3-Chloropropane	28	U	28	3.7
95-50-1	1,2-Dichlorobenzene	1.7	J	14	1.0
107-06-2	1,2-Dichloroethane	1.0	J	14	0.96
78-87-5	1,2-Dichloropropane	14	U	14	2.0
541-73-1	1,3-Dichlorobenzene	14	U	14	0.99
142-28-9	1,3-Dichloropropane	14	U	14	0.96
106-46-7	1,4-Dichlorobenzene	14	U	14	1.9
594-20-7	2,2-Dichloropropane	14	U	14	2.7
110-75-8	2-Chloroethyl vinyl ether	140	U	140	4.0
95-49-8	2-Chlorotoluene	14	U	14	1.1
591-78-6	2-Hexanone	57	U	57	1.8
108-86-1	Bromobenzene	14	U	14	0.93
74-97-5	Bromochloromethane	14	U	14	2.0
106-43-4	4-Chlorotoluene	14	U	14	1.2
99-87-6	p-Isopropyltoluene	14	U	14	0.59
67-64-1	Acetone	24	J B	57	18
71-43-2	Benzene	14	U	14	0.65
75-25-2	Bromoform	14	U	14	0.93
74-83-9	Bromomethane	14	U	14	1.5
75-15-0	Carbon disulfide	14	U	14	1.2
56-23-5	Carbon tetrachloride	14	U	14	1.0
108-90-7	Chlorobenzene	14	U	14	0.93
75-00-3	Chloroethane	14	U	14	2.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 | Lab Sample ID: 240-28322-4

Matrix: Solid | Lab File ID: UX87059.D

Analysis Method: 8260B | Date Collected: 08/23/2013 11:20

Sample wt/vol: 2.10(g) | Date Analyzed: 08/29/2013 04:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	14	U	14	0.82
74-87-3	Chloromethane	14	U	14	1.2
156-59-2	cis-1,2-Dichloroethene	14		14	1.0
10061-01-5	cis-1,3-Dichloropropene	14	U	14	0.96
87-68-3	Hexachlorobutadiene	14	U	14	3.4
74-95-3	Dibromomethane	14	U	14	1.8
75-27-4	Bromodichloromethane	14	U	14	0.79
75-71-8	Dichlorodifluoromethane	14	U	14	1.4
100-41-4	Ethylbenzene	14	U	14	0.74
106-93-4	1,2-Dibromoethane	14	U	14	1.4
108-20-3	Diisopropyl ether	28	U	28	4.2
91-20-3	Naphthalene	1.3	J B	14	0.54
179601-23-1	m-Xylene & p-Xylene	28	U	28	3.4
104-51-8	n-Butylbenzene	14	U	14	0.65
98-82-8	Isopropylbenzene	14	U	14	0.45
103-65-1	n-Propylbenzene	14	U	14	1.1
78-93-3	2-Butanone	57	U	57	4.0
108-10-1	4-Methyl-2-pentanone	57	U	57	1.5
135-98-8	sec-Butylbenzene	14	U	14	0.51
1634-04-4	Methyl tert-butyl ether	14	U	14	1.2
994-05-8	Tert-amyl-methyl ether (TAME)	14	U	14	1.0
75-09-2	Methylene Chloride	16	B	14	1.9
95-47-6	o-Xylene	14	U	14	0.99
100-42-5	Styrene	14	U	14	0.42
637-92-3	Ethyl-t-butyl ether (ETBE)	14	U	14	0.62
98-06-6	tert-Butylbenzene	14	U	14	0.82
127-18-4	Tetrachloroethene	3.7	J	14	1.5
108-88-3	Toluene	2.0	J B	14	0.76
156-60-5	trans-1,2-Dichloroethene	14	U	14	1.2
10061-02-6	trans-1,3-Dichloropropene	14	U	14	1.5
79-01-6	Trichloroethene	220		14	1.2
75-69-4	Trichlorofluoromethane	14	U	14	0.96
108-05-4	Vinyl acetate	28	U	28	0.71
75-01-4	Vinyl chloride	14	U	14	1.1
75-65-0	tert-Butyl alcohol	570	U	570	22
1330-20-7	Xylenes, Total	28	U	28	0.99

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 Lab Sample ID: 240-28322-4

Matrix: Solid Lab File ID: UX87059.D

Analysis Method: 8260B Date Collected: 08/23/2013 11:20

Sample wt/vol: 2.10(g) Date Analyzed: 08/29/2013 04:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 Level: (low/med) Low

Analysis Batch No.: 99442 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	14	U	14	1.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	77		58-123
460-00-4	4-Bromofluorobenzene (Surr)	86		52-136
2037-26-5	Toluene-d8 (Surr)	105		67-125
1868-53-7	Dibromofluoromethane (Surr)	88		37-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 Lab Sample ID: 240-28322-4

Matrix: Solid Lab File ID: UX87059.D

Analysis Method: 8260B Date Collected: 08/23/2013 11:20

Sample wt/vol: 2.10(g) Date Analyzed: 08/29/2013 04:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 Level: (low/med) Low

Analysis Batch No.: 99442 Units: ug/Kg

Number TICs Found: 1 TIC Result Total: 4.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
108-87-2	Methylcyclohexane	5.61	4.7	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 | Lab Sample ID: 240-28322-2

Matrix: Solid | Lab File ID: UX87063.D

Analysis Method: 8260B | Date Collected: 08/23/2013 14:00

Sample wt/vol: 5.30(g) | Date Analyzed: 08/29/2013 06:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 18.5 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.8	U	5.8	0.72
71-55-6	1,1,1-Trichloroethane	5.8	U	5.8	0.65
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U	5.8	0.39
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.8	U	5.8	1.5
75-34-3	1,1-Dichloroethane	5.8	U	5.8	0.42
75-35-4	1,1-Dichloroethene	5.8	U	5.8	0.60
563-58-6	1,1-Dichloropropene	5.8	U	5.8	0.35
87-61-6	1,2,3-Trichlorobenzene	5.8	U	5.8	0.44
96-18-4	1,2,3-Trichloropropane	5.8	U	5.8	1.0
526-73-8	1,2,3-Trimethylbenzene	5.8	U	5.8	0.20
120-82-1	1,2,4-Trichlorobenzene	0.93	J B	5.8	0.31
95-63-6	1,2,4-Trimethylbenzene	5.8	U	5.8	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	12	U	12	1.5
95-50-1	1,2-Dichlorobenzene	0.71	J	5.8	0.42
107-06-2	1,2-Dichloroethane	5.8	U	5.8	0.39
78-87-5	1,2-Dichloropropane	5.8	U	5.8	0.80
541-73-1	1,3-Dichlorobenzene	0.50	J	5.8	0.41
142-28-9	1,3-Dichloropropane	5.8	U	5.8	0.39
106-46-7	1,4-Dichlorobenzene	3.7	J	5.8	0.76
594-20-7	2,2-Dichloropropane	5.8	U	5.8	1.1
110-75-8	2-Chloroethyl vinyl ether	58	U	58	1.6
95-49-8	2-Chlorotoluene	5.8	U	5.8	0.46
591-78-6	2-Hexanone	23	U	23	0.73
108-86-1	Bromobenzene	5.8	U	5.8	0.38
74-97-5	Bromochloromethane	5.8	U	5.8	0.82
106-43-4	4-Chlorotoluene	5.8	U	5.8	0.47
99-87-6	p-Isopropyltoluene	5.8	U	5.8	0.24
67-64-1	Acetone	16	J B	23	7.3
71-43-2	Benzene	5.8	U	5.8	0.27
75-25-2	Bromoform	5.8	U	5.8	0.38
74-83-9	Bromomethane	5.8	U	5.8	0.63
75-15-0	Carbon disulfide	1.9	J	5.8	0.51
56-23-5	Carbon tetrachloride	5.8	U	5.8	0.43
108-90-7	Chlorobenzene	0.69	J	5.8	0.38
75-00-3	Chloroethane	5.8	U	5.8	1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 | Lab Sample ID: 240-28322-2

Matrix: Solid | Lab File ID: UX87063.D

Analysis Method: 8260B | Date Collected: 08/23/2013 14:00

Sample wt/vol: 5.30(g) | Date Analyzed: 08/29/2013 06:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 18.5 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	5.8	U	5.8	0.34
74-87-3	Chloromethane	5.8	U	5.8	0.47
156-59-2	cis-1,2-Dichloroethene	34		5.8	0.42
10061-01-5	cis-1,3-Dichloropropene	5.8	U	5.8	0.39
87-68-3	Hexachlorobutadiene	5.8	U	5.8	1.4
74-95-3	Dibromomethane	5.8	U	5.8	0.73
75-27-4	Bromodichloromethane	5.8	U	5.8	0.32
75-71-8	Dichlorodifluoromethane	5.8	U	5.8	0.58
100-41-4	Ethylbenzene	5.8	U	5.8	0.30
106-93-4	1,2-Dibromoethane	5.8	U	5.8	0.58
108-20-3	Diisopropyl ether	12	U	12	1.7
91-20-3	Naphthalene	0.95	J B	5.8	0.22
179601-23-1	m-Xylene & p-Xylene	12	U	12	1.4
104-51-8	n-Butylbenzene	5.8	U	5.8	0.27
98-82-8	Isopropylbenzene	5.8	U	5.8	0.19
103-65-1	n-Propylbenzene	5.8	U	5.8	0.46
78-93-3	2-Butanone	23	U	23	1.6
108-10-1	4-Methyl-2-pentanone	23	U	23	0.63
135-98-8	sec-Butylbenzene	5.8	U	5.8	0.21
1634-04-4	Methyl tert-butyl ether	5.8	U	5.8	0.50
994-05-8	Tert-amyl-methyl ether (TAME)	5.8	U	5.8	0.43
75-09-2	Methylene Chloride	4.0	J B	5.8	0.78
95-47-6	o-Xylene	5.8	U	5.8	0.41
100-42-5	Styrene	5.8	U	5.8	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.8	U	5.8	0.25
98-06-6	tert-Butylbenzene	5.8	U	5.8	0.34
127-18-4	Tetrachloroethene	5.8	U	5.8	0.60
108-88-3	Toluene	1.6	J B	5.8	0.31
156-60-5	trans-1,2-Dichloroethene	5.8	U	5.8	0.47
10061-02-6	trans-1,3-Dichloropropene	5.8	U	5.8	0.63
79-01-6	Trichloroethene	5.8	U	5.8	0.49
75-69-4	Trichlorofluoromethane	5.8	U	5.8	0.39
108-05-4	Vinyl acetate	12	U	12	0.29
75-01-4	Vinyl chloride	8.8		5.8	0.45
75-65-0	tert-Butyl alcohol	230	U	230	8.8
1330-20-7	Xylenes, Total	12	U	12	0.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 | Lab Sample ID: 240-28322-2

Matrix: Solid | Lab File ID: UX87063.D

Analysis Method: 8260B | Date Collected: 08/23/2013 14:00

Sample wt/vol: 5.30(g) | Date Analyzed: 08/29/2013 06:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 18.5 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	5.8	U	5.8	0.64

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73		58-123
460-00-4	4-Bromofluorobenzene (Surr)	84		52-136
2037-26-5	Toluene-d8 (Surr)	103		67-125
1868-53-7	Dibromofluoromethane (Surr)	85		37-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 Lab Sample ID: 240-28322-2

Matrix: Solid Lab File ID: UX87063.D

Analysis Method: 8260B Date Collected: 08/23/2013 14:00

Sample wt/vol: 5.30(g) Date Analyzed: 08/29/2013 06:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 18.5 Level: (low/med) Low

Analysis Batch No.: 99442 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 | Lab Sample ID: 240-28322-5

Matrix: Solid | Lab File ID: UX87064.D

Analysis Method: 8260B | Date Collected: 08/23/2013 14:10

Sample wt/vol: 5.02(g) | Date Analyzed: 08/29/2013 06:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 13.7 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.8	U	5.8	0.72
71-55-6	1,1,1-Trichloroethane	5.8	U	5.8	0.65
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U	5.8	0.39
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.8	U	5.8	1.5
75-34-3	1,1-Dichloroethane	5.8	U	5.8	0.42
75-35-4	1,1-Dichloroethene	5.8	U	5.8	0.60
563-58-6	1,1-Dichloropropene	5.8	U	5.8	0.35
87-61-6	1,2,3-Trichlorobenzene	5.8	U	5.8	0.44
96-18-4	1,2,3-Trichloropropane	5.8	U	5.8	1.0
526-73-8	1,2,3-Trimethylbenzene	5.1	J	5.8	0.20
120-82-1	1,2,4-Trichlorobenzene	5.8	U	5.8	0.31
95-63-6	1,2,4-Trimethylbenzene	4.4	J	5.8	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	12	U	12	1.5
95-50-1	1,2-Dichlorobenzene	5.8	U	5.8	0.42
107-06-2	1,2-Dichloroethane	2.0	J	5.8	0.39
78-87-5	1,2-Dichloropropane	5.8	U	5.8	0.80
541-73-1	1,3-Dichlorobenzene	5.8	U	5.8	0.40
142-28-9	1,3-Dichloropropane	5.8	U	5.8	0.39
106-46-7	1,4-Dichlorobenzene	5.8	U	5.8	0.76
594-20-7	2,2-Dichloropropane	5.8	U	5.8	1.1
110-75-8	2-Chloroethyl vinyl ether	58	U	58	1.6
95-49-8	2-Chlorotoluene	5.8	U	5.8	0.46
591-78-6	2-Hexanone	23	U	23	0.73
108-86-1	Bromobenzene	5.8	U	5.8	0.38
74-97-5	Bromochloromethane	5.8	U	5.8	0.82
106-43-4	4-Chlorotoluene	5.8	U	5.8	0.47
99-87-6	p-Isopropyltoluene	2.1	J	5.8	0.24
67-64-1	Acetone	22	J B	23	7.3
71-43-2	Benzene	5.8	U	5.8	0.27
75-25-2	Bromoform	5.8	U	5.8	0.38
74-83-9	Bromomethane	5.8	U	5.8	0.62
75-15-0	Carbon disulfide	2.3	J	5.8	0.51
56-23-5	Carbon tetrachloride	5.8	U	5.8	0.43
108-90-7	Chlorobenzene	5.8	U	5.8	0.38
75-00-3	Chloroethane	5.8	U	5.8	0.99

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 | Lab Sample ID: 240-28322-5

Matrix: Solid | Lab File ID: UX87064.D

Analysis Method: 8260B | Date Collected: 08/23/2013 14:10

Sample wt/vol: 5.02(g) | Date Analyzed: 08/29/2013 06:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 13.7 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	5.8	U	5.8	0.33
74-87-3	Chloromethane	5.8	U	5.8	0.47
156-59-2	cis-1,2-Dichloroethene	5.5	J	5.8	0.42
10061-01-5	cis-1,3-Dichloropropene	5.8	U	5.8	0.39
87-68-3	Hexachlorobutadiene	5.8	U	5.8	1.4
74-95-3	Dibromomethane	5.8	U	5.8	0.73
75-27-4	Bromodichloromethane	5.8	U	5.8	0.32
75-71-8	Dichlorodifluoromethane	5.8	U	5.8	0.58
100-41-4	Ethylbenzene	1.2	J	5.8	0.30
106-93-4	1,2-Dibromoethane	5.8	U	5.8	0.58
108-20-3	Diisopropyl ether	12	U	12	1.7
91-20-3	Naphthalene	10	B	5.8	0.22
179601-23-1	m-Xylene & p-Xylene	4.3	J	12	1.4
104-51-8	n-Butylbenzene	0.95	J	5.8	0.27
98-82-8	Isopropylbenzene	5.8	U	5.8	0.18
103-65-1	n-Propylbenzene	5.8	U	5.8	0.46
78-93-3	2-Butanone	23	U	23	1.6
108-10-1	4-Methyl-2-pentanone	23	U	23	0.62
135-98-8	sec-Butylbenzene	5.8	U	5.8	0.21
1634-04-4	Methyl tert-butyl ether	5.8	U	5.8	0.50
994-05-8	Tert-amyl-methyl ether (TAME)	5.8	U	5.8	0.43
75-09-2	Methylene Chloride	3.4	J B	5.8	0.77
95-47-6	o-Xylene	5.7	J	5.8	0.40
100-42-5	Styrene	5.8	U	5.8	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.8	U	5.8	0.25
98-06-6	tert-Butylbenzene	5.8	U	5.8	0.33
127-18-4	Tetrachloroethene	1.5	J	5.8	0.60
108-88-3	Toluene	7.8	B	5.8	0.31
156-60-5	trans-1,2-Dichloroethene	5.8	U	5.8	0.47
10061-02-6	trans-1,3-Dichloropropene	5.8	U	5.8	0.62
79-01-6	Trichloroethene	14		5.8	0.48
75-69-4	Trichlorofluoromethane	5.8	U	5.8	0.39
108-05-4	Vinyl acetate	12	U	12	0.29
75-01-4	Vinyl chloride	4.2	J	5.8	0.45
75-65-0	tert-Butyl alcohol	230	U	230	8.8
1330-20-7	Xylenes, Total	10	J	12	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 | Lab Sample ID: 240-28322-5

Matrix: Solid | Lab File ID: UX87064.D

Analysis Method: 8260B | Date Collected: 08/23/2013 14:10

Sample wt/vol: 5.02(g) | Date Analyzed: 08/29/2013 06:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 13.7 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	5.8	U	5.8	0.63

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	77		58-123
460-00-4	4-Bromofluorobenzene (Surr)	86		52-136
2037-26-5	Toluene-d8 (Surr)	105		67-125
1868-53-7	Dibromofluoromethane (Surr)	86		37-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 Lab Sample ID: 240-28322-5

Matrix: Solid Lab File ID: UX87064.D

Analysis Method: 8260B Date Collected: 08/23/2013 14:10

Sample wt/vol: 5.02(g) Date Analyzed: 08/29/2013 06:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 13.7 Level: (low/med) Low

Analysis Batch No.: 99442 Units: ug/Kg

Number TICs Found: 5 TIC Result Total: 38.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
110-82-7	Cyclohexane	4.72	2.0	J
108-87-2	Methylcyclohexane	5.61	5.7	J
80-56-8	.alpha.-Pinene	8.60	19	T J N
108-67-8	1,3,5-Trimethylbenzene	9.17	4.7	J
1195-79-5	Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet	10.97	7.4	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: TB-082313 | Lab Sample ID: 240-28322-3

Matrix: Water | Lab File ID: UXR7363.D

Analysis Method: 8260B | Date Collected: 08/23/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/30/2013 20:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99702 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	0.72	J	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: TB-082313 | Lab Sample ID: 240-28322-3

Matrix: Water | Lab File ID: UXR7363.D

Analysis Method: 8260B | Date Collected: 08/23/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/30/2013 20:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99702 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.4		1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: TB-082313 | Lab Sample ID: 240-28322-3

Matrix: Water | Lab File ID: UXR7363.D

Analysis Method: 8260B | Date Collected: 08/23/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/30/2013 20:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99702 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	102		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: TB-082313 Lab Sample ID: 240-28322-3

Matrix: Water Lab File ID: UXR7363.D

Analysis Method: 8260B Date Collected: 08/23/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/30/2013 20:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99702 Units: ug/L

Number TICs Found: 2 TIC Result Total: 580.37

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
74-88-4	Iodomethane	3.33	0.37	J
123-91-1	1,4-Dioxane	6.39	580	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 | Lab Sample ID: 240-28322-1

Matrix: Solid | Lab File ID: 30911025.D

Analysis Method: 8270D | Date Collected: 08/23/2013 11:10

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.26(g) | Date Analyzed: 09/11/2013 19:04

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 38.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	80	U	80	5.6
123-91-1	1,4-Dioxane	160	U	160	35
88-06-2	2,4,6-Trichlorophenol	240	U	240	14
95-95-4	2,4,5-Trichlorophenol	240	U	240	40
120-83-2	2,4-Dichlorophenol	240	U	240	32
105-67-9	2,4-Dimethylphenol	240	U	240	32
51-28-5	2,4-Dinitrophenol	530	U	530	34
121-14-2	2,4-Dinitrotoluene	320	U	320	27
91-58-7	2-Chloronaphthalene	80	U	80	0.72
95-57-8	2-Chlorophenol	80	U	80	13
91-57-6	2-Methylnaphthalene	8.6	J	11	0.80
95-48-7	2-Methylphenol	320	U	320	18
88-74-4	2-Nitroaniline	320	U	320	15
88-75-5	2-Nitrophenol	80	U	80	13
15831-10-4	3 & 4 Methylphenol	640	U	640	32
91-94-1	3,3'-Dichlorobenzidine	160	U	160	29
99-09-2	3-Nitroaniline	320	U	320	26
534-52-1	4,6-Dinitro-2-methylphenol	240	U	240	15
101-55-3	4-Bromophenyl phenyl ether	80	U	80	21
59-50-7	4-Chloro-3-methylphenol	240	U	240	34
106-47-8	4-Chloroaniline	240	U	240	27
7005-72-3	4-Chlorophenyl phenyl ether	80	U	80	21
100-01-6	4-Nitroaniline	320	U	320	42
83-32-9	Acenaphthene	19		11	1.2
208-96-8	Acenaphthylene	5.7	J	11	0.56
98-86-2	Acetophenone	160	U	160	15
120-12-7	Anthracene	58		11	1.3
1912-24-9	Atrazine	320	U	320	15
100-52-7	Benzaldehyde	160	U *	160	19
56-55-3	Benzo[a]anthracene	220		11	1.0
50-32-8	Benzo[a]pyrene	190		11	1.0
205-99-2	Benzo[b]fluoranthene	170		11	0.95
191-24-2	Benzo[g,h,i]perylene	90		11	0.56
207-08-9	Benzo[k]fluoranthene	64		11	1.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 | Lab Sample ID: 240-28322-1

Matrix: Solid | Lab File ID: 30911025.D

Analysis Method: 8270D | Date Collected: 08/23/2013 11:10

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.26(g) | Date Analyzed: 09/11/2013 19:04

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 38.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	160	U	160	35
111-44-4	Bis(2-chloroethyl)ether	160	U	160	3.2
117-81-7	Bis(2-ethylhexyl) phthalate	35	J	110	30
85-68-7	Butyl benzyl phthalate	110	U	110	16
105-60-2	Caprolactam	530	U	530	59
86-74-8	Carbazole	80	U	80	43
218-01-9	Chrysene	210		11	1.8
84-74-2	Di-n-butyl phthalate	110	U	110	24
117-84-0	Di-n-octyl phthalate	110	U	110	13
53-70-3	Dibenzo(a,h)anthracene	25		11	1.1
132-64-9	Dibenzofuran	80	U	80	1.1
84-66-2	Diethyl phthalate	110	U	110	26
131-11-3	Dimethyl phthalate	110	U	110	27
206-44-0	Fluoranthene	250		11	0.88
86-73-7	Fluorene	36		11	0.85
118-74-1	Hexachlorobenzene	11	U	11	3.4
87-68-3	Hexachlorobutadiene	80	U	80	9.0
77-47-4	Hexachlorocyclopentadiene	530	U	530	13
67-72-1	Hexachloroethane	80	U	80	14
193-39-5	Indeno[1,2,3-cd]pyrene	77		11	0.56
78-59-1	Isophorone	80	U	80	21
621-64-7	N-Nitrosodi-n-propylamine	80	U	80	10
62-75-9	N-Nitrosodimethylamine	160	U	160	26
86-30-6	N-Nitrosodiphenylamine	80	U	80	34
91-20-3	Naphthalene	13		11	1.3
98-95-3	Nitrobenzene	160	U	160	3.5
87-86-5	Pentachlorophenol	240	U	240	15
85-01-8	Phenanthrene	200		11	1.2
108-95-2	Phenol	80	U	80	12
129-00-0	Pyrene	360		11	0.71
108-60-1	2,2'-oxybis[1-chloropropane]	160	U	160	15
606-20-2	2,6-Dinitrotoluene	320	U	320	34
100-02-7	4-Nitrophenol	530	U	530	27

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 | Lab Sample ID: 240-28322-1

Matrix: Solid | Lab File ID: 30911025.D

Analysis Method: 8270D | Date Collected: 08/23/2013 11:10

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.26(g) | Date Analyzed: 09/11/2013 19:04

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 38.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	70		36-110
4165-62-2	Phenol-d5 (Surr)	56		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	52		20-110
367-12-4	2-Fluorophenol (Surr)	56		24-110
321-60-8	2-Fluorobiphenyl (Surr)	56		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	60		10-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 | Lab Sample ID: 240-28322-4

Matrix: Solid | Lab File ID: 30911024.D

Analysis Method: 8270D | Date Collected: 08/23/2013 11:20

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 29.96(g) | Date Analyzed: 09/11/2013 18:38

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	7.5	J	60	4.2
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	11
95-95-4	2,4,5-Trichlorophenol	180	U	180	30
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	390	U	390	25
121-14-2	2,4-Dinitrotoluene	240	U	240	20
91-58-7	2-Chloronaphthalene	60	U	60	0.54
95-57-8	2-Chlorophenol	60	U	60	9.8
91-57-6	2-Methylnaphthalene	26		7.9	0.60
95-48-7	2-Methylphenol	240	U	240	13
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	60	U	60	9.9
15831-10-4	3 & 4 Methylphenol	480	U	480	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	11
101-55-3	4-Bromophenyl phenyl ether	60	U	60	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	60	U	60	15
100-01-6	4-Nitroaniline	240	U	240	31
83-32-9	Acenaphthene	35		7.9	0.90
208-96-8	Acenaphthylene	23		7.9	0.42
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	94		7.9	0.93
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U *	120	14
56-55-3	Benzo[a]anthracene	300		7.9	0.75
50-32-8	Benzo[a]pyrene	290		7.9	0.76
205-99-2	Benzo[b]fluoranthene	380		7.9	0.70
191-24-2	Benzo[g,h,i]perylene	220		7.9	0.42
207-08-9	Benzo[k]fluoranthene	140		7.9	0.81

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 | Lab Sample ID: 240-28322-4

Matrix: Solid | Lab File ID: 30911024.D

Analysis Method: 8270D | Date Collected: 08/23/2013 11:20

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 29.96(g) | Date Analyzed: 09/11/2013 18:38

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	36	J	83	23
85-68-7	Butyl benzyl phthalate	83	U	83	12
105-60-2	Caprolactam	390	U	390	44
86-74-8	Carbazole	60	U	60	32
218-01-9	Chrysene	320		7.9	1.3
84-74-2	Di-n-butyl phthalate	83	U	83	18
117-84-0	Di-n-octyl phthalate	83	U	83	9.4
53-70-3	Dibenzo(a,h)anthracene	46		7.9	0.79
132-64-9	Dibenzofuran	33	J	60	0.79
84-66-2	Diethyl phthalate	83	U	83	19
131-11-3	Dimethyl phthalate	83	U	83	20
206-44-0	Fluoranthene	740		7.9	0.65
86-73-7	Fluorene	61		7.9	0.63
118-74-1	Hexachlorobenzene	7.9	U	7.9	2.5
87-68-3	Hexachlorobutadiene	60	U	60	6.7
77-47-4	Hexachlorocyclopentadiene	390	U	390	9.6
67-72-1	Hexachloroethane	60	U	60	11
193-39-5	Indeno[1,2,3-cd]pyrene	180		7.9	0.42
78-59-1	Isophorone	60	U	60	15
621-64-7	N-Nitrosodi-n-propylamine	60	U	60	7.5
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	60	U	60	25
91-20-3	Naphthalene	42		7.9	0.98
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	11
85-01-8	Phenanthrene	300		7.9	0.87
108-95-2	Phenol	60	U	60	8.7
129-00-0	Pyrene	720		7.9	0.52
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	390	U	390	20

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 | Lab Sample ID: 240-28322-4

Matrix: Solid | Lab File ID: 30911024.D

Analysis Method: 8270D | Date Collected: 08/23/2013 11:20

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 29.96(g) | Date Analyzed: 09/11/2013 18:38

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	82		36-110
4165-62-2	Phenol-d5 (Surr)	68		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	61		20-110
367-12-4	2-Fluorophenol (Surr)	71		24-110
321-60-8	2-Fluorobiphenyl (Surr)	63		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	63		10-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 | Lab Sample ID: 240-28322-2

Matrix: Solid | Lab File ID: 30911014.D

Analysis Method: 8270D | Date Collected: 08/23/2013 14:00

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.42(g) | Date Analyzed: 09/11/2013 14:26

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	61	U	61	4.2
123-91-1	1,4-Dioxane	120	U	120	27
88-06-2	2,4,6-Trichlorophenol	180	U	180	11
95-95-4	2,4,5-Trichlorophenol	180	U	180	30
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	400	U	400	25
121-14-2	2,4-Dinitrotoluene	240	U	240	21
91-58-7	2-Chloronaphthalene	61	U	61	0.54
95-57-8	2-Chlorophenol	61	U	61	9.9
91-57-6	2-Methylnaphthalene	8.1	U	8.1	0.61
95-48-7	2-Methylphenol	240	U	240	13
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	61	U	61	10
15831-10-4	3 & 4 Methylphenol	480	U	480	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	22
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	11
101-55-3	4-Bromophenyl phenyl ether	61	U	61	16
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	21
7005-72-3	4-Chlorophenyl phenyl ether	61	U	61	16
100-01-6	4-Nitroaniline	240	U	240	31
83-32-9	Acenaphthene	8.1	U	8.1	0.92
208-96-8	Acenaphthylene	8.1	U	8.1	0.42
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	8.1	U	8.1	0.94
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U *	120	15
56-55-3	Benzo[a]anthracene	8.1	U	8.1	0.76
50-32-8	Benzo[a]pyrene	8.1	U	8.1	0.77
205-99-2	Benzo[b]fluoranthene	8.1	U	8.1	0.71
191-24-2	Benzo[g,h,i]perylene	8.1	U	8.1	0.42
207-08-9	Benzo[k]fluoranthene	8.1	U	8.1	0.82

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 | Lab Sample ID: 240-28322-2

Matrix: Solid | Lab File ID: 30911014.D

Analysis Method: 8270D | Date Collected: 08/23/2013 14:00

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.42(g) | Date Analyzed: 09/11/2013 14:26

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	27
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	36	J	85	23
85-68-7	Butyl benzyl phthalate	85	U	85	12
105-60-2	Caprolactam	400	U	400	45
86-74-8	Carbazole	61	U	61	33
218-01-9	Chrysene	8.1	U	8.1	1.3
84-74-2	Di-n-butyl phthalate	85	U	85	18
117-84-0	Di-n-octyl phthalate	85	U	85	9.6
53-70-3	Dibenzo(a,h)anthracene	8.1	U	8.1	0.80
132-64-9	Dibenzofuran	61	U	61	0.80
84-66-2	Diethyl phthalate	85	U	85	19
131-11-3	Dimethyl phthalate	85	U	85	21
206-44-0	Fluoranthene	8.1	U	8.1	0.67
86-73-7	Fluorene	8.1	U	8.1	0.64
118-74-1	Hexachlorobenzene	8.1	U	8.1	2.5
87-68-3	Hexachlorobutadiene	61	U	61	6.8
77-47-4	Hexachlorocyclopentadiene	400	U	400	9.8
67-72-1	Hexachloroethane	61	U	61	11
193-39-5	Indeno[1,2,3-cd]pyrene	8.1	U	8.1	0.42
78-59-1	Isophorone	61	U	61	16
621-64-7	N-Nitrosodi-n-propylamine	61	U	61	7.6
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	61	U	61	25
91-20-3	Naphthalene	8.1	U	8.1	0.99
98-95-3	Nitrobenzene	120	U	120	2.7
87-86-5	Pentachlorophenol	180	U	180	11
85-01-8	Phenanthrene	8.1	U	8.1	0.88
108-95-2	Phenol	12	J	61	8.8
129-00-0	Pyrene	8.1	U	8.1	0.53
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	400	U	400	21

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 | Lab Sample ID: 240-28322-2

Matrix: Solid | Lab File ID: 30911014.D

Analysis Method: 8270D | Date Collected: 08/23/2013 14:00

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.42(g) | Date Analyzed: 09/11/2013 14:26

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	93		36-110
4165-62-2	Phenol-d5 (Surr)	68		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	64		20-110
367-12-4	2-Fluorophenol (Surr)	71		24-110
321-60-8	2-Fluorobiphenyl (Surr)	65		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	67		10-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 | Lab Sample ID: 240-28322-5

Matrix: Solid | Lab File ID: 30911027.D

Analysis Method: 8270D | Date Collected: 08/23/2013 14:10

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.30(g) | Date Analyzed: 09/11/2013 19:54

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	120	J	570	40
123-91-1	1,4-Dioxane	1100	U	1100	250
88-06-2	2,4,6-Trichlorophenol	1700	U	1700	100
95-95-4	2,4,5-Trichlorophenol	1700	U	1700	290
120-83-2	2,4-Dichlorophenol	1700	U	1700	230
105-67-9	2,4-Dimethylphenol	1700	U	1700	230
51-28-5	2,4-Dinitrophenol	3800	U	3800	240
121-14-2	2,4-Dinitrotoluene	2300	U	2300	190
91-58-7	2-Chloronaphthalene	570	U	570	5.2
95-57-8	2-Chlorophenol	570	U	570	94
91-57-6	2-Methylnaphthalene	410		77	5.7
95-48-7	2-Methylphenol	2300	U	2300	130
88-74-4	2-Nitroaniline	2300	U	2300	100
88-75-5	2-Nitrophenol	570	U	570	95
15831-10-4	3 & 4 Methylphenol	4600	U	4600	230
91-94-1	3,3'-Dichlorobenzidine	1100	U	1100	210
99-09-2	3-Nitroaniline	2300	U	2300	180
534-52-1	4,6-Dinitro-2-methylphenol	1700	U	1700	110
101-55-3	4-Bromophenyl phenyl ether	570	U	570	150
59-50-7	4-Chloro-3-methylphenol	1700	U	1700	240
106-47-8	4-Chloroaniline	1700	U	1700	190
7005-72-3	4-Chlorophenyl phenyl ether	570	U	570	150
100-01-6	4-Nitroaniline	2300	U	2300	300
83-32-9	Acenaphthene	930		77	8.7
208-96-8	Acenaphthylene	81		77	4.0
98-86-2	Acetophenone	1100	U	1100	110
120-12-7	Anthracene	1700		77	8.9
1912-24-9	Atrazine	2300	U	2300	100
100-52-7	Benzaldehyde	1100	U *	1100	140
56-55-3	Benzo[a]anthracene	6900		77	7.2
50-32-8	Benzo[a]pyrene	6400		77	7.3
205-99-2	Benzo[b]fluoranthene	9400		77	6.8
191-24-2	Benzo[g,h,i]perylene	3800		77	4.0
207-08-9	Benzo[k]fluoranthene	3200		77	7.8

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 | Lab Sample ID: 240-28322-5

Matrix: Solid | Lab File ID: 30911027.D

Analysis Method: 8270D | Date Collected: 08/23/2013 14:10

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.30(g) | Date Analyzed: 09/11/2013 19:54

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1100	U	1100	250
111-44-4	Bis(2-chloroethyl)ether	1100	U	1100	23
117-81-7	Bis(2-ethylhexyl) phthalate	310	J	800	220
85-68-7	Butyl benzyl phthalate	800	U	800	110
105-60-2	Caprolactam	3800	U	3800	420
86-74-8	Carbazole	990		570	310
218-01-9	Chrysene	7600		77	13
84-74-2	Di-n-butyl phthalate	800	U	800	170
117-84-0	Di-n-octyl phthalate	800	U	800	91
53-70-3	Dibenzo(a,h)anthracene	1200		77	7.6
132-64-9	Dibenzofuran	620		570	7.6
84-66-2	Diethyl phthalate	800	U	800	180
131-11-3	Dimethyl phthalate	800	U	800	190
206-44-0	Fluoranthene	13000		77	6.3
86-73-7	Fluorene	990		77	6.1
118-74-1	Hexachlorobenzene	77	U	77	24
87-68-3	Hexachlorobutadiene	570	U	570	64
77-47-4	Hexachlorocyclopentadiene	3800	U	3800	93
67-72-1	Hexachloroethane	570	U	570	100
193-39-5	Indeno[1,2,3-cd]pyrene	3600		77	4.0
78-59-1	Isophorone	570	U	570	150
621-64-7	N-Nitrosodi-n-propylamine	570	U	570	72
62-75-9	N-Nitrosodimethylamine	1100	U	1100	180
86-30-6	N-Nitrosodiphenylamine	570	U	570	240
91-20-3	Naphthalene	680		77	9.4
98-95-3	Nitrobenzene	1100	U	1100	25
87-86-5	Pentachlorophenol	1700	U	1700	100
85-01-8	Phenanthrene	6900		77	8.4
108-95-2	Phenol	570	U	570	84
129-00-0	Pyrene	10000		77	5.0
108-60-1	2,2'-oxybis[1-chloropropane]	1100	U	1100	110
606-20-2	2,6-Dinitrotoluene	2300	U	2300	240
100-02-7	4-Nitrophenol	3800	U	3800	190

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 | Lab Sample ID: 240-28322-5

Matrix: Solid | Lab File ID: 30911027.D

Analysis Method: 8270D | Date Collected: 08/23/2013 14:10

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.30(g) | Date Analyzed: 09/11/2013 19:54

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	70		36-110
4165-62-2	Phenol-d5 (Surr)	59		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	57		20-110
367-12-4	2-Fluorophenol (Surr)	66		24-110
321-60-8	2-Fluorobiphenyl (Surr)	56		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	57		10-110

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 Lab Sample ID: 240-28322-1

Matrix: Solid Lab File ID: YF082807.D

Analysis Method: 8015C Date Collected: 08/23/2013 11:10

Sample wt/vol: 5.14(g) Date Analyzed: 08/28/2013 13:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 38.2 Level: (low/med) Low

Analysis Batch No.: 99374 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	160	U	160	72

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	41		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 Lab Sample ID: 240-28322-4

Matrix: Solid Lab File ID: YF082811.D

Analysis Method: 8015C Date Collected: 08/23/2013 11:20

Sample wt/vol: 5.09(g) Date Analyzed: 08/28/2013 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 15.9 Level: (low/med) Low

Analysis Batch No.: 99374 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	69	J	120	54

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	41		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 Lab Sample ID: 240-28322-2

Matrix: Solid Lab File ID: YF082808.D

Analysis Method: 8015C Date Collected: 08/23/2013 14:00

Sample wt/vol: 5.07(g) Date Analyzed: 08/28/2013 14:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 18.5 Level: (low/med) Low

Analysis Batch No.: 99374 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	56

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	46		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 Lab Sample ID: 240-28322-5

Matrix: Solid Lab File ID: YF082812.D

Analysis Method: 8015C Date Collected: 08/23/2013 14:10

Sample wt/vol: 5.07(g) Date Analyzed: 08/28/2013 17:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 13.7 Level: (low/med) Low

Analysis Batch No.: 99374 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	330		110	53

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	43		10-150

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 | Lab Sample ID: 240-28322-1

Matrix: Solid | Lab File ID: P6F90310.D

Analysis Method: 8015C | Date Collected: 08/23/2013 11:10

Extraction Method: 3550C | Date Extracted: 09/03/2013 07:22

Sample wt/vol: 30.15(g) | Date Analyzed: 09/03/2013 20:15

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 38.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99953 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	27	U	27	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	44		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 Lab Sample ID: 240-28322-4

Matrix: Solid Lab File ID: P6F90312.D

Analysis Method: 8015C Date Collected: 08/23/2013 11:20

Extraction Method: 3550C Date Extracted: 09/03/2013 07:22

Sample wt/vol: 29.66(g) Date Analyzed: 09/03/2013 21:17

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 15.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 99953 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	14	J	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	39		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 | Lab Sample ID: 240-28322-2

Matrix: Solid | Lab File ID: P6F90311.D

Analysis Method: 8015C | Date Collected: 08/23/2013 14:00

Extraction Method: 3550C | Date Extracted: 09/03/2013 07:22

Sample wt/vol: 29.80(g) | Date Analyzed: 09/03/2013 20:46

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 18.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 99953 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	21	U	21	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	39		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 Lab Sample ID: 240-28322-5

Matrix: Solid Lab File ID: P6F90335.D

Analysis Method: 8015C Date Collected: 08/23/2013 14:10

Extraction Method: 3550C Date Extracted: 09/03/2013 07:22

Sample wt/vol: 30.48(g) Date Analyzed: 09/04/2013 09:46

Con. Extract Vol.: 5(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 13.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 99953 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	430		95	53

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	44		10-110

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 Lab Sample ID: 240-28322-1

Matrix: Solid Lab File ID: P1300004.D

Analysis Method: 8082A Date Collected: 08/23/2013 11:10

Extraction Method: 3540C Date Extracted: 09/05/2013 11:13

Sample wt/vol: 29.61(g) Date Analyzed: 09/10/2013 09:55

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 38.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100765 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	54	U	54	34
11104-28-2	Aroclor-1221	54	U	54	26
11141-16-5	Aroclor-1232	54	U	54	23
53469-21-9	Aroclor-1242	54	U	54	21
12672-29-6	Aroclor-1248	54	U	54	28
11097-69-1	Aroclor-1254	54	U	54	28
11096-82-5	Aroclor-1260	54	U	54	28

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	76		29-151
2051-24-3	Decachlorobiphenyl	77		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-18-20 Lab Sample ID: 240-28322-1

Matrix: Solid Lab File ID: P1300004.D

Analysis Method: 8082A Date Collected: 08/23/2013 11:10

Extraction Method: 3540C Date Extracted: 09/05/2013 11:13

Sample wt/vol: 29.61(g) Date Analyzed: 09/10/2013 09:55

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 38.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100765 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	79		29-151
2051-24-3	Decachlorobiphenyl	82		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 Lab Sample ID: 240-28322-4

Matrix: Solid Lab File ID: P1300006.D

Analysis Method: 8082A Date Collected: 08/23/2013 11:20

Extraction Method: 3540C Date Extracted: 09/05/2013 11:13

Sample wt/vol: 29.67(g) Date Analyzed: 09/10/2013 10:25

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 15.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100765 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	40	U	40	25
11104-28-2	Aroclor-1221	40	U	40	19
11141-16-5	Aroclor-1232	40	U	40	17
53469-21-9	Aroclor-1242	40	U	40	16
12672-29-6	Aroclor-1248	40	U	40	20
11097-69-1	Aroclor-1254	40	U	40	20
11096-82-5	Aroclor-1260	40	U	40	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	71		29-151
2051-24-3	Decachlorobiphenyl	74		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 Lab Sample ID: 240-28322-4

Matrix: Solid Lab File ID: P1300006.D

Analysis Method: 8082A Date Collected: 08/23/2013 11:20

Extraction Method: 3540C Date Extracted: 09/05/2013 11:13

Sample wt/vol: 29.67(g) Date Analyzed: 09/10/2013 10:25

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 15.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100765 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	74		29-151
2051-24-3	Decachlorobiphenyl	91		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 Lab Sample ID: 240-28322-2

Matrix: Solid Lab File ID: P1300005.D

Analysis Method: 8082A Date Collected: 08/23/2013 14:00

Extraction Method: 3540C Date Extracted: 09/05/2013 11:13

Sample wt/vol: 29.94(g) Date Analyzed: 09/10/2013 10:10

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 18.5 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100765 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	41	U	41	26
11104-28-2	Aroclor-1221	41	U	41	20
11141-16-5	Aroclor-1232	41	U	41	17
53469-21-9	Aroclor-1242	41	U	41	16
12672-29-6	Aroclor-1248	41	U	41	21
11097-69-1	Aroclor-1254	41	U	41	21
11096-82-5	Aroclor-1260	41	U	41	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	71		29-151
2051-24-3	Decachlorobiphenyl	82		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-8-10 Lab Sample ID: 240-28322-2

Matrix: Solid Lab File ID: P1300005.D

Analysis Method: 8082A Date Collected: 08/23/2013 14:00

Extraction Method: 3540C Date Extracted: 09/05/2013 11:13

Sample wt/vol: 29.94(g) Date Analyzed: 09/10/2013 10:10

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 18.5 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100765 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	70		29-151
2051-24-3	Decachlorobiphenyl	84		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 | Lab Sample ID: 240-28322-5

Matrix: Solid | Lab File ID: P1300007.D

Analysis Method: 8082A | Date Collected: 08/23/2013 14:10

Extraction Method: 3540C | Date Extracted: 09/05/2013 11:13

Sample wt/vol: 29.52(g) | Date Analyzed: 09/09/2013 20:53

Con. Extract Vol.: 10(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 13.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100696 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	190	U	190	120
11104-28-2	Aroclor-1221	190	U	190	94
11141-16-5	Aroclor-1232	190	U	190	82
53469-21-9	Aroclor-1242	190	U	190	77
12672-29-6	Aroclor-1248	190	U	190	100
11097-69-1	Aroclor-1254	710		190	100
11096-82-5	Aroclor-1260	190	U	190	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	110		29-151
2051-24-3	Decachlorobiphenyl	74		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 Lab Sample ID: 240-28322-5

Matrix: Solid Lab File ID: P1300007.D

Analysis Method: 8082A Date Collected: 08/23/2013 14:10

Extraction Method: 3540C Date Extracted: 09/05/2013 11:13

Sample wt/vol: 29.52(g) Date Analyzed: 09/09/2013 20:53

Con. Extract Vol.: 10(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 13.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100696 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	305	X	29-151
2051-24-3	Decachlorobiphenyl	333	X	14-163

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-190-18-20 Lab Sample ID: 240-28322-1

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG ID.:

Matrix: Solid Date Sampled: 08/23/2013 11:10

Reporting Basis: DRY Date Received: 08/26/2013 10:00

% Solids: 61.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	3.1	3.1	0.60	mg/Kg	U		1	6010C
7440-38-2	Arsenic	10	2.3	0.46	mg/Kg			1	6010C
7440-39-3	Barium	25	31	0.11	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	1.3	0.77	0.066	mg/Kg			1	6010C
7440-43-9	Cadmium	0.37	0.77	0.055	mg/Kg	J		1	6010C
7440-47-3	Chromium	50	1.5	0.31	mg/Kg			1	6010C
7440-48-4	Cobalt	27	1.5	0.25	mg/Kg			1	6010C
7440-50-8	Copper	17	3.9	1.1	mg/Kg			1	6010C
7439-92-1	Lead	16	1.5	0.29	mg/Kg			1	6010C
7439-98-7	Molybdenum	1.3	6.2	0.42	mg/Kg	J		1	6010C
7440-02-0	Nickel	31	6.2	0.42	mg/Kg			1	6010C
7782-49-2	Selenium	0.79	3.1	0.69	mg/Kg	J		1	6010C
7440-22-4	Silver	1.5	1.5	0.15	mg/Kg	U		1	6010C
7440-28-0	Thallium	3.1	3.1	0.85	mg/Kg	U		1	6010C
7440-62-2	Vanadium	51	1.5	0.18	mg/Kg			1	6010C
7440-66-6	Zinc	85	7.7	1.5	mg/Kg			1	6010C
7439-97-6	Mercury	0.028	0.15	0.023	mg/Kg	J		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-190-28-30 Lab Sample ID: 240-28322-4

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG ID.:

Matrix: Solid Date Sampled: 08/23/2013 11:20

Reporting Basis: DRY Date Received: 08/26/2013 10:00

% Solids: 84.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.2	2.2	0.43	mg/Kg	U		1	6010C
7440-38-2	Arsenic	0.70	1.6	0.33	mg/Kg	J		1	6010C
7440-39-3	Barium	4.1	22	0.077	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.15	0.55	0.047	mg/Kg	J		1	6010C
7440-43-9	Cadmium	0.36	0.55	0.039	mg/Kg	J		1	6010C
7440-47-3	Chromium	5.5	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	2.0	1.1	0.17	mg/Kg			1	6010C
7440-50-8	Copper	5.4	2.7	0.81	mg/Kg			1	6010C
7439-92-1	Lead	9.2	1.1	0.21	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.45	4.4	0.29	mg/Kg	J		1	6010C
7440-02-0	Nickel	2.5	4.4	0.29	mg/Kg	J		1	6010C
7782-49-2	Selenium	2.2	2.2	0.49	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.60	mg/Kg	U		1	6010C
7440-62-2	Vanadium	5.1	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	17	5.5	1.1	mg/Kg			1	6010C
7439-97-6	Mercury	0.13	0.13	0.019	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-191-8-10 Lab Sample ID: 240-28322-2

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG ID.:

Matrix: Solid Date Sampled: 08/23/2013 14:00

Reporting Basis: DRY Date Received: 08/26/2013 10:00

% Solids: 81.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.2	2.2	0.43	mg/Kg	U		1	6010C
7440-38-2	Arsenic	0.65	1.7	0.33	mg/Kg	J		1	6010C
7440-39-3	Barium	1.6	22	0.078	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.55	0.55	0.048	mg/Kg	U		1	6010C
7440-43-9	Cadmium	2.0	0.55	0.040	mg/Kg			1	6010C
7440-47-3	Chromium	85	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	0.74	1.1	0.18	mg/Kg	J		1	6010C
7440-50-8	Copper	18	2.8	0.82	mg/Kg			1	6010C
7439-92-1	Lead	1.1	1.1	0.21	mg/Kg			1	6010C
7439-98-7	Molybdenum	4.4	4.4	0.30	mg/Kg	U		1	6010C
7440-02-0	Nickel	0.83	4.4	0.30	mg/Kg	J		1	6010C
7782-49-2	Selenium	2.2	2.2	0.50	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.61	mg/Kg	U		1	6010C
7440-62-2	Vanadium	4.3	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	6.1	5.5	1.1	mg/Kg			1	6010C
7439-97-6	Mercury	0.11	0.11	0.017	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-191-22-24 Lab Sample ID: 240-28322-5

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG ID.:

Matrix: Solid Date Sampled: 08/23/2013 14:10

Reporting Basis: DRY Date Received: 08/26/2013 10:00

% Solids: 86.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	11	1.9	0.38	mg/Kg			1	6010C
7440-38-2	Arsenic	5.1	1.4	0.29	mg/Kg			1	6010C
7440-39-3	Barium	190	19	0.069	mg/Kg		B	1	6010C
7440-41-7	Beryllium	0.63	0.48	0.042	mg/Kg			1	6010C
7440-43-9	Cadmium	28	0.48	0.035	mg/Kg			1	6010C
7440-47-3	Chromium	100	0.97	0.19	mg/Kg			1	6010C
7440-48-4	Cobalt	7.2	0.97	0.15	mg/Kg			1	6010C
7440-50-8	Copper	1100	2.4	0.71	mg/Kg			1	6010C
7439-92-1	Lead	470	0.97	0.18	mg/Kg			1	6010C
7439-98-7	Molybdenum	5.5	3.9	0.26	mg/Kg			1	6010C
7440-02-0	Nickel	38	3.9	0.26	mg/Kg			1	6010C
7782-49-2	Selenium	0.47	1.9	0.43	mg/Kg	J		1	6010C
7440-22-4	Silver	4.5	0.97	0.097	mg/Kg			1	6010C
7440-28-0	Thallium	1.9	1.9	0.53	mg/Kg	U		1	6010C
7440-62-2	Vanadium	41	0.97	0.12	mg/Kg			1	6010C
7440-66-6	Zinc	880	4.8	0.97	mg/Kg			1	6010C
7439-97-6	Mercury	0.73	0.13	0.019	mg/Kg			1	7471B

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-28322-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/26/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.8 C.

The following sample(s) was preserved by freezing outside the 48 hour timeframe required for samples collected in water preserved TerraCores: . All Terra Core Kits(Samples #1,2,4,5) were collected on 08/23/13 at 11:10,14:00,11:20,14:10 and placed in the freezer on 08/26/13 at 11:45AM. Per email with Tony Apanavage on 8/26/13 the VOCs will be run out of the undisturbed 4oz soil jar.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-SB-190-18-20 (240-28322-1), DR-SB-190-8-10 (240-28322-2), DR-SB-190-28-30 (240-28322-4) and DR-SB-191-22-24 (240-28322-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/29/2013.

1,2,4-Trichlorobenzene, Acetone, Methylene Chloride, Naphthalene and Toluene were detected in method blank MB 240-99442/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample TB-082313 (240-28322-3) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/30/2013.

Benzene and Methylene Chloride were detected in method blank MB 240-99702/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-SB-190-18-20 (240-28322-1), DR-SB-190-8-10 (240-28322-2), DR-SB-190-28-30 (240-28322-4) and DR-SB-191-22-24 (240-28322-5) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples

were prepared on 09/05/2013 and analyzed on 09/11/2013.

Sample DR-SB-191-22-24 (240-28322-5)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 100222 associated with sample(s) DR-SB-190-18-20 (240-28322-1), DR-SB-190-28-30 (240-28322-4), DR-SB-190-8-10 (240-28322-2), DR-SB-191-22-24 (240-28322-5) recovered outside control limits for the following analyte: Benzaldehyde. However, since Benzaldehyde is a non-controlling compound no corrective action was required.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples DR-SB-190-18-20 (240-28322-1), DR-SB-190-8-10 (240-28322-2), DR-SB-190-28-30 (240-28322-4) and DR-SB-191-22-24 (240-28322-5) were analyzed for gasoline range organics (GRO) in accordance with EPA-SW-846 Method 8015C - GRO. The samples were analyzed on 08/28/2013.

No difficulties were encountered during the GRO analysis. All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)

Samples DR-SB-190-18-20 (240-28322-1), DR-SB-190-8-10 (240-28322-2), DR-SB-190-28-30 (240-28322-4) and DR-SB-191-22-24 (240-28322-5) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 09/03/2013 and analyzed on 09/03/2013 and 09/04/2013.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

Sample DR-SB-191-22-24 (240-28322-5)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the DRO analysis. All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples DR-SB-190-18-20 (240-28322-1), DR-SB-190-8-10 (240-28322-2), DR-SB-190-28-30 (240-28322-4) and DR-SB-191-22-24 (240-28322-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/05/2013 and analyzed on 09/09/2013 and 09/10/2013.

Sample DR-SB-191-22-24 (240-28322-5)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample(s) required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DR-SB-190-18-20 (240-28322-1), DR-SB-190-28-30 (240-28322-4), DR-SB-190-8-10 (240-28322-2). Lot # S65830

No other difficulties were encountered during the PCBs analysis. All other quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)

Samples DR-SB-190-18-20 (240-28322-1), DR-SB-190-8-10 (240-28322-2), DR-SB-190-28-30 (240-28322-4) and DR-SB-191-22-24 (240-28322-5) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 08/27/2013 and analyzed on 08/30/2013.

Barium was detected in method blank MB 240-99163/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Barium, Cadmium and Molybdenum exceeded the RPD limit for the duplicate of sample DR-SB-190-18-20DU (240-28322-1).

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

MERCURY

Samples DR-SB-190-18-20 (240-28322-1), DR-SB-190-8-10 (240-28322-2), DR-SB-190-28-30 (240-28322-4) and DR-SB-191-22-24 (240-28322-5) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared on 08/27/2013 and analyzed on 08/28/2013.

No other difficulties were encountered during the mercury analysis. All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples DR-SB-190-18-20 (240-28322-1), DR-SB-190-8-10 (240-28322-2), DR-SB-190-28-30 (240-28322-4) and DR-SB-191-22-24 (240-28322-5) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 08/26/2013.

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28322-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-28322-1	DR-SB-190-18-20	Solid	08/23/2013 1110	08/26/2013 1000
240-28322-2	DR-SB-191-8-10	Solid	08/23/2013 1400	08/26/2013 1000
240-28322-3TB	TB-082313	Water	08/23/2013 0000	08/26/2013 1000
240-28322-4	DR-SB-190-28-30	Solid	08/23/2013 1120	08/26/2013 1000
240-28322-5	DR-SB-191-22-24	Solid	08/23/2013 1410	08/26/2013 1000

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28322-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B
Semivolatile Organic Compounds (GC/MS)	TAL CAN	SW846 8270D	
Soxhlet Extraction	TAL CAN		SW846 3540C
Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	TAL CAN	SW846 8015C	
Purge and Trap	TAL CAN		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL CAN	SW846 8015C	
Ultrasonic Extraction	TAL CAN		SW846 3550C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL CAN	SW846 8082A	
Soxhlet Extraction	TAL CAN		SW846 3540C
Metals (ICP)	TAL CAN	SW846 6010C	
Preparation, Metals	TAL CAN		SW846 3050B
Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	TAL CAN	SW846 7471B	
Preparation, Mercury	TAL CAN		SW846 7471B
Percent Moisture	TAL CAN	EPA Moisture	
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

2.2

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/23/13	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below: Standard			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			Sampler: S. Cameron
Site: MSA	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	SVOCs, PCBs, TPH-GRO	TPH-DRO	Priority Polutant Metals	Sample Specific Notes:
DR-SB-190- 18-20	8/23/2013	1110	Soil	Water	6		x	x	x	x	
DR-SB-191- 8-10	8/23/2013	1400	Soil	Water	6		x	x	x	x	
DR-SB-192-	8/23/2013		Soil	Water	6		x	x	x	x	
DR-SB-193-	8/23/2013		Soil	Water	6		x	x	x	x	
DR-SB-194-	8/23/2013		Soil	Water	6		x	x	x	x	
TB-082313	8/23/2013		AQ	Water	2		x				
DR-SB-190-28-30	8/23/13	1120	Soil	Water	6		x	x	x	x	
DR-SB-191-22-24	8/23/13	1410	Soil	Water	6		x	x	x	x	

240-28322 Chain of Custody

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Preservation Used: (1= Ice) 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/23/13 1440	[signature]	TestAmerica	8/23/13 1446
[signature]	TestAmerica	8/23/13 1550	[signature]	TA	8-24-13 1000
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 28322**
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 8-24-13 Opened on 8-26-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # No # Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. 3.8 °C	Corrected Cooler Temp. 3.8 °C	☐ See Multiple Cooler Form	
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 — Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? — Yes No NA
   -Were custody seals on the bottle(s)? — Yes No
3. Shippers' packing slip attached to the cooler(s)? — Yes No
4. Did custody papers accompany the sample(s)? — Yes No
5. Were the custody papers relinquished & signed in the appropriate place? — Yes No
6. Did all bottles arrive in good condition (Unbroken)? — Yes No
7. Could all bottle labels be reconciled with the COC? — Yes No
8. Were correct bottle(s) used for the test(s) indicated? — Yes No
9. Sufficient quantity received to perform indicated analyses? — Yes No
10. Were sample(s) at the correct pH upon receipt? — Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? — Yes No
12. Were air bubbles >6 mm in any VOA vials? — Yes No NA
13. Was a trip blank present in the cooler(s)? — Yes No DDG 8-26-13

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

HOLDTIME

SDG 240-28322-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	DR-SB-190-18-20	240-28322-1	NM	08/23/2013	08/27/2013	08/28/2013	4	1	5
HG	MG/KG	DR-SB-190-28-30	240-28322-4	NM	08/23/2013	08/27/2013	08/28/2013	4	1	5
HG	MG/KG	DR-SB-190-8-10	240-28322-2	NM	08/23/2013	08/27/2013	08/28/2013	4	1	5
HG	MG/KG	DR-SB-191-22-28	240-28322-5	NM	08/23/2013	08/27/2013	08/28/2013	4	1	5
M	MG/KG	DR-SB-191-22-28	240-28322-5	NM	08/23/2013	08/27/2013	08/30/2013	4	3	7
M	MG/KG	DR-SB-190-18-20	240-28322-1	NM	08/23/2013	08/27/2013	08/30/2013	4	3	7
M	MG/KG	DR-SB-190-8-10	240-28322-2	NM	08/23/2013	08/27/2013	08/30/2013	4	3	7
M	MG/KG	DR-SB-190-28-30	240-28322-4	NM	08/23/2013	08/27/2013	08/30/2013	4	3	7
OS	UG/KG	DR-SB-191-22-28	240-28322-5	NM	08/23/2013	09/05/2013	09/11/2013	13	6	19
OS	UG/KG	DR-SB-190-8-10	240-28322-2	NM	08/23/2013	09/05/2013	09/11/2013	13	6	19
OS	UG/KG	DR-SB-190-28-30	240-28322-4	NM	08/23/2013	09/05/2013	09/11/2013	13	6	19
OS	UG/KG	DR-SB-190-18-20	240-28322-1	NM	08/23/2013	09/05/2013	09/11/2013	13	6	19
OV	UG/KG	DR-SB-190-18-20	240-28322-1	NM	08/23/2013	08/29/2013	08/29/2013	6	0	6
OV	UG/KG	DR-SB-190-8-10	240-28322-2	NM	08/23/2013	08/29/2013	08/29/2013	6	0	6
OV	UG/KG	DR-SB-191-22-28	240-28322-5	NM	08/23/2013	08/29/2013	08/29/2013	6	0	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/KG	DR-SB-190-28-30	240-28322-4	NM	08/23/2013	08/29/2013	08/29/2013	6	0	6
OV	UG/L	TB-082313	240-28322-3	TB	08/23/2013	08/30/2013	08/30/2013	7	0	7
PCB	UG/KG	DR-SB-190-8-10	240-28322-2	NM	08/23/2013	09/05/2013	09/10/2013	13	5	18
PCB	UG/KG	DR-SB-190-18-20	240-28322-1	NM	08/23/2013	09/05/2013	09/10/2013	13	5	18
PCB	UG/KG	DR-SB-191-22-28	240-28322-5	NM	08/23/2013	09/05/2013	09/09/2013	13	4	17
PCB	UG/KG	DR-SB-190-28-30	240-28322-4	NM	08/23/2013	09/05/2013	09/10/2013	13	5	18
	MG/KG	DR-SB-190-18-20	240-28322-1	NM	08/23/2013	09/03/2013	09/03/2013	11	0	11
	MG/KG	DR-SB-191-22-28	240-28322-5	NM	08/23/2013	09/03/2013	09/04/2013	11	1	12
	MG/KG	DR-SB-190-8-10	240-28322-2	NM	08/23/2013	09/03/2013	09/03/2013	11	0	11
	MG/KG	DR-SB-190-28-30	240-28322-4	NM	08/23/2013	09/03/2013	09/03/2013	11	0	11
	UG/KG	DR-SB-191-22-28	240-28322-5	NM	08/23/2013	08/28/2013	08/28/2013	5	0	5
	UG/KG	DR-SB-190-8-10	240-28322-2	NM	08/23/2013	08/28/2013	08/28/2013	5	0	5
	UG/KG	DR-SB-190-28-30	240-28322-4	NM	08/23/2013	08/28/2013	08/28/2013	5	0	5
	UG/KG	DR-SB-190-18-20	240-28322-1	NM	08/23/2013	08/28/2013	08/28/2013	5	0	5

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab File ID: BFB414.D BFB Injection Date: 08/17/2013

Instrument ID: A3UX17 BFB Injection Time: 15:32

Analysis Batch No.: 97903

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	42.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	89.6	
175	5.0 - 9.0 % of mass 174	6.2	(6.9)1
176	95.0 - 101.0 % of mass 174	89.6	(100.0)1
177	5.0 - 9.0 % of mass 176	5.4	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97903/2	UXR7004.D	08/17/2013	15:56
	STD8260 240-97903/3	UXR7005.D	08/17/2013	16:18
	STD8260 240-97903/4	UXR7006.D	08/17/2013	16:41
	STD8260 240-97903/5	UXR7007.D	08/17/2013	17:03
	STD8260 240-97903/6	UXR7008.D	08/17/2013	17:25
	STD8260 240-97903/7	UXR7009.D	08/17/2013	17:48
	STDA9 240-97903/8	UXR7010.D	08/17/2013	18:10
	STDA9 240-97903/9	UXR7011.D	08/17/2013	18:32
	STDA9 240-97903/10	UXR7012.D	08/17/2013	18:54
	STDA9 240-97903/11	UXR7013.D	08/17/2013	19:16
	STDA9 240-97903/12	UXR7014.D	08/17/2013	19:39
	STDA9 240-97903/13	UXR7015.D	08/17/2013	20:01
	ICV 240-97903/14	UXR7016.D	08/17/2013	20:23

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97903/7	UXR7009.D
Level 2	STD8260 240-97903/6	UXR7008.D
Level 3	STD8260 240-97903/5	UXR7007.D
Level 4	STD8260 240-97903/4	UXR7006.D
Level 5	STD8260 240-97903/3	UXR7005.D
Level 6	STD8260 240-97903/2	UXR7004.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3204 0.2926	0.2676	0.2764	0.2861	0.2872	Ave		0.2884				6.2		15.0			
Chloromethane	0.4139 0.3439	0.3668	0.3596	0.3531	0.3711	Ave		0.3681			0.1000	6.6		15.0			
Vinyl chloride	0.3940 0.3125	0.3245	0.3155	0.3332	0.3243	Ave		0.3340				9.1		15.0			
Bromomethane	0.1734 0.0852	0.1389	0.1172	0.1098	0.1078	Qua	0.0082	0.1248	-0.001						0.9990		0.9900
Chloroethane	0.1149 0.0795	0.1143	0.1007	0.0850	0.1011	Ave		0.0993				15.0		15.0			
Trichlorofluoromethane	0.2573 0.2239	0.2306	0.2276	0.2301	0.2270	Ave		0.2327				5.3		15.0			
Acrolein	0.0416 0.0342	0.0317	0.0345	0.0350	0.0348	Ave		0.0353				9.4		15.0			
1,1-Dichloroethene	0.2818 0.2716	0.2599	0.2612	0.2809	0.2682	Ave		0.2706				3.5		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2259 0.2105	0.1993	0.2023	0.2185	0.2130	Ave		0.2116				4.7		15.0			
Acetone	0.1943 0.0801	0.1013	0.0910	0.0876	0.0830	Lin1	0.1117	0.0795							1.0000		0.9900
Iodomethane	0.3883 0.3571	0.3803	0.3822	0.3812	0.3768	Ave		0.3777				2.8		15.0			
Carbon disulfide	0.7719 0.7593	0.6773	0.7122	0.7680	0.7537	Ave		0.7404				5.1		15.0			
Acetonitrile	0.0466 0.0335	0.0340	0.0368	0.0346	0.0344	Ave		0.0366				14.0		15.0			
Methyl acetate	0.2649 0.2101	0.2094	0.2214	0.2237	0.2177	Ave		0.2245				9.2		15.0			
Methylene Chloride	1.0972 0.2798	0.4538	0.3555	0.3214	0.2971	Lin1	0.4062	0.2728							1.0000		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0240 0.0204	0.0208	0.0212	0.0221	0.0216	Ave		0.0217				5.9		15.0			
Acrylonitrile	0.1371 0.1043	0.1034	0.1113	0.1144	0.1096	Ave		0.1133				11.0		15.0			
Methyl tert-butyl ether	0.7668 0.7487	0.7032	0.7304	0.7764	0.7508	Ave		0.7461				3.5		15.0			
trans-1,2-Dichloroethene	0.3148 0.2849	0.2867	0.2853	0.2966	0.2863	Ave		0.2924				4.0		15.0			
Hexane	0.0992 0.0780	0.0708	0.0695	0.0827	0.0800	Ave		0.0800				13.0		15.0			
1,1-Dichloroethane	0.5339 0.4884	0.4788	0.4796	0.5057	0.4874	Ave		0.4956			0.1000	4.3		15.0			
Vinyl acetate	0.0353 0.0410	0.0341	0.0395	0.0436	0.0431	Ave		0.0394				10.0		15.0			
2,2-Dichloropropane	0.2891 0.2547	0.2421	0.2517	0.2761	0.2630	Ave		0.2628				6.6		15.0			
cis-1,2-Dichloroethene	0.3348 0.2979	0.2915	0.3010	0.3187	0.3034	Ave		0.3079				5.2		15.0			
2-Butanone	0.1550 0.1121	0.1165	0.1152	0.1221	0.1194	Ave		0.1234				13.0		15.0			
Bromochloromethane	0.1627 0.1407	0.1371	0.1393	0.1472	0.1412	Ave		0.1447				6.5		15.0			
Tetrahydrofuran	0.1433 0.0739	0.0937	0.0801	0.0838	0.0777	Lin1	0.0363	0.0747							0.9990		0.9900
Chloroform	0.4968 0.4344	0.4333	0.4317	0.4548	0.4433	Ave		0.4491				5.6		15.0			
1,1,1-Trichloroethane	0.3491 0.3450	0.3369	0.3423	0.3732	0.3542	Ave		0.3501				3.6		15.0			
Cyclohexane	0.6528 0.5796	0.5383	0.5348	0.6061	0.5879	Ave		0.5833				7.6		15.0			
1,1-Dichloropropene	0.3835 0.3611	0.3385	0.3509	0.3855	0.3654	Ave		0.3641				5.0		15.0			
Carbon tetrachloride	0.3117 0.3191	0.2879	0.2913	0.3292	0.3199	Ave		0.3098				5.4		15.0			
Benzene	1.4198 1.1202	1.1585	1.1063	1.1850	1.1333	Ave		1.1872				9.9		15.0			
1,2-Dichloroethane	0.3511 0.3344	0.3323	0.3346	0.3528	0.3411	Ave		0.3411				2.6		15.0			
Trichloroethene	0.3448 0.2857	0.2917	0.2853	0.3070	0.2909	Ave		0.3009				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.5453 0.5080	0.4552	0.4671	0.5291	0.5232	Ave		0.5046				7.1		15.0			
1,2-Dichloropropane	0.2805 0.2809	0.2698	0.2732	0.2999	0.2828	Ave		0.2812				3.7		15.0			
1,4-Dioxane	0.0031 0.0025	0.0029	0.0029	0.0029	0.0027	Ave		0.0028				6.9		15.0			
Dibromomethane	0.1442 0.1421	0.1403	0.1425	0.1520	0.1431	Ave		0.1440				2.8		15.0			
Bromodichloromethane	0.3119 0.3254	0.2892	0.2930	0.3231	0.3176	Ave		0.3100				5.0		15.0			
2-Chloroethyl vinyl ether	0.1316 0.1591	0.1239	0.1453	0.1553	0.1616	Ave		0.1461				11.0		15.0			
cis-1,3-Dichloropropene	0.3392 0.4287	0.3324	0.3686	0.4103	0.4121	Ave		0.3819				11.0		15.0			
4-Methyl-2-pentanone	0.2607 0.2377	0.2157	0.2417	0.2472	0.2493	Ave		0.2420				6.2		15.0			
Toluene	1.6522 1.4698	1.4513	1.4774	1.5492	1.5164	Ave		1.5194				4.9		15.0			
trans-1,3-Dichloropropene	0.3213 0.4538	0.3447	0.3782	0.4331	0.4465	Ave		0.3963				14.0		15.0			
Ethyl methacrylate	0.4007 0.4327	0.3691	0.3814	0.4268	0.4329	Ave		0.4073				6.8		15.0			
1,1,2-Trichloroethane	0.3167 0.2763	0.2853	0.2849	0.2935	0.2866	Ave		0.2905				4.8		15.0			
Tetrachloroethene	0.3325 0.3049	0.3095	0.3044	0.3290	0.3164	Ave		0.3161				3.9		15.0			
1,3-Dichloropropane	0.5272 0.4996	0.4841	0.4918	0.5267	0.5162	Ave		0.5076				3.6		15.0			
2-Hexanone	0.1971 0.2006	0.1820	0.1978	0.2079	0.2150	Ave		0.2001				5.6		15.0			
Dibromochloromethane	0.2402 0.3001	0.2430	0.2552	0.2811	0.2927	Ave		0.2687				9.7		15.0			
1,2-Dibromoethane	0.2911 0.2813	0.2846	0.2815	0.2929	0.2953	Ave		0.2878				2.1		15.0			
Chlorobenzene	1.1274 0.9807	0.9718	0.9671	1.0149	1.0027	Ave		1.0107			0.3000	5.9		15.0			
1,1,1,2-Tetrachloroethane	0.3060 0.3269	0.2962	0.3098	0.3339	0.3317	Ave		0.3174				4.9		15.0			
Ethylbenzene	0.5443 0.5315	0.5042	0.5217	0.5506	0.5482	Ave		0.5334				3.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6588 0.6727	0.6095	0.6454	0.6967	0.6838	Ave		0.6612				4.7		15.0			
o-Xylene	0.5652 0.6364	0.5841	0.6074	0.6647	0.6500	Ave		0.6180				6.3		15.0			
Styrene	0.8997 1.0677	0.8939	0.9726	1.0763	1.0831	Ave		0.9989				8.9		15.0			
Bromoform	0.1401 0.1923	0.1362	0.1490	0.1704	0.1835	Ave		0.1619			0.1000	15.0		15.0			
Isopropylbenzene	1.5085 1.6272	1.4364	1.5259	1.6642	1.6725	Ave		1.5725				6.1		15.0			
1,1,2,2-Tetrachloroethane	0.6899 0.5937	0.6221	0.6118	0.6565	0.6264	Ave		0.6334			0.3000	5.4		15.0			
Bromobenzene	0.8428 0.7434	0.7732	0.7399	0.7988	0.7642	Ave		0.7771				5.0		15.0			
1,2,3-Trichloropropane	0.2256 0.1928	0.2102	0.2058	0.2230	0.2026	Ave		0.2100				6.0		15.0			
trans-1,4-Dichloro-2-butene	0.1193 0.1579	0.1115	0.1100	0.1265	0.1387	Ave		0.1273				14.0		15.0			
n-Propylbenzene	0.8083 0.8092	0.7417	0.7798	0.8729	0.8206	Ave		0.8054				5.4		15.0			
2-Chlorotoluene	0.7298 0.6717	0.6515	0.6649	0.7468	0.6980	Ave		0.6938				5.5		15.0			
1,3,5-Trimethylbenzene	2.1369 2.3790	2.1516	2.2670	2.4960	2.4224	Ave		2.3088				6.4		15.0			
4-Chlorotoluene	0.7933 0.7186	0.7058	0.7223	0.7864	0.7387	Ave		0.7442				5.0		15.0			
tert-Butylbenzene	2.0917 2.2012	2.0079	2.0434	2.2852	2.1947	Ave		2.1373				5.0		15.0			
1,2,4-Trimethylbenzene	2.1622 2.4480	2.1730	2.2959	2.5240	2.4090	Ave		2.3353				6.4		15.0			
sec-Butylbenzene	2.8644 2.9340	2.6593	2.7372	3.0508	2.9003	Ave		2.8577				4.9		15.0			
1,3-Dichlorobenzene	1.6000 1.4148	1.3939	1.3950	1.4783	1.4105	Ave		1.4487				5.5		15.0			
p-Isopropyltoluene	2.3644 2.5719	2.2377	2.3885	2.6865	2.5733	Ave		2.4704				6.8		15.0			
1,4-Dichlorobenzene	1.6117 1.4458	1.4717	1.4339	1.5395	1.4513	Ave		1.4923				4.7		15.0			
n-Butylbenzene	1.9979 2.1246	1.8316	1.8865	2.1547	2.0745	Ave		2.0116				6.5		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.5271 1.3033	1.3237	1.3061	1.3852	1.3171	Ave		1.3604				6.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1057 0.0982	0.0874	0.0888	0.0978	0.1015	Ave		0.0966				7.4		15.0			
1,3,5-Trichlorobenzene	1.1940 0.9716	1.0178	1.0187	1.0770	1.0108	Ave		1.0483				7.5		15.0			
1,2,4-Trichlorobenzene	1.1068 0.7641	0.9118	0.8790	0.9473	0.8677	Ave		0.9128				12.0		15.0			
Hexachlorobutadiene	0.6127 0.3153	0.4584	0.4366	0.4435	0.3631	Qua	0.1528	0.4230	-0.003						0.9980		0.9900
Naphthalene	2.0370 1.3497	1.6368	1.6979	1.8755	1.7777	Ave		1.7291				13.0		15.0			
1,2,3-Trichlorobenzene	1.1380 0.5313	0.8347	0.7936	0.8280	0.7164	Qua	-0.050	0.9072	-0.009						1.0000		0.9900
Dibromofluoromethane (Surr)	0.2446 0.2246	0.2310	0.2246	0.2337	0.2289	Ave		0.2312				3.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3381 0.2592	0.2726	0.2664	0.2732	0.2645	Ave		0.2790				11.0		15.0			
Toluene-d8 (Surr)	1.4464 1.2376	1.3008	1.2447	1.2828	1.2699	Ave		1.2971				5.9		15.0			
4-Bromofluorobenzene (Surr)	0.5369 0.4602	0.4610	0.4532	0.4686	0.4753	Ave		0.4759				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 18:10 Calibration End Date: 08/17/2013 20:01 Calibration ID: 16934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-97903/13	UXR7015.D
Level 2	STDA9 240-97903/12	UXR7014.D
Level 3	STDA9 240-97903/11	UXR7013.D
Level 4	STDA9 240-97903/10	UXR7012.D
Level 5	STDA9 240-97903/9	UXR7011.D
Level 6	STDA9 240-97903/8	UXR7010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4058 0.3150	0.2923	0.3314	0.3073	0.3098	Ave		0.3269				12.0		15.0			
Ethyl ether	0.2556 0.2493	0.2351	0.2562	0.2555	0.2582	Ave		0.2516				3.4		15.0			
3-Chloro-1-propene	0.1295 0.1407	0.1107	0.1227	0.1277	0.1381	Ave		0.1282				8.5		15.0			
Diisopropyl ether	0.2598 0.2542	0.2248	0.2497	0.2520	0.2611	Ave		0.2503				5.3		15.0			
2-Chloro-1,3-butadiene	0.4633 0.4486	0.4063	0.4234	0.4362	0.4556	Ave		0.4389				4.9		15.0			
Ethyl-t-butyl ether (ETBE)	0.8518 0.8690	0.7673	0.8096	0.8401	0.8700	Ave		0.8346				4.8		15.0			
Ethyl acetate	0.2494 0.2478	0.2117	0.2363	0.2410	0.2507	Ave		0.2395				6.1		15.0			
Propionitrile	0.0428 0.0394	0.0395	0.0384	0.0398	0.0403	Ave		0.0400				3.7		15.0			
Methacrylonitrile	0.1716 0.1599	0.1460	0.1626	0.1550	0.1635	Ave		0.1598				5.4		15.0			
Isobutyl alcohol	0.0115 0.0099	0.0089	0.0093	0.0098	0.0102	Ave		0.0099				8.9		15.0			
Tert-amyl-methyl ether (TAME)	0.6806 0.7154	0.5918	0.6571	0.6769	0.7228	Ave		0.6741				7.0		15.0			
n-Heptane	0.0793 0.0787	0.0664	0.0707	0.0732	0.0794	Ave		0.0746				7.3		15.0			
n-Butanol	0.0100 0.0096	0.0086	0.0090	0.0096	0.0098	Ave		0.0094				5.5		15.0			
Methyl methacrylate	0.2118 0.2263	0.1740	0.2034	0.2126	0.2275	Ave		0.2093				9.4		15.0			
2-Nitropropane	0.0419 0.0509	0.0409	0.0407	0.0447	0.0503	Ave		0.0449				10.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 18:10 Calibration End Date: 08/17/2013 20:01 Calibration ID: 16934

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0934 0.1169	0.0892	0.1098	0.1147	0.1227	Ave		0.1078				13.0		15.0			
1,2,3-Trimethylbenzene	2.2268 2.4130	1.8784	2.1822	2.2922	2.4829	Ave		2.2459				9.5		15.0			
2-Methylnaphthalene	0.8375	1.0311	1.0420	1.0385	0.8614	Ave		0.9621				11.0		15.0			
n-Butyl acetate	0.1966 0.2372	0.1786	0.2194	0.2183	0.2332	Ave		0.2139				10.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab File ID: BFB434.D BFB Injection Date: 08/30/2013

Instrument ID: A3UX17 BFB Injection Time: 10:06

Analysis Batch No.: 99702

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.3	
75	30.0 - 60.0 % of mass 95	44.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.4	(0.4)1
174	50.0 - 120.00 % of mass 95	86.8	
175	5.0 - 9.0 % of mass 174	6.2	(7.1)1
176	95.0 - 101.0 % of mass 174	87.1	(100.4)1
177	5.0 - 9.0 % of mass 176	5.4	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-99702/2	UXR7339.D	08/30/2013	10:39
	CCV 240-99702/3	UXR7340.D	08/30/2013	11:02
	LCS 240-99702/4	UXR7341.D	08/30/2013	11:25
	MB 240-99702/6	UXR7343.D	08/30/2013	12:10
TB-082313	240-28322-3	UXR7363.D	08/30/2013	20:03
	240-28239-A-5 MS	UXR7364.D	08/30/2013	20:26
	240-28239-C-5 MSD	UXR7365.D	08/30/2013	20:48

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCVIS 240-99702/2 Calibration Date: 08/30/2013 10:39

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7339.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2884	0.3107		1.00	0.0100	7.7	50.0
Chloromethane	Ave	0.3681	0.3286	0.1000	1.00	0.0100	-10.7	50.0
Vinyl chloride	Ave	0.3340	0.2926		1.00	0.0100	-12.4	20.0
Bromomethane	Qua		0.1098		1.00	0.0100	-5.6	50.0
Chloroethane	Ave	0.0993	0.0860		1.00	0.0100	-13.4	50.0
Trichlorofluoromethane	Ave	0.2327	0.2499		1.00	0.0100	7.4	50.0
Acrolein	Ave	0.0353	0.0409		20.0	0.100	15.7	50.0
1,1-Dichloroethene	Ave	0.2706	0.2750		1.00	0.0100	1.6	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2351		1.00	0.0100	11.1	50.0
Acetone	Linl		0.0885		10.0	0.0200	4.3	50.0
Iodomethane	Ave	0.3777	0.3931		1.00	0.0100	4.1	50.0
Carbon disulfide	Ave	0.7404	0.6749		1.00	0.0100	-8.9	50.0
Acetonitrile	Ave	0.0366	0.0357		20.0	0.100	-2.6	50.0
Methyl acetate	Ave	0.2245	0.2119		10.0	0.0200	-5.6	50.0
Methylene Chloride	Linl		0.3387		1.00	0.0100	9.3	50.0
tert-Butyl alcohol	Ave	0.0217	0.0175		50.0	0.200	-19.3	50.0
Acrylonitrile	Ave	0.1133	0.1169		20.0	0.0200	3.1	50.0
Methyl tert-butyl ether	Ave	0.7461	0.6768		1.00	0.0100	-9.3	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2967		1.00	0.0100	1.4	50.0
Hexane	Ave	0.0800	0.0746		1.00	0.0100	-6.8	20.0
1,1-Dichloroethane	Ave	0.4956	0.4905	0.1000	1.00	0.0100	-1.0	50.0
Vinyl acetate	Ave	0.0394	0.0450		2.00	0.0100	14.1	50.0
2,2-Dichloropropane	Ave	0.2628	0.2363		1.00	0.0100	-10.1	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.3110		1.00	0.0100	1.0	50.0
2-Butanone	Ave	0.1234	0.1175		10.0	0.0200	-4.8	50.0
Bromochloromethane	Ave	0.1447	0.1519		1.00	0.0100	4.9	50.0
Tetrahydrofuran	Linl		0.0685		5.00	0.0100	-13.1	50.0
Chloroform	Ave	0.4491	0.4792		1.00	0.0100	6.7	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3558		1.00	0.0100	1.6	50.0
Cyclohexane	Ave	0.5833	0.5681		1.00	0.0100	-2.6	50.0
1,1-Dichloropropene	Ave	0.3641	0.3722		1.00	0.0100	2.2	50.0
Carbon tetrachloride	Ave	0.3098	0.3382		1.00	0.0100	9.2	50.0
Benzene	Ave	1.187	1.136		1.00	0.0100	-4.3	50.0
1,2-Dichloroethane	Ave	0.3411	0.3770		1.00	0.0100	10.5	50.0
Trichloroethene	Ave	0.3009	0.3028		1.00	0.0100	0.6	50.0
Methylcyclohexane	Ave	0.5046	0.4891		1.00	0.0100	-3.1	50.0
1,2-Dichloropropane	Ave	0.2812	0.2673		1.00	0.0100	-4.9	20.0
1,4-Dioxane	Ave	0.0028	0.0024		50.0	0.500	-13.5	50.0
Dibromomethane	Ave	0.1440	0.1464		1.00	0.0100	1.6	50.0
Bromodichloromethane	Ave	0.3100	0.3052		1.00	0.0100	-1.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCVIS 240-99702/2 Calibration Date: 08/30/2013 10:39

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7339.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1461	0.1455		10.0	0.0200	-0.4	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3550		1.00	0.0100	-7.1	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2196		10.0	0.0200	-9.3	50.0
Toluene	Ave	1.519	1.460		1.00	0.0100	-3.9	20.0
trans-1,3-Dichloropropene	Ave	0.3963	0.3598		1.00	0.0100	-9.2	50.0
Ethyl methacrylate	Ave	0.4073	0.3607		1.00	0.0100	-11.4	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2781		1.00	0.0100	-4.3	50.0
Tetrachloroethene	Ave	0.3161	0.3299		1.00	0.0100	4.3	50.0
1,3-Dichloropropane	Ave	0.5076	0.4854		1.00	0.0100	-4.4	50.0
2-Hexanone	Ave	0.2001	0.1812		10.0	0.0200	-9.4	50.0
Dibromochloromethane	Ave	0.2687	0.2696		1.00	0.0100	0.3	50.0
1,2-Dibromoethane	Ave	0.2878	0.2784		1.00	0.0100	-3.3	50.0
Chlorobenzene	Ave	1.011	0.9779	0.3000	1.00	0.0100	-3.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.3215		1.00	0.0100	1.3	50.0
Ethylbenzene	Ave	0.5334	0.5193		1.00	0.0100	-2.7	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6795		2.00	0.0200	2.8	50.0
o-Xylene	Ave	0.6180	0.6319		1.00	0.0100	2.3	50.0
Styrene	Ave	0.999	1.025		1.00	0.0100	2.6	50.0
Bromoform	Ave	0.1619	0.1596	0.1000	1.00	0.0100	-1.4	50.0
Isopropylbenzene	Ave	1.572	1.564		1.00	0.0100	-0.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.5487	0.3000	1.00	0.0100	-13.4	50.0
Bromobenzene	Ave	0.7771	0.7230		1.00	0.0100	-7.0	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.1959		1.00	0.0100	-6.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.1189		1.00	0.0100	-6.6	50.0
n-Propylbenzene	Ave	0.8054	0.7411		1.00	0.0100	-8.0	50.0
2-Chlorotoluene	Ave	0.6938	0.6370		1.00	0.0100	-8.2	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.194		1.00	0.0100	-5.0	50.0
4-Chlorotoluene	Ave	0.7442	0.6952		1.00	0.0100	-6.6	50.0
tert-Butylbenzene	Ave	2.137	1.963		1.00	0.0100	-8.2	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.219		1.00	0.0100	-5.0	50.0
sec-Butylbenzene	Ave	2.858	2.619		1.00	0.0100	-8.4	50.0
1,3-Dichlorobenzene	Ave	1.449	1.366		1.00	0.0100	-5.7	50.0
p-Isopropyltoluene	Ave	2.470	2.298		1.00	0.0100	-7.0	50.0
1,4-Dichlorobenzene	Ave	1.492	1.404		1.00	0.0100	-5.9	50.0
n-Butylbenzene	Ave	2.012	1.767		1.00	0.0100	-12.2	50.0
1,2-Dichlorobenzene	Ave	1.360	1.271		1.00	0.0100	-6.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0711		2.00	0.0100	-26.4	50.0
1,3,5-Trichlorobenzene	Ave	1.048	0.8946		1.00	0.0100	-14.7	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.6707		1.00	0.0100	-26.5	50.0
Hexachlorobutadiene	Qua		0.3353		1.00	0.0100	-20.1	50.0
Naphthalene	Ave	1.729	1.011		1.00	0.0100	-41.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCVIS 240-99702/2 Calibration Date: 08/30/2013 10:39

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7339.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua		0.5185		1.00	0.0100	-38.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2317		0.00893	0.00891	0.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2738		0.00874	0.00891	-1.9	50.0
Toluene-d8 (Surr)	Ave	1.297	1.194		0.00820	0.00891	-8.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4606		0.00862	0.00891	-3.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-99702/3 Calibration Date: 08/30/2013 11:02

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7340.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3269	0.2795		2.00	0.0100	-14.5	50.0
Ethyl ether	Ave	0.2516	0.2536		2.00	0.0100	0.8	50.0
3-Chloro-1-propene	Ave	0.1282	0.1146		2.00	0.0100	-10.7	50.0
Diisopropyl ether	Ave	0.2503	0.2372		10.0	0.0500	-5.2	50.0
2-Chloro-1,3-butadiene	Ave	0.4389	0.4522		2.00	0.0100	3.0	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8346	0.7200		5.00	0.0100	-13.7	50.0
Ethyl acetate	Ave	0.2395	0.2239		4.00	0.0200	-6.5	50.0
Propionitrile	Ave	0.0400	0.0360		4.00	0.0200	-10.1	50.0
Methacrylonitrile	Ave	0.1598	0.1432		2.00	0.0100	-10.4	50.0
Isobutyl alcohol	Ave	0.0099	0.0094		50.0	0.200	-5.1	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6741	0.5667		5.00	0.0100	-15.9	50.0
n-Heptane	Ave	0.0746	0.0771		1.00	0.0100	3.2	50.0
n-Butanol	Ave	0.0094	0.0072		50.0	0.200	-23.4	50.0
Methyl methacrylate	Ave	0.2093	0.1882		2.00	0.0100	-10.0	50.0
2-Nitropropane	Ave	0.0449	0.0366		2.00	0.0200	-18.5	50.0
Cyclohexanone	Ave	0.1078	0.1045		20.0	0.100	-3.1	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.216		0.00987	0.0100	-1.3	50.0
2-Methylnaphthalene	Ave	0.9621	0.1895		5.00	0.0200	-80.3*	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab File ID: UXR7343.D Lab Sample ID: MB 240-99702/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/30/2013 12:10

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
TB-082313	240-28322-3	UXR7363.D	08/30/2013 20:03
	240-28239-A-5 MS	UXR7364.D	08/30/2013 20:26
	240-28239-C-5 MSD	UXR7365.D	08/30/2013 20:48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99702/6

Matrix: Water | Lab File ID: UXR7343.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/30/2013 12:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99702 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	0.148	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99702/6

Matrix: Water | Lab File ID: UXR7343.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/30/2013 12:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99702 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	0.854	J	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99702/6

Matrix: Water | Lab File ID: UXR7343.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/30/2013 12:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99702 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	107		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99702/6

Matrix: Water Lab File ID: UXR7343.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/30/2013 12:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99702 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab File ID: BFB8265.D BFB Injection Date: 04/17/2013

Instrument ID: A3UX8 BFB Injection Time: 23:22

Analysis Batch No.: 82425

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.1	
75	30.0 - 60.0 % of mass 95	53.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	71.1	
175	5.0 - 9.0 % of mass 174	5.1	(7.2)1
176	95.0 - 101.0 % of mass 174	68.2	(95.9)1
177	5.0 - 9.0 % of mass 176	4.5	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-82425/3	UX84674.D	04/18/2013	00:06
	STD8260 240-82425/4	UX84675.D	04/18/2013	00:27
	STD8260 240-82425/5	UX84676.D	04/18/2013	00:49
	ICIS 240-82425/6	UX84677.D	04/18/2013	01:10
	STD8260 240-82425/7	UX84678.D	04/18/2013	01:31
	STD8260 240-82425/8	UX84679.D	04/18/2013	01:52
	STD8260 240-82425/9	UX84680.D	04/18/2013	02:13
	STD8260 240-82425/10	UX84681.D	04/18/2013	02:35
	STDA9 240-82425/11	UX84682.D	04/18/2013	02:56
	STDA9 240-82425/12	UX84683.D	04/18/2013	03:17
	STDA9 240-82425/13	UX84684.D	04/18/2013	03:38
	STDA9 240-82425/14	UX84685.D	04/18/2013	04:00
	STDA9 240-82425/15	UX84686.D	04/18/2013	04:21
	STDA9 240-82425/16	UX84687.D	04/18/2013	04:42
	ICV 240-82425/18	UX84689.D	04/18/2013	05:24

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-82425/10	UX84681.D
Level 2	STD8260 240-82425/9	UX84680.D
Level 3	STD8260 240-82425/8	UX84679.D
Level 4	STD8260 240-82425/7	UX84678.D
Level 5	ICIS 240-82425/6	UX84677.D
Level 6	STD8260 240-82425/5	UX84676.D
Level 7	STD8260 240-82425/4	UX84675.D
Level 8	STD8260 240-82425/3	UX84674.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1811 0.2387	0.1889 0.2445	0.2519 0.2304	0.2507	0.2495	Ave		0.2295				12.0		15.0			
Chloromethane	0.2249 0.2429	0.2517 0.2417	0.2599 0.2220	0.2623	0.2617	Ave		0.2459			0.1000	6.5		15.0			
Vinyl chloride	0.1944 0.2136	0.2024 0.2152	0.2288 0.2027	0.2331	0.2261	Ave		0.2145				6.5		15.0			
Bromomethane	0.1285 0.1249	0.1404 0.1229	0.1468	0.1416	0.1356	Qua	0.0714	0.1284	0						1.0000		0.9900
Chloroethane	0.1242 0.1338	0.1297 0.1344	0.1463 0.1311	0.1414	0.1442	Ave		0.1356				5.6		15.0			
Trichlorofluoromethane	0.2414 0.2848	0.2401 0.2798	0.3160 0.2662	0.3071	0.3005	Ave		0.2795				10.0		15.0			
Acrolein	0.0440 0.0393	0.0446 0.0387	0.0478 0.0366	0.0408	0.0412	Ave		0.0416				8.8		15.0			
1,1-Dichloroethene	0.1913 0.2041	0.1637 0.2024	0.2002 0.2014	0.2208	0.2195	Ave		0.2004				8.9		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1461 0.1453	0.1067 0.1432	0.1489 0.1412	0.1559	0.1577	Ave		0.1431				11.0		15.0			
Acetone	+++++ 0.0783	+++++ 0.0773	0.1029 0.0730	0.0818	0.0807	Ave		0.0823				13.0		15.0			
Iodomethane	0.3032 0.3273	0.3086 0.3238	0.3127 0.3141	0.3552	0.3490	Ave		0.3242				5.8		15.0			
Carbon disulfide	0.4660 0.6404	0.5024 0.6445	0.5462 0.6510	0.6310	0.6558	Ave		0.5922				13.0		15.0			
Acetonitrile	0.0332 0.0310	0.0351 0.0308	0.0338 0.0287	0.0324	0.0323	Ave		0.0322				6.2		15.0			
Methyl acetate	0.1936 0.2003	0.1959 0.1942	0.2029 0.1894	0.1841	0.1847	Ave		0.1931				3.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Methylene Chloride	+++++ 0.2666	+++++ 0.2588	0.4599 0.2469	0.3873	0.3262	Lin1	1.2599	0.2434							0.9990		0.9900
tert-Butyl alcohol	0.0217 0.0225	0.0246 0.0207	0.0278 0.0199	0.0301	0.0227	Ave		0.0237				15.0		15.0			
Acrylonitrile	0.0873 0.0963	0.1030 0.0969	0.0989 0.0921	0.0913	0.0964	Ave		0.0953				5.1		15.0			
Methyl tert-butyl ether	0.6380 0.7277	0.6706 0.7364	0.6460 0.7278	0.7286	0.7282	Ave		0.7004				5.9		15.0			
trans-1,2-Dichloroethene	0.2387 0.2370	0.2273 0.2344	0.2318 0.2267	0.2530	0.2580	Ave		0.2384				4.8		15.0			
Hexane	0.0714 0.0605	0.0468 0.0586	0.0570 0.0620	0.0605	0.0582	Ave		0.0594				11.0		15.0			
1,1-Dichloroethane	0.3820 0.4131	0.3972 0.4151	0.3991 0.4116	0.4202	0.4364	Ave		0.4093			0.1000	4.0		15.0			
Vinyl acetate	+++++ 0.0467	0.0393 0.0505	0.0412 0.0496	0.0370	0.0400	Ave		0.0435				12.0		15.0			
2-Butanone	0.1148 0.1123	0.1166 0.1133	0.1177 0.1080	0.1003	0.1028	Ave		0.1107				5.8		15.0			
cis-1,2-Dichloroethene	0.2445 0.2601	0.2544 0.2623	0.2531 0.2547	0.2698	0.2700	Ave		0.2586				3.4		15.0			
2,2-Dichloropropane	0.1883 0.2476	0.2012 0.2446	0.2101 0.2257	0.2448	0.2528	Ave		0.2269				11.0		15.0			
Bromochloromethane	0.1075 0.1254	0.1165 0.1267	0.1274 0.1223	0.1309	0.1266	Ave		0.1229				6.1		15.0			
Tetrahydrofuran	0.0586 0.0811	0.0812 0.0763	0.0768 0.0744	0.0788	0.0669	Ave		0.0743				11.0		15.0			
Chloroform	0.3863 0.4142	0.3925 0.4165	0.3998 0.4119	0.4279	0.4207	Ave		0.4087				3.5		15.0			
1,1,1-Trichloroethane	0.2476 0.3413	0.2678 0.3441	0.2978 0.3397	0.3414	0.3518	Ave		0.3164				13.0		15.0			
Cyclohexane	0.3824 0.4152	0.2880 0.4048	0.3958 0.4068	0.4353	0.4276	Ave		0.3945				12.0		15.0			
1,1-Dichloropropene	0.2685 0.3059	0.2684 0.3063	0.2948 0.3116	0.3067	0.3091	Ave		0.2964				6.0		15.0			
Carbon tetrachloride	+++++ 0.2786	0.1951 0.2862	0.2400 0.2917	0.2682	0.2784	Ave		0.2626				13.0		15.0			
1,2-Dichloroethane	0.3793 0.3515	0.3620 0.3631	0.3464 0.3571	0.3500	0.3466	Ave		0.3570				3.1		15.0			
Benzene	0.9106 0.9315	0.9044 0.9305	0.9323 0.9142	0.9635	0.9389	Ave		0.9282				2.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Trichloroethene	0.2227 0.2297	0.2204 0.2320	0.2233 0.2317	0.2285	0.2298	Ave		0.2273				2.0		15.0			
Methylcyclohexane	0.3658 0.4295	0.2695 0.4145	0.4036 0.4206	0.4397	0.4308	Ave		0.3967				14.0		15.0			
1,2-Dichloropropane	0.2021 0.2286	0.2208 0.2323	0.2239 0.2256	0.2321	0.2322	Ave		0.2247				4.5		15.0			
1,4-Dioxane	+++++ 0.0025	0.0027 0.0023	0.0031 0.0023	0.0034	0.0027	Ave		0.0027				15.0		15.0			
Dibromomethane	0.1155 0.1435	0.1379 0.1439	0.1333 0.1434	0.1444	0.1395	Ave		0.1377				7.1		15.0			
Bromodichloromethane	0.2087 0.2861	0.2186 0.3059	0.2397 0.3132	0.2651	0.2640	Ave		0.2627				15.0		15.0			
2-Chloroethyl vinyl ether	0.1246 0.1425	0.1235 0.1479	0.1350 0.1481	0.1195	0.1314	Ave		0.1341				8.4		15.0			
cis-1,3-Dichloropropene	+++++ 0.3457	0.2445 0.3584	0.2672 0.3701	0.2902	0.3077	Ave		0.3120				15.0		15.0			
4-Methyl-2-pentanone	0.1793 0.2377	0.2098 0.2395	0.2294 0.2256	0.2015	0.2221	Ave		0.2181				9.3		15.0			
Toluene	1.8671 1.4284	1.6572 1.4300	1.5541 1.4591	1.4975	1.4350	Ave		1.5411				10.0		15.0			
trans-1,3-Dichloropropene	0.2771 0.4424	0.2782 0.4779	0.3313 0.5125	0.3716	0.3865	Lin1	-0.445	0.4894							0.9950		0.9900
Ethyl methacrylate	+++++ 0.4727	+++++ 0.4751	0.3749 0.4907	0.4227	0.4007	Ave		0.4395				11.0		15.0			
1,1,2-Trichloroethane	0.2664 0.2924	0.2996 0.2925	0.3025 0.2944	0.3009	0.2828	Ave		0.2914				4.1		15.0			
1,3-Dichloropropane	0.4978 0.5180	0.5217 0.5194	0.5302 0.5271	0.5272	0.4906	Ave		0.5165				2.8		15.0			
Tetrachloroethene	0.2311 0.2501	0.2346 0.2488	0.2567 0.2515	0.2467	0.2525	Ave		0.2465				3.6		15.0			
2-Hexanone	0.1610 0.2360	0.2057 0.2365	0.2423 0.2306	0.1959	0.2179	Ave		0.2157				13.0		15.0			
Dibromochloromethane	+++++ 0.2968	+++++ 0.3186	0.2317 0.3349	0.2594	0.2615	Ave		0.2838				14.0		15.0			
1,2-Dibromoethane	0.2373 0.2931	0.2771 0.2934	0.2738 0.2973	0.2846	0.2756	Ave		0.2790				6.8		15.0			
Chlorobenzene	0.9140 0.8933	0.9549 0.9055	0.9245 0.9053	0.9472	0.9081	Ave		0.9191			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2048 0.2957	0.2380 0.3085	0.2560 0.3136	0.2982	0.2861	Ave		0.2751				14.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethylbenzene	0.4469 0.4917	0.4780 0.4898	0.4726 0.4926	0.4862	0.4908	Ave		0.4811				3.2		15.0			
m-Xylene & p-Xylene	0.5287 0.5979	0.5508 0.5981	0.5781 0.5911	0.6075	0.6078	Ave		0.5825				4.9		15.0			
o-Xylene	0.5085 0.5805	0.5264 0.5793	0.5855 0.5640	0.6164	0.6016	Ave		0.5703				6.4		15.0			
Styrene	0.7162 0.9695	0.7426 1.0013	0.8327 0.9868	0.9326	0.9448	Ave		0.8908				13.0		15.0			
Bromoform	0.0828 0.1645	0.0940 0.1801	0.1225 0.1911	0.1512	0.1453	Lin1	-0.178	0.1835			0.1000				0.9950		0.9900
Isopropylbenzene	1.2300 1.4977	1.2741 1.5143	1.4714 1.5181	1.5652	1.5573	Ave		1.4535				8.8		15.0			
1,1,2,2-Tetrachloroethane	0.6834 0.8455	0.8495 0.8291	0.9900 0.8268	0.9772	0.8422	Ave		0.8555			0.3000	11.0		15.0			
Bromobenzene	0.7591 0.8023	0.7848 0.8080	0.8518 0.7963	0.8799	0.8068	Ave		0.8111				4.7		15.0			
1,2,3-Trichloropropane	0.2570 0.2769	0.2751 0.2710	0.3229 0.2652	0.3339	0.2757	Ave		0.2847				9.8		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2597	0.1975 0.2709	0.2306 0.2750	0.2462	0.2319	Ave		0.2445				11.0		15.0			
n-Propylbenzene	0.7215 0.9103	0.7754 0.9130	0.8525 0.9087	0.9283	0.9020	Ave		0.8640				8.8		15.0			
2-Chlorotoluene	0.7137 0.7759	0.7210 0.7754	0.8076 0.7753	0.8160	0.7726	Ave		0.7697				4.7		15.0			
1,3,5-Trimethylbenzene	2.0704 2.7465	2.1123 2.7513	2.5013 2.8303	2.7635	2.7227	Ave		2.5623				12.0		15.0			
4-Chlorotoluene	0.6687 0.7931	0.7490 0.8015	0.8219 0.8034	0.8726	0.8118	Ave		0.7902				7.6		15.0			
tert-Butylbenzene	2.0567 2.4267	2.2129 2.4520	2.4049 2.5107	2.5052	2.5168	Ave		2.3857				6.9		15.0			
1,2,4-Trimethylbenzene	2.0285 2.7574	2.1845 2.7404	2.5970 2.8009	2.8215	2.7579	Ave		2.5860				12.0		15.0			
sec-Butylbenzene	2.6872 3.4208	2.6225 3.3583	3.3361 3.5096	3.5540	3.4548	Ave		3.2429				11.0		15.0			
1,3-Dichlorobenzene	1.3222 1.4260	1.3845 1.4330	1.5458 1.4456	1.5821	1.4863	Ave		1.4532				5.8		15.0			
p-Isopropyltoluene	2.0913 2.7997	2.1135 2.7729	2.6464 2.8828	2.8345	2.7872	Ave		2.6160				12.0		15.0			
1,4-Dichlorobenzene	1.5977 1.4641	1.5591 1.4427	1.6647 1.4796	1.6302	1.5033	Ave		1.5427				5.3		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Butylbenzene	1.8992 2.5431	1.7894 2.5269	2.3620 2.6891	2.4672	2.5212	Ave		2.3498				14.0		15.0			
1,2-Dichlorobenzene	1.2983 1.3570	1.4042 1.3105	1.5341 1.3420	1.5542	1.4137	Ave		1.4018				6.9		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1176	0.0865 0.1161	0.1145 0.1271	0.1072	0.1063	Ave		0.1108				12.0		15.0			
1,3,5-Trichlorobenzene	0.8395 0.9411	0.8215 0.9022	0.9981 0.9471	1.0168	0.9675	Ave		0.9292				7.6		15.0			
1,2,4-Trichlorobenzene	0.6488 0.8193	0.7124 0.7749	0.9179 0.8138	0.9083	0.8746	Ave		0.8087				12.0		15.0			
Hexachlorobutadiene	0.3359 0.3725	0.3321 0.3416	0.4720 0.3687	0.4263	0.4197	Ave		0.3836				13.0		15.0			
Naphthalene	1.5907 2.2828	1.9524 2.1007	2.4451 2.1109	2.3638	2.2213	Ave		2.1335				13.0		15.0			
1,2,3-Trichlorobenzene	0.7687 0.7411	0.7741 0.6784	0.9198 0.6798	0.8552	0.8030	Ave		0.7775				11.0		15.0			
Dibromofluoromethane (Surr)	+++++ 0.1608	0.3347 0.1892	0.2542 0.1978	0.2338	0.2287	Qua	0.5422	0.1621	0.0002						0.9980		0.9900
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2174	0.4883 0.2656	0.3820 0.2736	0.3247	0.3168	Qua	0.7530	0.2267	0.0002						0.9980		0.9900
Toluene-d8 (Surr)	+++++ 0.9659	2.0231 1.0881	1.5292 1.1474	1.3576	1.2978	Qua	3.3362	0.9381	0.0010						0.9990		0.9900
4-Bromofluorobenzene (Surr)	+++++ 0.3594	0.8933 0.4138	0.6350 0.4270	0.5731	0.5237	Qua	1.6369	0.3547	0.0003						0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 02:56 Calibration End Date: 04/18/2013 04:42 Calibration ID: 14626

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-82425/16	UX84687.D
Level 2	STDA9 240-82425/15	UX84686.D
Level 3	STDA9 240-82425/14	UX84685.D
Level 4	STDA9 240-82425/13	UX84684.D
Level 5	STDA9 240-82425/12	UX84683.D
Level 6	STDA9 240-82425/11	UX84682.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.3244 0.3320	0.3248	0.3201	0.3252	0.3434	Ave		0.3283				2.5		15.0			
Ethyl ether	0.1960 0.2096	0.2024	0.1952	0.2023	0.2024	Ave		0.2013				2.6		15.0			
3-Chloro-1-propene	0.0960 0.1154	0.0955	0.1031	0.1056	0.1178	Ave		0.1056				8.9		15.0			
Diisopropyl ether	0.2120 0.2134	0.2138	0.2119	0.2185	0.2244	Ave		0.2157				2.3		15.0			
2-Chloro-1,3-butadiene	0.2916 0.3666	0.3109	0.3148	0.3461	0.3588	Ave		0.3315				9.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.6212 0.7705	0.6493	0.6625	0.6914	0.7463	Ave		0.6902				8.4		15.0			
Ethyl acetate	0.1809 0.2308	0.2002	0.1863	0.2092	0.1905	Ave		0.1997				9.2		15.0			
Propionitrile	0.0351 0.0346	0.0340	0.0323	0.0324	0.0306	Ave		0.0332				5.1		15.0			
Methacrylonitrile	0.1312 0.1496	0.1378	0.1288	0.1385	0.1312	Ave		0.1362				5.6		15.0			
Isobutyl alcohol	0.0121 0.0072	0.0101	0.0069	0.0067	0.0064	Qua	0.8131	0.0052	0						1.0000		0.9900
Tert-amyl-methyl ether (TAME)	0.4979 0.6472	0.5400	0.5410	0.5700	0.6264	Ave		0.5704				9.9		15.0			
n-Heptane	0.0571 0.0642	0.0579	0.0567	0.0625	0.0614	Ave		0.0600				5.2		15.0			
n-Butanol	0.0080 0.0052	0.0066	0.0045	0.0048	0.0047	Qua	0.3821	0.0040	0						1.0000		0.9900
Ethyl acrylate	0.2251 0.3138	0.2432	0.2343	0.2773	0.2711	Ave		0.2608				13.0		15.0			
Methyl methacrylate	0.1686 0.2191	0.1872	0.1771	0.1993	0.1899	Ave		0.1902				9.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 02:56 Calibration End Date: 04/18/2013 04:42 Calibration ID: 14626

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Nitropropane	0.0290 0.0568	0.0310	0.0302	0.0381	0.0387	Qua	0.1876	0.0228	0.0001						0.9990		0.9900
Cyclohexanone	0.0132 0.0144	0.0131	0.0089	0.0103	0.0114	Qua	0.2977	0.0079	0						1.0000		0.9900
1,2,3-Trimethylbenzene	2.4868 2.6366	2.7108	2.4258	2.6782	2.6722	Ave		2.6017				4.5		15.0			
Benzyl chloride	0.1171 0.1990	0.0931	0.0878	0.1105	0.1444	Qua	-0.031	0.0866	0.0006						1.0000		0.9900
2-Methylnaphthalene	0.6131 0.8444	0.6882	0.8256	0.9956	0.9603	Qua	-7.918	1.1321	-0.001						1.0000		0.9900
n-Butyl acetate	0.2873 0.3806	0.3405	0.2931	0.3363	0.3338	Ave		0.3286				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab File ID: BFB8350.D BFB Injection Date: 08/29/2013

Instrument ID: A3UX8 BFB Injection Time: 02:05

Analysis Batch No.: 99442

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.4	
75	30.0 - 60.0 % of mass 95	46.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	71.2	
175	5.0 - 9.0 % of mass 174	5.1	(7.2)1
176	95.0 - 101.0 % of mass 174	68.9	(96.7)1
177	5.0 - 9.0 % of mass 176	4.7	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-99442/3	UX87054.D	08/29/2013	02:42
	CCV 240-99442/4	UX87055.D	08/29/2013	03:03
	LCS 240-99442/5	UX87056.D	08/29/2013	03:28
	MB 240-99442/6	UX87057.D	08/29/2013	03:49
DR-SB-190-28-30	240-28322-4	UX87059.D	08/29/2013	04:44
DR-SB-190-18-20	240-28322-1	UX87060.D	08/29/2013	05:05
DR-SB-190-18-20 MS	240-28322-1 MS	UX87061.D	08/29/2013	05:27
DR-SB-190-18-20 MSD	240-28322-1 MSD	UX87062.D	08/29/2013	05:48
DR-SB-191-8-10	240-28322-2	UX87063.D	08/29/2013	06:09
DR-SB-191-22-24	240-28322-5	UX87064.D	08/29/2013	06:31

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCVIS 240-99442/3 Calibration Date: 08/29/2013 02:42

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 00:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 02:35

Lab File ID: UX87054.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2295	0.1993		1.00	0.0200	-13.1	50.0
Chloromethane	Ave	0.2459	0.2182	0.1000	1.00	0.0200	-11.3	50.0
Vinyl chloride	Ave	0.2145	0.1997		1.00	0.0200	-6.9	20.0
Bromomethane	Qua		0.1283		1.00	0.0200	-2.0	50.0
Chloroethane	Ave	0.1356	0.1257		1.00	0.0200	-7.3	50.0
Trichlorofluoromethane	Ave	0.2795	0.2724		1.00	0.0200	-2.5	50.0
Acrolein	Ave	0.0416	0.0356		20.0	0.200	-14.5	50.0
1,1-Dichloroethene	Ave	0.2004	0.1767		1.00	0.0200	-11.9	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1431	0.1202		1.00	0.0200	-16.1	50.0
Acetone	Ave	0.0823	0.0766		10.0	0.0400	-7.0	50.0
Iodomethane	Ave	0.3242	0.2845		1.00	0.0200	-12.2	50.0
Carbon disulfide	Ave	0.5922	0.4395		1.00	0.0200	-25.8	50.0
Acetonitrile	Ave	0.0322	0.0284		20.0	0.200	-11.8	50.0
Methyl acetate	Ave	0.1931	0.1678		10.0	0.0400	-13.1	50.0
Methylene Chloride	Lin1		0.3593		1.00	0.0200	21.7	50.0
tert-Butyl alcohol	Ave	0.0237	0.0156		50.0	0.400	-34.2	50.0
Acrylonitrile	Ave	0.0953	0.0856		20.0	0.0400	-10.2	50.0
Methyl tert-butyl ether	Ave	0.7004	0.5623		1.00	0.0200	-19.7	50.0
trans-1,2-Dichloroethene	Ave	0.2384	0.2227		1.00	0.0200	-6.6	50.0
Hexane	Ave	0.0594	0.0530		1.00	0.0200	-10.7	50.0
1,1-Dichloroethane	Ave	0.4093	0.3614	0.1000	1.00	0.0200	-11.7	50.0
Vinyl acetate	Ave	0.0435	0.0361		2.00	0.0200	-17.1	50.0
2-Butanone	Ave	0.1107	0.0988		10.0	0.0400	-10.7	50.0
cis-1,2-Dichloroethene	Ave	0.2586	0.2449		1.00	0.0200	-5.3	50.0
2,2-Dichloropropane	Ave	0.2269	0.1863		1.00	0.0200	-17.9	50.0
Bromochloromethane	Ave	0.1229	0.1147		1.00	0.0200	-6.7	50.0
Tetrahydrofuran	Ave	0.0743	0.0603		5.00	0.0200	-18.9	50.0
Chloroform	Ave	0.4087	0.3735		1.00	0.0200	-8.6	20.0
1,1,1-Trichloroethane	Ave	0.3164	0.3067		1.00	0.0200	-3.1	50.0
Cyclohexane	Ave	0.3945	0.3466		1.00	0.0200	-12.2	50.0
1,1-Dichloropropene	Ave	0.2964	0.2765		1.00	0.0200	-6.7	50.0
Carbon tetrachloride	Ave	0.2626	0.2362		1.00	0.0200	-10.0	50.0
1,2-Dichloroethane	Ave	0.3570	0.2877		1.00	0.0200	-19.4	50.0
Benzene	Ave	0.9282	0.8422		1.00	0.0200	-9.3	50.0
Trichloroethene	Ave	0.2273	0.2254		1.00	0.0200	-0.8	50.0
Methylcyclohexane	Ave	0.3967	0.3725		1.00	0.0200	-6.1	50.0
1,2-Dichloropropane	Ave	0.2247	0.1957		1.00	0.0200	-12.9	20.0
1,4-Dioxane	Ave	0.0027	0.0020		50.0	1.00	-27.1	50.0
Dibromomethane	Ave	0.1377	0.1240		1.00	0.0200	-10.0	50.0
Bromodichloromethane	Ave	0.2627	0.2357		1.00	0.0200	-10.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCVIS 240-99442/3 Calibration Date: 08/29/2013 02:42

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 00:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 02:35

Lab File ID: UX87054.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1341	0.1124		10.0	0.0400	-16.2	50.0
cis-1,3-Dichloropropene	Ave	0.3120	0.2626		1.00	0.0200	-15.8	50.0
4-Methyl-2-pentanone	Ave	0.2181	0.1872		10.0	0.0400	-14.2	50.0
Toluene	Ave	1.541	1.602		1.00	0.0200	4.0	20.0
trans-1,3-Dichloropropene	Lin1		0.3543		1.00	0.0200	-23.1	50.0
Ethyl methacrylate	Ave	0.4395	0.3789		1.00	0.0200	-13.8	50.0
1,1,2-Trichloroethane	Ave	0.2914	0.2810		1.00	0.0200	-3.6	50.0
1,3-Dichloropropane	Ave	0.5165	0.4731		1.00	0.0200	-8.4	50.0
Tetrachloroethene	Ave	0.2465	0.2740		1.00	0.0200	11.2	50.0
2-Hexanone	Ave	0.2157	0.2060		10.0	0.0400	-4.5	50.0
Dibromochloromethane	Ave	0.2838	0.2753		1.00	0.0200	-3.0	50.0
1,2-Dibromoethane	Ave	0.2790	0.2659		1.00	0.0200	-4.7	50.0
Chlorobenzene	Ave	0.9191	0.9059	0.3000	1.00	0.0200	-1.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2751	0.2818		1.00	0.0200	2.4	50.0
Ethylbenzene	Ave	0.4811	0.4923		1.00	0.0200	2.3	20.0
m-Xylene & p-Xylene	Ave	0.5825	0.6051		2.00	0.0400	3.9	50.0
o-Xylene	Ave	0.5703	0.5847		1.00	0.0200	2.5	50.0
Styrene	Ave	0.8908	0.9275		1.00	0.0200	4.1	50.0
Bromoform	Lin1		0.1422	0.1000	1.00	0.0200	-17.7	50.0
Isopropylbenzene	Ave	1.454	1.491		1.00	0.0200	2.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8555	0.6563	0.3000	1.00	0.0200	-23.3	50.0
Bromobenzene	Ave	0.8111	0.7466		1.00	0.0200	-8.0	50.0
1,2,3-Trichloropropane	Ave	0.2847	0.2224		1.00	0.0200	-21.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2445	0.1753		1.00	0.0200	-28.3	50.0
n-Propylbenzene	Ave	0.8640	0.8190		1.00	0.0200	-5.2	50.0
2-Chlorotoluene	Ave	0.7697	0.7009		1.00	0.0200	-8.9	50.0
1,3,5-Trimethylbenzene	Ave	2.562	2.410		1.00	0.0200	-6.0	50.0
4-Chlorotoluene	Ave	0.7902	0.7504		1.00	0.0200	-5.0	50.0
tert-Butylbenzene	Ave	2.386	2.091		1.00	0.0200	-12.3	50.0
1,2,4-Trimethylbenzene	Ave	2.586	2.414		1.00	0.0200	-6.7	50.0
sec-Butylbenzene	Ave	3.243	2.981		1.00	0.0200	-8.1	50.0
1,3-Dichlorobenzene	Ave	1.453	1.394		1.00	0.0200	-4.0	50.0
p-Isopropyltoluene	Ave	2.616	2.450		0.0187	0.0200	-6.3	50.0
1,4-Dichlorobenzene	Ave	1.543	1.440		1.00	0.0200	-6.7	50.0
n-Butylbenzene	Ave	2.350	2.230		1.00	0.0200	-5.1	50.0
1,2-Dichlorobenzene	Ave	1.402	1.294		1.00	0.0200	-7.7	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1108	0.0776		2.00	0.0200	-30.0	50.0
1,3,5-Trichlorobenzene	Ave	0.9292	0.8590		1.00	0.0200	-7.6	50.0
1,2,4-Trichlorobenzene	Ave	0.8087	0.6851		1.00	0.0200	-15.3	50.0
Hexachlorobutadiene	Ave	0.3836	0.3465		1.00	0.0200	-9.7	50.0
Naphthalene	Ave	2.133	1.455		1.00	0.0200	-31.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCVIS 240-99442/3 Calibration Date: 08/29/2013 02:42

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 00:06

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 02:35

Lab File ID: UX87054.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7775	0.5675		1.00	0.0200	-27.0	50.0
Dibromofluoromethane (Surr)	Qua		0.1721		0.0474	0.0500	-5.2	50.0
1,2-Dichloroethane-d4 (Surr)	Qua		0.2057		0.0405	0.0500	-19.1	50.0
Toluene-d8 (Surr)	Qua		1.148		0.0545	0.0500	9.1	50.0
4-Bromofluorobenzene (Surr)	Qua		0.3940		0.0487	0.0500	-2.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-99442/4 Calibration Date: 08/29/2013 03:03

Instrument ID: A3UX8 Calib Start Date: 04/18/2013 02:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/18/2013 04:42

Lab File ID: UX87055.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3283	0.2802		2.00	0.0200	-14.7	50.0
Ethyl ether	Ave	0.2013	0.2081		2.00	0.0200	3.4	50.0
3-Chloro-1-propene	Ave	0.1056	0.0892		2.00	0.0200	-15.5	50.0
Diisopropyl ether	Ave	0.2157	0.2070		10.0	0.100	-4.0	50.0
2-Chloro-1,3-butadiene	Ave	0.3315	0.3349		2.00	0.0200	1.0	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6902	0.5947		5.00	0.0200	-13.8	50.0
Ethyl acetate	Ave	0.1997	0.2148		4.00	0.0400	7.6	50.0
Propionitrile	Ave	0.0332	0.0341		4.00	0.0400	2.9	50.0
Methacrylonitrile	Ave	0.1362	0.1425		2.00	0.0200	4.7	50.0
Isobutyl alcohol	Qua		0.0066		50.0	0.400	-15.0	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.5704	0.5076		5.00	0.0200	-11.0	50.0
n-Heptane	Ave	0.0600	0.0670		1.00	0.0200	11.7	50.0
n-Butanol	Qua		0.0045		50.0	0.400	-13.8	50.0
Methyl methacrylate	Ave	0.1902	0.1652		2.00	0.0200	-13.1	50.0
2-Nitropropane	Qua		0.0327		2.00	0.0400	6.5	50.0
Cyclohexanone	Qua		0.0176		20.0	0.200	78.4*	50.0
1,2,3-Trimethylbenzene	Ave	2.602	2.401		0.0185	0.0200	-7.7	50.0
2-Methylnaphthalene	Qua		0.6888		5.00	0.0400	-20.2	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab File ID: UX87057.D Lab Sample ID: MB 240-99442/6

Matrix: Solid Heated Purge: (Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 08/29/2013 03:49

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-99442/5	UX87056.D	08/29/2013 03:28
DR-SB-190-28-30	240-28322-4	UX87059.D	08/29/2013 04:44
DR-SB-190-18-20	240-28322-1	UX87060.D	08/29/2013 05:05
DR-SB-190-18-20 MS	240-28322-1 MS	UX87061.D	08/29/2013 05:27
DR-SB-190-18-20 MSD	240-28322-1 MSD	UX87062.D	08/29/2013 05:48
DR-SB-191-8-10	240-28322-2	UX87063.D	08/29/2013 06:09
DR-SB-191-22-24	240-28322-5	UX87064.D	08/29/2013 06:31

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99442/6

Matrix: Solid | Lab File ID: UX87057.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 08/29/2013 03:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	0.62
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.34
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	1.3
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.36
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.52
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.30
87-61-6	1,2,3-Trichlorobenzene	5.0	U	5.0	0.38
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	0.90
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.17
120-82-1	1,2,4-Trichlorobenzene	0.389	J	5.0	0.27
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	1.3
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.36
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.34
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.69
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.35
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.34
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.66
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.94
110-75-8	2-Chloroethyl vinyl ether	50	U	50	1.4
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.40
591-78-6	2-Hexanone	20	U	20	0.63
108-86-1	Bromobenzene	5.0	U	5.0	0.33
74-97-5	Bromochloromethane	5.0	U	5.0	0.71
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.41
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.21
67-64-1	Acetone	6.77	J	20	6.3
71-43-2	Benzene	5.0	U	5.0	0.23
75-25-2	Bromoform	5.0	U	5.0	0.33
74-83-9	Bromomethane	5.0	U	5.0	0.54
75-15-0	Carbon disulfide	5.0	U	5.0	0.44
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.37
108-90-7	Chlorobenzene	5.0	U	5.0	0.33
75-00-3	Chloroethane	5.0	U	5.0	0.86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99442/6

Matrix: Solid | Lab File ID: UX87057.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 08/29/2013 03:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	5.0	U	5.0	0.29
74-87-3	Chloromethane	5.0	U	5.0	0.41
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.36
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.34
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.2
74-95-3	Dibromomethane	5.0	U	5.0	0.63
75-27-4	Bromodichloromethane	5.0	U	5.0	0.28
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	0.50
100-41-4	Ethylbenzene	5.0	U	5.0	0.26
106-93-4	1,2-Dibromoethane	5.0	U	5.0	0.50
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	0.636	J	5.0	0.19
179601-23-1	m-Xylene & p-Xylene	10	U	10	1.2
104-51-8	n-Butylbenzene	5.0	U	5.0	0.23
98-82-8	Isopropylbenzene	5.0	U	5.0	0.16
103-65-1	n-Propylbenzene	5.0	U	5.0	0.40
78-93-3	2-Butanone	20	U	20	1.4
108-10-1	4-Methyl-2-pentanone	20	U	20	0.54
135-98-8	sec-Butylbenzene	5.0	U	5.0	0.18
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.43
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.37
75-09-2	Methylene Chloride	1.06	J	5.0	0.67
95-47-6	o-Xylene	5.0	U	5.0	0.35
100-42-5	Styrene	5.0	U	5.0	0.15
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.22
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.29
127-18-4	Tetrachloroethene	5.0	U	5.0	0.52
108-88-3	Toluene	0.513	J	5.0	0.27
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.41
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.54
79-01-6	Trichloroethene	5.0	U	5.0	0.42
75-69-4	Trichlorofluoromethane	5.0	U	5.0	0.34
108-05-4	Vinyl acetate	10	U	10	0.25
75-01-4	Vinyl chloride	5.0	U	5.0	0.39
75-65-0	tert-Butyl alcohol	200	U	200	7.6
1330-20-7	Xylenes, Total	10	U	10	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99442/6

Matrix: Solid Lab File ID: UX87057.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/29/2013 03:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99442 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	5.0	U	5.0	0.55

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	76		58-123
460-00-4	4-Bromofluorobenzene (Surr)	85		52-136
2037-26-5	Toluene-d8 (Surr)	100		67-125
1868-53-7	Dibromofluoromethane (Surr)	85		37-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99442/6

Matrix: Solid Lab File ID: UX87057.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/29/2013 03:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99442 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-SB-190-18-20	240-28322-1	83	73	99	79
DR-SB-191-8-10	240-28322-2	85	73	103	84
DR-SB-190-28-30	240-28322-4	88	77	105	86
DR-SB-191-22-24	240-28322-5	86	77	105	86
	MB 240-99442/6	85	76	100	85
	LCS 240-99442/5	88	80	103	91
DR-SB-190-18-20 MS	240-28322-1 MS	86	75	105	88
DR-SB-190-18-20 MSD	240-28322-1 MSD	87	76	104	87

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	37-132
DCA = 1,2-Dichloroethane-d4 (Surr)	58-123
TOL = Toluene-d8 (Surr)	67-125
BFB = 4-Bromofluorobenzene (Surr)	52-136

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-082313	240-28322-3	102	106	86	81
	MB 240-99702/6	107	112	90	86
	LCS 240-99702/4	99	100	91	101
	240-28239-A-5 MS	95	96	89	97
	240-28239-C-5 MSD	103	100	92	104

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87056.D

Lab ID: LCS 240-99442/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	50.6	101	81-119	
1,1,1-Trichloroethane	50.0	46.6	93	77-126	
1,1,2,2-Tetrachloroethane	50.0	41.7	83	77-123	
1,1,2-Trichloro-1,2,2-trichfluoroethane	50.0	51.7	103	82-138	
1,1-Dichloroethane	50.0	44.1	88	76-115	
1,1-Dichloroethene	50.0	49.2	98	75-135	
1,1-Dichloropropene	50.0	43.7	87	80-120	
1,2,3-Trichlorobenzene	50.0	33.2	66	61-121	
1,2,3-Trichloropropane	50.0	44.1	88	84-126	
1,2,3-Trimethylbenzene	50.0	41.9	84	70-130	
1,2,4-Trichlorobenzene	50.0	40.4	81	64-124	
1,2,4-Trimethylbenzene	50.0	43.7	87	80-129	
1,2-Dibromo-3-Chloropropane	50.0	47.1	94	61-132	
1,2-Dichlorobenzene	50.0	43.4	87	76-110	
1,2-Dichloroethane	50.0	42.1	84	72-120	
1,2-Dichloropropane	50.0	44.9	90	87-113	
1,3-Dichlorobenzene	50.0	45.6	91	78-111	
1,3-Dichloropropane	50.0	48.9	98	82-118	
1,4-Dichlorobenzene	50.0	43.8	88	75-110	
2,2-Dichloropropane	50.0	41.5	83	69-135	
2-Chloroethyl vinyl ether	50.0	47.9 J	96	28-173	
2-Chlorotoluene	50.0	42.1	84	78-119	
2-Hexanone	100	117	117	64-136	
Bromobenzene	50.0	44.4	89	81-115	
Bromochloromethane	50.0	48.0	96	79-111	
4-Chlorotoluene	50.0	44.2	88	79-118	
p-Isopropyltoluene	50.0	45.6	91	77-131	
Acetone	100	99.3	99	41-137	
Benzene	50.0	44.2	88	79-112	
Bromoform	50.0	48.4	97	62-133	
Bromomethane	50.0	37.5	75	42-136	
Carbon disulfide	50.0	48.4	97	62-146	
Carbon tetrachloride	50.0	45.8	92	71-129	
Chlorobenzene	50.0	46.3	93	78-110	
Chloroethane	50.0	37.4	75	58-117	
Chloroform	50.0	43.9	88	77-114	
Chloromethane	50.0	36.0	72	50-110	
cis-1,2-Dichloroethene	50.0	47.6	95	76-113	
cis-1,3-Dichloropropene	50.0	45.8	92	74-128	
Hexachlorobutadiene	50.0	34.5	69	54-131	
Dibromomethane	50.0	47.7	95	85-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87056.D

Lab ID: LCS 240-99442/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	50.0	47.5	95	84-122	
Dichlorodifluoromethane	50.0	36.1	72	26-113	
Ethylbenzene	50.0	48.5	97	79-117	
1,2-Dibromoethane	50.0	51.3	103	83-117	
Diisopropyl ether	50.0	46.0	92	82-119	
Naphthalene	50.0	38.1	76	65-123	
m-Xylene & p-Xylene	100	97.4	97	80-117	
n-Butylbenzene	50.0	46.3	93	68-135	
Isopropylbenzene	50.0	47.6	95	76-122	
n-Propylbenzene	50.0	44.9	90	81-129	
2-Butanone	100	108	108	52-131	
4-Methyl-2-pentanone	100	104	104	67-135	
sec-Butylbenzene	50.0	42.4	85	74-129	
Methyl tert-butyl ether	50.0	44.1	88	49-165	
Methylene Chloride	50.0	45.9	92	75-118	
o-Xylene	50.0	47.2	94	80-120	
Styrene	50.0	51.6	103	87-117	
tert-Butylbenzene	50.0	40.7	81	76-126	
Tetrachloroethene	50.0	55.0	110	79-114	
Toluene	50.0	45.4	91	75-111	
trans-1,2-Dichloroethene	50.0	46.8	94	78-117	
trans-1,3-Dichloropropene	50.0	41.3	83	73-131	
Trichloroethene	50.0	50.2	100	79-113	
Trichlorofluoromethane	50.0	42.2	84	57-146	
Vinyl acetate	50.0	44.3	89	70-130	
Vinyl chloride	50.0	37.6	75	57-114	
tert-Butyl alcohol	1000	904	90	60-125	
Xylenes, Total	150	145	96	80-118	
Dibromochloromethane	50.0	51.8	104	72-127	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7341.D

Lab ID: LCS 240-99702/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.78	98	72-116	
1,1,1-Trichloroethane	10.0	9.88	99	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.95	89	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.7	117	74-151	
1,1-Dichloroethane	10.0	9.88	99	82-115	
1,1-Dichloroethene	10.0	9.81	98	78-131	
1,1-Dichloropropene	10.0	9.39	94	83-114	
1,2,3-Trichlorobenzene	10.0	6.48	65	54-126	
1,2,3-Trichloropropane	10.0	9.47	95	73-129	
1,2,3-Trimethylbenzene	10.0	9.96	100	70-130	
1,2,4-Trichlorobenzene	10.0	7.23	72	48-135	
1,2,4-Trimethylbenzene	10.0	9.46	95	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.61	76	42-136	
1,2-Dichlorobenzene	10.0	9.18	92	81-110	
1,2-Dichloroethane	10.0	10.9	109	71-127	
1,2-Dichloropropane	10.0	9.75	98	81-115	
1,3-Dichlorobenzene	10.0	9.45	94	80-110	
1,3-Dichloropropane	10.0	9.85	98	79-116	
1,4-Dichlorobenzene	10.0	9.28	93	82-110	
2,2-Dichloropropane	10.0	8.68	87	50-129	
2-Chloroethyl vinyl ether	10.0	8.86 J	89	52-131	
2-Chlorotoluene	10.0	9.13	91	76-116	
2-Hexanone	20.0	18.1	90	55-133	
Bromobenzene	10.0	9.22	92	76-115	
Bromochloromethane	10.0	10.3	103	77-120	
4-Chlorotoluene	10.0	9.15	91	77-115	
p-Isopropyltoluene	10.0	9.68	97	74-120	
Acetone	20.0	19.2	96	43-136	
Benzene	10.0	9.67	97	83-112	
Bromoform	10.0	9.86	99	40-131	
Bromomethane	10.0	6.88	69	11-185	
Carbon disulfide	10.0	8.81	88	62-142	
Carbon tetrachloride	10.0	10.5	105	66-128	
Chlorobenzene	10.0	9.69	97	85-110	
Chloroethane	10.0	6.51	65	25-153	
Chloroform	10.0	10.3	103	79-117	
Chloromethane	10.0	7.15	71	44-126	
cis-1,2-Dichloroethene	10.0	9.88	99	80-113	
cis-1,3-Dichloropropene	10.0	8.90	89	61-115	
Hexachlorobutadiene	10.0	7.58	76	36-134	
Dibromomethane	10.0	10.4	104	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7341.D

Lab ID: LCS 240-99702/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.92	99	72-121	
Dichlorodifluoromethane	10.0	7.91	79	19-129	
Ethylbenzene	10.0	9.80	98	83-112	
1,2-Dibromoethane	10.0	9.74	97	79-113	
Diisopropyl ether	10.0	9.61 J	96	77-118	
Naphthalene	10.0	6.15	62	32-141	
m-Xylene & p-Xylene	20.0	20.0	100	83-113	
n-Butylbenzene	10.0	8.80	88	66-125	
Isopropylbenzene	10.0	9.74	97	75-114	
n-Propylbenzene	10.0	9.70	97	74-121	
2-Butanone	20.0	18.6	93	60-126	
4-Methyl-2-pentanone	20.0	18.4	92	63-128	
sec-Butylbenzene	10.0	8.83	88	70-117	
Methyl tert-butyl ether	10.0	8.91	89	52-144	
Methylene Chloride	10.0	10.9	109	66-131	
o-Xylene	10.0	9.92	99	83-113	
Styrene	10.0	10.3	103	79-114	
tert-Butylbenzene	10.0	9.08	91	71-115	
Tetrachloroethene	10.0	10.2	102	79-114	
Toluene	10.0	9.48	95	84-111	
trans-1,2-Dichloroethene	10.0	9.78	98	83-117	
trans-1,3-Dichloropropene	10.0	8.86	89	58-117	
Trichloroethene	10.0	9.86	99	76-117	
Trichlorofluoromethane	10.0	9.52	95	49-157	
Vinyl acetate	10.0	9.04	90	46-161	
Vinyl chloride	10.0	7.45	75	53-127	
tert-Butyl alcohol	200	170	85	70-130	
Xylenes, Total	30.0	29.9	100	83-112	
Dibromochloromethane	10.0	9.66	97	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87061.D

Lab ID: 240-28322-1 MS Client ID: DR-SB-190-18-20 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	39.0	8.0 U	35.6	91	34-135	
1,1,1-Trichloroethane	39.0	8.0 U	33.4	86	51-128	
1,1,2,2-Tetrachloroethane	39.0	8.0 U	30.6	78	16-179	
1,1,2-Trichloro-1,2,2-trichfluoroethane	39.0	8.0 U	34.4	88	50-147	
1,1-Dichloroethane	39.0	8.0 U	32.4	83	54-122	
1,1-Dichloroethene	39.0	8.0 U	36.8	94	49-157	
1,1-Dichloropropene	39.0	8.0 U	30.7	79	50-122	
1,2,3-Trichlorobenzene	39.0	8.0 U	17.7	45	10-110	
1,2,3-Trichloropropane	39.0	8.0 U	32.0	82	32-174	
1,2,3-Trimethylbenzene	39.0	8.0 U	31.4	80	70-130	
1,2,4-Trichlorobenzene	39.0	1.5 J	22.1	53	10-111	
1,2,4-Trimethylbenzene	39.0	8.0 U	32.4	83	10-173	
1,2-Dibromo-3-Chloropropane	39.0	16 U	27.4	70	10-153	
1,2-Dichlorobenzene	39.0	8.0 U	30.4	78	17-122	
1,2-Dichloroethane	39.0	8.0 U	29.9	77	49-123	
1,2-Dichloropropane	39.0	8.0 U	32.1	82	61-117	
1,3-Dichlorobenzene	39.0	8.0 U	32.3	83	16-126	
1,3-Dichloropropane	39.0	8.0 U	35.7	92	54-128	
1,4-Dichlorobenzene	39.0	8.0 U	31.4	80	15-121	
2,2-Dichloropropane	39.0	8.0 U	27.9	71	49-132	
2-Chloroethyl vinyl ether	39.0	80 U	28.5 J	73	10-162	
2-Chlorotoluene	39.0	8.0 U	32.1	82	11-162	
2-Hexanone	78.1	32 U	72.8	93	37-147	
Bromobenzene	39.0	8.0 U	33.7	86	24-144	
Bromochloromethane	39.0	8.0 U	35.2	90	53-116	
4-Chlorotoluene	39.0	8.0 U	33.0	85	15-149	
p-Isopropyltoluene	39.0	8.0 U	32.3	83	10-165	
Acetone	78.1	31 J	88.5	73	24-140	
Benzene	39.0	8.0 U	32.8	84	53-118	
Bromoform	39.0	8.0 U	28.6	73	18-129	
Bromomethane	39.0	8.0 U	26.2	67	33-130	
Carbon disulfide	39.0	8.0 U	34.2	88	20-151	
Carbon tetrachloride	39.0	8.0 U	31.9	82	32-137	
Chlorobenzene	39.0	8.0 U	33.7	86	37-116	
Chloroethane	39.0	8.0 U	27.5	70	45-118	
Chloroform	39.0	8.0 U	32.8	84	53-119	
Chloromethane	39.0	8.0 U	25.9	66	34-117	
cis-1,2-Dichloroethene	39.0	8.0 U	35.1	90	50-119	
cis-1,3-Dichloropropene	39.0	8.0 U	29.9	77	27-133	
Hexachlorobutadiene	39.0	8.0 U	23.8	61	10-131	
Dibromomethane	39.0	8.0 U	33.5	86	52-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87061.D

Lab ID: 240-28322-1 MS Client ID: DR-SB-190-18-20 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	39.0	8.0 U	33.7	86	35-132	
Dichlorodifluoromethane	39.0	8.0 U	25.6	66	17-115	
Ethylbenzene	39.0	8.0 U	34.6	89	30-131	
1,2-Dibromoethane	39.0	8.0 U	36.1	92	45-127	
Diisopropyl ether	39.0	16 U	34.4	88	62-128	
Naphthalene	39.0	8.0 U	20.6	53	10-124	
m-Xylene & p-Xylene	78.1	16 U	70.8	91	29-131	
n-Butylbenzene	39.0	8.0 U	30.3	78	10-148	
Isopropylbenzene	39.0	8.0 U	33.1	85	21-134	
n-Propylbenzene	39.0	8.0 U	33.5	86	10-178	
2-Butanone	78.1	3.1 J	69.4	85	30-143	
4-Methyl-2-pentanone	78.1	32 U	66.5	85	43-147	
sec-Butylbenzene	39.0	8.0 U	30.5	78	10-172	
Methyl tert-butyl ether	39.0	8.0 U	30.8	79	51-157	
Methylene Chloride	39.0	4.7 J	37.5	84	54-115	
o-Xylene	39.0	8.0 U	33.7	86	29-134	
Styrene	39.0	8.0 U	34.8	89	27-127	
tert-Butylbenzene	39.0	8.0 U	31.0	79	10-163	
Tetrachloroethene	39.0	8.0 U	39.0	100	31-135	
Toluene	39.0	8.0 U	34.9	89	39-129	
trans-1,2-Dichloroethene	39.0	8.0 U	33.7	86	50-123	
trans-1,3-Dichloropropene	39.0	8.0 U	27.6	71	28-137	
Trichloroethene	39.0	8.0 U	34.8	89	10-177	
Trichlorofluoromethane	39.0	8.0 U	29.9	77	36-142	
Vinyl acetate	39.0	16 U	24.2	62	70-130	F
Vinyl chloride	39.0	8.0 U	27.1	69	42-117	
tert-Butyl alcohol	781	320 U	492	63	60-125	
Xylenes, Total	117	16 U	105	89	30-131	
Dibromochloromethane	39.0	8.0 U	33.9	87	29-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87062.D

Lab ID: 240-28322-1 MSD Client ID: DR-SB-190-18-20 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	40.4	36.7	91	3	30	34-135	
1,1,1-Trichloroethane	40.4	35.0	86	5	30	51-128	
1,1,2,2-Tetrachloroethane	40.4	31.2	77	2	30	16-179	
1,1,2-Trichloro-1,2,2-trichfluoroethane	40.4	36.1	89	5	30	50-147	
1,1-Dichloroethane	40.4	33.4	83	3	30	54-122	
1,1-Dichloroethene	40.4	38.0	94	3	30	49-157	
1,1-Dichloropropene	40.4	31.6	78	3	30	50-122	
1,2,3-Trichlorobenzene	40.4	18.3	45	3	30	10-110	
1,2,3-Trichloropropane	40.4	32.8	81	3	30	32-174	
1,2,3-Trimethylbenzene	40.4	31.0	77	1	30	70-130	
1,2,4-Trichlorobenzene	40.4	22.3	51	1	30	10-111	
1,2,4-Trimethylbenzene	40.4	31.4	78	3	30	10-173	
1,2-Dibromo-3-Chloropropane	40.4	31.4	78	14	30	10-153	
1,2-Dichlorobenzene	40.4	30.3	75	1	30	17-122	
1,2-Dichloroethane	40.4	31.1	77	4	30	49-123	
1,2-Dichloropropane	40.4	33.3	82	4	30	61-117	
1,3-Dichlorobenzene	40.4	31.6	78	2	30	16-126	
1,3-Dichloropropane	40.4	36.0	89	1	30	54-128	
1,4-Dichlorobenzene	40.4	30.9	76	2	30	15-121	
2,2-Dichloropropane	40.4	30.4	75	9	30	49-132	
2-Chloroethyl vinyl ether	40.4	30.3 J	75	6	30	10-162	
2-Chlorotoluene	40.4	32.0	79	0	30	11-162	
2-Hexanone	80.9	79.7	99	9	30	37-147	
Bromobenzene	40.4	33.6	83	0	30	24-144	
Bromochloromethane	40.4	36.4	90	3	30	53-116	
4-Chlorotoluene	40.4	31.3	78	5	30	15-149	
p-Isopropyltoluene	40.4	30.6	76	5	30	10-165	
Acetone	80.9	101	87	14	30	24-140	
Benzene	40.4	34.0	84	4	30	53-118	
Bromoform	40.4	28.1	70	2	30	18-129	
Bromomethane	40.4	28.0	69	7	30	33-130	
Carbon disulfide	40.4	34.3	85	0	30	20-151	
Carbon tetrachloride	40.4	32.9	81	3	30	32-137	
Chlorobenzene	40.4	33.8	84	0	30	37-116	
Chloroethane	40.4	27.5	68	0	30	45-118	
Chloroform	40.4	33.4	83	2	30	53-119	
Chloromethane	40.4	26.9	67	4	30	34-117	
cis-1,2-Dichloroethene	40.4	36.6	91	4	30	50-119	
cis-1,3-Dichloropropene	40.4	31.5	78	5	30	27-133	
Hexachlorobutadiene	40.4	21.3	53	11	30	10-131	
Dibromomethane	40.4	34.7	86	3	30	52-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87062.D

Lab ID: 240-28322-1 MSD Client ID: DR-SB-190-18-20 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	40.4	33.7	83	0	30	35-132	
Dichlorodifluoromethane	40.4	25.4	63	1	30	17-115	
Ethylbenzene	40.4	34.1	84	2	30	30-131	
1,2-Dibromoethane	40.4	36.9	91	2	30	45-127	
Diisopropyl ether	40.4	36.2	90	5	30	62-128	
Naphthalene	40.4	21.5	53	5	30	10-124	
m-Xylene & p-Xylene	80.9	68.9	85	3	30	29-131	
n-Butylbenzene	40.4	28.8	71	5	30	10-148	
Isopropylbenzene	40.4	32.2	80	3	30	21-134	
n-Propylbenzene	40.4	33.0	82	1	30	10-178	
2-Butanone	80.9	76.7	91	10	30	30-143	
4-Methyl-2-pentanone	80.9	72.0	89	8	30	43-147	
sec-Butylbenzene	40.4	29.2	72	4	30	10-172	
Methyl tert-butyl ether	40.4	33.0	82	7	30	51-157	
Methylene Chloride	40.4	39.7	86	6	30	54-115	
o-Xylene	40.4	34.5	85	2	30	29-134	
Styrene	40.4	35.0	87	1	30	27-127	
tert-Butylbenzene	40.4	29.7	73	4	30	10-163	
Tetrachloroethene	40.4	38.1	94	2	30	31-135	
Toluene	40.4	34.8	86	0	30	39-129	
trans-1,2-Dichloroethene	40.4	35.9	89	6	30	50-123	
trans-1,3-Dichloropropene	40.4	28.3	70	2	30	28-137	
Trichloroethene	40.4	35.5	88	2	30	10-177	
Trichlorofluoromethane	40.4	31.7	78	6	30	36-142	
Vinyl acetate	40.4	26.9	67	11	30	70-130	F
Vinyl chloride	40.4	27.8	69	3	30	42-117	
tert-Butyl alcohol	809	590	73	18	30	60-125	
Xylenes, Total	121	103	85	1	30	30-131	
Dibromochloromethane	40.4	34.8	86	3	30	29-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7364.D

Lab ID: 240-28239-A-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	1.0 U	9.70	97	68-121	
Acetone	20.0	10 U	19.2	96	33-145	
Benzene	10.0	1.0 U	9.55	95	72-121	
Chlorobenzene	10.0	1.0 U	9.60	96	80-110	
cis-1,2-Dichloroethene	10.0	1.0 U	9.92	99	70-120	
Ethylbenzene	10.0	1.0 U	9.42	94	75-116	
m-Xylene & p-Xylene	20.0	2.0 U	20.0	100	75-117	
2-Butanone	20.0	10 U	17.9	90	54-129	
4-Methyl-2-pentanone	20.0	10 U	18.2	91	56-131	
Methylene Chloride	10.0	1.0 U	8.76	88	63-128	
o-Xylene	10.0	1.0 U	10.1	101	76-116	
Toluene	10.0	1.0 U	9.40	94	78-114	
trans-1,2-Dichloroethene	10.0	1.0 U	9.87	99	80-119	
Trichloroethene	10.0	1.0 U	9.99	100	66-120	
Vinyl chloride	10.0	1.0 U	7.59	76	49-130	
Xylenes, Total	30.0	2.0 U	30.1	100	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7365.D

Lab ID: 240-28239-C-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	10.1	101	5	30	68-121	
Acetone	20.0	19.1	95	1	30	33-145	
Benzene	10.0	9.99	100	5	30	72-121	
Chlorobenzene	10.0	9.99	100	4	30	80-110	
cis-1,2-Dichloroethene	10.0	10.2	102	3	30	70-120	
Ethylbenzene	10.0	9.78	98	4	30	75-116	
m-Xylene & p-Xylene	20.0	20.7	103	3	30	75-117	
2-Butanone	20.0	18.9	94	5	30	54-129	
4-Methyl-2-pentanone	20.0	18.7	93	2	30	56-131	
Methylene Chloride	10.0	9.37	94	7	30	63-128	
o-Xylene	10.0	10.4	104	3	30	76-116	
Toluene	10.0	9.56	96	2	30	78-114	
trans-1,2-Dichloroethene	10.0	10.2	102	4	30	80-119	
Trichloroethene	10.0	10.3	103	3	30	66-120	
Vinyl chloride	10.0	7.75	78	2	30	49-130	
Xylenes, Total	30.0	31.1	104	3	30	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: STD8260 240-97903/4 Date Analyzed: 08/17/2013 16:41

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7006.D Heated Purge: (Y/N) N

Calibration ID: 16931

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1705267	5.76	1392950	8.48	758712	10.72
UPPER LIMIT		3410534	6.26	2785900	8.98	1517424	11.22
LOWER LIMIT		852634	5.26	696475	7.98	379356	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-97903/14		1783740	5.76	1420617	8.48	800428	10.72
CCVIS 240-99702/2		1253644	5.76	1037969	8.48	639750	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCVIS 240-99702/2 Date Analyzed: 08/30/2013 10:39

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7339.D Heated Purge: (Y/N) N

Calibration ID: 16934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1253644	5.76	1037969	8.48	639750	10.72
UPPER LIMIT		2507288	6.26	2075938	8.98	1279500	11.22
LOWER LIMIT		626822	5.26	518985	7.98	319875	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-99702/3		1341155	5.76	1064002	8.48	567107	10.72
LCS 240-99702/4		1291617	5.76	1071782	8.48	650904	10.72
MB 240-99702/6		1160095	5.76	986256	8.48	509556	10.72
240-28322-3	TB-082313	1185432	5.76	1017788	8.48	544740	10.72
240-28239-A-5 MS		1274799	5.76	1033081	8.48	653416	10.72
240-28239-C-5 MSD		1276163	5.76	1042619	8.48	661436	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: ICIS 240-82425/6 Date Analyzed: 04/18/2013 01:10

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX84677.D Heated Purge: (Y/N) Y

Calibration ID: 14624

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1428291	5.16	1006774	7.68	466721	9.88
UPPER LIMIT		2856582	5.66	2013548	8.18	933442	10.38
LOWER LIMIT		714146	4.66	503387	7.18	233361	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-82425/18		1484382	5.16	1023045	7.68	442539	9.88
CCVIS 240-99442/3		1318123	5.16	802997	7.68	405288	9.88

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCVIS 240-99442/3 Date Analyzed: 08/29/2013 02:42

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX87054.D Heated Purge: (Y/N) Y

Calibration ID: 14626

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1318123	5.16	802997	7.68	405288	9.88
UPPER LIMIT		2636246	5.66	1605994	8.18	810576	10.38
LOWER LIMIT		659062	4.66	401499	7.18	202644	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-99442/4		1298978	5.16	795963	7.68	383598	9.88
LCS 240-99442/5		1298427	5.16	807743	7.69	399714	9.88
MB 240-99442/6		1271775	5.16	790582	7.68	376625	9.88
240-28322-4	DR-SB-190-28-30	1279885	5.16	786544	7.68	370075	9.88
240-28322-1	DR-SB-190-18-20	1245547	5.16	762201	7.68	337846	9.88
240-28322-1 MS	DR-SB-190-18-20 MS	1325293	5.16	796948	7.68	365533	9.88
240-28322-1 MSD	DR-SB-190-18-20 MSD	1296842	5.16	792290	7.68	359514	9.88
240-28322-2	DR-SB-191-8-10	1277404	5.16	783442	7.69	365709	9.88
240-28322-5	DR-SB-191-22-24	1224803	5.15	724731	7.68	301629	9.87

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab File ID: 30905001.D DFTPP Injection Date: 09/05/2013

Instrument ID: A4HP7 DFTPP Injection Time: 15:25

Analysis Batch No.: 100302

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	36.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	43.4	
70	Less than 2.0% of mass 69	0.2	(0.6)1
127	25.0 - 75.0% of mass 198	47.5	
197	Less than 1.0% of mass 198	0.3	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	25.3	
365	Greater than 0.75% of mass 198	2.7	
441	Present, but less than mass 443	9.2	
442	40.0 - 110.0% of mass 198	62.8	
443	15.0 - 24.0% of mass 442	11.6	(18.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-100302/2	30905002.D	09/05/2013	15:47
	STD4 240-100302/3	30905003.D	09/05/2013	16:17
	STD3 240-100302/4	30905004.D	09/05/2013	16:42
	STD2 240-100302/5	30905005.D	09/05/2013	17:07
	STD1 240-100302/6	30905006.D	09/05/2013	17:32
	STD9 240-100302/7	30905007.D	09/05/2013	17:56
	STD8 240-100302/8	30905008.D	09/05/2013	18:21
	STD7 240-100302/9	30905009.D	09/05/2013	18:46
	STD6 240-100302/10	30905010.D	09/05/2013	19:11
	ICV 240-100302/11	30905011.D	09/05/2013	19:36

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-100302/6	30905006.D
Level 2	STD2 240-100302/5	30905005.D
Level 3	STD3 240-100302/4	30905004.D
Level 4	STD4 240-100302/3	30905003.D
Level 5	STD5 240-100302/2	30905002.D
Level 6	STD6 240-100302/10	30905010.D
Level 7	STD7 240-100302/9	30905009.D
Level 8	STD8 240-100302/8	30905008.D
Level 9	STD9 240-100302/7	30905007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5712	0.5686 0.5151	0.5563 0.5895	0.5026 0.5817	0.5238	Ave		0.5511				6.0		20.0			
N-Nitrosodimethylamine	0.8050	0.6484 0.8110	0.5761 0.8324	0.6865 0.8465	0.7278	Ave		0.7417				13.0		20.0			
Pyridine	1.3442	1.0642 1.2172	1.1215 1.4796	1.2156 1.4257	1.3409	Ave		1.2761				11.0		20.0			
Benzaldehyde	1.2477	1.3064 1.1909	1.1483 1.2581	1.1951 1.2206	1.2038	Ave		1.2234			0.0100	3.7		20.0			
Phenol	1.8189	1.6269 1.7544	1.7417 1.8976	1.7447 1.8785	1.7628	Ave		1.7782			0.8000	4.9		20.0			
Aniline	2.1016	2.0153 2.0340	2.0328 2.1870	2.0892 2.1722	2.0594	Ave		2.0864				3.1		20.0			
Bis(2-chloroethyl)ether	1.4132	1.2528 1.3751	1.2571 1.4983	1.4050 1.4705	1.3829	Ave		1.3819			0.7000	6.4		20.0			
2-Chlorophenol	1.3700	1.2224 1.3134	1.2742 1.4157	1.2917 1.4276	1.2661	Ave		1.3227			0.8000	5.6		20.0			
1,3-Dichlorobenzene	1.4696	1.3499 1.4209	1.4323 1.5519	1.4055 1.5468	1.3668	Ave		1.4430				5.2		20.0			
1,4-Dichlorobenzene	1.4605	1.4126 1.4468	1.4185 1.5895	1.4339 1.5926	1.4380	Ave		1.4741				5.0		20.0			
Benzyl alcohol	0.9188	0.8913 0.8958	0.8598 0.9820	0.8924 0.9866	0.8825	Ave		0.9137				5.1		20.0			
1,2-Dichlorobenzene	1.4162	1.2775 1.3775	1.3253 1.5068	1.3286 1.4932	1.3578	Ave		1.3854				5.9		20.0			
2-Methylphenol	1.2798	1.2746 1.2365	1.2087 1.3388	1.2331 1.3212	1.2419	Ave		1.2668			0.7000	3.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,2'-oxybis[1-chloropropane]	1.4209	1.4467 1.3490	1.4403 1.4732	1.4104 1.4467	1.3743	Ave		1.4202				2.9		20.0			
Indene	2.5742	2.4346 2.5225	2.3906 2.7468	2.4238 2.5461	2.4529	Ave		2.5114				4.6		20.0			
3 & 4 Methylphenol	1.3879	1.2753 1.3244	1.2899 1.4567	1.3132 1.4158	1.3082	Ave		1.3464				4.9		20.0			
N-Nitrosodi-n-propylamine	1.0723	0.9822 1.0121	1.0318 1.1058	1.0746 1.0951	1.0236	Ave		1.0497			0.5000	4.2		20.0			
Acetophenone	2.1078	2.0780 2.0389	2.0072 2.1691	2.0310 2.1975	1.9786	Ave		2.0760			0.0100	3.7		20.0			
Hexachloroethane	0.6255	0.6045 0.6205	0.6300 0.6605	0.5989 0.6668	0.5932	Ave		0.6250			0.3000	4.3		20.0			
Nitrobenzene	0.4098	0.4028 0.4067	0.3975 0.4451	0.3945 0.4365	0.4102	Ave		0.4129			0.2000	4.4		20.0			
Isophorone	0.7061	0.6629 0.6987	0.6728 0.7728	0.6916 0.7575	0.6711	Ave		0.7042			0.4000	5.8		20.0			
2-Nitrophenol	0.1737	0.1327 0.1794	0.1438 0.1929	0.1572 0.1890	0.1647	Ave		0.1667			0.1000	13.0		20.0			
2,4-Dimethylphenol	0.3010	0.3335 0.2854	0.3273 0.3047	0.2790 0.3015	0.3039	Ave		0.3045			0.2000	6.1		20.0			
Benzoic acid	0.1903	+++++ 0.2061	0.1165 0.1744	0.1398 +++++	0.1656	Ave		0.1655				20.0		20.0			
Bis(2-chloroethoxy)methane	0.4030	0.3919 0.3980	0.3987 0.4362	0.3985 0.4275	0.3906	Ave		0.4055			0.3000	4.2		20.0			
2,4-Dichlorophenol	0.2677	0.2395 0.2746	0.2508 0.2980	0.2515 0.2972	0.2647	Ave		0.2680			0.2000	8.0		20.0			
1,2,4-Trichlorobenzene	0.3052	0.3042 0.3078	0.2921 0.3394	0.2999 0.3368	0.2928	Ave		0.3098				5.9		20.0			
Naphthalene	1.0085 0.9653	0.9225 0.9831	0.9326 1.0949	0.9319 1.0493	0.9584	Ave		0.9829			0.7000	5.9		20.0			
4-Chloroaniline	0.3979	0.3745 0.4048	0.3923 0.4484	0.3940 0.4453	0.3878	Ave		0.4056			0.0100	6.6		20.0			
Hexachlorobutadiene	0.1816	0.1758 0.1891	0.1761 0.2063	0.1899 0.2056	0.1821	Ave		0.1883			0.0100	6.4		20.0			
Caprolactam	0.0898	0.0924 0.0847	0.0933 0.0930	0.0990 0.0911	0.0974	Ave		0.0926			0.0100	4.8		20.0			
4-Chloro-3-methylphenol	0.3327	0.3157 0.3327	0.3153 0.3634	0.3239 0.3632	0.3207	Ave		0.3335			0.2000	5.9		20.0			
2-Methylnaphthalene	0.6877 0.6502	0.6235 0.6601	0.6208 0.7330	0.6233 0.7306	0.6207	Ave		0.6611			0.4000	7.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.6584 0.6041	0.5732 0.6145	0.5922 0.6850	0.5628 0.6788	0.5852	Ave		0.6172				7.4		20.0			
Hexachlorocyclopentadiene	0.2934	0.2561 0.3434	0.2806 0.3835	0.3093 0.3854	0.3112	Ave		0.3204			0.0500	15.0		20.0			
1,2,4,5-Tetrachlorobenzene	0.5196	0.5038 0.5357	0.5183 0.5836	0.5315 0.5907	0.5214	Ave		0.5381			0.0100	5.9		20.0			
2,4,6-Trichlorophenol	0.3370	0.2892 0.3365	0.3191 0.3716	0.3241 0.3704	0.3176	Ave		0.3332			0.2000	8.3		20.0			
2,4,5-Trichlorophenol	0.3478	0.3172 0.3530	0.3316 0.3890	0.3402 0.3900	0.3337	Ave		0.3503			0.2000	7.6		20.0			
1,1'-Biphenyl	1.5149 1.3393	1.2733 1.3894	1.3411 1.5194	1.3259 1.5495	1.2985	Ave		1.3946			0.0100	7.5		20.0			
2-Chloronaphthalene	1.1504 1.0135	0.9770 1.0473	1.0099 1.1366	1.0169 1.1616	1.0055	Ave		1.0576			0.8000	6.8		20.0			
2-Nitroaniline	0.3773	0.2958 0.3766	0.3527 0.4042	0.3491 0.4003	0.3539	Ave		0.3638			0.0100	9.5		20.0			
Dimethyl phthalate	1.1853	1.1474 1.1918	1.1662 1.2895	1.1447 1.3011	1.1362	Ave		1.1953			0.0100	5.4		20.0			
1,3-Dinitrobenzene	0.1894	0.1233 0.1956	0.1507 0.2143	0.1609 0.2157	0.1717	Ave		0.1777				18.0		20.0			
2,6-Dinitrotoluene	0.2697	0.2221 0.2680	0.2199 0.2922	0.2537 0.2887	0.2607	Ave		0.2594				10.0		20.0			
Acenaphthylene	1.8628 1.6277	1.5711 1.6844	1.5857 1.8582	1.5949 1.6980	1.5732	Ave		1.6729			0.9000	6.9		20.0			
3-Nitroaniline	0.2895	0.2140 0.2933	0.2491 0.3158	0.2780 0.3126	0.2724	Ave		0.2781			0.0100	12.0		20.0			
2,4-Dinitrophenol	0.1784	0.0641 0.1983	0.0900 0.2165	0.1210 0.2155	0.1442	Lin1	-0.228	0.2098			0.0100				0.9910		0.9900
Acenaphthene	1.3244 1.0593	1.0343 1.0932	1.0738 1.1954	1.0596 1.1960	1.0330	Ave		1.1188			0.9000	8.8		20.0			
4-Nitrophenol	0.2186	0.1777 0.2237	0.1926 0.2486	0.2029 0.2445	0.2149	Ave		0.2155				11.0		20.0			
2,4-Dinitrotoluene	0.3619	0.2770 0.3649	0.3015 0.4023	0.3056 0.3960	0.3386	Ave		0.3435			0.2000	13.0		20.0			
Dibenzofuran	1.5503 1.4763	1.4218 1.5132	1.4201 1.6553	1.4350 1.6302	1.3984	Ave		1.5001			0.8000	6.3		20.0			
2,3,4,6-Tetrachlorophenol	0.3108	0.2624 0.3113	0.2777 0.3388	0.2804 0.3450	0.2951	Ave		0.3027			0.0100	9.7		20.0			
Diethyl phthalate	1.1412	1.1608 1.1591	1.1386 1.2968	1.1621 1.2876	1.1318	Ave		1.1847			0.0100	5.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chlorophenyl phenyl ether	0.6105	0.6016 0.6296	0.5734 0.6909	0.6178 0.6824	0.5840	Ave		0.6238			0.4000	6.9		20.0			
4-Nitroaniline	0.2911	0.2132 0.2955	0.2554 0.3217	0.2835 0.3259	0.2626	Ave		0.2811			0.0100	13.0		20.0			
Fluorene	1.2141 1.2233	1.1793 1.2772	1.2016 1.3806	1.2013 1.3824	1.1674	Ave		1.2474			0.9000	6.6		20.0			
4,6-Dinitro-2-methylphenol	0.1402	0.0662 0.1493	0.0782 0.1654	0.1010 0.1605	0.1128	Lin1	-0.148	0.1584			0.0100				0.9930		0.9900
N-Nitrosodiphenylamine	0.5363	0.5026 0.5484	0.4891 0.5752	0.4987 0.5276	0.4985	Ave		0.5221			0.0100	5.8		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.8514	0.7969 0.8578	0.7876 0.9249	0.7928 0.8827	0.8013	Ave		0.8368				6.0		20.0			
Azobenzene	0.8514	0.7969 0.8578	0.7876 0.9249	0.7917 0.8827	0.8013	Ave		0.8368				6.0		20.0			
4-Bromophenyl phenyl ether	0.2003	0.1797 0.2021	0.1819 0.2210	0.1836 0.2179	0.1866	Ave		0.1966			0.1000	8.3		20.0			
Hexachlorobenzene	0.2053 0.1964	0.1782 0.1992	0.1899 0.2216	0.1861 0.2207	0.1826	Ave		0.1978			0.1000	7.9		20.0			
Atrazine	0.1815	0.1889 0.1760	0.1887 0.1867	0.1750 0.1777	0.1813	Ave		0.1820			0.0100	3.1		20.0			
Pentachlorophenol	0.1429	0.1096 0.1472	0.1117 0.1632	0.1168 0.1585	0.1300	Ave		0.1350			0.0500	16.0		20.0			
Phenanthrene	1.1771 1.0427	0.9608 1.0515	0.9787 1.1474	0.9858 1.0282	0.9888	Ave		1.0401			0.7000	7.3		20.0			
Anthracene	1.1796 1.0505	0.9709 1.0960	0.9808 1.1568	0.9829 1.0915	0.9977	Ave		1.0563			0.7000	7.5		20.0			
Carbazole	0.9137	0.8860 0.9376	0.9023 1.0350	0.8930 0.9563	0.8462	Ave		0.9213			0.0100	6.2		20.0			
Di-n-butyl phthalate	1.1504	0.9854 1.1933	0.9905 1.2364	0.9710 1.1351	1.0389	Ave		1.0876			0.0100	9.5		20.0			
Fluoranthene	1.2708 1.1643	1.0474 1.2243	1.0853 1.3485	1.0597 1.2446	1.0753	Ave		1.1689			0.6000	9.3		20.0			
Benzidine	0.1944	0.1790 +++++	0.1860 +++++	0.2178 +++++	0.1785	Ave		0.1911				8.5		20.0			
Pyrene	1.1930 1.0520	1.0028 1.0643	1.0547 1.1753	1.0140 1.1037	1.0157	Ave		1.0751			0.6000	6.4		20.0			
Butyl benzyl phthalate	0.4499	0.3765 0.4499	0.4022 0.4944	0.4262 0.4882	0.4320	Ave		0.4399			0.0100	9.1		20.0			
3,3'-Dichlorobenzidine	0.3517	0.2636 0.3624	0.2985 0.3971	0.3161 0.3997	0.3223	Ave		0.3389			0.0100	14.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Bis(2-ethylhexyl) phthalate	0.6305	0.4990 0.6387	0.5549 0.7008	0.5993 0.6827	0.5923	Ave		0.6123			0.0100	11.0		20.0			
Benzo[a]anthracene	1.1595 1.0291	0.9190 1.0393	1.0010 1.1441	0.9967 1.1398	0.9882	Ave		1.0463			0.8000	8.0		20.0			
Chrysene	1.0322 0.9732	0.9078 0.9750	0.9294 1.0698	0.9332 1.0807	0.9289	Ave		0.9811			0.7000	6.6		20.0			
Di-n-octyl phthalate	1.2090	0.8186 1.2747	0.9596 1.4160	1.0323 1.4351	1.1930	Ave		1.1673			0.0100	19.0		20.0			
Benzo[b]fluoranthene	0.9564 1.0435	0.8962 1.1110	0.9510 1.2152	0.9762 1.2198	1.0377	Ave		1.0452			0.7000	11.0		20.0			
Benzo[k]fluoranthene	1.2159 1.1259	0.9920 1.1613	1.0093 1.3230	1.0436 1.3339	1.0494	Ave		1.1394			0.7000	11.0		20.0			
Benzo[a]pyrene	1.0798 1.0075	0.8832 1.0492	0.9154 1.1671	0.9375 1.1762	0.9839	Ave		1.0222			0.7000	10.0		20.0			
Indeno[1,2,3-cd]pyrene	1.1882 1.1297	0.9779 1.1565	1.0537 1.2838	1.1165 1.2928	1.1195	Ave		1.1465			0.5000	8.8		20.0			
Dibenzo(a,h)anthracene	1.0331 0.9525	0.8453 0.9915	0.8734 1.1103	0.9190 1.1240	0.9506	Ave		0.9777			0.4000	9.9		20.0			
Benzo[g,h,i]perylene	1.0207 0.9283	0.9051 0.9504	0.8934 1.0518	0.9461 1.0538	0.9496	Ave		0.9666			0.5000	6.3		20.0			
2-Fluorophenol (Surr)	1.3313	1.1342 1.2852	1.2592 1.4077	1.3403 1.4053	1.2992	Ave		1.3078				6.7		20.0			
Phenol-d5 (Surr)	1.7946	1.7109 1.7351	1.7202 1.8677	1.7163 1.8473	1.7185	Ave		1.7638				3.6		20.0			
Nitrobenzene-d5 (Surr)	0.4619 0.4166	0.4147 0.4201	0.4122 0.4600	0.4250 0.4530	0.4358	Ave		0.4333				4.6		20.0			
2-Fluorobiphenyl (Surr)	1.3100 1.1932	1.1515 1.2364	1.2142 1.3557	1.2026 1.3816	1.1649	Ave		1.2456				6.7		20.0			
2,4,6-Tribromophenol (Surr)	0.1467	0.1111 0.1558	0.1343 0.1700	0.1378 0.1710	0.1471	Ave		0.1467				13.0		20.0			
Terphenyl-d14 (Surr)	0.7506 0.6317	0.5864 0.6506	0.6180 0.7230	0.6153 0.7144	0.6117	Ave		0.6557				8.9		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab File ID: 30910001.D DFTPP Injection Date: 09/10/2013

Instrument ID: A4HP7 DFTPP Injection Time: 09:35

Analysis Batch No.: 100796

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	36.2	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	42.3	
70	Less than 2.0% of mass 69	0.2	(0.5)1
127	25.0 - 75.0% of mass 198	48.3	
197	Less than 1.0% of mass 198	0.1	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.6	
275	10.0- 30.0% of mass 198	25.9	
365	Greater than 0.75% of mass 198	2.7	
441	Present, but less than mass 443	10.0	
442	40.0 - 110.0% of mass 198	65.6	
443	15.0 - 24.0% of mass 442	12.2	(18.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-100796/2	30910002.D	09/10/2013	09:59
	CCV 240-100796/3	30910003.D	09/10/2013	10:24
	MB 240-100222/23-A	30910006.D	09/10/2013	11:38
	LCS 240-100222/24-A	30910007.D	09/10/2013	12:03

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCVIS 240-100796/2 Calibration Date: 09/10/2013 09:59

Instrument ID: A4HP7 Calib Start Date: 09/05/2013 15:47

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/05/2013 19:11

Lab File ID: 30910002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5511	0.5577		10.1	10.0	1.2	20.0
N-Nitrosodimethylamine	Ave	0.7417	0.7555		10.2	10.0	1.9	20.0
Pyridine	Ave	1.276	1.386		10.9	10.0	8.6	20.0
Benzaldehyde	Ave	1.223	1.164	0.0100	19.0	20.0	-4.8	20.0
Phenol	Ave	1.778	1.743	0.8000	9.80	10.0	-2.0	20.0
Aniline	Ave	2.086	2.061		9.88	10.0	-1.2	20.0
Bis(2-chloroethyl)ether	Ave	1.382	1.350	0.7000	9.77	10.0	-2.3	20.0
2-Chlorophenol	Ave	1.323	1.334	0.8000	10.1	10.0	0.8	20.0
1,3-Dichlorobenzene	Ave	1.443	1.437		9.96	10.0	-0.4	20.0
1,4-Dichlorobenzene	Ave	1.474	1.451		9.84	10.0	-1.6	20.0
Benzyl alcohol	Ave	0.9137	0.8053		8.81	10.0	-11.9	20.0
1,2-Dichlorobenzene	Ave	1.385	1.377		9.94	10.0	-0.6	20.0
2-Methylphenol	Ave	1.267	1.222	0.7000	9.65	10.0	-3.5	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.420	1.347		9.49	10.0	-5.1	20.0
Indene	Ave	2.511	2.510		20.0	20.0	-0.0	20.0
3 & 4 Methylphenol	Ave	1.346	1.257		9.34	10.0	-6.6	20.0
N-Nitrosodi-n-propylamine	Ave	1.050	0.9435	0.5000	8.99	10.0	-10.1	20.0
Acetophenone	Ave	2.076	1.976	0.0100	9.52	10.0	-4.8	20.0
Hexachloroethane	Ave	0.6250	0.6061	0.3000	9.70	10.0	-3.0	20.0
Nitrobenzene	Ave	0.4129	0.4064	0.2000	9.84	10.0	-1.6	20.0
Isophorone	Ave	0.7042	0.6739	0.4000	9.57	10.0	-4.3	20.0
2-Nitrophenol	Ave	0.1667	0.1753	0.1000	10.5	10.0	5.1	20.0
2,4-Dimethylphenol	Ave	0.3045	0.2862	0.2000	9.40	10.0	-6.0	20.0
Benzoic acid	Ave	0.1655	0.1949		23.6	20.0	17.8	20.0
Bis(2-chloroethoxy)methane	Ave	0.4055	0.3898	0.3000	9.61	10.0	-3.9	20.0
2,4-Dichlorophenol	Ave	0.2680	0.2753	0.2000	10.3	10.0	2.7	20.0
1,2,4-Trichlorobenzene	Ave	0.3098	0.3124		10.1	10.0	0.8	20.0
Naphthalene	Ave	0.9829	0.9661	0.7000	9.83	10.0	-1.7	20.0
4-Chloroaniline	Ave	0.4056	0.4048	0.0100	9.98	10.0	-0.2	20.0
Hexachlorobutadiene	Ave	0.1883	0.1847	0.0100	9.81	10.0	-1.9	20.0
Caprolactam	Ave	0.0926	0.1006	0.0100	21.7	20.0	8.6	20.0
4-Chloro-3-methylphenol	Ave	0.3335	0.3139	0.2000	9.41	10.0	-5.9	20.0
2-Methylnaphthalene	Ave	0.6611	0.6368	0.4000	9.63	10.0	-3.7	20.0
1-Methylnaphthalene	Ave	0.6172	0.5842		9.47	10.0	-5.3	20.0
Hexachlorocyclopentadiene	Ave	0.3204	0.3121	0.0500	9.74	10.0	-2.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5381	0.5303	0.0100	9.85	10.0	-1.5	20.0
2,4,6-Trichlorophenol	Ave	0.3332	0.3307	0.2000	9.93	10.0	-0.7	20.0
2,4,5-Trichlorophenol	Ave	0.3503	0.3540	0.2000	10.1	10.0	1.0	20.0
1,1'-Biphenyl	Ave	1.395	1.345	0.0100	9.64	10.0	-3.6	20.0
2-Chloronaphthalene	Ave	1.058	1.046	0.8000	9.89	10.0	-1.1	20.0
2-Nitroaniline	Ave	0.3638	0.3612	0.0100	9.93	10.0	-0.7	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCVIS 240-100796/2 Calibration Date: 09/10/2013 09:59

Instrument ID: A4HP7 Calib Start Date: 09/05/2013 15:47

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/05/2013 19:11

Lab File ID: 30910002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.195	1.181	0.0100	9.88	10.0	-1.2	20.0
1,3-Dinitrobenzene	Ave	0.1777	0.1932		10.9	10.0	8.7	20.0
2,6-Dinitrotoluene	Ave	0.2594	0.2706		10.4	10.0	4.3	20.0
Acenaphthylene	Ave	1.673	1.619	0.9000	9.68	10.0	-3.2	20.0
3-Nitroaniline	Ave	0.2781	0.3012	0.0100	10.8	10.0	8.3	20.0
2,4-Dinitrophenol	Lin1		0.1854	0.0100	18.8	20.0	-6.2	20.0
Acenaphthene	Ave	1.119	1.076	0.9000	9.62	10.0	-3.8	20.0
4-Nitrophenol	Ave	0.2155	0.2020		18.7	20.0	-6.3	20.0
2,4-Dinitrotoluene	Ave	0.3435	0.3625	0.2000	10.6	10.0	5.6	20.0
Dibenzofuran	Ave	1.500	1.476	0.8000	9.84	10.0	-1.6	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3027	0.2878	0.0100	9.51	10.0	-4.9	20.0
Diethyl phthalate	Ave	1.185	1.150	0.0100	9.71	10.0	-2.9	20.0
4-Chlorophenyl phenyl ether	Ave	0.6238	0.6211	0.4000	9.96	10.0	-0.4	20.0
4-Nitroaniline	Ave	0.2811	0.3061	0.0100	10.9	10.0	8.9	20.0
Fluorene	Ave	1.247	1.233	0.9000	9.88	10.0	-1.2	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1367	0.0100	18.2	20.0	-9.0	20.0
N-Nitrosodiphenylamine	Ave	0.5221	0.5450	0.0100	20.9	20.0	4.4	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8368	0.8327		9.95	10.0	-0.5	20.0
4-Bromophenyl phenyl ether	Ave	0.1966	0.2007	0.1000	10.2	10.0	2.1	20.0
Hexachlorobenzene	Ave	0.1978	0.1980	0.1000	10.0	10.0	0.1	20.0
Atrazine	Ave	0.1820	0.1879	0.0100	20.6	20.0	3.2	20.0
Pentachlorophenol	Ave	0.1350	0.1386	0.0500	20.5	20.0	2.7	20.0
Phenanthrene	Ave	1.040	1.022	0.7000	9.83	10.0	-1.7	20.0
Anthracene	Ave	1.056	1.050	0.7000	9.94	10.0	-0.6	20.0
Carbazole	Ave	0.9213	0.9512	0.0100	10.3	10.0	3.2	20.0
Di-n-butyl phthalate	Ave	1.088	1.162	0.0100	10.7	10.0	6.9	20.0
Fluoranthene	Ave	1.169	1.196	0.6000	10.2	10.0	2.3	20.0
Benzidine	Ave	0.1911	0.1943		20.3	20.0	1.7	20.0
Pyrene	Ave	1.075	1.063	0.6000	9.89	10.0	-1.1	20.0
Butyl benzyl phthalate	Ave	0.4399	0.4479	0.0100	10.2	10.0	1.8	20.0
3,3'-Dichlorobenzidine	Ave	0.3389	0.3615	0.0100	21.3	20.0	6.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6123	0.6273	0.0100	10.2	10.0	2.5	20.0
Benzo[a]anthracene	Ave	1.046	1.033	0.8000	9.87	10.0	-1.3	20.0
Chrysene	Ave	0.9811	0.9684	0.7000	9.87	10.0	-1.3	20.0
Di-n-octyl phthalate	Ave	1.167	1.231	0.0100	10.5	10.0	5.5	20.0
Benzo[b]fluoranthene	Ave	1.045	1.104	0.7000	10.6	10.0	5.6	20.0
Benzo[k]fluoranthene	Ave	1.139	1.136	0.7000	9.97	10.0	-0.3	20.0
Benzo[a]pyrene	Ave	1.022	1.029	0.7000	10.1	10.0	0.6	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.147	1.139	0.5000	9.93	10.0	-0.7	20.0
Dibenzo(a,h)anthracene	Ave	0.9777	0.9538	0.4000	9.76	10.0	-2.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCVIS 240-100796/2 Calibration Date: 09/10/2013 09:59

Instrument ID: A4HP7 Calib Start Date: 09/05/2013 15:47

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/05/2013 19:11

Lab File ID: 30910002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[g,h,i]perylene	Ave	0.9666	0.9449	0.5000	9.78	10.0	-2.2	20.0
2-Fluorophenol (Surr)	Ave	1.308	1.342		10.3	10.0	2.6	20.0
Phenol-d5 (Surr)	Ave	1.764	1.728		9.80	10.0	-2.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4333	0.4231		9.76	10.0	-2.4	20.0
2-Fluorobiphenyl (Surr)	Ave	1.246	1.214		9.75	10.0	-2.5	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1467	0.1532		10.4	10.0	4.4	20.0
Terphenyl-d14 (Surr)	Ave	0.6557	0.6428		9.80	10.0	-2.0	20.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab File ID: 30910006.D Lab Sample ID: MB 240-100222/23-A

Matrix: Solid Date Extracted: 09/05/2013 10:25

Instrument ID: A4HP7 Date Analyzed: 09/10/2013 11:38

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-100222/24-A	30910007.D	09/10/2013 12:03
DR-SB-191-8-10	240-28322-2	30911014.D	09/11/2013 14:26
DR-SB-190-28-30	240-28322-4	30911024.D	09/11/2013 18:38
DR-SB-190-18-20	240-28322-1	30911025.D	09/11/2013 19:04
DR-SB-191-22-24	240-28322-5	30911027.D	09/11/2013 19:54

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100222/23-A

Matrix: Solid | Lab File ID: 30910006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.0(g) | Date Analyzed: 09/10/2013 11:38

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100796 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	50	U	50	3.5
123-91-1	1,4-Dioxane	100	U	100	22
88-06-2	2,4,6-Trichlorophenol	150	U	150	8.9
95-95-4	2,4,5-Trichlorophenol	150	U	150	25
120-83-2	2,4-Dichlorophenol	150	U	150	20
105-67-9	2,4-Dimethylphenol	150	U	150	20
51-28-5	2,4-Dinitrophenol	330	U	330	21
121-14-2	2,4-Dinitrotoluene	200	U	200	17
91-58-7	2-Chloronaphthalene	50	U	50	0.45
95-57-8	2-Chlorophenol	50	U	50	8.2
91-57-6	2-Methylnaphthalene	6.7	U	6.7	0.50
95-48-7	2-Methylphenol	200	U	200	11
88-74-4	2-Nitroaniline	200	U	200	9.1
88-75-5	2-Nitrophenol	50	U	50	8.3
15831-10-4	3 & 4 Methylphenol	400	U	400	20
91-94-1	3,3'-Dichlorobenzidine	100	U	100	18
99-09-2	3-Nitroaniline	200	U	200	16
534-52-1	4,6-Dinitro-2-methylphenol	150	U	150	9.2
101-55-3	4-Bromophenyl phenyl ether	50	U	50	13
59-50-7	4-Chloro-3-methylphenol	150	U	150	21
106-47-8	4-Chloroaniline	150	U	150	17
7005-72-3	4-Chlorophenyl phenyl ether	50	U	50	13
100-01-6	4-Nitroaniline	200	U	200	26
83-32-9	Acenaphthene	6.7	U	6.7	0.76
208-96-8	Acenaphthylene	6.7	U	6.7	0.35
98-86-2	Acetophenone	100	U	100	9.2
120-12-7	Anthracene	6.7	U	6.7	0.78
1912-24-9	Atrazine	200	U	200	9.1
100-52-7	Benzaldehyde	100	U	100	12
56-55-3	Benzo[a]anthracene	6.7	U	6.7	0.63
50-32-8	Benzo[a]pyrene	6.7	U	6.7	0.64
205-99-2	Benzo[b]fluoranthene	6.7	U	6.7	0.59
191-24-2	Benzo[g,h,i]perylene	6.7	U	6.7	0.35
207-08-9	Benzo[k]fluoranthene	6.7	U	6.7	0.68

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100222/23-A

Matrix: Solid | Lab File ID: 30910006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.0(g) | Date Analyzed: 09/10/2013 11:38

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100796 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	100	U	100	22
111-44-4	Bis(2-chloroethyl)ether	100	U	100	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	70	U	70	19
85-68-7	Butyl benzyl phthalate	70	U	70	10
105-60-2	Caprolactam	330	U	330	37
86-74-8	Carbazole	50	U	50	27
218-01-9	Chrysene	6.7	U	6.7	1.1
84-74-2	Di-n-butyl phthalate	70	U	70	15
117-84-0	Di-n-octyl phthalate	70	U	70	7.9
53-70-3	Dibenzo(a,h)anthracene	6.7	U	6.7	0.66
132-64-9	Dibenzofuran	50	U	50	0.66
84-66-2	Diethyl phthalate	70	U	70	16
131-11-3	Dimethyl phthalate	70	U	70	17
206-44-0	Fluoranthene	6.7	U	6.7	0.55
86-73-7	Fluorene	6.7	U	6.7	0.53
118-74-1	Hexachlorobenzene	6.7	U	6.7	2.1
87-68-3	Hexachlorobutadiene	50	U	50	5.6
77-47-4	Hexachlorocyclopentadiene	330	U	330	8.1
67-72-1	Hexachloroethane	50	U	50	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	6.7	U	6.7	0.35
78-59-1	Isophorone	50	U	50	13
621-64-7	N-Nitrosodi-n-propylamine	50	U	50	6.3
62-75-9	N-Nitrosodimethylamine	100	U	100	16
86-30-6	N-Nitrosodiphenylamine	50	U	50	21
91-20-3	Naphthalene	6.7	U	6.7	0.82
98-95-3	Nitrobenzene	100	U	100	2.2
87-86-5	Pentachlorophenol	150	U	150	9.1
85-01-8	Phenanthrene	6.7	U	6.7	0.73
108-95-2	Phenol	50	U	50	7.3
129-00-0	Pyrene	6.7	U	6.7	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	100	U	100	9.5
606-20-2	2,6-Dinitrotoluene	200	U	200	21
100-02-7	4-Nitrophenol	330	U	330	17

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100222/23-A

Matrix: Solid | Lab File ID: 30910006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.0(g) | Date Analyzed: 09/10/2013 11:38

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100796 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	80		36-110
4165-62-2	Phenol-d5 (Surr)	54		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	51		20-110
367-12-4	2-Fluorophenol (Surr)	56		24-110
321-60-8	2-Fluorobiphenyl (Surr)	53		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	38		10-110

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab File ID: 30911001.D DFTPP Injection Date: 09/11/2013

Instrument ID: A4HP7 DFTPP Injection Time: 08:59

Analysis Batch No.: 100975

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	37.6	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	44.1	
70	Less than 2.0% of mass 69	0.2	(0.5)1
127	25.0 - 75.0% of mass 198	49.2	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0- 30.0% of mass 198	25.9	
365	Greater than 0.75% of mass 198	2.6	
441	Present, but less than mass 443	9.6	
442	40.0 - 110.0% of mass 198	64.1	
443	15.0 - 24.0% of mass 442	12.5	(19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-100975/2	30911002.D	09/11/2013	09:24
DR-SB-191-8-10	240-28322-2	30911014.D	09/11/2013	14:26
DR-SB-190-28-30	240-28322-4	30911024.D	09/11/2013	18:38
DR-SB-190-18-20	240-28322-1	30911025.D	09/11/2013	19:04
DR-SB-191-22-24	240-28322-5	30911027.D	09/11/2013	19:54

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100975/2 Calibration Date: 09/11/2013 09:24

Instrument ID: A4HP7 Calib Start Date: 09/05/2013 15:47

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/05/2013 19:11

Lab File ID: 30911002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5511	0.5640		10.2	10.0	2.3	20.0
N-Nitrosodimethylamine	Ave	0.7417	0.7915		10.7	10.0	6.7	20.0
Pyridine	Ave	1.276	1.356		10.6	10.0	6.2	20.0
Benzaldehyde	Ave	1.223	1.158	0.0100	18.9	20.0	-5.4	20.0
Phenol	Ave	1.778	1.764	0.8000	9.92	10.0	-0.8	20.0
Aniline	Ave	2.086	2.064		9.89	10.0	-1.1	20.0
Bis(2-chloroethyl)ether	Ave	1.382	1.336	0.7000	9.67	10.0	-3.3	20.0
2-Chlorophenol	Ave	1.323	1.326	0.8000	10.0	10.0	0.2	20.0
1,3-Dichlorobenzene	Ave	1.443	1.438		9.96	10.0	-0.4	20.0
1,4-Dichlorobenzene	Ave	1.474	1.462		9.92	10.0	-0.8	20.0
Benzyl alcohol	Ave	0.9137	0.8076		8.84	10.0	-11.6	20.0
1,2-Dichlorobenzene	Ave	1.385	1.390		10.0	10.0	0.4	20.0
2-Methylphenol	Ave	1.267	1.254	0.7000	9.90	10.0	-1.0	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.420	1.361		9.58	10.0	-4.2	20.0
Indene	Ave	2.511	2.501		19.9	20.0	-0.4	20.0
3 & 4 Methylphenol	Ave	1.346	1.314		9.76	10.0	-2.4	20.0
N-Nitrosodi-n-propylamine	Ave	1.050	0.9782	0.5000	9.32	10.0	-6.8	20.0
Acetophenone	Ave	2.076	2.039	0.0100	9.82	10.0	-1.8	20.0
Hexachloroethane	Ave	0.6250	0.5964	0.3000	9.54	10.0	-4.6	20.0
Nitrobenzene	Ave	0.4129	0.3916	0.2000	9.48	10.0	-5.2	20.0
Isophorone	Ave	0.7042	0.6625	0.4000	9.41	10.0	-5.9	20.0
2-Nitrophenol	Ave	0.1667	0.1765	0.1000	10.6	10.0	5.9	20.0
2,4-Dimethylphenol	Ave	0.3045	0.2911	0.2000	9.56	10.0	-4.4	20.0
Benzoic acid	Ave	0.1655	0.1880		22.7	20.0	13.6	20.0
Bis(2-chloroethoxy)methane	Ave	0.4055	0.3960	0.3000	9.77	10.0	-2.3	20.0
2,4-Dichlorophenol	Ave	0.2680	0.2731	0.2000	10.2	10.0	1.9	20.0
1,2,4-Trichlorobenzene	Ave	0.3098	0.3175		10.2	10.0	2.5	20.0
Naphthalene	Ave	0.9829	0.9737	0.7000	9.91	10.0	-0.9	20.0
4-Chloroaniline	Ave	0.4056	0.4088	0.0100	10.1	10.0	0.8	20.0
Hexachlorobutadiene	Ave	0.1883	0.1901	0.0100	10.1	10.0	0.9	20.0
Caprolactam	Ave	0.0926	0.0987	0.0100	21.3	20.0	6.6	20.0
4-Chloro-3-methylphenol	Ave	0.3335	0.3252	0.2000	9.75	10.0	-2.5	20.0
2-Methylnaphthalene	Ave	0.6611	0.6465	0.4000	9.78	10.0	-2.2	20.0
1-Methylnaphthalene	Ave	0.6172	0.6053		9.81	10.0	-1.9	20.0
Hexachlorocyclopentadiene	Ave	0.3204	0.3121	0.0500	9.74	10.0	-2.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5381	0.5324	0.0100	9.89	10.0	-1.1	20.0
2,4,6-Trichlorophenol	Ave	0.3332	0.3389	0.2000	10.2	10.0	1.7	20.0
2,4,5-Trichlorophenol	Ave	0.3503	0.3497	0.2000	9.98	10.0	-0.2	20.0
1,1'-Biphenyl	Ave	1.395	1.351	0.0100	9.69	10.0	-3.1	20.0
2-Chloronaphthalene	Ave	1.058	1.037	0.8000	9.81	10.0	-1.9	20.0
2-Nitroaniline	Ave	0.3638	0.3631	0.0100	9.98	10.0	-0.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100975/2 Calibration Date: 09/11/2013 09:24

Instrument ID: A4HP7 Calib Start Date: 09/05/2013 15:47

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/05/2013 19:11

Lab File ID: 30911002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.195	1.175	0.0100	9.83	10.0	-1.7	20.0
1,3-Dinitrobenzene	Ave	0.1777	0.1941		10.9	10.0	9.2	20.0
2,6-Dinitrotoluene	Ave	0.2594	0.2745		10.6	10.0	5.8	20.0
Acenaphthylene	Ave	1.673	1.640	0.9000	9.80	10.0	-2.0	20.0
3-Nitroaniline	Ave	0.2781	0.2933	0.0100	10.5	10.0	5.5	20.0
2,4-Dinitrophenol	Lin1		0.1805	0.0100	18.3	20.0	-8.5	20.0
Acenaphthene	Ave	1.119	1.068	0.9000	9.55	10.0	-4.5	20.0
4-Nitrophenol	Ave	0.2155	0.2034		18.9	20.0	-5.6	20.0
2,4-Dinitrotoluene	Ave	0.3435	0.3662	0.2000	10.7	10.0	6.6	20.0
Dibenzofuran	Ave	1.500	1.496	0.8000	9.97	10.0	-0.3	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3027	0.3057	0.0100	10.1	10.0	1.0	20.0
Diethyl phthalate	Ave	1.185	1.142	0.0100	9.64	10.0	-3.6	20.0
4-Chlorophenyl phenyl ether	Ave	0.6238	0.6231	0.4000	9.99	10.0	-0.1	20.0
4-Nitroaniline	Ave	0.2811	0.3015	0.0100	10.7	10.0	7.2	20.0
Fluorene	Ave	1.247	1.223	0.9000	9.80	10.0	-2.0	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1388	0.0100	18.5	20.0	-7.7	20.0
N-Nitrosodiphenylamine	Ave	0.5221	0.5297	0.0100	20.3	20.0	1.5	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8368	0.7937		9.48	10.0	-5.2	20.0
4-Bromophenyl phenyl ether	Ave	0.1966	0.2039	0.1000	10.4	10.0	3.7	20.0
Hexachlorobenzene	Ave	0.1978	0.1983	0.1000	10.0	10.0	0.3	20.0
Atrazine	Ave	0.1820	0.1795	0.0100	19.7	20.0	-1.4	20.0
Pentachlorophenol	Ave	0.1350	0.1344	0.0500	19.9	20.0	-0.4	20.0
Phenanthrene	Ave	1.040	1.008	0.7000	9.69	10.0	-3.1	20.0
Anthracene	Ave	1.056	1.025	0.7000	9.70	10.0	-3.0	20.0
Carbazole	Ave	0.9213	0.9376	0.0100	10.2	10.0	1.8	20.0
Di-n-butyl phthalate	Ave	1.088	1.140	0.0100	10.5	10.0	4.8	20.0
Fluoranthene	Ave	1.169	1.197	0.6000	10.2	10.0	2.4	20.0
Benzidine	Ave	0.1911	0.1903		19.9	20.0	-0.5	20.0
Pyrene	Ave	1.075	1.065	0.6000	9.91	10.0	-0.9	20.0
Butyl benzyl phthalate	Ave	0.4399	0.4488	0.0100	10.2	10.0	2.0	20.0
3,3'-Dichlorobenzidine	Ave	0.3389	0.3623	0.0100	21.4	20.0	6.9	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6123	0.6347	0.0100	10.4	10.0	3.7	20.0
Benzo[a]anthracene	Ave	1.046	1.066	0.8000	10.2	10.0	1.8	20.0
Chrysene	Ave	0.9811	0.9867	0.7000	10.1	10.0	0.6	20.0
Di-n-octyl phthalate	Ave	1.167	1.225	0.0100	10.5	10.0	4.9	20.0
Benzo[b]fluoranthene	Ave	1.045	1.106	0.7000	10.6	10.0	5.8	20.0
Benzo[k]fluoranthene	Ave	1.139	1.109	0.7000	9.74	10.0	-2.6	20.0
Benzo[a]pyrene	Ave	1.022	1.038	0.7000	10.2	10.0	1.5	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.147	1.190	0.5000	10.4	10.0	3.8	20.0
Dibenzo(a,h)anthracene	Ave	0.9777	1.009	0.4000	10.3	10.0	3.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100975/2 Calibration Date: 09/11/2013 09:24

Instrument ID: A4HP7 Calib Start Date: 09/05/2013 15:47

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/05/2013 19:11

Lab File ID: 30911002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[g,h,i]perylene	Ave	0.9666	1.002	0.5000	10.4	10.0	3.7	20.0
2-Fluorophenol (Surr)	Ave	1.308	1.322		10.1	10.0	1.1	20.0
Phenol-d5 (Surr)	Ave	1.764	1.706		9.67	10.0	-3.3	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4333	0.4081		9.42	10.0	-5.8	20.0
2-Fluorobiphenyl (Surr)	Ave	1.246	1.213		9.74	10.0	-2.6	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1467	0.1558		10.6	10.0	6.2	20.0
Terphenyl-d14 (Surr)	Ave	0.6557	0.6523		9.95	10.0	-0.5	20.0

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
DR-SB-190-18-20	240-28322-1	56	56	52	56	60	70
DR-SB-191-8-10	240-28322-2	71	68	64	65	67	93
DR-SB-190-28-30	240-28322-4	71	68	61	63	63	82
DR-SB-191-22-24	240-28322-5	66	59	57	56	57	70
	MB 240-100222/23-A	56	54	51	53	38	80
	LCS 240-100222/24-A	65	62	61	61	67	88

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	24-110
PHL = Phenol-d5 (Surr)	26-110
NBZ = Nitrobenzene-d5 (Surr)	20-110
FBP = 2-Fluorobiphenyl (Surr)	24-110
TBP = 2,4,6-Tribromophenol (Surr)	10-110
TPH = Terphenyl-dl4 (Surr)	36-110

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 30910007.D

Lab ID: LCS 240-100222/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	667	401	60	35-110	
1,4-Dioxane	667	193	29	10-110	
2,4,6-Trichlorophenol	667	410	61	12-110	
2,4,5-Trichlorophenol	667	439	66	25-110	
2,4-Dichlorophenol	667	418	63	39-110	
2,4-Dimethylphenol	667	400	60	29-110	
2,4-Dinitrophenol	1330	426	32	10-110	
2,4-Dinitrotoluene	667	505	76	48-110	
2-Chloronaphthalene	667	403	60	32-110	
2-Chlorophenol	667	414	62	37-110	
2-Methylnaphthalene	667	413	62	36-110	
2-Methylphenol	667	385	58	41-110	
2-Nitroaniline	667	443	66	45-110	
2-Nitrophenol	667	432	65	34-110	
3 & 4 Methylphenol	667	398 J	60	40-110	
3,3'-Dichlorobenzidine	1330	883	66	28-110	
3-Nitroaniline	667	479	72	44-110	
4,6-Dinitro-2-methylphenol	1330	664	50	10-110	
4-Bromophenyl phenyl ether	667	476	71	39-110	
4-Chloro-3-methylphenol	667	434	65	48-110	
4-Chloroaniline	667	395	59	30-110	
4-Chlorophenyl phenyl ether	667	441	66	40-110	
4-Nitroaniline	667	512	77	48-110	
Acenaphthene	667	403	60	38-110	
Acenaphthylene	667	388	58	40-110	
Acetophenone	667	397	60	40-110	
Anthracene	667	467	70	48-110	
Atrazine	1330	1080	81	66-127	
Benzaldehyde	1330	289	22	32-110	*
Benzo[a]anthracene	667	488	73	50-110	
Benzo[a]pyrene	667	497	75	44-110	
Benzo[b]fluoranthene	667	501	75	43-110	
Benzo[g,h,i]perylene	667	495	74	51-110	
Benzo[k]fluoranthene	667	505	76	38-105	
Bis(2-chloroethoxy)methane	667	419	63	32-110	
Bis(2-chloroethyl)ether	667	407	61	34-110	
Bis(2-ethylhexyl) phthalate	667	506	76	50-110	
Butyl benzyl phthalate	667	506	76	51-110	
Caprolactam	1330	1110	83	44-114	
Carbazole	667	507	76	50-110	
Chrysene	667	494	74	50-110	
Di-n-butyl phthalate	667	517	78	51-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 30910007.D

Lab ID: LCS 240-100222/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	667	485	73	48-110	
Dibenzo(a,h)anthracene	667	478	72	51-110	
Dibenzofuran	667	423	63	43-110	
Diethyl phthalate	667	475	71	52-110	
Dimethyl phthalate	667	447	67	50-110	
Fluoranthene	667	491	74	51-110	
Fluorene	667	430	65	46-110	
Hexachlorobenzene	667	463	69	43-110	
Hexachlorobutadiene	667	406	61	29-110	
Hexachlorocyclopentadiene	667	344	52	12-110	
Hexachloroethane	667	386	58	30-110	
Indeno[1,2,3-cd]pyrene	667	495	74	50-110	
Isophorone	667	389	58	36-110	
N-Nitrosodi-n-propylamine	667	407	61	38-110	
N-Nitrosodimethylamine	667	399	60	31-110	
N-Nitrosodiphenylamine	1330	920	69	46-110	
Naphthalene	667	405	61	36-110	
Nitrobenzene	667	402	60	32-110	
Pentachlorophenol	1330	654	49	10-110	
Phenanthrene	667	467	70	49-110	
Phenol	667	412	62	38-110	
Pyrene	667	492	74	49-110	
2,2'-oxybis[1-chloropropane]	667	398	60	29-110	
2,6-Dinitrotoluene	667	465	70	45-110	
4-Nitrophenol	1330	934	70	28-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: STD6 240-100302/10 Date Analyzed: 09/05/2013 19:11

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30905010.D Heated Purge: (Y/N) N

Calibration ID: 17254

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		292234	6.22	1223720	7.33	745016	8.83
UPPER LIMIT		584468	6.72	2447440	7.83	1490032	9.33
LOWER LIMIT		146117	5.72	611860	6.83	372508	8.33
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-100302/11		249818	6.22	1038836	7.33	612033	8.84
CCVIS 240-100796/2		264880	6.20	1046874	7.34	618269	8.85
CCV 240-100975/2 CCVIS		229172	6.18	926376	7.32	552272	8.83

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: STD6 240-100302/10 Date Analyzed: 09/05/2013 19:11

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30905010.D Heated Purge: (Y/N) N

Calibration ID: 17254

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1260524	10.10	1443215	12.82	1266035	15.02
UPPER LIMIT		2521048	10.60	2886430	13.32	2532070	15.52
LOWER LIMIT		630262	9.60	721608	12.32	633018	14.52
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-100302/11		1017520	10.10	1185617	12.82	1033040	15.01
CCVIS 240-100796/2		1057238	10.12	1230848	12.85	1070856	15.05
CCV 240-100975/2 CCVIS		956889	10.08	1089600	12.77	959275	14.95

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCVIS 240-100796/2 Date Analyzed: 09/10/2013 09:59

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30910002.D Heated Purge: (Y/N) N

Calibration ID: 17262

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		264880	6.20	1046874	7.34	618269	8.85
UPPER LIMIT		529760	6.70	2093748	7.84	1236538	9.35
LOWER LIMIT		132440	5.70	523437	6.84	309135	8.35
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-100796/3		207171	6.20	856651	7.33	514725	8.85
MB 240-100222/23-A		208898	6.20	840338	7.34	512889	8.85
LCS 240-100222/24-A		218966	6.20	889739	7.34	548112	8.85

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCVIS 240-100796/2 Date Analyzed: 09/10/2013 09:59

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30910002.D Heated Purge: (Y/N) N

Calibration ID: 17262

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1057238	10.12	1230848	12.85	1070856	15.05
UPPER LIMIT		2114476	10.62	2461696	13.35	2141712	15.55
LOWER LIMIT		528619	9.62	615424	12.35	535428	14.55
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-100796/3		900593	10.12	940800	12.85	843146	15.05
MB 240-100222/23-A		878114	10.12	935939	12.85	814304	15.05
LCS 240-100222/24-A		952772	10.12	1059779	12.85	921037	15.05

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCV 240-100975/2 Date Analyzed: 09/11/2013 09:24

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30911002.D Heated Purge: (Y/N) N

Calibration ID: 17262

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		229172	6.18	926376	7.32	552272	8.83
UPPER LIMIT		458344	6.68	1852752	7.82	1104544	9.33
LOWER LIMIT		114586	5.68	463188	6.82	276136	8.33
LAB SAMPLE ID	CLIENT SAMPLE ID						
240-28322-2	DR-SB-191-8-10	205238	6.19	832782	7.31	532435	8.82
240-28322-4	DR-SB-190-28-30	186165	6.19	782373	7.31	489157	8.82
240-28322-1	DR-SB-190-18-20	172563	6.19	697134	7.32	439600	8.82
240-28322-5	DR-SB-191-22-24	214635	6.18	857809	7.31	533348	8.82

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCV 240-100975/2 Date Analyzed: 09/11/2013 09:24

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30911002.D Heated Purge: (Y/N) N

Calibration ID: 17262

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		956889	10.08	1089600	12.77	959275	14.95
UPPER LIMIT		1913778	10.58	2179200	13.27	1918550	15.45
LOWER LIMIT		478445	9.58	544800	12.27	479638	14.45
LAB SAMPLE ID	CLIENT SAMPLE ID						
240-28322-2	DR-SB-191-8-10	928839	10.08	1029118	12.76	920115	14.95
240-28322-4	DR-SB-190-28-30	858134	10.08	1006127	12.77	943109	14.95
240-28322-1	DR-SB-190-18-20	774191	10.08	913430	12.76	901376	14.95
240-28322-5	DR-SB-191-22-24	941309	10.08	1161981	12.77	1104776	14.96

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: YPID Start Date: 08/21/2013 11:53

Analysis Batch Number: 98316 End Date: 08/21/2013 16:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-98316/5 IC		08/21/2013 11:53	1	YF082105.D	RTX-VRX 0.45(mm)
STD2 240-98316/6 IC		08/21/2013 12:34	1	YF082106.D	RTX-VRX 0.45(mm)
STD3 240-98316/7 IC		08/21/2013 13:16	1	YF082107.D	RTX-VRX 0.45(mm)
STD4 240-98316/8 ICRT		08/21/2013 13:57	1	YF082108.D	RTX-VRX 0.45(mm)
STD5 240-98316/9 IC		08/21/2013 14:38	1	YF082109.D	RTX-VRX 0.45(mm)
STD6 240-98316/10 IC		08/21/2013 15:19	1	YF082110.D	RTX-VRX 0.45(mm)
ICV 240-98316/11		08/21/2013 16:00	1	YF082111.D	RTX-VRX 0.45(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: YPID Start Date: 08/28/2013 11:07

Analysis Batch Number: 99374 End Date: 08/29/2013 00:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-99374/4		08/28/2013 11:07	1	YF082804.D	RTX-VRX 0.45(mm)
MB 240-99362/1-A		08/28/2013 12:16	1	YF082805.D	RTX-VRX 0.45(mm)
LCS 240-99362/2-A		08/28/2013 13:00	1	YF082806.D	RTX-VRX 0.45(mm)
240-28322-1	DR-SB-190-18-20	08/28/2013 13:45	1	YF082807.D	RTX-VRX 0.45(mm)
240-28322-2	DR-SB-191-8-10	08/28/2013 14:30	1	YF082808.D	RTX-VRX 0.45(mm)
240-28322-2 MS	DR-SB-191-8-10 MS	08/28/2013 15:16	1	YF082809.D	RTX-VRX 0.45(mm)
240-28322-2 MSD	DR-SB-191-8-10 MSD	08/28/2013 16:00	1	YF082810.D	RTX-VRX 0.45(mm)
240-28322-4	DR-SB-190-28-30	08/28/2013 16:45	1	YF082811.D	RTX-VRX 0.45(mm)
240-28322-5	DR-SB-191-22-24	08/28/2013 17:30	1	YF082812.D	RTX-VRX 0.45(mm)
ZZZZZ		08/28/2013 18:14	1		RTX-VRX 0.45(mm)
ZZZZZ		08/28/2013 18:59	1		RTX-VRX 0.45(mm)
CCV 240-99374/15		08/28/2013 19:43	1	YF082815.D	RTX-VRX 0.45(mm)
ZZZZZ		08/28/2013 20:27	1		RTX-VRX 0.45(mm)
ZZZZZ		08/28/2013 21:10	1		RTX-VRX 0.45(mm)
ZZZZZ		08/28/2013 21:53	1		RTX-VRX 0.45(mm)
ZZZZZ		08/28/2013 22:35	1		RTX-VRX 0.45(mm)
ZZZZZ		08/28/2013 23:18	1		RTX-VRX 0.45(mm)
ZZZZZ		08/29/2013 00:01	1		RTX-VRX 0.45(mm)
CCV 240-99374/22		08/29/2013 00:43	1		RTX-VRX 0.45(mm)

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 98316

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/21/2013 11:53 Calibration End Date: 08/21/2013 15:19 Calibration ID: 17011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98316/5	YF082105.D
Level 2	STD2 240-98316/6	YF082106.D
Level 3	STD3 240-98316/7	YF082107.D
Level 4	STD4 240-98316/8	YF082108.D
Level 5	STD5 240-98316/9	YF082109.D
Level 6	STD6 240-98316/10	YF082110.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	218793 178073	200683 168402	185221	179733	Ave		188484.161				9.7		20.0			
C6-C12	253410 192449	217081 182497	201115	194347	Ave		206816.484				12.0		20.0			
Trifluorotoluene (Surr)	208336 165275	165005 153793	163672	170026	Ave		171017.973				11.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: ICV 240-98316/11 Calibration Date: 08/21/2013 16:00

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082111.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	170634		724	800	-9.5	20.0
C6-C12	Ave	206816	191323		740	800	-7.5	20.0
Trifluorotoluene (Surr)	Ave	171018	169240		9.90	10.0	-1.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCVRT 240-99374/4 Calibration Date: 08/28/2013 11:07

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082804.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	182695		775	800	-3.1	20.0
C6-C12	Ave	206816	198898		769	800	-3.8	20.0
Trifluorotoluene (Surr)	Ave	171018	168427		9.85	10.0	-1.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-99374/15 Calibration Date: 08/28/2013 19:43

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082815.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	169047		717	800	-10.3	20.0
C6-C12	Ave	206816	183276		709	800	-11.4	20.0
Trifluorotoluene (Surr)	Ave	171018	159969		9.35	10.0	-6.5	20.0

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: MB 240-99362/1-A

Matrix: Solid Date Extracted: 08/28/2013 12:10

Lab File ID:(1) YF082805.D Lab File ID:(2)

Date Analyzed:(1) 08/28/2013 12:16 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-99362/2-A	08/28/2013 13:00	
DR-SB-190-18-20	240-28322-1	08/28/2013 13:45	
DR-SB-191-8-10	240-28322-2	08/28/2013 14:30	
DR-SB-191-8-10 MS	240-28322-2 MS	08/28/2013 15:16	
DR-SB-191-8-10 MSD	240-28322-2 MSD	08/28/2013 16:00	
DR-SB-190-28-30	240-28322-4	08/28/2013 16:45	
DR-SB-191-22-24	240-28322-5	08/28/2013 17:30	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99362/1-A

Matrix: Solid Lab File ID: YF082805.D

Analysis Method: 8015C Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/28/2013 12:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99374 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	100	U	100	46

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	47		10-150

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
DR-SB-190-18-20	240-28322-1	41
DR-SB-191-8-10	240-28322-2	46
DR-SB-190-28-30	240-28322-4	41
DR-SB-191-22-24	240-28322-5	43
	MB 240-99362/1-A	47
	LCS 240-99362/2-A	54
DR-SB-191-8-10 MS	240-28322-2 MS	56
DR-SB-191-8-10 MSD	240-28322-2 MSD	56

	QC LIMITS
TFT = Trifluorotoluene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8015C

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF082806.D

Lab ID: LCS 240-99362/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	796	100	60-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF082809.D

Lab ID: 240-28322-2 MS Client ID: DR-SB-191-8-10 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	964	120 U	1020	106	10-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF082810.D

Lab ID: 240-28322-2 MSD Client ID: DR-SB-191-8-10 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	972	1040	107	2	94	10-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCVRT 240-99374/4 Date Analyzed: 08/28/2013 11:07

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF082804.D Heated Purge: (Y/N) N

Calibration ID: 17011

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.79		
UPPER LIMIT				9.89		
LOWER LIMIT				9.69		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-99374/4		08/28/2013 11:07	YF082804.D	9.79		
LCS 240-99362/2-A		08/28/2013 13:00	YF082806.D	9.80		
240-28322-1	DR-SB-190-18-20	08/28/2013 13:45	YF082807.D	9.79		
240-28322-2	DR-SB-191-8-10	08/28/2013 14:30	YF082808.D	9.79		
240-28322-2 MS	DR-SB-191-8-10 MS	08/28/2013 15:16	YF082809.D	9.79		
240-28322-2 MSD	DR-SB-191-8-10 MSD	08/28/2013 16:00	YF082810.D	9.79		
240-28322-4	DR-SB-190-28-30	08/28/2013 16:45	YF082811.D	9.79		
240-28322-5	DR-SB-191-22-24	08/28/2013 17:30	YF082812.D	9.79		
CCV 240-99374/15		08/28/2013 19:43	YF082815.D	9.80		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: A2HP6F Start Date: 06/21/2013 18:42

Analysis Batch Number: 90904 End Date: 06/21/2013 22:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-90904/6 IC		06/21/2013 18:42	1	P6F62106.D	RTX-5 0.53(mm)
STD2 240-90904/7 IC		06/21/2013 19:14	1	P6F62107.D	RTX-5 0.53(mm)
STD3 240-90904/8 ICRT		06/21/2013 19:45	1	P6F62108.D	RTX-5 0.53(mm)
STD4 240-90904/9 IC		06/21/2013 20:16	1	P6F62109.D	RTX-5 0.53(mm)
STD5 240-90904/10 IC		06/21/2013 20:48	1	P6F62110.D	RTX-5 0.53(mm)
ICV 240-90904/11		06/21/2013 21:19	1	P6F62111.D	RTX-5 0.53(mm)
240-24857-A-58-A MDLV		06/21/2013 21:50	1		RTX-5 0.53(mm)
240-24857-A-61-A MDLV		06/21/2013 22:22	1		RTX-5 0.53(mm)
CCV 240-90904/14		06/21/2013 22:53	1		RTX-5 0.53(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: A2HP6F Start Date: 09/03/2013 16:58

Analysis Batch Number: 99953 End Date: 09/04/2013 10:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-99953/4 CCVRT		09/03/2013 16:58	1	P6F90304.D	RTX-5 0.53(mm)
CCV 240-99953/7		09/03/2013 18:42	1	P6F90307.D	RTX-5 0.53(mm)
MB 240-99867/23-A		09/03/2013 19:13	1	P6F90308.D	RTX-5 0.53(mm)
LCS 240-99867/24-A		09/03/2013 19:44	1	P6F90309.D	RTX-5 0.53(mm)
240-28322-1	DR-SB-190-18-20	09/03/2013 20:15	1	P6F90310.D	RTX-5 0.53(mm)
240-28322-2	DR-SB-191-8-10	09/03/2013 20:46	1	P6F90311.D	RTX-5 0.53(mm)
240-28322-4	DR-SB-190-28-30	09/03/2013 21:17	1	P6F90312.D	RTX-5 0.53(mm)
ZZZZZ		09/03/2013 21:48	1		RTX-5 0.53(mm)
ZZZZZ		09/03/2013 22:19	1		RTX-5 0.53(mm)
ZZZZZ		09/03/2013 22:50	1		RTX-5 0.53(mm)
ZZZZZ		09/03/2013 23:21	1		RTX-5 0.53(mm)
ZZZZZ		09/03/2013 23:53	1		RTX-5 0.53(mm)
CCV 240-99953/18		09/04/2013 00:24	1	P6F90318.D	RTX-5 0.53(mm)
ZZZZZ		09/04/2013 00:55	1		RTX-5 0.53(mm)
ZZZZZ		09/04/2013 01:26	1		RTX-5 0.53(mm)
ZZZZZ		09/04/2013 01:57	1		RTX-5 0.53(mm)
ZZZZZ		09/04/2013 02:28	1		RTX-5 0.53(mm)
ZZZZZ		09/04/2013 02:59	1		RTX-5 0.53(mm)
ZZZZZ		09/04/2013 03:30	1		RTX-5 0.53(mm)
ZZZZZ		09/04/2013 04:01	1		RTX-5 0.53(mm)
ZZZZZ		09/04/2013 04:32	1		RTX-5 0.53(mm)
ZZZZZ		09/04/2013 05:03	1		RTX-5 0.53(mm)
ZZZZZ		09/04/2013 05:33	1		RTX-5 0.53(mm)
CCV 240-99953/29		09/04/2013 06:04	1	P6F90329.D	RTX-5 0.53(mm)
ZZZZZ		09/04/2013 06:35	1		RTX-5 0.53(mm)
ZZZZZ		09/04/2013 07:06	1		RTX-5 0.53(mm)
240-28436-H-4-B MS		09/04/2013 07:37	1	P6F90332.D	RTX-5 0.53(mm)
240-28436-H-4-C MSD		09/04/2013 08:07	1	P6F90333.D	RTX-5 0.53(mm)
CCV 240-99953/34		09/04/2013 08:38	1	P6F90334.D	RTX-5 0.53(mm)
240-28322-5	DR-SB-191-22-24	09/04/2013 09:46	5	P6F90335.D	RTX-5 0.53(mm)
CCV 240-99953/36		09/04/2013 10:16	1	P6F90336.D	RTX-5 0.53(mm)

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 90904

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/21/2013 18:42 Calibration End Date: 06/21/2013 20:48 Calibration ID: 15948

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-90904/6	P6F62106.D
Level 2	STD2 240-90904/7	P6F62107.D
Level 3	STD3 240-90904/8	P6F62108.D
Level 4	STD4 240-90904/9	P6F62109.D
Level 5	STD5 240-90904/10	P6F62110.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	229736 199026	208006	214580	204717	Ave		211213.003				5.6		20.0			
n-Nonane	197074 216592	204389	220666	215642	Ave		210872.522				4.6		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: ICV 240-90904/11 Calibration Date: 06/21/2013 21:19

Instrument ID: A2HP6F Calib Start Date: 06/21/2013 18:42

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/21/2013 20:48

Lab File ID: P6F62111.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	211213	198068		470	501	-6.2	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-99953/4 Calibration Date: 09/03/2013 16:58

Instrument ID: A2HP6F Calib Start Date: 06/21/2013 18:42

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/21/2013 20:48

Lab File ID: P6F90304.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	211213	211796		501	500	0.3	20.0
n-Nonane	Ave	210873	224658		53.3	50.0	6.5	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-99953/7 Calibration Date: 09/03/2013 18:42

Instrument ID: A2HP6F Calib Start Date: 06/21/2013 18:42

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/21/2013 20:48

Lab File ID: P6F90307.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	211213	213832		506	500	1.2	20.0
n-Nonane	Ave	210873	225607		53.5	50.0	7.0	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-99953/18 Calibration Date: 09/04/2013 00:24

Instrument ID: A2HP6F Calib Start Date: 06/21/2013 18:42

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/21/2013 20:48

Lab File ID: P6F90318.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	211213	212172		502	500	0.5	20.0
n-Nonane	Ave	210873	219376		52.0	50.0	4.0	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-99953/29 Calibration Date: 09/04/2013 06:04

Instrument ID: A2HP6F Calib Start Date: 06/21/2013 18:42

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/21/2013 20:48

Lab File ID: P6F90329.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	211213	232945		552	500	10.3	20.0
n-Nonane	Ave	210873	233624		55.4	50.0	10.8	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-99953/34 Calibration Date: 09/04/2013 08:38

Instrument ID: A2HP6F Calib Start Date: 06/21/2013 18:42

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/21/2013 20:48

Lab File ID: P6F90334.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	211213	228781		542	500	8.3	20.0
n-Nonane	Ave	210873	235593		55.9	50.0	11.7	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-99953/36 Calibration Date: 09/04/2013 10:16

Instrument ID: A2HP6F Calib Start Date: 06/21/2013 18:42

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/21/2013 20:48

Lab File ID: P6F90336.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	211213	241261		571	500	14.2	20.0
n-Nonane	Ave	210873	250803		59.5	50.0	18.9	20.0

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: MB 240-99867/23-A

Matrix: Solid Date Extracted: 09/03/2013 07:22

Lab File ID:(1) P6F90308.D Lab File ID:(2)

Date Analyzed:(1) 09/03/2013 19:13 Date Analyzed:(2)

Instrument ID:(1) A2HP6F Instrument ID:(2)

GC Column:(1) RTX-5 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-99867/24-A	09/03/2013 19:44	
DR-SB-190-18-20	240-28322-1	09/03/2013 20:15	
DR-SB-191-8-10	240-28322-2	09/03/2013 20:46	
DR-SB-190-28-30	240-28322-4	09/03/2013 21:17	
	240-28436-H-4-B MS	09/04/2013 07:37	
	240-28436-H-4-C MSD	09/04/2013 08:07	
DR-SB-191-22-24	240-28322-5	09/04/2013 09:46	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99867/23-A

Matrix: Solid Lab File ID: P6F90308.D

Analysis Method: 8015C Date Collected:

Extraction Method: 3550C Date Extracted: 09/03/2013 07:22

Sample wt/vol: 30.00(g) Date Analyzed: 09/03/2013 19:13

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 99953 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	17	U	17	9.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	57		10-110

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-5 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	C91 #
DR-SB-190-18-20	240-28322-1	44
DR-SB-191-8-10	240-28322-2	39
DR-SB-190-28-30	240-28322-4	39
DR-SB-191-22-24	240-28322-5	44
	MB 240-99867/23-A	57
	LCS 240-99867/24-A	53
	240-28436-H-4-B MS	19
	240-28436-H-4-C MSD	49

	QC LIMITS
C9 = n-Nonane	10-110

Column to be used to flag recovery values

FORM II 8015C

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P6F90309.D

Lab ID: LCS 240-99867/24-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Diesel	83.3	70.0	84	47-138	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P6F90332.D

Lab ID: 240-28436-H-4-B MS Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Diesel	97.8	20 U	44.5	45	10-199	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P6F90333.D

Lab ID: 240-28436-H-4-C MSD Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Diesel	98.5	73.2	74	49	30	10-199	F

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCV 240-99953/4 Date Analyzed: 09/03/2013 16:58

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm)

Lab File ID (Standard): P6F90304.D Heated Purge: (Y/N) N

Calibration ID: 15948

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				4.11		
UPPER LIMIT				4.21		
LOWER LIMIT				4.01		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-99953/4 CCVRT		09/03/2013 16:58	P6F90304.D	4.11		
CCV 240-99953/7		09/03/2013 18:42	P6F90307.D	4.11		
MB 240-99867/23-A		09/03/2013 19:13	P6F90308.D	4.10		
LCS 240-99867/24-A		09/03/2013 19:44	P6F90309.D	4.10		
240-28322-1	DR-SB-190-18-20	09/03/2013 20:15	P6F90310.D	4.10		
240-28322-2	DR-SB-191-8-10	09/03/2013 20:46	P6F90311.D	4.10		
240-28322-4	DR-SB-190-28-30	09/03/2013 21:17	P6F90312.D	4.10		
CCV 240-99953/18		09/04/2013 00:24	P6F90318.D	4.11		
CCV 240-99953/29		09/04/2013 06:04	P6F90329.D	4.11		
240-28436-H-4-B MS		09/04/2013 07:37	P6F90332.D	4.10		
240-28436-H-4-C MSD		09/04/2013 08:07	P6F90333.D	4.10		
CCV 240-99953/34		09/04/2013 08:38	P6F90334.D	4.11		
240-28322-5	DR-SB-191-22-24	09/04/2013 09:46	P6F90335.D	4.11		
CCV 240-99953/36		09/04/2013 10:16	P6F90336.D	4.11		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: A2HP13 Start Date: 09/06/2013 16:29

Analysis Batch Number: 100485 End Date: 09/07/2013 04:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 240-100485/3 IC		09/06/2013 16:29	1	P1300003.D	CLP-1 0.53(mm)
STD005 240-100485/3 IC		09/06/2013 16:29	1	P1300003.D	CLP-2 0.53(mm)
STD01 240-100485/4 IC		09/06/2013 16:44	1	P1300004.D	CLP-1 0.53(mm)
STD01 240-100485/4 IC		09/06/2013 16:44	1	P1300004.D	CLP-2 0.53(mm)
STD02 240-100485/5 IC		09/06/2013 16:59	1	P1300005.D	CLP-1 0.53(mm)
STD02 240-100485/5 IC		09/06/2013 16:59	1	P1300005.D	CLP-2 0.53(mm)
STD05 240-100485/6 IC		09/06/2013 17:14	1	P1300006.D	CLP-1 0.53(mm)
STD05 240-100485/6 IC		09/06/2013 17:14	1	P1300006.D	CLP-2 0.53(mm)
STD1 240-100485/7 IC		09/06/2013 17:28	1	P1300007.D	CLP-1 0.53(mm)
STD1 240-100485/7 IC		09/06/2013 17:28	1	P1300007.D	CLP-2 0.53(mm)
STD2 240-100485/8 IC		09/06/2013 17:43	1	P1300008.D	CLP-1 0.53(mm)
STD2 240-100485/8 IC		09/06/2013 17:43	1	P1300008.D	CLP-2 0.53(mm)
STD005 240-100485/9 IC		09/06/2013 17:58	1	P1300009.D	CLP-1 0.53(mm)
STD005 240-100485/9 IC		09/06/2013 17:58	1	P1300009.D	CLP-2 0.53(mm)
STD01 240-100485/10 IC		09/06/2013 18:13	1	P1300010.D	CLP-1 0.53(mm)
STD01 240-100485/10 IC		09/06/2013 18:13	1	P1300010.D	CLP-2 0.53(mm)
STD02 240-100485/11 IC		09/06/2013 18:28	1	P1300011.D	CLP-1 0.53(mm)
STD02 240-100485/11 IC		09/06/2013 18:28	1	P1300011.D	CLP-2 0.53(mm)
STD05 240-100485/12 IC		09/06/2013 18:43	1	P1300012.D	CLP-1 0.53(mm)
STD05 240-100485/12 IC		09/06/2013 18:43	1	P1300012.D	CLP-2 0.53(mm)
STD1 240-100485/13 IC		09/06/2013 18:58	1	P1300013.D	CLP-1 0.53(mm)
STD1 240-100485/13 IC		09/06/2013 18:58	1	P1300013.D	CLP-2 0.53(mm)
STD2 240-100485/14 IC		09/06/2013 19:13	1	P1300014.D	CLP-1 0.53(mm)
STD2 240-100485/14 IC		09/06/2013 19:13	1	P1300014.D	CLP-2 0.53(mm)
STD005 240-100485/15 IC		09/06/2013 19:27	1	P1300015.D	CLP-1 0.53(mm)
STD005 240-100485/15 IC		09/06/2013 19:27	1	P1300015.D	CLP-2 0.53(mm)
STD01 240-100485/16 IC		09/06/2013 19:42	1	P1300016.D	CLP-1 0.53(mm)
STD01 240-100485/16 IC		09/06/2013 19:42	1	P1300016.D	CLP-2 0.53(mm)
STD02 240-100485/17 IC		09/06/2013 19:57	1	P1300017.D	CLP-1 0.53(mm)
STD02 240-100485/17 IC		09/06/2013 19:57	1	P1300017.D	CLP-2 0.53(mm)
STD05 240-100485/18 IC		09/06/2013 20:12	1	P1300018.D	CLP-1 0.53(mm)
STD05 240-100485/18 IC		09/06/2013 20:12	1	P1300018.D	CLP-2 0.53(mm)
STD1 240-100485/19 IC		09/06/2013 20:27	1	P1300019.D	CLP-1 0.53(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: A2HP13 Start Date: 09/06/2013 16:29

Analysis Batch Number: 100485 End Date: 09/07/2013 04:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-100485/19 IC		09/06/2013 20:27	1	P1300019.D	CLP-2 0.53(mm)
STD2 240-100485/20 IC		09/06/2013 20:42	1	P1300020.D	CLP-1 0.53(mm)
STD2 240-100485/20 IC		09/06/2013 20:42	1	P1300020.D	CLP-2 0.53(mm)
STD005 240-100485/21 IC		09/06/2013 20:57	1	P1300021.D	CLP-1 0.53(mm)
STD005 240-100485/21 IC		09/06/2013 20:57	1	P1300021.D	CLP-2 0.53(mm)
STD01 240-100485/22 IC		09/06/2013 21:12	1	P1300022.D	CLP-1 0.53(mm)
STD01 240-100485/22 IC		09/06/2013 21:12	1	P1300022.D	CLP-2 0.53(mm)
STD02 240-100485/23 IC		09/06/2013 21:26	1	P1300023.D	CLP-1 0.53(mm)
STD02 240-100485/23 IC		09/06/2013 21:26	1	P1300023.D	CLP-2 0.53(mm)
STD05 240-100485/24 IC		09/06/2013 21:41	1	P1300024.D	CLP-1 0.53(mm)
STD05 240-100485/24 IC		09/06/2013 21:41	1	P1300024.D	CLP-2 0.53(mm)
STD1 240-100485/25 IC		09/06/2013 21:56	1	P1300025.D	CLP-1 0.53(mm)
STD1 240-100485/25 IC		09/06/2013 21:56	1	P1300025.D	CLP-2 0.53(mm)
STD2 240-100485/26 IC		09/06/2013 22:11	1	P1300026.D	CLP-1 0.53(mm)
STD2 240-100485/26 IC		09/06/2013 22:11	1	P1300026.D	CLP-2 0.53(mm)
STD005 240-100485/27 IC		09/06/2013 22:26	1	P1300027.D	CLP-1 0.53(mm)
STD005 240-100485/27 IC		09/06/2013 22:26	1	P1300027.D	CLP-2 0.53(mm)
STD01 240-100485/28 IC		09/06/2013 22:41	1	P1300028.D	CLP-1 0.53(mm)
STD01 240-100485/28 IC		09/06/2013 22:41	1	P1300028.D	CLP-2 0.53(mm)
STD02 240-100485/29 IC		09/06/2013 22:56	1	P1300029.D	CLP-1 0.53(mm)
STD02 240-100485/29 IC		09/06/2013 22:56	1	P1300029.D	CLP-2 0.53(mm)
STD05 240-100485/30 ICRT		09/06/2013 23:11	1	P1300030.D	CLP-1 0.53(mm)
STD05 240-100485/30 ICRT		09/06/2013 23:11	1	P1300030.D	CLP-2 0.53(mm)
STD1 240-100485/31 IC		09/06/2013 23:26	1	P1300031.D	CLP-1 0.53(mm)
STD1 240-100485/31 IC		09/06/2013 23:26	1	P1300031.D	CLP-2 0.53(mm)
STD2 240-100485/32 IC		09/06/2013 23:40	1	P1300032.D	CLP-1 0.53(mm)
STD2 240-100485/32 IC		09/06/2013 23:40	1	P1300032.D	CLP-2 0.53(mm)
STD005 240-100485/33 IC		09/06/2013 23:55	1		CLP-1 0.53(mm)
STD005 240-100485/33 IC		09/06/2013 23:55	1		CLP-2 0.53(mm)
STD01 240-100485/34 IC		09/07/2013 00:10	1		CLP-1 0.53(mm)
STD01 240-100485/34 IC		09/07/2013 00:10	1		CLP-2 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: A2HP13 Start Date: 09/06/2013 16:29

Analysis Batch Number: 100485 End Date: 09/07/2013 04:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD02 240-100485/35 IC		09/07/2013 00:25	1		CLP-1 0.53(mm)
STD02 240-100485/35 IC		09/07/2013 00:25	1		CLP-2 0.53(mm)
STD05 240-100485/36 IC		09/07/2013 00:40	1		CLP-1 0.53(mm)
STD05 240-100485/36 IC		09/07/2013 00:40	1		CLP-2 0.53(mm)
STD1 240-100485/37 IC		09/07/2013 00:55	1		CLP-1 0.53(mm)
STD1 240-100485/37 IC		09/07/2013 00:55	1		CLP-2 0.53(mm)
STD2 240-100485/38 IC		09/07/2013 01:10	1		CLP-1 0.53(mm)
STD2 240-100485/38 IC		09/07/2013 01:10	1		CLP-2 0.53(mm)
STD005 240-100485/39 IC		09/07/2013 01:25	1		CLP-1 0.53(mm)
STD005 240-100485/39 IC		09/07/2013 01:25	1		CLP-2 0.53(mm)
STD01 240-100485/40 IC		09/07/2013 01:39	1		CLP-1 0.53(mm)
STD01 240-100485/40 IC		09/07/2013 01:39	1		CLP-2 0.53(mm)
STD02 240-100485/41 IC		09/07/2013 01:54	1		CLP-1 0.53(mm)
STD02 240-100485/41 IC		09/07/2013 01:54	1		CLP-2 0.53(mm)
STD05 240-100485/42 IC		09/07/2013 02:09	1		CLP-1 0.53(mm)
STD05 240-100485/42 IC		09/07/2013 02:09	1		CLP-2 0.53(mm)
STD1 240-100485/43 IC		09/07/2013 02:24	1		CLP-1 0.53(mm)
STD1 240-100485/43 IC		09/07/2013 02:24	1		CLP-2 0.53(mm)
STD2 240-100485/44 IC		09/07/2013 02:39	1		CLP-1 0.53(mm)
STD2 240-100485/44 IC		09/07/2013 02:39	1		CLP-2 0.53(mm)
ICV 240-100485/45		09/07/2013 02:54	1		CLP-1 0.53(mm)
ICV 240-100485/45		09/07/2013 02:54	1		CLP-2 0.53(mm)
ICV 240-100485/46		09/07/2013 03:09	1		CLP-1 0.53(mm)
ICV 240-100485/46		09/07/2013 03:09	1		CLP-2 0.53(mm)
ICV 240-100485/47		09/07/2013 03:24	1		CLP-1 0.53(mm)
ICV 240-100485/47		09/07/2013 03:24	1		CLP-2 0.53(mm)
ICV 240-100485/48		09/07/2013 03:39	1		CLP-1 0.53(mm)
ICV 240-100485/48		09/07/2013 03:39	1		CLP-2 0.53(mm)
ICV 240-100485/49		09/07/2013 03:54	1		CLP-1 0.53(mm)
ICV 240-100485/49		09/07/2013 03:54	1		CLP-2 0.53(mm)
ICV 240-100485/50		09/07/2013 04:08	1	P1300050.D	CLP-1 0.53(mm)
ICV 240-100485/50		09/07/2013 04:08	1	P1300050.D	CLP-2 0.53(mm)
ICV 240-100485/51		09/07/2013 04:23	1		CLP-1 0.53(mm)
ICV 240-100485/51		09/07/2013 04:23	1		CLP-2 0.53(mm)
ICV 240-100485/52		09/07/2013 04:38	1		CLP-1 0.53(mm)
ICV 240-100485/52		09/07/2013 04:38	1		CLP-2 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: A2HP13 Start Date: 09/09/2013 19:54

Analysis Batch Number: 100696 End Date: 09/10/2013 02:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-100696/3 CCVRT		09/09/2013 19:54	1	P1300003.D	CLP-1 0.53(mm)
CCV 240-100696/3 CCVRT		09/09/2013 19:54	1	P1300003.D	CLP-2 0.53(mm)
ZZZZZ		09/09/2013 20:09	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 20:09	1		CLP-2 0.53(mm)
ZZZZZ		09/09/2013 20:24	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 20:24	1		CLP-2 0.53(mm)
ZZZZZ		09/09/2013 20:38	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 20:38	1		CLP-2 0.53(mm)
240-28322-5	DR-SB-191-22-24	09/09/2013 20:53	5	P1300007.D	CLP-1 0.53(mm)
240-28322-5	DR-SB-191-22-24	09/09/2013 20:53	5	P1300007.D	CLP-2 0.53(mm)
ZZZZZ		09/09/2013 21:08	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 21:08	1		CLP-2 0.53(mm)
ZZZZZ		09/09/2013 21:23	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 21:23	1		CLP-2 0.53(mm)
ZZZZZ		09/09/2013 21:38	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 21:38	1		CLP-2 0.53(mm)
ZZZZZ		09/09/2013 21:53	5		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 21:53	5		CLP-2 0.53(mm)
ZZZZZ		09/09/2013 22:08	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 22:08	1		CLP-2 0.53(mm)
ZZZZZ		09/09/2013 22:23	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 22:23	1		CLP-2 0.53(mm)
ZZZZZ		09/09/2013 22:38	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 22:38	1		CLP-2 0.53(mm)
ZZZZZ		09/09/2013 22:52	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 22:52	1		CLP-2 0.53(mm)
ZZZZZ		09/09/2013 23:07	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 23:07	1		CLP-2 0.53(mm)
MB 240-100250/23-A		09/09/2013 23:22	1	P1300017.D	CLP-1 0.53(mm)
MB 240-100250/23-A		09/09/2013 23:22	1	P1300017.D	CLP-2 0.53(mm)
CCV 240-100696/18		09/09/2013 23:37	1	P1300018.D	CLP-1 0.53(mm)
CCV 240-100696/18		09/09/2013 23:37	1	P1300018.D	CLP-2 0.53(mm)
ZZZZZ		09/09/2013 23:52	1		CLP-1 0.53(mm)
ZZZZZ		09/09/2013 23:52	1		CLP-2 0.53(mm)
ZZZZZ		09/10/2013 01:36	1		CLP-1 0.53(mm)
ZZZZZ		09/10/2013 01:36	1		CLP-2 0.53(mm)
ZZZZZ		09/10/2013 01:51	1		CLP-1 0.53(mm)
ZZZZZ		09/10/2013 01:51	1		CLP-2 0.53(mm)
LCS 240-100250/24-A		09/10/2013 02:06	1	P1300028.D	CLP-1 0.53(mm)
LCS 240-100250/24-A		09/10/2013 02:06	1	P1300028.D	CLP-2 0.53(mm)
CCV 240-100696/29		09/10/2013 02:21	1	P1300029.D	CLP-1 0.53(mm)
CCV 240-100696/29		09/10/2013 02:21	1	P1300029.D	CLP-2 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: A2HP13 Start Date: 09/10/2013 09:40

Analysis Batch Number: 100765 End Date: 09/10/2013 13:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-100765/3 CCVRT		09/10/2013 09:40	1	P1300003.D	CLP-1 0.53(mm)
CCV 240-100765/3 CCVRT		09/10/2013 09:40	1	P1300003.D	CLP-2 0.53(mm)
240-28322-1	DR-SB-190-18-20	09/10/2013 09:55	1	P1300004.D	CLP-1 0.53(mm)
240-28322-1	DR-SB-190-18-20	09/10/2013 09:55	1	P1300004.D	CLP-2 0.53(mm)
240-28322-2	DR-SB-191-8-10	09/10/2013 10:10	1	P1300005.D	CLP-1 0.53(mm)
240-28322-2	DR-SB-191-8-10	09/10/2013 10:10	1	P1300005.D	CLP-2 0.53(mm)
240-28322-4	DR-SB-190-28-30	09/10/2013 10:25	1	P1300006.D	CLP-1 0.53(mm)
240-28322-4	DR-SB-190-28-30	09/10/2013 10:25	1	P1300006.D	CLP-2 0.53(mm)
ZZZZZ		09/10/2013 10:40	1		CLP-1 0.53(mm)
ZZZZZ		09/10/2013 10:40	1		CLP-2 0.53(mm)
ZZZZZ		09/10/2013 10:54	1		CLP-1 0.53(mm)
ZZZZZ		09/10/2013 10:54	1		CLP-2 0.53(mm)
ZZZZZ		09/10/2013 11:09	1		CLP-1 0.53(mm)
ZZZZZ		09/10/2013 11:09	1		CLP-2 0.53(mm)
ZZZZZ		09/10/2013 12:54	1		CLP-1 0.53(mm)
ZZZZZ		09/10/2013 12:54	1		CLP-2 0.53(mm)
CCV 240-100765/17		09/10/2013 13:09	1	P1300017.D	CLP-1 0.53(mm)
CCV 240-100765/17		09/10/2013 13:09	1	P1300017.D	CLP-2 0.53(mm)

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 16:29 Calibration End Date: 09/06/2013 17:43 Calibration ID: 17276

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/3	P1300003.D
Level 2	STD01 240-100485/4	P1300004.D
Level 3	STD02 240-100485/5	P1300005.D
Level 4	STD05 240-100485/6	P1300006.D
Level 5	STD1 240-100485/7	P1300007.D
Level 6	STD2 240-100485/8	P1300008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1232 Peak 1	28809440 22306440	27695550 21271194	25679470	23575052	Ave		24889524.3				12.0		20.0			
PCB-1232 Peak 2	20642060 15392396	18754790 14587051	19224460	14033012	Ave		17105628.2				16.0		20.0			
PCB-1232 Peak 3	36798040 33792271	37744480 31478057	34509105	33524366	Ave		34641053.1				6.6		20.0			
PCB-1232 Peak 4	15025700 14545742	17219860 13896870	15976615	14522604	Ave		15197898.5				7.9		20.0			
PCB-1232 Peak 5	15244880 12796045	15040870 11987218	13695655	13006718	Ave		13628564.4				9.5		20.0			

Note: The ml coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 16:29 Calibration End Date: 09/06/2013 17:43 Calibration ID: 17277

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/3	P1300003.D
Level 2	STD01 240-100485/4	P1300004.D
Level 3	STD02 240-100485/5	P1300005.D
Level 4	STD05 240-100485/6	P1300006.D
Level 5	STD1 240-100485/7	P1300007.D
Level 6	STD2 240-100485/8	P1300008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1232 Peak 1	34187720 26343023	32582220 24829233	29658020	27798372	Ave		29233098.1				12.0		20.0			
PCB-1232 Peak 2	30792560 20442268	26252630 19112402	23845875	20556854	Ave		23500431.5				19.0		20.0			
PCB-1232 Peak 3	47895260 41157776	46062860 38569540	41656345	40483020	Ave		42637466.8				8.4		20.0			
PCB-1232 Peak 4	22331920 18137842	21247720 17267079	19944775	18190230	Ave		19519927.7				10.0		20.0			
PCB-1232 Peak 5	17572040 14394415	17246230 13429395	15504880	15139240	Ave		15547700.0				10.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 17:58 Calibration End Date: 09/06/2013 19:13 Calibration ID: 17282

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/9	P1300009.D
Level 2	STD01 240-100485/10	P1300010.D
Level 3	STD02 240-100485/11	P1300011.D
Level 4	STD05 240-100485/12	P1300012.D
Level 5	STD1 240-100485/13	P1300013.D
Level 6	STD2 240-100485/14	P1300014.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	22662540 17233958	22121550 15349131	18547420	18221420	Ave		19022669.9				15.0		20.0			
PCB-1242 Peak 2	38846940 30817971	37088130 27374329	31825665	32080562	Ave		33005599.5				13.0		20.0			
PCB-1242 Peak 3	72701200 62575631	68781080 58560360	62236190	63495720	Ave		64725030.3				7.9		20.0			
PCB-1242 Peak 4	34237580 28454490	31957240 25716426	28329090	28890708	Ave		29597589.1				10.0		20.0			
PCB-1242 Peak 5	32439040 26703682	30304520 24505709	26800735	27015656	Ave		27961556.9				10.0		20.0			

Note: The ml coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 17:58 Calibration End Date: 09/06/2013 19:13 Calibration ID: 17283

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/9	P1300009.D
Level 2	STD01 240-100485/10	P1300010.D
Level 3	STD02 240-100485/11	P1300011.D
Level 4	STD05 240-100485/12	P1300012.D
Level 5	STD1 240-100485/13	P1300013.D
Level 6	STD2 240-100485/14	P1300014.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	26738960 20002099	23901380 18077681	21349305	20688912	Ave		21793056.2				14.0		20.0			
PCB-1242 Peak 2	51420080 38164803	43652940 34636540	38804575	39812054	Ave		41081831.9				14.0		20.0			
PCB-1242 Peak 3	89135980 76444002	80722920 72571902	73010185	76943214	Ave		78138033.8				7.9		20.0			
PCB-1242 Peak 4	42018960 35089563	37494290 32009360	33581540	35702452	Ave		35982694.1				9.7		20.0			
PCB-1242 Peak 5	40138960 30123196	34334460 28471895	30388525	31145818	Ave		32433809.0				13.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 19:27 Calibration End Date: 09/06/2013 20:42 Calibration ID: 17288

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/15	P1300015.D
Level 2	STD01 240-100485/16	P1300016.D
Level 3	STD02 240-100485/17	P1300017.D
Level 4	STD05 240-100485/18	P1300018.D
Level 5	STD1 240-100485/19	P1300019.D
Level 6	STD2 240-100485/20	P1300020.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	18581960 14982195	21743760 14047378	17199680	16096992	Ave		17108660.9				16.0		20.0			
PCB-1248 Peak 2	45458720 40491136	46159960 37562317	42157635	40104178	Ave		41988990.9				7.9		20.0			
PCB-1248 Peak 3	49240040 42607970	49661550 39571303	45039325	42595578	Ave		44785961.0				9.0		20.0			
PCB-1248 Peak 4	27219340 24562080	26605670 23027518	24444135	23935166	Ave		24965651.4				6.5		20.0			
PCB-1248 Peak 5	21980560 19896761	23369770 19514517	21232295	20453026	Ave		21074488.2				6.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 19:27 Calibration End Date: 09/06/2013 20:42 Calibration ID: 17289

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/15	P1300015.D
Level 2	STD01 240-100485/16	P1300016.D
Level 3	STD02 240-100485/17	P1300017.D
Level 4	STD05 240-100485/18	P1300018.D
Level 5	STD1 240-100485/19	P1300019.D
Level 6	STD2 240-100485/20	P1300020.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	24181580 18803383	23755550 16953906	21502335	19567840	Ave		20794099.0				14.0		20.0			
PCB-1248 Peak 2	56751180 49662453	53670160 45304792	50406240	47564960	Ave		50559964.1				8.2		20.0			
PCB-1248 Peak 3	54327740 48644084	54699570 46188323	51314740	48955800	Ave		50688376.2				6.7		20.0			
PCB-1248 Peak 4	58202860 53328345	55896280 50050383	54728230	51381770	Ave		53931311.3				5.5		20.0			
PCB-1248 Peak 5	33080120 28096939	31838350 26209484	29518130	27537420	Ave		29380073.8				9.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 20:57 Calibration End Date: 09/06/2013 22:11 Calibration ID: 17294

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/21	P1300021.D
Level 2	STD01 240-100485/22	P1300022.D
Level 3	STD02 240-100485/23	P1300023.D
Level 4	STD05 240-100485/24	P1300024.D
Level 5	STD1 240-100485/25	P1300025.D
Level 6	STD2 240-100485/26	P1300026.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	16029020 10845035	14797870 10327406	13342960	11635498	Ave		12829631.5				18.0		20.0			
PCB-1221 Peak 2	8585880 5346798	7948980 5297971	6830275	5657694	Lin1	218750.263	5207618.81							0.9980		0.9900
PCB-1221 Peak 3	37587680 26687461	33676600 25650526	32055670	29457000	Ave		30852489.5				15.0		20.0			
PCB-1254 Peak 1	77750840 61591170	67744210 62780571	69335785	66671528	Ave		67645684.0				8.5		20.0			
PCB-1254 Peak 2	80887800 67284222	73558170 68939478	75332210	73648268	Ave		73275024.6				6.6		20.0			
PCB-1254 Peak 3	59862120 49442619	54198260 50670802	56437570	55012016	Ave		54270564.5				7.0		20.0			
PCB-1254 Peak 4	55298740 44471824	50363730 45463401	51274450	49372598	Ave		49374123.8				8.1		20.0			
PCB-1254 Peak 5	75064140 59894194	66930320 61732132	68550320	67109742	Ave		66546807.9				8.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 22:26 Calibration End Date: 09/06/2013 23:40 Calibration ID: 17300

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/27	P1300027.D
Level 2	STD01 240-100485/28	P1300028.D
Level 3	STD02 240-100485/29	P1300029.D
Level 4	STD05 240-100485/30	P1300030.D
Level 5	STD1 240-100485/31	P1300031.D
Level 6	STD2 240-100485/32	P1300032.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	28177700 19913791	23790320 19427933	23661700	22411120	Ave		22897093.9				14.0		20.0			
PCB-1016 Peak 2	47036740 35475786	41852700 35104324	40677095	37938580	Ave		39680870.8				11.0		20.0			
PCB-1016 Peak 3	90229820 76329159	74884700 76423757	83115035	78774078	Ave		79959424.8				7.3		20.0			
PCB-1016 Peak 4	41649420 32960100	30802860 33279713	36773345	34909780	Ave		35062536.3				11.0		20.0			
PCB-1016 Peak 5	39823920 31881967	37185900 32416360	35632565	33960806	Ave		35150252.9				8.6		20.0			
PCB-1260 Peak 1	56615880 46643964	53384200 47685016	50816910	49158410	Ave		50717396.7				7.4		20.0			
PCB-1260 Peak 2	108265540 90912614	102166230 92217263	99350140	94212106	Ave		97853982.1				6.8		20.0			
PCB-1260 Peak 3	92680620 80213413	87755540 81545202	87477460	80890440	Ave		85093779.1				5.9		20.0			
PCB-1260 Peak 4	130369100 117171308	123982110 118015348	126764895	114004532	Ave		121717882				5.2		20.0			
PCB-1260 Peak 5	62215740 54999208	59209510 55144626	59976165	52010468	Ave		57259286.2				6.7		20.0			
Tetrachloro-m-xylene	1432613200 1193569380	1248363400 1193837520	1302712400	1269478720	Ave		1273429103				7.0		20.0			
Decachlorobiphenyl	1188436800 1020334720	1087774600 1024409890	1146609800	939981280	Ave		1067924515				8.5		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 22:26 Calibration End Date: 09/06/2013 23:40 Calibration ID: 17301

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/27	P1300027.D
Level 2	STD01 240-100485/28	P1300028.D
Level 3	STD02 240-100485/29	P1300029.D
Level 4	STD05 240-100485/30	P1300030.D
Level 5	STD1 240-100485/31	P1300031.D
Level 6	STD2 240-100485/32	P1300032.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	31055280 22642688	27965170 22256990	26359400	24866644	Ave		25857695.3				13.0		20.0			
PCB-1016 Peak 2	61586820 44566146	56140650 43951079	52284265	48361696	Ave		51148442.7				13.0		20.0			
PCB-1016 Peak 3	108652620 92998392	102030460 94750098	100353500	95743614	Ave		99088114.0				5.9		20.0			
PCB-1016 Peak 4	49141940 39917040	47116840 40199076	45112510	42846030	Ave		44055572.7				8.5		20.0			
PCB-1016 Peak 5	45399160 31298855	39880350 31759100	37028250	33454246	Ave		36469993.5				15.0		20.0			
PCB-1260 Peak 1	78749580 62688888	73090320 64418586	67106575	67085438	Ave		68856564.4				8.7		20.0			
PCB-1260 Peak 2	82957760 66888482	77431670 69663844	74421575	69170950	Ave		73422380.2				8.2		20.0			
PCB-1260 Peak 3	114829440 100032755	105053580 102871093	105924405	100278642	Ave		104831653				5.2		20.0			
PCB-1260 Peak 4	145249320 136772548	129110540 140712176	143584745	129746512	Ave		137529307				5.0		20.0			
PCB-1260 Peak 5	111572980 99946570	104481990 103955462	107420675	94129448	Ave		103584521				5.8		20.0			
Tetrachloro-m-xylene	1595364000 1392744760	1440824200 1442674100	1452576000	1438021040	Ave		1460367350				4.7		20.0			
Decachlorobiphenyl	1337908000 1175493900	1248092000 1196011070	1314759800	1076402920	Ave		1224777948				7.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 20:57 Calibration End Date: 09/06/2013 22:11 Calibration ID: 17295

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/21	P1300021.D
Level 2	STD01 240-100485/22	P1300022.D
Level 3	STD02 240-100485/23	P1300023.D
Level 4	STD05 240-100485/24	P1300024.D
Level 5	STD1 240-100485/25	P1300025.D
Level 6	STD2 240-100485/26	P1300026.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	17716280 12724296	16290910 12562186	15352625	14045068	Ave		14781894.2				14.0		20.0			
PCB-1221 Peak 2	12041260 8227255	10856060 7932037	10210345	9286302	Ave		9758876.42				16.0		20.0			
PCB-1221 Peak 3	43125980 30515983	38569910 30226979	36228035	33513472	Ave		35363393.3				14.0		20.0			
PCB-1254 Peak 1	63689320 49277418	57705420 50087692	55654000	51425346	Ave		54639866.0				10.0		20.0			
PCB-1254 Peak 2	69216360 53162537	60868990 55025511	59161875	56234524	Ave		58944966.1				9.8		20.0			
PCB-1254 Peak 3	99603380 83612668	92609840 86836177	93707795	91071450	Ave		91240218.3				6.1		20.0			
PCB-1254 Peak 4	76491040 62179958	68304640 65148565	70473995	68729428	Ave		68554604.3				7.1		20.0			
PCB-1254 Peak 5	90592460 76891018	81400440 80334820	87111020	85786454	Ave		83686035.3				6.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: ICV 240-100485/50 Calibration Date: 09/07/2013 04:08

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300050.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	22897094	20342139		0.888	1.00	-11.2	20.0
PCB-1016 Peak 2	Ave	39680871	37323753		0.941	1.00	-5.9	20.0
PCB-1016 Peak 3	Ave	79959425	77153102		0.965	1.00	-3.5	20.0
PCB-1016 Peak 4	Ave	35062536	34443149		0.982	1.00	-1.8	20.0
PCB-1016 Peak 5	Ave	35150253	33577207		0.955	1.00	-4.5	20.0
PCB-1260 Peak 1	Ave	50717397	48499916		0.956	1.00	-4.4	20.0
PCB-1260 Peak 2	Ave	97853982	93569358		0.956	1.00	-4.4	20.0
PCB-1260 Peak 3	Ave	85093779	81138059		0.954	1.00	-4.6	20.0
PCB-1260 Peak 4	Ave	121717882	122946281		1.01	1.00	1.0	20.0
PCB-1260 Peak 5	Ave	57259286	57288775		1.00	1.00	0.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: ICV 240-100485/50 Calibration Date: 09/07/2013 04:08

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300050.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	25857695	24032114		0.929	1.00	-7.1	20.0
PCB-1016 Peak 2	Ave	51148443	46874468		0.916	1.00	-8.4	20.0
PCB-1016 Peak 3	Ave	99088114	98225054		0.991	1.00	-0.9	20.0
PCB-1016 Peak 4	Ave	44055573	41647811		0.945	1.00	-5.5	20.0
PCB-1016 Peak 5	Ave	36469994	33197620		0.910	1.00	-9.0	20.0
PCB-1260 Peak 1	Ave	68856564	64559488		0.938	1.00	-6.2	20.0
PCB-1260 Peak 2	Ave	73422380	69965926		0.953	1.00	-4.7	20.0
PCB-1260 Peak 3	Ave	104831653	101606396		0.969	1.00	-3.1	20.0
PCB-1260 Peak 4	Ave	137529307	146393818		1.06	1.00	6.4	20.0
PCB-1260 Peak 5	Ave	103584521	103065251		0.995	1.00	-0.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100696/3 Calibration Date: 09/09/2013 19:54

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	22897094	23129026		0.505	0.500	1.0	20.0
PCB-1016 Peak 2	Ave	39680871	40413694		0.509	0.500	1.8	20.0
PCB-1016 Peak 3	Ave	79959425	94123300		0.589	0.500	17.7	20.0
PCB-1016 Peak 4	Ave	35062536	37374086		0.533	0.500	6.6	20.0
PCB-1016 Peak 5	Ave	35150253	36310776		0.517	0.500	3.3	20.0
PCB-1260 Peak 1	Ave	50717397	51270218		0.505	0.500	1.1	20.0
PCB-1260 Peak 2	Ave	97853982	102000246		0.521	0.500	4.2	20.0
PCB-1260 Peak 3	Ave	85093779	90628286		0.533	0.500	6.5	20.0
PCB-1260 Peak 4	Ave	121717882	132088038		0.543	0.500	8.5	20.0
PCB-1260 Peak 5	Ave	57259286	60364334		0.527	0.500	5.4	20.0
Tetrachloro-m-xylene	Ave	1273429103	1367563080		0.0268	0.0250	7.4	20.0
Decachlorobiphenyl	Ave	1067924515	1018263360		0.0238	0.0250	-4.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100696/3 Calibration Date: 09/09/2013 19:54

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	25857695	25817072		0.499	0.500	-0.2	20.0
PCB-1016 Peak 2	Ave	51148443	51531592		0.504	0.500	0.7	20.0
PCB-1016 Peak 3	Ave	99088114	109035622		0.550	0.500	10.0	20.0
PCB-1016 Peak 4	Ave	44055573	44662888		0.507	0.500	1.4	20.0
PCB-1016 Peak 5	Ave	36469994	35623560		0.488	0.500	-2.3	20.0
PCB-1260 Peak 1	Ave	68856564	59485420		0.432	0.500	-13.6	20.0
PCB-1260 Peak 2	Ave	73422380	70375034		0.479	0.500	-4.2	20.0
PCB-1260 Peak 3	Ave	104831653	101832340		0.486	0.500	-2.9	20.0
PCB-1260 Peak 4	Ave	137529307	133453578		0.485	0.500	-3.0	20.0
PCB-1260 Peak 5	Ave	103584521	90084474		0.435	0.500	-13.0	20.0
Tetrachloro-m-xylene	Ave	1460367350	1574154760		0.0269	0.0250	7.8	20.0
Decachlorobiphenyl	Ave	1224777948	1087681520		0.0222	0.0250	-11.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100696/18 Calibration Date: 09/09/2013 23:37

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300018.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	22897094	22615108		0.494	0.500	-1.2	20.0
PCB-1016 Peak 2	Ave	39680871	41343536		0.521	0.500	4.2	20.0
PCB-1016 Peak 3	Ave	79959425	98181916		0.614	0.500	22.8*	20.0
PCB-1016 Peak 4	Ave	35062536	38488410		0.549	0.500	9.8	20.0
PCB-1016 Peak 5	Ave	35150253	36147064		0.514	0.500	2.8	20.0
PCB-1260 Peak 1	Ave	50717397	55353012		0.546	0.500	9.1	20.0
PCB-1260 Peak 2	Ave	97853982	110703378		0.566	0.500	13.1	20.0
PCB-1260 Peak 3	Ave	85093779	99772860		0.586	0.500	17.3	20.0
PCB-1260 Peak 4	Ave	121717882	148235962		0.609	0.500	21.8*	20.0
PCB-1260 Peak 5	Ave	57259286	68457618		0.598	0.500	19.6	20.0
Tetrachloro-m-xylene	Ave	1273429103	1413957880		0.0278	0.0250	11.0	20.0
Decachlorobiphenyl	Ave	1067924515	1198322320		0.0281	0.0250	12.2	20.0

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FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100696/18 Calibration Date: 09/09/2013 23:37

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300018.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	25857695	26575180		0.514	0.500	2.8	20.0
PCB-1016 Peak 2	Ave	51148443	53573154		0.524	0.500	4.7	20.0
PCB-1016 Peak 3	Ave	99088114	115171974		0.581	0.500	16.2	20.0
PCB-1016 Peak 4	Ave	44055573	47570000		0.540	0.500	8.0	20.0
PCB-1016 Peak 5	Ave	36469994	38024136		0.521	0.500	4.3	20.0
PCB-1260 Peak 1	Ave	68856564	70702442		0.513	0.500	2.7	20.0
PCB-1260 Peak 2	Ave	73422380	80824524		0.550	0.500	10.1	20.0
PCB-1260 Peak 3	Ave	104831653	116483472		0.556	0.500	11.1	20.0
PCB-1260 Peak 4	Ave	137529307	157927576		0.574	0.500	14.8	20.0
PCB-1260 Peak 5	Ave	103584521	111196398		0.537	0.500	7.3	20.0
Tetrachloro-m-xylene	Ave	1460367350	1639449800		0.0281	0.0250	12.3	20.0
Decachlorobiphenyl	Ave	1224777948	1199826720		0.0245	0.0250	-2.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100696/29 Calibration Date: 09/10/2013 02:21

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300029.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	22897094	23475244		0.513	0.500	2.5	20.0
PCB-1016 Peak 2	Ave	39680871	42667334		0.538	0.500	7.5	20.0
PCB-1016 Peak 3	Ave	79959425	98406824		0.615	0.500	23.1*	20.0
PCB-1016 Peak 4	Ave	35062536	37975054		0.542	0.500	8.3	20.0
PCB-1016 Peak 5	Ave	35150253	36676850		0.522	0.500	4.3	20.0
PCB-1260 Peak 1	Ave	50717397	55386388		0.546	0.500	9.2	20.0
PCB-1260 Peak 2	Ave	97853982	111714782		0.571	0.500	14.2	20.0
PCB-1260 Peak 3	Ave	85093779	101524556		0.597	0.500	19.3	20.0
PCB-1260 Peak 4	Ave	121717882	150860782		0.620	0.500	23.9*	20.0
PCB-1260 Peak 5	Ave	57259286	70477068		0.615	0.500	23.1*	20.0
Tetrachloro-m-xylene	Ave	1273429103	1463110040		0.0287	0.0250	14.9	20.0
Decachlorobiphenyl	Ave	1067924515	1321418960		0.0309	0.0250	23.7*	20.0

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FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100696/29 Calibration Date: 09/10/2013 02:21

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300029.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	25857695	27269974		0.527	0.500	5.5	20.0
PCB-1016 Peak 2	Ave	51148443	55048318		0.538	0.500	7.6	20.0
PCB-1016 Peak 3	Ave	99088114	118680516		0.599	0.500	19.8	20.0
PCB-1016 Peak 4	Ave	44055573	48900506		0.555	0.500	11.0	20.0
PCB-1016 Peak 5	Ave	36469994	39511512		0.542	0.500	8.3	20.0
PCB-1260 Peak 1	Ave	68856564	73085110		0.531	0.500	6.1	20.0
PCB-1260 Peak 2	Ave	73422380	84374972		0.575	0.500	14.9	20.0
PCB-1260 Peak 3	Ave	104831653	122646734		0.585	0.500	17.0	20.0
PCB-1260 Peak 4	Ave	137529307	169110084		0.615	0.500	23.0	20.0
PCB-1260 Peak 5	Ave	103584521	120434312		0.581	0.500	16.3	20.0
Tetrachloro-m-xylene	Ave	1460367350	1681762080		0.0288	0.0250	15.2	20.0
Decachlorobiphenyl	Ave	1224777948	1296630200		0.0265	0.0250	5.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100765/3 Calibration Date: 09/10/2013 09:40

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	22897094	22013076		0.481	0.500	-3.9	20.0
PCB-1016 Peak 2	Ave	39680871	39208122		0.494	0.500	-1.2	20.0
PCB-1016 Peak 3	Ave	79959425	91656392		0.573	0.500	14.6	20.0
PCB-1016 Peak 4	Ave	35062536	36650562		0.523	0.500	4.5	20.0
PCB-1016 Peak 5	Ave	35150253	35550908		0.506	0.500	1.1	20.0
PCB-1260 Peak 1	Ave	50717397	50516762		0.498	0.500	-0.4	20.0
PCB-1260 Peak 2	Ave	97853982	101426428		0.518	0.500	3.7	20.0
PCB-1260 Peak 3	Ave	85093779	93252808		0.548	0.500	9.6	20.0
PCB-1260 Peak 4	Ave	121717882	134566992		0.553	0.500	10.6	20.0
PCB-1260 Peak 5	Ave	57259286	62546698		0.546	0.500	9.2	20.0
Tetrachloro-m-xylene	Ave	1273429103	1317911200		0.0259	0.0250	3.5	20.0
Decachlorobiphenyl	Ave	1067924515	1157097560		0.0271	0.0250	8.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100765/3 Calibration Date: 09/10/2013 09:40

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	25857695	24740790		0.478	0.500	-4.3	20.0
PCB-1016 Peak 2	Ave	51148443	50030564		0.489	0.500	-2.2	20.0
PCB-1016 Peak 3	Ave	99088114	106859898		0.539	0.500	7.8	20.0
PCB-1016 Peak 4	Ave	44055573	44343924		0.503	0.500	0.7	20.0
PCB-1016 Peak 5	Ave	36469994	35553204		0.487	0.500	-2.5	20.0
PCB-1260 Peak 1	Ave	68856564	64870956		0.471	0.500	-5.8	20.0
PCB-1260 Peak 2	Ave	73422380	74657694		0.508	0.500	1.7	20.0
PCB-1260 Peak 3	Ave	104831653	105549040		0.503	0.500	0.7	20.0
PCB-1260 Peak 4	Ave	137529307	147147422		0.535	0.500	7.0	20.0
PCB-1260 Peak 5	Ave	103584521	108015036		0.521	0.500	4.3	20.0
Tetrachloro-m-xylene	Ave	1460367350	1506817840		0.0258	0.0250	3.2	20.0
Decachlorobiphenyl	Ave	1224777948	1190053400		0.0243	0.0250	-2.8	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100765/17 Calibration Date: 09/10/2013 13:09

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300017.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	22897094	26262406		0.573	0.500	14.7	20.0
PCB-1016 Peak 2	Ave	39680871	40547594		0.511	0.500	2.2	20.0
PCB-1016 Peak 3	Ave	79959425	94772740		0.593	0.500	18.5	20.0
PCB-1016 Peak 4	Ave	35062536	37435092		0.534	0.500	6.8	20.0
PCB-1016 Peak 5	Ave	35150253	36180442		0.515	0.500	2.9	20.0
PCB-1260 Peak 1	Ave	50717397	51596062		0.509	0.500	1.7	20.0
PCB-1260 Peak 2	Ave	97853982	103266004		0.528	0.500	5.5	20.0
PCB-1260 Peak 3	Ave	85093779	94629184		0.556	0.500	11.2	20.0
PCB-1260 Peak 4	Ave	121717882	137735500		0.566	0.500	13.2	20.0
PCB-1260 Peak 5	Ave	57259286	64755602		0.565	0.500	13.1	20.0
Tetrachloro-m-xylene	Ave	1273429103	1373241200		0.0270	0.0250	7.8	20.0
Decachlorobiphenyl	Ave	1067924515	1196346600		0.0280	0.0250	12.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: CCV 240-100765/17 Calibration Date: 09/10/2013 13:09

Instrument ID: A2HP13 Calib Start Date: 09/06/2013 22:26

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/06/2013 23:40

Lab File ID: P1300017.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	25857695	24685226		0.477	0.500	-4.5	20.0
PCB-1016 Peak 2	Ave	51148443	49933704		0.488	0.500	-2.4	20.0
PCB-1016 Peak 3	Ave	99088114	106741810		0.539	0.500	7.7	20.0
PCB-1016 Peak 4	Ave	44055573	44105550		0.501	0.500	0.1	20.0
PCB-1016 Peak 5	Ave	36469994	35233432		0.483	0.500	-3.4	20.0
PCB-1260 Peak 1	Ave	68856564	65241964		0.474	0.500	-5.2	20.0
PCB-1260 Peak 2	Ave	73422380	75307622		0.513	0.500	2.6	20.0
PCB-1260 Peak 3	Ave	104831653	108755230		0.519	0.500	3.7	20.0
PCB-1260 Peak 4	Ave	137529307	149636576		0.544	0.500	8.8	20.0
PCB-1260 Peak 5	Ave	103584521	106318618		0.513	0.500	2.6	20.0
Tetrachloro-m-xylene	Ave	1460367350	1515360720		0.0259	0.0250	3.8	20.0
Decachlorobiphenyl	Ave	1224777948	1209165160		0.0247	0.0250	-1.3	20.0

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: MB 240-100250/23-A

Matrix: Solid Date Extracted: 09/05/2013 11:13

Lab File ID:(1) P1300017.D Lab File ID:(2) P1300017.D

Date Analyzed:(1) 09/09/2013 23:22 Date Analyzed:(2) 09/09/2013 23:22

Instrument ID:(1) A2HP13 Instrument ID:(2) A2HP13

GC Column:(1) CLP-2 ID: 0.53(mm) GC Column:(2) CLP-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
DR-SB-191-22-24	240-28322-5	09/09/2013 20:53	09/09/2013 20:53
	LCS 240-100250/24-A	09/10/2013 02:06	09/10/2013 02:06
DR-SB-190-18-20	240-28322-1	09/10/2013 09:55	09/10/2013 09:55
DR-SB-191-8-10	240-28322-2	09/10/2013 10:10	09/10/2013 10:10
DR-SB-190-28-30	240-28322-4	09/10/2013 10:25	09/10/2013 10:25

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100250/23-A

Matrix: Solid Lab File ID: P1300017.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3540C Date Extracted: 09/05/2013 11:13

Sample wt/vol: 30.00(g) Date Analyzed: 09/09/2013 23:22

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 100696 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	33	U	33	21
11104-28-2	Aroclor-1221	33	U	33	16
11141-16-5	Aroclor-1232	33	U	33	14
53469-21-9	Aroclor-1242	33	U	33	13
12672-29-6	Aroclor-1248	33	U	33	17
11097-69-1	Aroclor-1254	33	U	33	17
11096-82-5	Aroclor-1260	33	U	33	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	83		29-151
2051-24-3	Decachlorobiphenyl	83		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100250/23-A

Matrix: Solid Lab File ID: P1300017.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3540C Date Extracted: 09/05/2013 11:13

Sample wt/vol: 30.00(g) Date Analyzed: 09/09/2013 23:22

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 100696 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	77		29-151
2051-24-3	Decachlorobiphenyl	85		14-163

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm) GC Column (2): CLP-1 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCB1 #	DCB2 #
DR-SB-190-18-20	240-28322-1	76	79	77	82
DR-SB-191-8-10	240-28322-2	71	70	82	84
DR-SB-190-28-30	240-28322-4	71	74	74	91
DR-SB-191-22-24	240-28322-5	110	305 X	74	333 X
	MB 240-100250/23-A	83	77	83	85
	LCS 240-100250/24-A	78	82	87	91

5X

	QC LIMITS
TCX = Tetrachloro-m-xylene	29-151
DCB = Decachlorobiphenyl	14-163

Column to be used to flag recovery values

FORM II 8082A

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P1300028.D

Lab ID: LCS 240-100250/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Aroclor-1016	333	261	78	62-120	
Aroclor-1260	333	295	89	56-122	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCV 240-100696/3 Date Analyzed: 09/09/2013 19:54

Instrument ID: A2HP13 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P1300003.D Heated Purge: (Y/N) N

Calibration ID: 17300

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.19	6.88	
UPPER LIMIT				1.29	6.98	
LOWER LIMIT				1.09	6.78	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-100696/3 CCVRT		09/09/2013 19:54	P1300003.D	1.19	6.88	
240-28322-5	DR-SB-191-22-24	09/09/2013 20:53	P1300007.D	1.17	6.85	
MB 240-100250/23-A		09/09/2013 23:22	P1300017.D	1.20	6.89	
CCV 240-100696/18		09/09/2013 23:37	P1300018.D	1.19	6.88	
LCS 240-100250/24-A		09/10/2013 02:06	P1300028.D	1.19	6.88	
CCV 240-100696/29		09/10/2013 02:21	P1300029.D	1.19	6.88	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCV 240-100696/3 Date Analyzed: 09/09/2013 19:54

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1300003.D Heated Purge: (Y/N) N

Calibration ID: 17301

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.70	8.33	
UPPER LIMIT				1.80	8.43	
LOWER LIMIT				1.60	8.23	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-100696/3 CCVRT		09/09/2013 19:54	P1300003.D	1.70	8.33	
240-28322-5	DR-SB-191-22-24	09/09/2013 20:53	P1300007.D	1.71	8.33	
MB 240-100250/23-A		09/09/2013 23:22	P1300017.D	1.71	8.33	
CCV 240-100696/18		09/09/2013 23:37	P1300018.D	1.71	8.33	
LCS 240-100250/24-A		09/10/2013 02:06	P1300028.D	1.71	8.33	
CCV 240-100696/29		09/10/2013 02:21	P1300029.D	1.70	8.33	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCV 240-100765/3 Date Analyzed: 09/10/2013 09:40

Instrument ID: A2HP13 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P1300003.D Heated Purge: (Y/N) N

Calibration ID: 17300

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.19	6.89	
UPPER LIMIT				1.29	6.99	
LOWER LIMIT				1.09	6.79	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-100765/3 CCVRT		09/10/2013 09:40	P1300003.D	1.19	6.89	
240-28322-1	DR-SB-190-18-20	09/10/2013 09:55	P1300004.D	1.19	6.88	
240-28322-2	DR-SB-191-8-10	09/10/2013 10:10	P1300005.D	1.19	6.88	
240-28322-4	DR-SB-190-28-30	09/10/2013 10:25	P1300006.D	1.19	6.88	
CCV 240-100765/17		09/10/2013 13:09	P1300017.D	1.19	6.88	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Sample No.: CCV 240-100765/3 Date Analyzed: 09/10/2013 09:40

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1300003.D Heated Purge: (Y/N) N

Calibration ID: 17301

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.70	8.33	
UPPER LIMIT				1.80	8.43	
LOWER LIMIT				1.60	8.23	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-100765/3 CCVRT		09/10/2013 09:40	P1300003.D	1.70	8.33	
240-28322-1	DR-SB-190-18-20	09/10/2013 09:55	P1300004.D	1.70	8.33	
240-28322-2	DR-SB-191-8-10	09/10/2013 10:10	P1300005.D	1.71	8.33	
240-28322-4	DR-SB-190-28-30	09/10/2013 10:25	P1300006.D	1.71	8.33	
CCV 240-100765/17		09/10/2013 13:09	P1300017.D	1.71	8.33	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 Lab Sample ID: 240-28322-5

Instrument ID (1): A2HP13 Instrument ID (2): A2HP13

Date Analyzed (1): 09/09/2013 20:53 Date Analyzed (2): 09/09/2013 20:53

GC Column (1): CLP-2 ID: 0.53(mm) GC Column (2): CLP-1 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor-1254	1	1	4.28	4.23	4.33	810	710	0.3
		2	4.51	4.45	4.55	637		
		3	5.02	4.96	5.06	658		
		4	5.66	5.61	5.71	703		
		5	5.88	5.82	5.92	763		
	2	1	3.40	3.34	3.44	669	710	
		2	3.81	3.75	3.85	663		
		3	4.11	4.05	4.15	727		
		4	4.32	4.26	4.36	744		
		5	4.61	4.55	4.65	756		

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-28322-1

SDG No.:

Project: Dump Road Source Area

Client Sample ID	Lab Sample ID
DR-SB-190-18-20	240-28322-1
DR-SB-191-8-10	240-28322-2
DR-SB-190-28-30	240-28322-4
DR-SB-191-22-24	240-28322-5

Comments:

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 08/30/2013 14:19 End Date: 08/30/2013 23:25

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ICIS 240-99875/1	1		14:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-99875/2 IC			14:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-99875/3 IC			14:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-99875/4	1		14:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICB 240-99875/5	1		14:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-99875/6			14:39																				
ZZZZZZ			14:43																				
ICSA 240-99875/8	1		14:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-99875/9	1		14:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-99875/10			14:55																				
CCB 240-99875/11			14:59																				
ZZZZZZ			15:03																				
ZZZZZZ			15:07																				
ZZZZZZ			15:12																				
ZZZZZZ			15:16																				
ZZZZZZ			15:20																				
ZZZZZZ			15:24																				
CCV 240-99875/18			15:28																				
CCB 240-99875/19			15:32																				
CRI 240-99875/20	1		15:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			15:41																				
ZZZZZZ			15:45																				
ZZZZZZ			15:49																				
ZZZZZZ			15:53																				
ZZZZZZ			15:57																				
ZZZZZZ			16:01																				
ZZZZZZ			16:05																				
ZZZZZZ			16:09																				
ZZZZZZ			16:13																				
CCV 240-99875/30	1		16:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-99875/31	1		16:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			16:24																				
ZZZZZZ			16:28																				
ZZZZZZ			16:32																				
ZZZZZZ			16:36																				
ZZZZZZ			16:40																				
MB 240-99163/1-A	1	T	16:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-99163/2-A	1	T	16:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28322-1	1	T	16:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28322-1 SD	5	T	16:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28322-1 DU	1	T	17:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-99875/42	1		17:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 08/30/2013 14:19 End Date: 08/30/2013 23:25

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCB 240-99875/43	1		17:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28322-1 MS	1	T	17:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28322-1 PDS	1	T	17:15												X								
240-28322-2	1	T	17:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28322-4	1	T	17:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28322-5	1	T	17:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			17:31																				
ZZZZZZ			17:36																				
ZZZZZZ			17:40																				
ZZZZZZ			17:44																				
ZZZZZZ			17:48																				
CCV 240-99875/54	1		17:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-99875/55	1		17:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			18:00																				
ZZZZZZ			18:04																				
ZZZZZZ			18:08																				
ZZZZZZ			18:12																				
ZZZZZZ			18:16																				
ZZZZZZ			18:20																				
ZZZZZZ			18:25																				
ZZZZZZ			18:28																				
ZZZZZZ			18:33																				
ZZZZZZ			18:37																				
CCV 240-99875/66			18:42																				
CCB 240-99875/67			18:46																				
CRI 240-99875/68	1		18:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			18:54																				
ZZZZZZ			18:58																				
ZZZZZZ			19:01																				
ZZZZZZ			19:05																				
ZZZZZZ			19:09																				
ZZZZZZ			19:13																				
ZZZZZZ			19:17																				
ZZZZZZ			19:21																				
ZZZZZZ			19:25																				
CCV 240-99875/78			19:29																				
CCB 240-99875/79			19:33																				
ZZZZZZ			19:37																				
ZZZZZZ			19:41																				
ZZZZZZ			19:45																				
ZZZZZZ			19:49																				
ZZZZZZ			19:54																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 08/30/2013 14:19 End Date: 08/30/2013 23:25

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			19:58																				
ZZZZZZ			20:02																				
ZZZZZZ			20:06																				
ZZZZZZ			20:10																				
ZZZZZZ			20:14																				
CCV 240-99875/90			20:18																				
CCB 240-99875/91			20:21																				
ZZZZZZ			20:26																				
ZZZZZZ			20:30																				
ZZZZZZ			20:34																				
ZZZZZZ			20:38																				
ZZZZZZ			20:42																				
ZZZZZZ			20:46																				
ZZZZZZ			20:50																				
ZZZZZZ			20:54																				
ZZZZZZ			20:58																				
ZZZZZZ			21:02																				
CCV 240-99875/102			21:06																				
CCB 240-99875/103			21:09																				
ZZZZZZ			21:14																				
ZZZZZZ			21:17																				
ZZZZZZ			21:22																				
ZZZZZZ			21:26																				
ZZZZZZ			21:30																				
ZZZZZZ			21:35																				
ZZZZZZ			21:39																				
ZZZZZZ			21:43																				
ZZZZZZ			21:47																				
ZZZZZZ			21:51																				
CCV 240-99875/114			21:55																				
CCB 240-99875/115			21:59																				
ZZZZZZ			22:03																				
ZZZZZZ			22:07																				
ZZZZZZ			22:11																				
ZZZZZZ			22:15																				
ZZZZZZ			22:19																				
ZZZZZZ			22:23																				
ZZZZZZ			22:27																				
ZZZZZZ			22:31																				
ZZZZZZ			22:35																				
ZZZZZZ			22:39																				
CCV 240-99875/126			22:44																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 08/30/2013 14:19 End Date: 08/30/2013 23:25

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCB 240-99875/127			22:48																					
ZZZZZZ			22:52																					
ZZZZZZ			22:56																					
ZZZZZZ			23:00																					
ZZZZZZ			23:04																					
ZZZZZZ			23:08																					
ZZZZZZ			23:13																					
ZZZZZZ			23:17																					
CCV 240-99875/135			23:21																					
CCB 240-99875/136			23:25																					

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 08/28/2013 11:29 End Date: 08/28/2013 13:45

Lab Sample ID	D/F	Type	Time	Analytes																				
				Hg																				
IC 240-99322/1-A			11:29	X																				
IC 240-99322/1-A			11:31	X																				
IC 240-99322/2-A			11:33	X																				
IC 240-99322/2-A			11:35	X																				
IC 240-99322/3-A			11:37	X																				
IC 240-99322/3-A			11:39	X																				
IC 240-99322/4-A			11:41	X																				
IC 240-99322/4-A			11:43	X																				
IC 240-99322/5-A			11:45	X																				
IC 240-99322/5-A			11:48	X																				
IC 240-99322/6-A			11:50	X																				
IC 240-99322/6-A			11:52	X																				
IC 240-99322/7-A			11:55	X																				
IC 240-99322/7-A			11:58	X																				
ICV 240-99322/8-A	1		12:00	X																				
ICB 240-99322/9-A	1		12:02	X																				
CRA 240-99322/10-A	1		12:04	X																				
CCV 240-99322/13-A	1		12:06	X																				
CCB 240-99322/12-A	1		12:08	X																				
ZZZZZZ			12:10																					
ZZZZZZ			12:12																					
ZZZZZZ			12:14																					
ZZZZZZ			12:16																					
ZZZZZZ			12:19																					
ZZZZZZ			12:21																					
ZZZZZZ			12:23																					
MB 240-99166/1-A	1	T	12:26	X																				
LCS 240-99166/2-A	1	T	12:28	X																				
240-28322-1	1	T	12:30	X																				
CCV 240-99322/13-A	1		12:32	X																				
CCB 240-99322/12-A	1		12:34	X																				
240-28322-1 DU	1	T	12:36	X																				
240-28322-1 MS	1	T	12:38	X																				
240-28322-2	1	T	12:40	X																				
240-28322-4	1	T	12:42	X																				
240-28322-5	1	T	12:44	X																				
ZZZZZZ			12:46																					
ZZZZZZ			12:49																					
ZZZZZZ			12:53																					
ZZZZZZ			12:55																					
ZZZZZZ			12:57																					
CCV 240-99322/13-A	1		12:59	X																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 08/28/2013 11:29 End Date: 08/28/2013 13:45

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
CCB 240-99322/12-A	1		13:02	X																				
ZZZZZZ			13:04																					
ZZZZZZ			13:06																					
ZZZZZZ			13:08																					
ZZZZZZ			13:11																					
ZZZZZZ			13:13																					
ZZZZZZ			13:15																					
ZZZZZZ			13:18																					
ZZZZZZ			13:20																					
ZZZZZZ			13:22																					
ZZZZZZ			13:25																					
CCV 240-99322/13-A			13:27																					
CCB 240-99322/12-A			13:29																					
ZZZZZZ			13:32																					
ZZZZZZ			13:34																					
ZZZZZZ			13:36																					
ZZZZZZ			13:38																					
ZZZZZZ			13:40																					
CCV 240-99322/13-A			13:42																					
CCB 240-99322/12-A			13:45																					

Prep Types

T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

ICV Source: MT6500ICV_00012 Concentration Units: ug/L

CCV Source: MTICPCCV_00006

Analyte	ICV 240-99875/4 08/30/2013 14:31				CCV 240-99875/30 08/30/2013 16:16				CCV 240-99875/42 08/30/2013 17:04			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	381		375	102	517		500	103	509		500	102
Arsenic	383		375	102	530		500	106	527		500	105
Barium	1500		1500	100	2000		2000	100	1990		2000	100
Beryllium	1530		1500	102	2040		2000	102	2040		2000	102
Cadmium	378		375	101	515		500	103	514		500	103
Chromium	1500		1500	100	2050		2000	102	2060		2000	103
Cobalt	1490		1500	99	2080		2000	104	2090		2000	104
Copper	1490		1500	99	2040		2000	102	2030		2000	101
Lead	371		375	99	505		500	101	506		500	101
Molybdenum	1510		1500	101	2090		2000	105	2090		2000	104
Nickel	1510		1500	101	2070		2000	104	2080		2000	104
Selenium	383		375	102	535		500	107	536		500	107
Silver	759		750	101	1020		1000	102	1020		1000	102
Thallium	749		750	100	1040		1000	104	1050		1000	105
Vanadium	1530		1500	102	2090		2000	105	2100		2000	105
Zinc	1530		1500	102	2110		2000	105	2130		2000	106

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

ICV Source: MT6500ICV_00012 Concentration Units: ug/L

CCV Source: MTICPCCV_00006

Analyte	CCV 240-99875/54 08/30/2013 17:52											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	508		500	102								
Arsenic	524		500	105								
Barium	1990		2000	99								
Beryllium	2050		2000	102								
Cadmium	512		500	102								
Chromium	2060		2000	103								
Cobalt	2080		2000	104								
Copper	2020		2000	101								
Lead	505		500	101								
Molybdenum	2080		2000	104								
Nickel	2080		2000	104								
Selenium	531		500	106								
Silver	1010		1000	101								
Thallium	1040		1000	104								
Vanadium	2090		2000	105								
Zinc	2130		2000	106								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00451

Analyte	ICV 240-99322/8-A 08/28/2013 12:00				CCV 240-99322/13-A 08/28/2013 12:06				CCV 240-99322/13-A 08/28/2013 12:32			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.05		5.00	101	10.2		10.0	102	10.0		10.0	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00451

Analyte	CCV 240-99322/13-A 08/28/2013 12:59											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	9.92		10.0	99								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-99875/20 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	21.4		107	70-130
Arsenic	15.0	15.2		101	70-130
Barium	200	201		100	70-130
Beryllium	5.00	4.88	J	98	70-130
Cadmium	5.00	5.16		103	70-130
Chromium	10.0	10.5		105	70-130
Cobalt	10.0	10.3		103	70-130
Copper	20.0	22.2	J	111	70-130
Lead	10.0	10.7		107	70-130
Molybdenum	40.0	41.6		104	70-130
Nickel	40.0	40.5		101	70-130
Selenium	20.0	18.6	J	93	70-130
Silver	10.0	10.4		104	70-130
Thallium	20.0	20.4		102	70-130
Vanadium	10.0	9.77	J	98	70-130
Zinc	50.0	51.1		102	70-130

Lab Sample ID: CRI 240-99875/68 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	21.3		107	70-130
Arsenic	15.0	16.0		107	70-130
Barium	200	201		100	70-130
Beryllium	5.00	4.91	J	98	70-130
Cadmium	5.00	5.19		104	70-130
Chromium	10.0	10.3		103	70-130
Cobalt	10.0	10.6		106	70-130
Copper	20.0	23.7	J	118	70-130
Lead	10.0	11.2		112	70-130
Molybdenum	40.0	42.6		106	70-130
Nickel	40.0	41.3		103	70-130
Selenium	20.0	22.1		110	70-130
Silver	10.0	10.7		107	70-130
Thallium	20.0	21.2		106	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-99875/68 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	10.0	10.0		100	70-130
Zinc	50.0	52.3		105	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Method: 7471B Instrument ID: H4

Lab Sample ID: CRA 240-99322/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00451

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.148	J	74	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-99875/5 08/30/2013 14:35		CCB 240-99875/31 08/30/2013 16:20		CCB 240-99875/43 08/30/2013 17:07		CCB 240-99875/55 08/30/2013 17:56	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	20	U	20	U	20	U
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	0.744	J	200	U
Beryllium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Lead	10	10	U	10	U	10	U	10	U
Molybdenum	40	1.91	J	2.34	J	2.17	J	2.36	J
Nickel	40	40	U	40	U	40	U	40	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	10	U	10	U	10	U	10	U
Zinc	50	50	U	50	U	50	U	50	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-99322/9-A 08/28/2013 12:02		CCB 240-99322/12-A 08/28/2013 12:08		CCB 240-99322/12-A 08/28/2013 12:34		CCB 240-99322/12-A 08/28/2013 13:02	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.60	0.60	U	0.60	U	0.60	U	0.60	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-99163/1-A

Instrument Code: I9 Batch No.: 99875

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6010C
7440-38-2	Arsenic	1.5	U		6010C
7440-39-3	Barium	0.145	J		6010C
7440-41-7	Beryllium	0.50	U		6010C
7440-43-9	Cadmium	0.50	U		6010C
7440-47-3	Chromium	1.0	U		6010C
7440-48-4	Cobalt	1.0	U		6010C
7440-50-8	Copper	2.5	U		6010C
7439-92-1	Lead	1.0	U		6010C
7439-98-7	Molybdenum	4.0	U		6010C
7440-02-0	Nickel	4.0	U		6010C
7782-49-2	Selenium	2.0	U		6010C
7440-22-4	Silver	1.0	U		6010C
7440-28-0	Thallium	2.0	U		6010C
7440-62-2	Vanadium	1.0	U		6010C
7440-66-6	Zinc	5.0	U		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-99166/1-A

Instrument Code: H4 Batch No.: 99396

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.10	U		7471B

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: ICSA 240-99875/8 Instrument ID: I9

Lab File ID: I9083013A.asc ICS Source: MTTRICSAW_00019

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-6.91**	
Arsenic		**0.896**	
Barium		**0.446**	
Beryllium		**-0.386**	
Cadmium		**0.812**	
Chromium		**3.25**	
Cobalt		**-0.651**	
Copper		**1.57**	
Lead		**2.88**	
Molybdenum		**-2.68**	
Nickel		**3.62**	
Selenium		**-7.15**	
Silver		**0.243**	
Thallium		**1.84**	
Vanadium		**0.0644**	
Zinc		**10.8**	
Aluminum	*500000*	*507500*	*102*
Boron		*3.61*	
Calcium	*500000*	*478130*	*96*
Iron	*200000*	*193080*	*97*
Lithium		*-29.0*	
Magnesium	*500000*	*508290*	*102*
Manganese		*3.89*	
Potassium		*98.1*	
Silicon		*-21.4*	
Sodium		*226*	
Strontium		*5.34*	
Tin		*1.91*	
Titanium		*-0.249*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Lab Sample ID: ICSAB 240-99875/9 Instrument ID: I9

Lab File ID: I9083013A.asc ICS Source: MTICPICSABW_00001

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**1000**	**1024**	**102**
Arsenic	**1000**	**1038**	**104**
Barium	**500**	**500**	**100**
Beryllium	**500**	**490**	**98**
Cadmium	**1000**	**1047**	**105**
Chromium	**500**	**498**	**100**
Cobalt	**500**	**508**	**102**
Copper	**500**	**530**	**106**
Lead	**1000**	**928**	**93**
Molybdenum	**1000**	**981**	**98**
Nickel	**1000**	**1008**	**101**
Selenium	**1000**	**1041**	**104**
Silver	**1000**	**1088**	**109**
Thallium	**1000**	**989**	**99**
Vanadium	**500**	**492**	**98**
Zinc	**1000**	**1025**	**103**
Aluminum	*500000*	*519640*	*104*
Boron	*500*	*511*	*102*
Calcium	*500000*	*485040*	*97*
Iron	*200000*	*195890*	*98*
Lithium	*500*	*495*	*99*
Magnesium	*500000*	*515180*	*103*
Manganese	*500*	*503*	*101*
Potassium	*10000*	*10720*	*107*
Silicon	*10000*	*9886*	*99*
Sodium	*10000*	*10851*	*109*
Strontium	*1500*	*1448*	*97*
Tin	*500*	*512*	*102*
Titanium	*500*	*511*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-SB-190-18-20 MS
Lab ID: 240-28322-1 MS
Lab Name: TestAmerica Canton
Job No.: 240-28322-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 61.8

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	26.9		3.1	U	77.0	35	75-125	F	6010C
Arsenic	263		10		308	82	75-125		6010C
Barium	268		25	J	308	79	75-125		6010C
Beryllium	7.30		1.3		7.70	78	75-125		6010C
Cadmium	6.58		0.37	J	7.70	81	75-125		6010C
Chromium	75.8		50		30.8	85	75-125		6010C
Cobalt	96.0		27		77.0	89	75-125		6010C
Copper	47.6		17		38.5	78	75-125		6010C
Lead	76.2		16		77.0	78	75-125		6010C
Molybdenum	121		1.3	J	154	78	75-125		6010C
Nickel	101		31		77.0	91	75-125		6010C
Selenium	255		0.79	J	308	82	75-125		6010C
Silver	6.46		1.5	U	7.70	84	75-125		6010C
Thallium	282		3.1	U	308	92	75-125		6010C
Vanadium	116		51		77.0	84	75-125		6010C
Zinc	157		85		77.0	94	75-125		6010C
Mercury	0.302		0.028	J	0.257	107	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-SB-190-18-20 PDS Lab ID: 240-28322-1 PDS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	20.5		3.1	U	23.1	89	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: DR-SB-190-18-20 DU Lab ID: 240-28322-1 DU

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

% Solids for Sample: 61.8 % Solids for Duplicate: 61.8

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	3.1	3.1	U	3.1	U	NC		6010C
Arsenic	2.3	10		9.30		7		6010C
Barium	31	25	J	23.8	J	3		6010C
Beryllium	0.77	1.3		1.36		4		6010C
Cadmium	0.77	0.37	J	0.352	J	6		6010C
Chromium	1.5	50		50.9		3		6010C
Cobalt	1.5	27		29.7		9		6010C
Copper	3.9	17		17.9		3		6010C
Lead	1.5	16		16.0		1		6010C
Molybdenum	6.2	1.3	J	0.930	J	30		6010C
Nickel	6.2	31		32.6		5		6010C
Selenium	3.1	0.79	J	3.1	U	NC		6010C
Silver	1.5	1.5	U	1.5	U	NC		6010C
Thallium	3.1	3.1	U	3.1	U	NC		6010C
Vanadium	1.5	51		55.8		8		6010C
Zinc	7.7	85		79.3		7		6010C
Mercury	0.15	0.028	J	0.0270	J	4		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-99163/2-A

Lab Name: TestAmerica Canton Job No.: 240-28322-1

Sample Matrix: Solid LCS Source: MTICP1_00023

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	49.0		98	80	120		6010C
Arsenic	200	202		101	80	120		6010C
Barium	200	192		96	80	120		6010C
Beryllium	5.00	4.80		96	80	120		6010C
Cadmium	5.00	4.93		99	80	120		6010C
Chromium	20.0	19.9		100	80	120		6010C
Cobalt	50.0	49.1		98	80	120		6010C
Copper	25.0	24.5		98	80	120		6010C
Lead	50.0	48.7		97	80	120		6010C
Molybdenum	100	100		100	80	120		6010C
Nickel	50.0	49.8		100	80	120		6010C
Selenium	200	202		101	80	120		6010C
Silver	5.00	4.92		98	80	120		6010C
Thallium	200	198		99	80	120		6010C
Vanadium	50.0	49.9		100	80	120		6010C
Zinc	50.0	50.5		101	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-99166/2-A

Lab Name: TestAmerica Canton Job No.: 240-28322-1

Sample Matrix: Solid LCS Source: MTHGCALW_00450

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.840		101	80	120		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-28322-1

SDG No:

Lab Name: TestAmerica Canton Job No: 240-28322-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	3.1	U	15	U	NC		6010C
Arsenic	10		13.8		NC		6010C
Barium	25	J	30.7	J	25	V	6010C
Beryllium	1.3		1.56	J	NC		6010C
Cadmium	0.37	J	0.384	J	NC		6010C
Chromium	50		63.4		28	V	6010C
Cobalt	27		33.1		21	V	6010C
Copper	17		23.1		NC		6010C
Lead	16		22.7		43	V	6010C
Molybdenum	1.3	J	31	U	NC		6010C
Nickel	31		37.3		21	V	6010C
Selenium	0.79	J	15	U	NC		6010C
Silver	1.5	U	7.7	U	NC		6010C
Thallium	3.1	U	15	U	NC		6010C
Vanadium	51		62.8		22	V	6010C
Zinc	85		103		22	V	6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28322-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010C MDL Date: 03/01/2011 14:59

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Antimony	206.838	2	0.39
Arsenic	189.042	1.5	0.3
Barium	493.409	20	0.071
Beryllium	313.042	0.5	0.043
Cadmium	226.502	0.5	0.036
Chromium	267.716	1	0.2
Cobalt	228.616	1	0.16
Copper	324.753	2.5	0.74
Lead	220.353	1	0.19
Molybdenum	202.030	4	0.27
Nickel	231.604	4	0.27
Selenium	196.026	2	0.45
Silver	328.068	1	0.1
Thallium	190.864	2	0.55
Vanadium	292.402	1	0.12
Zinc	213.856	5	1

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28322-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010C XMDL Date: 03/01/2011 15:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28322-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471B MDL Date: 02/16/2010 09:48

Prep Method: 7471B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury	253.7	0.1	0.015

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28322-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471B XMDL Date: 02/16/2010 09:48

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.6	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28322-1

SDG No.:

Instrument ID: I9 Date: 04/04/2013 11:44

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		10000	6010C
Arsenic		5000	6010C
Barium		25000	6010C
Beryllium		4000	6010C
Cadmium		2000	6010C
Chromium		20000	6010C
Cobalt		10000	6010C
Copper		30000	6010C
Lead		15000	6010C
Molybdenum		10000	6010C
Nickel		30000	6010C
Selenium		10000	6010C
Silver		2000	6010C
Thallium		10000	6010C
Vanadium		5000	6010C
Zinc		10000	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28322-1

SDG No.:

Instrument ID: H4 Date: 04/01/2011 10:50

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		50	7471B

FORM XI - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-99163/1-A	08/27/2013 12:07	99163	1.00		100
LCS 240-99163/2-A	08/27/2013 12:07	99163	1.00		100
240-28322-1	08/27/2013 12:07	99163	1.05		100
240-28322-1 DU	08/27/2013 12:07	99163	1.05		100
240-28322-1 MS	08/27/2013 12:07	99163	1.05		100
240-28322-2	08/27/2013 12:07	99163	1.11		100
240-28322-4	08/27/2013 12:07	99163	1.09		100
240-28322-5	08/27/2013 12:07	99163	1.20		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Prep Method: 7471B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-99166/1-A	08/27/2013 15:25	99166	0.60		100
LCS 240-99166/2-A	08/27/2013 15:25	99166	0.60		100
240-28322-1	08/27/2013 15:25	99166	0.63		100
240-28322-1 DU	08/27/2013 15:25	99166	0.63		100
240-28322-1 MS	08/27/2013 15:25	99166	0.63		100
240-28322-2	08/27/2013 15:25	99166	0.65		100
240-28322-4	08/27/2013 15:25	99166	0.57		100
240-28322-5	08/27/2013 15:25	99166	0.55		100

SAMPLE ID DR-SB-190-28-30

SAMPLE CALC **for benzene**

IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (ug/L)	Final Extract Volume (mL)	AVE RRF	CONCENTRATION PPB
1279885	1	444934	50	5	0.2273	216.50

Sample Volume (g)
2.1

Percent Solid
84.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-190-28-30 | Lab Sample ID: 240-28322-4

Matrix: Solid | Lab File ID: UX87059.D

Analysis Method: 8260B | Date Collected: 08/23/2013 11:20

Sample wt/vol: 2.10(g) | Date Analyzed: 08/29/2013 04:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 | Level: (low/med) Low

Analysis Batch No.: 99442 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	14	U	14	0.82
74-87-3	Chloromethane	14	U	14	1.2
156-59-2	cis-1,2-Dichloroethene	14		14	1.0
10061-01-5	cis-1,3-Dichloropropene	14	U	14	0.96
87-68-3	Hexachlorobutadiene	14	U	14	3.4
74-95-3	Dibromomethane	14	U	14	1.8
75-27-4	Bromodichloromethane	14	U	14	0.79
75-71-8	Dichlorodifluoromethane	14	U	14	1.4
100-41-4	Ethylbenzene	14	U	14	0.74
106-93-4	1,2-Dibromoethane	14	U	14	1.4
108-20-3	Diisopropyl ether	28	U	28	4.2
91-20-3	Naphthalene	1.3	J B	14	0.54
179601-23-1	m-Xylene & p-Xylene	28	U	28	3.4
104-51-8	n-Butylbenzene	14	U	14	0.65
98-82-8	Isopropylbenzene	14	U	14	0.45
103-65-1	n-Propylbenzene	14	U	14	1.1
78-93-3	2-Butanone	57	U	57	4.0
108-10-1	4-Methyl-2-pentanone	57	U	57	1.5
135-98-8	sec-Butylbenzene	14	U	14	0.51
1634-04-4	Methyl tert-butyl ether	14	U	14	1.2
994-05-8	Tert-amyl-methyl ether (TAME)	14	U	14	1.0
75-09-2	Methylene Chloride	16	B	14	1.9
95-47-6	o-Xylene	14	U	14	0.99
100-42-5	Styrene	14	U	14	0.42
637-92-3	Ethyl-t-butyl ether (ETBE)	14	U	14	0.62
98-06-6	tert-Butylbenzene	14	U	14	0.82
127-18-4	Tetrachloroethene	3.7	J	14	1.5
108-88-3	Toluene	2.0	J B	14	0.76
156-60-5	trans-1,2-Dichloroethene	14	U	14	1.2
10061-02-6	trans-1,3-Dichloropropene	14	U	14	1.5
79-01-6	Trichloroethene	220		14	1.2
75-69-4	Trichlorofluoromethane	14	U	14	0.96
108-05-4	Vinyl acetate	28	U	28	0.71
75-01-4	Vinyl chloride	14	U	14	1.1
75-65-0	tert-Butyl alcohol	570	U	570	22
1330-20-7	Xylenes, Total	28	U	28	0.99

Report Date: 31-Aug-2013 02:05:28 Chrom Revision: 2.0 01-Apr-2013 21:16:10

Sample Calculation

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20130829-22980.b\UX87059.D
Lims ID: 240-28322-G-4-A Client ID: DR-SB-190-28-30
Inject. Date: 29-Aug-2013 04:44:30 Dil. Factor: 1.0000
Sample Type: Client
Sample ID: 240-0022980-008
Misc. Info.: M30829A,8260SUX8,,402279 =M30829A,8260SUX8,,402279
Operator: 402279 Instrument ID: A3UX8
Purge Vol: 5.000 mL ALS Bottle#: 7
Lims Batch ID: 99442 Lims Sample ID: 8
Detector: MS SCAN

Method: \\Ncchrom\ChromData\A3UX8\20130829-22980.b\8260_8.m
Last Update: 31-Aug-2013 02:05:25 Calib Date: 18-Apr-2013 04:42:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20130417-18986.b\UX84687.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK015

First Level Reviewer: latat Date: 29-Aug-2013 06:01:05

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.158	5.157	0.001	99	1279885	50.0	
* 2 Chlorobenzene-d5	117	7.679	7.677	0.002	89	786544	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.878	0.002	98	370075	50.0	
$ 5 Dibromofluoromethane (Surr)	113	4.626	4.624	0.002	58	203759	43.8	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.886	4.885	0.001	85	249651	38.3	
$ 7 Toluene-d8 (Surr)	98	6.424	6.423	0.001	93	872028	52.7	
$ 131 4-Bromofluorobenzene (Surr)	95	8.755	8.754	0.001	87	275691	43.1	
12 Dichlorodifluoromethane	85		1.583					
13 Chloromethane	50		1.749					
14 Vinyl chloride	62		1.867					9
15 Bromomethane	94		2.187					
16 Chloroethane	64		2.282					
18 Trichlorofluoromethane	101		2.506					
21 1,1-Dichloroethene	96		2.932					
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.944					
22 Acetone	43	2.957	2.956	0.001	86	18035	8.56	
26 Carbon disulfide	76		3.110					9
30 Methylene Chloride	84	3.301	3.299	0.002	90	67967	5.73	
31 2-Methyl-2-propanol	59		3.382					
34 Methyl tert-butyl ether	73		3.524					
33 trans-1,2-Dichloroethene	96		3.524					
36 1,1-Dichloroethane	63		3.832					
37 Vinyl acetate	86		3.855					
38 Isopropyl ether	87		3.879					
40 Tert-butyl ethyl ether	59		4.151					
41 2-Butanone (MEK)	43		4.269					9
42 cis-1,2-Dichloroethene	96	4.271	4.269	0.002	64	32891	4.97	
43 2,2-Dichloropropane	77		4.281					
47 Chlorobromomethane	128		4.459					
49 Chloroform	83		4.506					9

Sample Calculation

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
50 1,1,1-Trichloroethane	97		4.672					
52 1,1-Dichloropropene	75		4.790					
53 Carbon tetrachloride	117		4.802					
55 Benzene	78		4.944					9
56 1,2-Dichloroethane	62	4.945	4.944	0.001	9	3289	0.3599	
57 Tert-amyl methyl ether	73		5.015					
60 Trichloroethene	130	5.442	5.441	0.001	99	444934	76.5	
62 1,2-Dichloropropane	63		5.618					
65 Dibromomethane	93		5.713					
67 Dichlorobromomethane	83		5.820					
69 2-Chloroethyl vinyl ether	63		6.044					
70 cis-1,3-Dichloropropene	75		6.186					
71 4-Methyl-2-pentanone (MIBK)	43		6.305					9
72 Toluene	91	6.484	6.482	0.002	57	17553	0.7241	
73 trans-1,3-Dichloropropene	75		6.648					
76 1,3-Dichloropropane	76		6.955					
77 Tetrachloroethene	164	6.957	6.955	0.002	63	5094	1.31	
78 2-Hexanone	43		7.003					
79 Chlorodibromomethane	129		7.157					
123 Ethylene Dibromide	107		7.275					
82 Chlorobenzene	112		7.713					9
83 1,1,1,2-Tetrachloroethane	131		7.772					
84 Ethylbenzene	106		7.796					
10 m-Xylene & p-Xylene	106		7.902					9
85 o-Xylene	106		8.269					9
86 Styrene	104		8.281					
87 Bromoform	173		8.458					
88 Isopropylbenzene	105		8.612					9
90 1,1,2,2-Tetrachloroethane	83		8.872					
91 Bromobenzene	156		8.908					
92 1,2,3-Trichloropropane	110		8.932					
94 N-Propylbenzene	120		9.003					9
95 2-Chlorotoluene	126		9.097					
104 4-Chlorotoluene	126		9.192					
97 tert-Butylbenzene	119		9.488					
98 1,2,4-Trimethylbenzene	105	9.536	9.535	0.001	1	7777	0.4063	
99 sec-Butylbenzene	105		9.701					9
100 1,3-Dichlorobenzene	146		9.819					9
101 4-Isopropyltoluene	119		9.843					9
102 1,4-Dichlorobenzene	146		9.902					9
103 1,2,3-Trimethylbenzene	105		9.949					9
105 n-Butylbenzene	91		10.245					9
106 1,2-Dichlorobenzene	146	10.270	10.269	0.001	18	6147	0.5925	
107 1,2-Dibromo-3-Chloropropane	157		11.026					
109 1,2,4-Trichlorobenzene	180	11.856	11.854	0.002	93	460176	76.9	
110 Hexachlorobutadiene	225		12.032					
111 Naphthalene	128	12.104	12.103	0.001	1	7466	0.4728	
112 1,2,3-Trichlorobenzene	180	12.353	12.363	-0.010	87	57231	9.94	
S 114 Xylenes, Total	106		16.530					

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Sample Calculation

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 82425

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/18/2013 00:06 Calibration End Date: 04/18/2013 02:35 Calibration ID: 14624

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Trichloroethene	0.2227 0.2297	0.2204 0.2320	0.2233 0.2317	0.2285	0.2298	Ave		0.2273				2.0		15.0			
Methylcyclohexane	0.3658 0.4295	0.2695 0.4145	0.4036 0.4206	0.4397	0.4308	Ave		0.3967				14.0		15.0			
1,2-Dichloropropane	0.2021 0.2286	0.2208 0.2323	0.2239 0.2256	0.2321	0.2322	Ave		0.2247				4.5		15.0			
1,4-Dioxane	+++++ 0.0025	0.0027 0.0023	0.0031 0.0023	0.0034	0.0027	Ave		0.0027				15.0		15.0			
Dibromomethane	0.1155 0.1435	0.1379 0.1439	0.1333 0.1434	0.1444	0.1395	Ave		0.1377				7.1		15.0			
Bromodichloromethane	0.2087 0.2861	0.2186 0.3059	0.2397 0.3132	0.2651	0.2640	Ave		0.2627				15.0		15.0			
2-Chloroethyl vinyl ether	0.1246 0.1425	0.1235 0.1479	0.1350 0.1481	0.1195	0.1314	Ave		0.1341				8.4		15.0			
cis-1,3-Dichloropropene	+++++ 0.3457	0.2445 0.3584	0.2672 0.3701	0.2902	0.3077	Ave		0.3120				15.0		15.0			
4-Methyl-2-pentanone	0.1793 0.2377	0.2098 0.2395	0.2294 0.2256	0.2015	0.2221	Ave		0.2181				9.3		15.0			
Toluene	1.8671 1.4284	1.6572 1.4300	1.5541 1.4591	1.4975	1.4350	Ave		1.5411				10.0		15.0			
trans-1,3-Dichloropropene	0.2771 0.4424	0.2782 0.4779	0.3313 0.5125	0.3716	0.3865	Lin1	-0.445	0.4894							0.9950		0.9900
Ethyl methacrylate	+++++ 0.4727	+++++ 0.4751	0.3749 0.4907	0.4227	0.4007	Ave		0.4395				11.0		15.0			
1,1,2-Trichloroethane	0.2664 0.2924	0.2996 0.2925	0.3025 0.2944	0.3009	0.2828	Ave		0.2914				4.1		15.0			
1,3-Dichloropropane	0.4978 0.5180	0.5217 0.5194	0.5302 0.5271	0.5272	0.4906	Ave		0.5165				2.8		15.0			
Tetrachloroethene	0.2311 0.2501	0.2346 0.2488	0.2567 0.2515	0.2467	0.2525	Ave		0.2465				3.6		15.0			
2-Hexanone	0.1610 0.2360	0.2057 0.2365	0.2423 0.2306	0.1959	0.2179	Ave		0.2157				13.0		15.0			
Dibromochloromethane	+++++ 0.2968	+++++ 0.3186	0.2317 0.3349	0.2594	0.2615	Ave		0.2838				14.0		15.0			
1,2-Dibromoethane	0.2373 0.2931	0.2771 0.2934	0.2738 0.2973	0.2846	0.2756	Ave		0.2790				6.8		15.0			
Chlorobenzene	0.9140 0.8933	0.9549 0.9055	0.9245 0.9053	0.9472	0.9081	Ave		0.9191			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2048 0.2957	0.2380 0.3085	0.2560 0.3136	0.2982	0.2861	Ave		0.2751				14.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

SAMPLE ID DR-SB-191-22-24

SAMPLE CALC for pyrene

IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (NG)	Final Extract Volume (mL)	AVE RRF	CONCENTRATION PPB
1161981	10	4173662	4	2	1.0751	10221.30

Sample Volume (g)
30.3

Percent Solids
86.3

Sample Calculation

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 Lab Sample ID: 240-28322-5

Matrix: Solid Lab File ID: 30911027.D

Analysis Method: 8270D Date Collected: 08/23/2013 14:10

Extract. Method: 3540C Date Extracted: 09/05/2013 10:25

Sample wt/vol: 30.30(g) Date Analyzed: 09/11/2013 19:54

Con. Extract Vol.: 2.0(mL) Dilution Factor: 10

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 13.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100975 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1100	U	1100	250
111-44-4	Bis(2-chloroethyl)ether	1100	U	1100	23
117-81-7	Bis(2-ethylhexyl) phthalate	310	J	800	220
85-68-7	Butyl benzyl phthalate	800	U	800	110
105-60-2	Caprolactam	3800	U	3800	420
86-74-8	Carbazole	990		570	310
218-01-9	Chrysene	7600		77	13
84-74-2	Di-n-butyl phthalate	800	U	800	170
117-84-0	Di-n-octyl phthalate	800	U	800	91
53-70-3	Dibenzo(a,h)anthracene	1200		77	7.6
132-64-9	Dibenzofuran	620		570	7.6
84-66-2	Diethyl phthalate	800	U	800	180
131-11-3	Dimethyl phthalate	800	U	800	190
206-44-0	Fluoranthene	13000		77	6.3
86-73-7	Fluorene	990		77	6.1
118-74-1	Hexachlorobenzene	77	U	77	24
87-68-3	Hexachlorobutadiene	570	U	570	64
77-47-4	Hexachlorocyclopentadiene	3800	U	3800	93
67-72-1	Hexachloroethane	570	U	570	100
193-39-5	Indeno[1,2,3-cd]pyrene	3600		77	4.0
78-59-1	Isophorone	570	U	570	150
621-64-7	N-Nitrosodi-n-propylamine	570	U	570	72
62-75-9	N-Nitrosodimethylamine	1100	U	1100	180
86-30-6	N-Nitrosodiphenylamine	570	U	570	240
91-20-3	Naphthalene	680		77	9.4
98-95-3	Nitrobenzene	1100	U	1100	25
87-86-5	Pentachlorophenol	1700	U	1700	100
85-01-8	Phenanthrene	6900		77	8.4
108-95-2	Phenol	570	U	570	84
129-00-0	Pyrene	10000		77	5.0
108-60-1	2,2'-oxybis[1-chloropropane]	1100	U	1100	110
606-20-2	2,6-Dinitrotoluene	2300	U	2300	240
100-02-7	4-Nitrophenol	3800	U	3800	190

Report Date: 12-Sep-2013 08:57:51 Chrom Revision: 2.1 01-Aug-2013 12:45:24

Sample Calculation

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP7\20130911-23368.b\30911027.D
Lims ID: 240-28322-H-5-D Client ID: DR-SB-191-22-28
Inject. Date: 11-Sep-2013 19:54:30 Dil. Factor: 10.0000
Sample Type: Client
Sample ID: 240-0023368-027
Misc. Info.: 240-28322-H-5-D
Operator: 001710 Instrument ID: A4HP7
Injection Vol: 1.0 ul ALS Bottle#: 27
Lims Batch ID: 100975 Lims Sample ID: 27
Detector: MS SCAN

Method: \\Ncchrom\ChromData\A4HP7\20130911-23368.b\8270_hp7.m
Last Update: 12-Sep-2013 08:57:25 Calib Date: 06-Sep-2013 02:38:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP7\20130905-23193.b\30905028.D
Limit Group: MSS 8270D ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: 5% phenyl Column Dia: 0.18 mm
Process Host: XAWRK048

First Level Reviewer: gruberj Date: 12-Sep-2013 08:53:00

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.184	6.184	0.0	94	214635	4.00	
* 2 Naphthalene-d8	136	7.312	7.318	-0.006	100	857809	4.00	
* 3 Acenaphthene-d10	164	8.821	8.826	-0.005	93	533348	4.00	
* 4 Phenanthrene-d10	188	10.083	10.083	0.0	98	941309	4.00	
* 5 Chrysene-d12	240	12.768	12.768	0.0	97	1161981	4.00	
* 6 Perylene-d12	264	14.956	14.945	0.011	98	1104776	4.00	
$ 7 2-Fluorophenol	112	4.927	4.921	0.006	69	46292	0.6597	
$ 8 Phenol-d5	99	5.820	5.815	0.005	92	55706	0.5886	
$ 9 Nitrobenzene-d5	82	6.670	6.671	0.0	87	52623	0.5663	
$ 10 2-Fluorobiphenyl (Surr)	172	8.227	8.227	0.0	98	93005	0.5600	
$ 11 2,4,6-Tribromophenol	330	9.484	9.489	-0.005	60	11054	0.5650	
$ 12 Terphenyl-d14	244	11.474	11.479	-0.005	76	132583	0.6960	
24 1,4-Dioxane	88		2.659					
25 N-Nitrosodimethylamine	74		3.189					
40 Benzaldehyde	77		5.783					
41 Phenol	94		5.825					
44 Bis(2-chloroethyl)ether	93		5.927					
46 2-Chlorophenol	128		5.991					
51 2-Methylphenol	108		6.382					
52 2,2'-oxybis[1-chloropropane]	45		6.414					
191 3 & 4 Methylphenol	108	6.515	6.515	0.0	87	17836	0.2469	
56 N-Nitrosodi-n-propylamine	70		6.526					
57 Acetophenone	105		6.537					
60 Hexachloroethane	117		6.649					
61 Nitrobenzene	77		6.692					
63 Isophorone	82		6.895					
65 2-Nitrophenol	139		6.970					
64 2,4-Dimethylphenol	107		6.986					
68 Bis(2-chloroethoxy)methane	93		7.066					
71 2,4-Dichlorophenol	162		7.179					

Sample Calculation

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
73 Naphthalene	128	7.334	7.334	0.0	97	187411	0.8891	
74 4-Chloroaniline	127		7.360					
77 Hexachlorobutadiene	225		7.435					
83 Caprolactam	113		7.655					
84 4-Chloro-3-methylphenol	107		7.756					
85 2-Methylnaphthalene	142	7.927	7.927	0.0	87	76131	0.5370	
88 Hexachlorocyclopentadiene	237		8.066					
90 2,4,6-Trichlorophenol	196		8.157					
91 2,4,5-Trichlorophenol	196		8.190					
95 1,1'-Biphenyl	154	8.318	8.318	0.0	93	28160	0.1514	
98 2-Chloronaphthalene	162		8.350					
100 2-Nitroaniline	65		8.414					
103 Dimethyl phthalate	163		8.553					
105 2,6-Dinitrotoluene	165		8.612					
107 Acenaphthylene	152	8.703	8.708	-0.005	94	23566	0.1056	
108 3-Nitroaniline	138		8.756					
109 2,4-Dinitrophenol	184		8.847					
110 Acenaphthene	153	8.847	8.853	-0.006	94	181709	1.22	
111 4-Nitrophenol	109		8.874					
112 2,4-Dinitrotoluene	165		8.954					
114 Dibenzofuran	168	8.992	8.997	-0.005	89	160994	0.8049	
119 Diethyl phthalate	149		9.147					
121 4-Chlorophenyl phenyl ether	204		9.270					
123 4-Nitroaniline	138		9.275					
124 Fluorene	166	9.281	9.286	-0.005	89	215591	1.30	
126 4,6-Dinitro-2-methylphenol	198		9.302					
130 N-Nitrosodiphenylamine	169		9.361					
137 4-Bromophenyl phenyl ether	248		9.687					
139 Hexachlorobenzene	284		9.762					
140 Atrazine	200		9.789					
141 Pentachlorophenol	266		9.912					
146 Phenanthrene	178	10.104	10.104	0.0	97	2212525	9.04	
147 Anthracene	178	10.147	10.147	0.0	97	555046	2.23	
149 Carbazole	167	10.265	10.265	0.0	80	280694	1.29	
151 Di-n-butyl phthalate	149		10.516					
157 Fluoranthene	202	11.137	11.137	0.0	97	4814371	17.5	
160 Pyrene	202	11.367	11.361	0.006	98	4173662	13.4	
166 Butyl benzyl phthalate	149		11.982					
173 3,3'-Dichlorobenzidine	252		12.682					
171 Bis(2-ethylhexyl) phthalate	149	12.704	12.704	0.0	66	71715	0.4032	
175 Benzo[a]anthracene	228	12.757	12.752	0.005	97	2746221	9.04	
176 Chrysene	228	12.805	12.800	0.005	93	2838925	9.96	
178 Di-n-octyl phthalate	149		13.661					
180 Benzo[b]fluoranthene	252	14.351	14.340	0.011	94	3535775	12.2	
181 Benzo[k]fluoranthene	252	14.389	14.383	0.006	99	1329406	4.22	
182 Benzo[a]pyrene	252	14.870	14.859	0.011	76	2368000	8.39	
186 Indeno[1,2,3-cd]pyrene	276	16.742	16.721	0.021	99	1473339	4.65	
187 Dibenz(a,h)anthracene	278	16.763	16.747	0.016	32	433935	1.61	
188 Benzo[g,h,i]perylene	276	17.250	17.234	0.016	97	1329960	4.98	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Sample Calculation

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chlorophenyl phenyl ether	0.6105	0.6016 0.6296	0.5734 0.6909	0.6178 0.6824	0.5840	Ave		0.6238			0.4000	6.9		20.0			
4-Nitroaniline	0.2911	0.2132 0.2955	0.2554 0.3217	0.2835 0.3259	0.2626	Ave		0.2811			0.0100	13.0		20.0			
Fluorene	1.2141 1.2233	1.1793 1.2772	1.2016 1.3806	1.2013 1.3824	1.1674	Ave		1.2474			0.9000	6.6		20.0			
4,6-Dinitro-2-methylphenol	0.1402	0.0662 0.1493	0.0782 0.1654	0.1010 0.1605	0.1128	Lin1	-0.148	0.1584			0.0100				0.9930		0.9900
N-Nitrosodiphenylamine	0.5363	0.5026 0.5484	0.4891 0.5752	0.4987 0.5276	0.4985	Ave		0.5221			0.0100	5.8		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.8514	0.7969 0.8578	0.7876 0.9249	0.7928 0.8827	0.8013	Ave		0.8368				6.0		20.0			
Azobenzene	0.8514	0.7969 0.8578	0.7876 0.9249	0.7917 0.8827	0.8013	Ave		0.8368				6.0		20.0			
4-Bromophenyl phenyl ether	0.2003	0.1797 0.2021	0.1819 0.2210	0.1836 0.2179	0.1866	Ave		0.1966			0.1000	8.3		20.0			
Hexachlorobenzene	0.2053 0.1964	0.1782 0.1992	0.1899 0.2216	0.1861 0.2207	0.1826	Ave		0.1978			0.1000	7.9		20.0			
Atrazine	0.1815	0.1889 0.1760	0.1887 0.1867	0.1750 0.1777	0.1813	Ave		0.1820			0.0100	3.1		20.0			
Pentachlorophenol	0.1429	0.1096 0.1472	0.1117 0.1632	0.1168 0.1585	0.1300	Ave		0.1350			0.0500	16.0		20.0			
Phenanthrene	1.1771 1.0427	0.9608 1.0515	0.9787 1.1474	0.9858 1.0282	0.9888	Ave		1.0401			0.7000	7.3		20.0			
Anthracene	1.1796 1.0505	0.9709 1.0960	0.9808 1.1568	0.9829 1.0915	0.9977	Ave		1.0563			0.7000	7.5		20.0			
Carbazole	0.9137	0.8860 0.9376	0.9023 1.0350	0.8930 0.9563	0.8462	Ave		0.9213			0.0100	6.2		20.0			
Di-n-butyl phthalate	1.1504	0.9854 1.1933	0.9905 1.2364	0.9710 1.1351	1.0389	Ave		1.0876			0.0100	9.5		20.0			
Fluoranthene	1.2708 1.1643	1.0474 1.2243	1.0853 1.3485	1.0597 1.2446	1.0753	Ave		1.1689			0.6000	9.3		20.0			
Benzidine	0.1944	0.1790 +++++	0.1860 +++++	0.2178 +++++	0.1785	Ave		0.1911				8.5		20.0			
Pyrene	1.1930 1.0520	1.0028 1.0643	1.0547 1.1753	1.0140 1.1037	1.0157	Ave		1.0751			0.6000	6.4		20.0			
Butyl benzyl phthalate	0.4499	0.3765 0.4499	0.4022 0.4944	0.4262 0.4882	0.4320	Ave		0.4399			0.0100	9.1		20.0			
3,3'-Dichlorobenzidine	0.3517	0.2636 0.3624	0.2985 0.3971	0.3161 0.3997	0.3223	Ave		0.3389			0.0100	14.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Sample Calculation

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 Lab Sample ID: 240-28322-5

Matrix: Solid Lab File ID: P1300007.D

Analysis Method: 8082A Date Collected: 08/23/2013 14:10

Extraction Method: 3540C Date Extracted: 09/05/2013 11:13

Sample wt/vol: 29.52(g) Date Analyzed: 09/09/2013 20:53

Con. Extract Vol.: 10(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 13.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100696 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	190	U	190	120
11104-28-2	Aroclor-1221	190	U	190	94
11141-16-5	Aroclor-1232	190	U	190	82
53469-21-9	Aroclor-1242	190	U	190	77
12672-29-6	Aroclor-1248	190	U	190	100
11097-69-1	Aroclor-1254	710		190	100
11096-82-5	Aroclor-1260	190	U	190	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	110		29-151
2051-24-3	Decachlorobiphenyl	74		14-163

Sample Calculation

Det	RT	EXP RT	DLT RT	Response	On-Col Amt ng/ul	Flags
4 PCB-1232						
1		1.476				
1		1.775				
1		2.193				
1		2.320				
1		2.725				
2		2.211				
2		2.643				
2		3.133				
2		3.282				
2		3.941				
6 PCB-1016						
1		1.478				
1		1.777				
1		2.197				
1		2.323				
1		2.728				
2		2.213				
2		2.647				
2		3.137				
2		3.286				
2		3.810				
7 PCB-1248						
1		1.774				
1		2.190				
1		2.723				
1		3.338				
1		3.799				
2		2.642				
2		3.131				
2		3.941				
2		4.282				
2		5.010				
8 PCB-1254						
1	3.399	3.392	0.007	23065809	0.3410	
1	3.807	3.799	0.008	24745981	0.3377	
1	4.110	4.103	0.007	20110036	0.3706	
1	4.316	4.306	0.010	18725041	0.3792	
1	4.613	4.604	0.009	25653040	0.3855	
		Average of Peak Amounts =			0.3628	
2	4.284	4.276	0.008	22543711	0.4126	
2	4.511	4.503	0.008	19141413	0.3247	
2	5.016	5.010	0.006	30586792	0.3352	
2	5.664	5.657	0.007	24575891	0.3585	
2	5.881	5.874	0.007	32550413	0.3890	
		Average of Peak Amounts =			0.3640	
					RPD = 0.33	

$\frac{22543711}{54639866} = 0.41259$

$\frac{19141413}{58944966.1} = 0.32473$

$\frac{30586792}{91240218.3} = 0.33523$

$\frac{24575891}{68554604.3} = 0.35849$

$\frac{32550413}{83686035.3} = 0.38896$

$= \frac{0.41259 + 0.32473 + 0.33523 + 0.35849 + 0.38896}{5}$

$= 0.364 * 5 * \frac{10mL}{29.52g} * \frac{1}{0.863} * 1000 = 7$

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Sample Calculation

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 100485

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2013 20:57 Calibration End Date: 09/06/2013 22:11 Calibration ID: 17295

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100485/21	P1300021.D
Level 2	STD01 240-100485/22	P1300022.D
Level 3	STD02 240-100485/23	P1300023.D
Level 4	STD05 240-100485/24	P1300024.D
Level 5	STD1 240-100485/25	P1300025.D
Level 6	STD2 240-100485/26	P1300026.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	17716280 12724296	16290910 12562186	15352625	14045068	Ave		14781894.2				14.0		20.0			
PCB-1221 Peak 2	12041260 8227255	10856060 7932037	10210345	9286302	Ave		9758876.42				16.0		20.0			
PCB-1221 Peak 3	43125980 30515983	38569910 30226979	36228035	33513472	Ave		35363393.3				14.0		20.0			
PCB-1254 Peak 1	63689320 49277418	57705420 50087692	55654000	51425346	Ave		54639866.0				10.0		20.0			
PCB-1254 Peak 2	69216360 53162537	60868990 55025511	59161875	56234524	Ave		58944966.1				9.8		20.0			
PCB-1254 Peak 3	99603380 83612668	92609840 86836177	93707795	91071450	Ave		91240218.3				6.1		20.0			
PCB-1254 Peak 4	76491040 62179958	68304640 65148565	70473995	68729428	Ave		68554604.3				7.1		20.0			
PCB-1254 Peak 5	90592460 76891018	81400440 80334820	87111020	85786454	Ave		83686035.3				6.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

Sample Calculation

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Client Sample ID: DR-SB-191-22-24 Lab Sample ID: 240-28322-5

Matrix: Solid Lab File ID: P6F90335.D

Analysis Method: 8015C Date Collected: 08/23/2013 14:10

Extraction Method: 3550C Date Extracted: 09/03/2013 07:22

Sample wt/vol: 30.48(g) Date Analyzed: 09/04/2013 09:46

Con. Extract Vol.: 5(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 13.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 99953 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	430		95	53

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	44		10-110

TestAmerica Canton
Target Compound Quantitation Report

Sample Calculation

Data File: \\Ncchrom\ChromData\A2HP6F\20130903-23106.b\P6F90335.D
Lims ID: 240-28322-H-5-C
Client ID: DR-SB-191-22-28
Inject. Date: 04-Sep-2013 09:46:01
Dil. Factor: 5.0000
Sample Type: Client
Sample ID: 240-0023106-035
Misc. Info.:
Operator: 400725
Instrument ID: A2HP6F
Injection Vol: 1.0 ul
ALS Bottle#: 35
Lims Batch ID: 99953
Lims Sample ID: 35
Detector: GC FID1A

Method: \\Ncchrom\ChromData\A2HP6F\20130903-23106.b\TPH6F.m
Last Update: 04-Sep-2013 10:15:28
Calib Date: 21-Jun-2013 20:48:04
Quant Method: External Standard
Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP6F\20130621-20976.b\P6F62110.D
Limit Group: GC 8015C TPH ICAL
Integrator: Falcon
Column Type:
Column Dia:
Process Host: XAWRK004

RT	EXP RT	DLT RT	Response	On-Col Amt ng/ul	Flags
$ 8 n-Nonane					
4.111	4.109	0.002	1874442	8.89	
A 15 Diesel					
9.326	5.127 - 13.526		75864057	359.2	
A 17 C10-C32					
9.905	5.127 - 14.683		95872808	453.9	

$$\frac{95872808}{211213.003} * 5 * \frac{5\,mL}{30.48\,g} * \frac{1}{0.863} = 431.4\ mg/kg$$

Sample Calculation

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28322-1 Analy Batch No.: 90904

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/21/2013 18:42 Calibration End Date: 06/21/2013 20:48 Calibration ID: 15948

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-90904/6	P6F62106.D
Level 2	STD2 240-90904/7	P6F62107.D
Level 3	STD3 240-90904/8	P6F62108.D
Level 4	STD4 240-90904/9	P6F62109.D
Level 5	STD5 240-90904/10	P6F62110.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	229736 199026	208006	214580	204717	Ave		211213.003				5.6		20.0			
n-Nonane	197074 216592	204389	220666	215642	Ave		210872.522				4.6		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Sample Calculation

Client Sample ID: DR-SB-190-18-20 Lab Sample ID: 240-28322-1

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG ID.:

Matrix: Solid Date Sampled: 08/23/2013 11:10

Reporting Basis: DRY Date Received: 08/26/2013 10:00

% Solids: 61.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	3.1	3.1	0.60	mg/Kg	U		1	6010C
7440-38-2	Arsenic	10	2.3	0.46	mg/Kg			1	6010C
7440-39-3	Barium	25	31	0.11	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	1.3	0.77	0.066	mg/Kg			1	6010C
7440-43-9	Cadmium	0.37	0.77	0.055	mg/Kg	J		1	6010C
7440-47-3	Chromium	50	1.5	0.31	mg/Kg			1	6010C
7440-48-4	Cobalt	27	1.5	0.25	mg/Kg			1	6010C
7440-50-8	Copper	17	3.9	1.1	mg/Kg			1	6010C
7439-92-1	Lead	16	1.5	0.29	mg/Kg			1	6010C
7439-98-7	Molybdenum	1.3	6.2	0.42	mg/Kg	J		1	6010C
7440-02-0	Nickel	31	6.2	0.42	mg/Kg			1	6010C
7782-49-2	Selenium	0.79	3.1	0.69	mg/Kg	J		1	6010C
7440-22-4	Silver	1.5	1.5	0.15	mg/Kg	U		1	6010C
7440-28-0	Thallium	3.1	3.1	0.85	mg/Kg	U		1	6010C
7440-62-2	Vanadium	51	1.5	0.18	mg/Kg			1	6010C
7440-66-6	Zinc	85	7.7	1.5	mg/Kg			1	6010C
7439-97-6	Mercury	0.028	0.15	0.023	mg/Kg	J		1	7471B

Sample Calculation

Sample Name: 240-28322-h-1-a Acquired: 8/30/2013 16:52:03 Type: Unk
Method: Standard Method + IEC Checks(v232) Mode: CONC Corr. Factor: 1.000000
User: Roger Method: 6010B/6010C Method: 200.7 :
Comment:

Elem	Se1960	Sn1899	Ti3372	Tl1908	V_2908	Zn2062	Si2516
IS Ref	(Y_2243)	(In2306)	(Y_3600)	(In2306)	(Y_3710)	(In2306)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.1412	24.549	1041.4	.18858	333.12	549.53	2573.8
Stddev	1.6163	.455	2.7	1.6683	.97	1.17	16.1
%RSD	31.438	1.8538	.25769	884.63	.29077	.21327	.62513
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sr3464
IS Ref	(Y_3710)
Units	ppb
Avg	49.346
Stddev	1.807
%RSD	3.6611
Check ?	Chk Pass
High Limit	
Low Limit	

$$333.12 * \frac{100\,mL}{1.05\,g} * \frac{1}{0.618} * \frac{L}{1000} = 51.3$$

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5164.7	6868.8	90160.	11742.
Stddev	7.5	6.9	297.	34.
%RSD	.14494	.10096	.32967	.29051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.955%	109.60%	108.59%	108.09%
Range				

Sample Calculation

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28322-1

SDG No.:

Batch Number: 99163 Batch Start Date: 08/27/13 12:07 Batch Analyst: Elshaw, Dale

Batch Method: 3050B Batch End Date: 08/27/13 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MT1TO1HN03 00549	MTAGSPIKEW 00032	MTH202 00021
MB 240-99163/1		3050B, 6010C		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL		10 mL
LCS 240-99163/2		3050B, 6010C		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	2 mL	10 mL
240-28322-H-1	DR-SB-190-18-20	3050B, 6010C	T	CALC NOT SET TO RUN	1.05 g	100 mL	10 mL		10 mL
240-28322-H-1 DU	DR-SB-190-18-20	3050B, 6010C	T	CALC NOT SET TO RUN	1.05 g	100 mL	10 mL		10 mL
240-28322-H-1 MS	DR-SB-190-18-20	3050B, 6010C	T	CALC NOT SET TO RUN	1.05 g	100 mL	10 mL	2 mL	10 mL
240-28322-H-2	DR-SB-191-8-10	3050B, 6010C	T	CALC NOT SET TO RUN	1.11 g	100 mL	10 mL		10 mL
240-28322-H-4	DR-SB-190-28-30	3050B, 6010C	T	CALC NOT SET TO RUN	1.09 g	100 mL	10 mL		10 mL
240-28322-H-5	DR-SB-191-22-24	3050B, 6010C	T	CALC NOT SET TO RUN	1.20 g	100 mL	10 mL		10 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICP1 00023	MTICP2A 00029	MTTMHCL 00011	MTTMHNO3 00014		
MB 240-99163/1		3050B, 6010C				10 mL	5 mL		
LCS 240-99163/2		3050B, 6010C		2 mL	2 mL	10 mL	5 mL		
240-28322-H-1	DR-SB-190-18-20	3050B, 6010C	T			10 mL	5 mL		
240-28322-H-1 DU	DR-SB-190-18-20	3050B, 6010C	T			10 mL	5 mL		
240-28322-H-1 MS	DR-SB-190-18-20	3050B, 6010C	T	2 mL	2 mL	10 mL	5 mL		
240-28322-H-2	DR-SB-191-8-10	3050B, 6010C	T			10 mL	5 mL		
240-28322-H-4	DR-SB-190-28-30	3050B, 6010C	T			10 mL	5 mL		
240-28322-H-5	DR-SB-191-22-24	3050B, 6010C	T			10 mL	5 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **October 29, 2013**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- SELECT METALS, CEC, NITRATE-N, pH, PHOSPHATE, TIC, TOTAL KJELDAHL NITROGEN, AND TOC**
LOCKHEED-MATRIN STATE AIRPORT
DUMP ROAD SOURCE AREAS
SDG 240-28627-1

SAMPLES: 6/Soil/

DR-SB-194-13-15	DR-SB-194-26-28
DR-SB-195-04-06	DR-SB-195-14-16
DR-SB-196-02-04	DR-SB-196-26-28

Overview

The sample set for Lockheed MSA, SDG 240-28627-1, consists of six (6) soil environmental samples.

All samples were analyzed for select metals. Sample DR-SB-196-02-04 was also analyzed for cation exchange capacity (CEC), nitrate-N, pH, phosphate, total inorganic carbon (TIC), total kjeldahl nitrogen, and total organic carbon (TOC). The samples were collected by Tetra Tech September 3rd, 2013 and analyzed by TestAmerica. Metals analyses were conducted using method 6010C. Mercury analyses were conducted using method 7471B. CEC analyses were conducted using method 9081. Nitrate-N analyses were conducted using EPA method 300.0. pH analyses were conducted using method 9045C. Phosphate analyses were conducted using EPA method 365.1. TIC analyses were conducted using method 9060A. Total nitrogen analyses were conducted using standard method 4500. TOC analyses were conducted using method 9060A.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, initial and continuing calibration verification results, laboratory method / preparation blank results, laboratory control sample recoveries, matrix spike recoveries, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems-

- None.

Minor Problems-

- The following contaminants were detected in preparation and calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Barium (1)	0.12 mg/kg	0.60 mg/kg
Barium (2)	0.12 mg/kg	0.60 mg/kg
Zinc (2)	2.14 mg/kg	10.7 mg/kg

Antimony [3]	1.91 ug/L	0.95 mg/kg
Molybdenum [3]	8.02 ug/L	4.0 mg/kg
Kjeldahl nitrogen [4]	55.6 mg/kg	278 mg/kg

[1] Maximum concentration found in preparation blank affecting samples in preparation batch 240-100393.
[2] Maximum concentration found in preparation blank affecting samples in preparation batch 240-100670.
[3] Maximum concentration found in a calibration blank affecting all soil samples.
[4] Maximum concentration found in a calibration blank affecting sample DR-SB-196-02-04.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Detected antimony, molybdenum, and zinc results less than the blank action level were qualified (B) for blank contamination.

- The matrix spike for preparation batch 100393 had a percent recovery <75% for antimony and percent recoveries > 125% for chromium and vanadium. Samples DR-SB-196-02-04 and DR-SB-196-26-28 were affected. Detected chromium and vanadium results were qualified as biased high (K). No validation action was warranted for antimony as sample results were qualified for blank contamination.

- The laboratory duplicate for preparation batch 100393 had a relative percent difference > 30% for cobalt, lead, and zinc. Samples DR-SB-196-02-04 and DR-SB-196-26-28 were affected. Detected results were qualified as estimated (J) and non-detected result was qualified as estimated (UJ).

- The matrix spike for preparation batch 100670 had a percent recovery <75% for antimony. Samples DR-SB-194-13-15, DR-SB-194-26-28, DR-SB-195-04-06, and DR-SB-195-14-16 were affected. The non-detected results were qualified as bias low (UL).

- The laboratory duplicate for preparation batch 100670 had a relative percent difference > 30% for cadmium. Samples DR-SB-194-13-15, DR-SB-194-26-28, DR-SB-195-04-06, and DR-SB-195-14-16 were affected. Detected results were qualified as estimated (J) and non-detected results were qualified as estimated (UJ).

- The serial dilution for preparation batch 100670 had a percent difference > 10% for chromium, lead, nickel, and zinc. Samples DR-SB-194-13-15, DR-SB-194-26-28, DR-SB-195-04-06, and DR-SB-195-14-16 were affected. Detected results were qualified as estimated (J).

- The CRDL standard analyzed on 9/6/13 had a percent recovery >120% for mercury. Samples DR-SB-196-02-04 and DR-SB-196-26-28 were affected. The detected result for sample DR-SB-196-02-04 was qualified as estimated (J) due to conflicting directional bias.

- The CRDL standard analyzed on 9/16/13 had a percent recovery <80% for beryllium and a percent recovery > 120% for molybdenum. All samples were affected. Detected beryllium results were qualified as either biased low (L) or estimated (J) due to conflicting directional bias. Non-detected beryllium results were qualified as biased low (UL). No validation action was warranted for molybdenum as sample results were previously qualified for blank contamination.

Notes

Non-detected results were reported at the MDL.

Positive results less than the reporting limit (RL) but greater than the method detection limit (MDL) were qualified as estimated (J).

Executive Summary

Laboratory Performance: Preparation and calibration blank contamination resulted in the qualification of antimony, molybdenum, and zinc results. Laboratory duplicate non-compliances for cadmium, cobalt, lead, and zinc resulted in the qualification of sample results. CRDL standard non-compliances resulted in the qualification of mercury and beryllium results.

Other Factors Affecting Data Quality: MS/MSD non-compliances for antimony, chromium and vanadium resulted in the qualification of sample results. Serial dilution non-compliances for chromium, lead, nickel, and zinc resulted in the qualification of sample results.

The data for these analyses were reviewed with reference to the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993).

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	DR-SB-194-13-15			DR-SB-194-26-28			DR-SB-195-04-06			DR-SB-195-14-16		
SDG: 240-28627-1	LAB_ID	240-28627-6			240-28627-7			240-28627-4			240-28627-5		
FRACTION: M	SAMP_DATE	9/3/2013			9/3/2013			9/3/2013			9/3/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	85.7			75.2			84.5			84.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.41	UL	D	0.43	UL	D	0.46	B	A	0.38	UL	D
ARSENIC		1.4	J	P	1.9			4			1.8		
BARIUM		9.4	J	P	10	J	P	19	J	P	5.3	J	P
BERYLLIUM		0.046	UJ	C	0.048	UJ	C	0.97			0.042	UJ	C
CADMIUM		0.038	UJ	F	0.04	J	FP	2.3	J	F	0.035	UJ	F
CHROMIUM		5.7	J	I	13	J	I	23	J	I	4.8	J	I
COBALT		0.59	J	P	0.78	J	P	12			0.15	U	
COPPER		3.2			5.5			10			1.1	J	P
LEAD		6.4	J	I	5.3	J	I	12	J	I	2.2	J	I
MERCURY		0.018	U		0.022	U		0.023	J	P	0.018	U	
MOLYBDENUM		0.29	U		0.77	B	A	0.89	B	A	0.38	B	A
NICKEL		3	J	IP	2.1	J	IP	16	J	I	0.29	J	IP
SELENIUM		0.48	U		0.5	U		0.5	U		0.44	U	
SILVER		0.12	J	P	0.17	J	P	0.11	U		0.097	U	
THALLIUM		0.58	U		0.61	U		0.61	U		0.53	U	
VANADIUM		82			13			20			13		
ZINC		19	J	F	38	J	F	61	J	F	1.8	B	A

PROJ_NO: 04882	NSAMPLE	DR-SB-196-02-04			DR-SB-196-26-28		
SDG: 240-28627-1	LAB_ID	240-28627-2			240-28627-3		
FRACTION: M	SAMP_DATE	9/3/2013			9/3/2013		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	MG/KG			MG/KG		
	PCT_SOLIDS	67.4			80.2		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.87	B	A	0.52	B	A
ARSENIC		9.8			3.9		
BARIUM		40			2.8	J	P
BERYLLIUM		0.31	J	CP	0.047	UJ	C
CADMIUM		0.31	J	P	0.039	U	
CHROMIUM		42	K	D	5.4	K	D
COBALT		5.6	J	F	0.17	UJ	F
COPPER		18			2.1	J	P
LEAD		22	J	F	0.87	J	FP
MERCURY		0.044	J	CP	0.017	U	
MOLYBDENUM		1.7	B	A	0.66	B	A
NICKEL		11			0.29	U	
SELENIUM		0.62	U		0.49	U	
SILVER		0.15	J	P	0.11	U	
THALLIUM		0.76	U		0.6	U	
VANADIUM		69	K	D	20	K	D
ZINC		48	J	F	1.2	J	FP

PROJ_NO: 04882	NSAMPLE	DR-SB-196-02-04											
SDG: 240-28627-1	LAB_ID	240-28627-2											
FRACTION: MISC	SAMP_DATE	9/3/2013											
MEDIA: SOIL	QC_TYPE	NM											
	UNITS	MEQ/100			MG/KG						S.U.		
	PCT_SOLIDS	67.4			0.0			67.4			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CATION EXCHANGE CAPACITY		50											
NITRATE-N								1.8	J	P			
PH											3.7		
PHOSPHATE								16	J	P			
TOTAL INORGANIC CARBON					1000	U							
TOTAL KJELDAHL NITROGEN								1900					
TOTAL ORGANIC CARBON					15000								

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-194-13-15 Lab Sample ID: 240-28627-6

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG ID.:

Matrix: Solid Date Sampled: 09/03/2013 14:42

Reporting Basis: DRY Date Received: 09/04/2013 09:20

% Solids: 85.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.1	2.1	0.41	mg/Kg	U		1	6010C
7440-38-2	Arsenic	1.4	1.6	0.32	mg/Kg	J		1	6010C
7440-39-3	Barium	9.4	21	0.075	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.53	0.53	0.046	mg/Kg	U		1	6010C
7440-43-9	Cadmium	0.53	0.53	0.038	mg/Kg	U		1	6010C
7440-47-3	Chromium	5.7	1.1	0.21	mg/Kg			1	6010C
7440-48-4	Cobalt	0.59	1.1	0.17	mg/Kg	J		1	6010C
7440-50-8	Copper	3.2	2.7	0.78	mg/Kg			1	6010C
7439-92-1	Lead	6.4	1.1	0.20	mg/Kg			1	6010C
7439-98-7	Molybdenum	4.2	4.2	0.29	mg/Kg	U		1	6010C
7440-02-0	Nickel	3.0	4.2	0.29	mg/Kg	J		1	6010C
7782-49-2	Selenium	2.1	2.1	0.48	mg/Kg	U		1	6010C
7440-22-4	Silver	0.12	1.1	0.11	mg/Kg	J		1	6010C
7440-28-0	Thallium	2.1	2.1	0.58	mg/Kg	U		1	6010C
7440-62-2	Vanadium	82	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	19	5.3	1.1	mg/Kg		B	1	6010C
7439-97-6	Mercury	0.12	0.12	0.018	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-194-26-28 Lab Sample ID: 240-28627-7

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG ID.:

Matrix: Solid Date Sampled: 09/03/2013 14:52

Reporting Basis: DRY Date Received: 09/04/2013 09:20

% Solids: 75.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.2	2.2	0.43	mg/Kg	U		1	6010C
7440-38-2	Arsenic	1.9	1.7	0.33	mg/Kg			1	6010C
7440-39-3	Barium	10	22	0.079	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.55	0.55	0.048	mg/Kg	U		1	6010C
7440-43-9	Cadmium	0.040	0.55	0.040	mg/Kg	J		1	6010C
7440-47-3	Chromium	13	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	0.78	1.1	0.18	mg/Kg	J		1	6010C
7440-50-8	Copper	5.5	2.8	0.82	mg/Kg			1	6010C
7439-92-1	Lead	5.3	1.1	0.21	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.77	4.4	0.30	mg/Kg	J		1	6010C
7440-02-0	Nickel	2.1	4.4	0.30	mg/Kg	J		1	6010C
7782-49-2	Selenium	2.2	2.2	0.50	mg/Kg	U		1	6010C
7440-22-4	Silver	0.17	1.1	0.11	mg/Kg	J		1	6010C
7440-28-0	Thallium	2.2	2.2	0.61	mg/Kg	U		1	6010C
7440-62-2	Vanadium	13	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	38	5.5	1.1	mg/Kg		B	1	6010C
7439-97-6	Mercury	0.15	0.15	0.022	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-195-04-06 Lab Sample ID: 240-28627-4

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG ID.:

Matrix: Solid Date Sampled: 09/03/2013 11:19

Reporting Basis: DRY Date Received: 09/04/2013 09:20

% Solids: 84.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.46	2.2	0.43	mg/Kg	J		1	6010C
7440-38-2	Arsenic	4.0	1.7	0.33	mg/Kg			1	6010C
7440-39-3	Barium	19	22	0.079	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.97	0.55	0.048	mg/Kg			1	6010C
7440-43-9	Cadmium	2.3	0.55	0.040	mg/Kg			1	6010C
7440-47-3	Chromium	23	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	12	1.1	0.18	mg/Kg			1	6010C
7440-50-8	Copper	10	2.8	0.82	mg/Kg			1	6010C
7439-92-1	Lead	12	1.1	0.21	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.89	4.4	0.30	mg/Kg	J		1	6010C
7440-02-0	Nickel	16	4.4	0.30	mg/Kg			1	6010C
7782-49-2	Selenium	2.2	2.2	0.50	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.61	mg/Kg	U		1	6010C
7440-62-2	Vanadium	20	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	61	5.5	1.1	mg/Kg		B	1	6010C
7439-97-6	Mercury	0.023	0.13	0.019	mg/Kg	J		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-195-14-16 Lab Sample ID: 240-28627-5

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG ID.:

Matrix: Solid Date Sampled: 09/03/2013 11:40

Reporting Basis: DRY Date Received: 09/04/2013 09:20

% Solids: 84.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	1.9	1.9	0.38	mg/Kg	U		1	6010C
7440-38-2	Arsenic	1.8	1.5	0.29	mg/Kg			1	6010C
7440-39-3	Barium	5.3	19	0.069	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.48	0.48	0.042	mg/Kg	U		1	6010C
7440-43-9	Cadmium	0.48	0.48	0.035	mg/Kg	U		1	6010C
7440-47-3	Chromium	4.8	0.97	0.19	mg/Kg			1	6010C
7440-48-4	Cobalt	0.97	0.97	0.15	mg/Kg	U		1	6010C
7440-50-8	Copper	1.1	2.4	0.72	mg/Kg	J		1	6010C
7439-92-1	Lead	2.2	0.97	0.18	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.38	3.9	0.26	mg/Kg	J		1	6010C
7440-02-0	Nickel	0.29	3.9	0.26	mg/Kg	J		1	6010C
7782-49-2	Selenium	1.9	1.9	0.44	mg/Kg	U		1	6010C
7440-22-4	Silver	0.97	0.97	0.097	mg/Kg	U		1	6010C
7440-28-0	Thallium	1.9	1.9	0.53	mg/Kg	U		1	6010C
7440-62-2	Vanadium	13	0.97	0.12	mg/Kg			1	6010C
7440-66-6	Zinc	1.8	4.8	0.97	mg/Kg	J	B	1	6010C
7439-97-6	Mercury	0.12	0.12	0.018	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-196-02-04 | Lab Sample ID: 240-28627-2

Lab Name: TestAmerica Canton | Job No.: 240-28627-1

SDG ID.:

Matrix: Solid | Date Sampled: 09/03/2013 09:50

Reporting Basis: DRY | Date Received: 09/04/2013 09:20

% Solids: 67.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.87	2.7	0.54	mg/Kg	J		1	6010C
7440-38-2	Arsenic	9.8	2.1	0.41	mg/Kg			1	6010C
7440-39-3	Barium	40	27	0.097	mg/Kg		B	1	6010C
7440-41-7	Beryllium	0.31	0.69	0.059	mg/Kg	J		1	6010C
7440-43-9	Cadmium	0.31	0.69	0.049	mg/Kg	J		1	6010C
7440-47-3	Chromium	42	1.4	0.27	mg/Kg			1	6010C
7440-48-4	Cobalt	5.6	1.4	0.22	mg/Kg			1	6010C
7440-50-8	Copper	18	3.4	1.0	mg/Kg			1	6010C
7439-92-1	Lead	22	1.4	0.26	mg/Kg			1	6010C
7439-98-7	Molybdenum	1.7	5.5	0.37	mg/Kg	J		1	6010C
7440-02-0	Nickel	11	5.5	0.37	mg/Kg			1	6010C
7782-49-2	Selenium	2.7	2.7	0.62	mg/Kg	U		1	6010C
7440-22-4	Silver	0.15	1.4	0.14	mg/Kg	J		1	6010C
7440-28-0	Thallium	2.7	2.7	0.76	mg/Kg	U		1	6010C
7440-62-2	Vanadium	69	1.4	0.16	mg/Kg			1	6010C
7440-66-6	Zinc	48	6.9	1.4	mg/Kg			1	6010C
7439-97-6	Mercury	0.044	0.16	0.024	mg/Kg	J		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-196-26-28 Lab Sample ID: 240-28627-3

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG ID.:

Matrix: Solid Date Sampled: 09/03/2013 10:40

Reporting Basis: DRY Date Received: 09/04/2013 09:20

% Solids: 80.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.52	2.2	0.42	mg/Kg	J		1	6010C
7440-38-2	Arsenic	3.9	1.6	0.33	mg/Kg			1	6010C
7440-39-3	Barium	2.8	22	0.077	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.54	0.54	0.047	mg/Kg	U		1	6010C
7440-43-9	Cadmium	0.54	0.54	0.039	mg/Kg	U		1	6010C
7440-47-3	Chromium	5.4	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	1.1	1.1	0.17	mg/Kg	U		1	6010C
7440-50-8	Copper	2.1	2.7	0.80	mg/Kg	J		1	6010C
7439-92-1	Lead	0.87	1.1	0.21	mg/Kg	J		1	6010C
7439-98-7	Molybdenum	0.66	4.3	0.29	mg/Kg	J		1	6010C
7440-02-0	Nickel	4.3	4.3	0.29	mg/Kg	U		1	6010C
7782-49-2	Selenium	2.2	2.2	0.49	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.60	mg/Kg	U		1	6010C
7440-62-2	Vanadium	20	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	1.2	5.4	1.1	mg/Kg	J		1	6010C
7439-97-6	Mercury	0.11	0.11	0.017	mg/Kg	U		1	7471B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-196-02-04 Lab Sample ID: 240-28627-2

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG ID.:

Matrix: Solid Date Sampled: 09/03/2013 09:50

Reporting Basis: DRY Date Received: 09/04/2013 09:20

% Solids: 67.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Phosphate as PO4	16	46	0.45	mg/Kg	J		1	365.1
	Nitrogen, Kjeldahl	1900	220	74	mg/Kg		B	1	SM4500_NH3_E

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-196-02-04 Lab Sample ID: 240-28627-2

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG ID.:

Matrix: Solid Date Sampled: 09/03/2013 09:50

Reporting Basis: WET Date Received: 09/04/2013 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	pH	3.70	0.100	0.100	SU			1	9045C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - ASTM LEACH

Client Sample ID: DR-SB-196-02-04 Lab Sample ID: 240-28627-2

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG ID.:

Matrix: Solid Date Sampled: 09/03/2013 09:50

Reporting Basis: DRY Date Received: 09/04/2013 09:20

% Solids: 67.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
14797-55-8	Nitrate as N	1.8	7.3	0.34	mg/Kg	J		1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-196-02-04 Lab Sample ID: 240-28627-2

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG ID.:

Matrix: Solid Date Sampled: 09/03/2013 09:50

Reporting Basis: DRY Date Received: 09/04/2013 09:20

% Solids: 67.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Cation Exchange Capacity	50	0.059	0.059	meq/100 gm			1	9081

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-196-02-04 Lab Sample ID: 240-28627-2

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG ID.:

Matrix: Solid Date Sampled: 09/03/2013 09:50

Reporting Basis: WET Date Received: 09/04/2013 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Inorganic Carbon - Duplicates	1000	1000	1000	mg/Kg	U		1	9060A
7440-44-0	Total Organic Carbon - Duplicates	15000	1000	600	mg/Kg			1	9060A

APPENDIX C

SUPPORT DOCUMENTATION

Chain of Custody Record

1.8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location:
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech	Client Project Manager: Tony Apanavage	Site Contact: Stu Cameron	Lab Contact: Pat Omeara	COC No:
Address: 20251 Century Blvd Ste 200	Telephone: (301) 528-5552	Telephone: (703) 342-8389	Telephone:	1 of 1 COCs
City/State/Zip: Germantown MD 20874	Email: Tony.Apanavage@tetratech.com			
Phone: (301) 528-5552				
Project Name: Dump Road Source	Method of Shipment/Carrier:			
Project Number: 112IC04882	Shipping/Tracking No:			
PO #				

Analysis Turnaround Time (in BUS days)
TAT if different from below
☐ 3 weeks
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Analyses

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other: MeOH/DI	Filtered Sample (Y/N)	Composite (Y/N)	VOCs	TPH-GRO	SVOCs, PCBs, DRO	PP Metals	TOC, TIC, NO3, PO4, PH, TAN	CEC					Sample Specific Notes / Special Instructions:
TB-090313	—	—		X						2							X										
DR-SB-196-02-04	9/3/13	0950				X							5	3			X	X	X	X	X	X					
DR-SB-196-26-28	↓	1040				X							3	3			X	X	X								
DR-SB-195-04-06		1119				X							3	3			X	X	X								
DR-SB-195-14-16		1140				X							3	3			X	X	X								
DR-SB-194-13-15		~~1408~~ 1442				X							3	3			X	X	X								
DR-SB-194-26-28		~~1435~~ 1452				X							3	3			X	X	X								

240-28627 Chain of Custody

Possible H
☒ Non ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	9-3-13 / 1600	[signature]	TestAmerica	9/3/13 / 1600
Paul [signature]	TestAmerica	9/3/13 / 1630	[signature]	TA	9.4.13 920
			Received in Laboratory by:		

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TAL-0018 (1008)

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source

Report Number: 240-28627-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 9060A TOC, 9060 TIC and 9081 CEC analysis were performed at the TestAmerica Nashville Laboratory.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 09/04/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.8 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples DR-SB-196-02-04 (240-28627-2), DR-SB-196-26-28 (240-28627-3), DR-SB-195-04-06 (240-28627-4), DR-SB-195-14-16 (240-28627-5), DR-SB-194-13-15 (240-28627-6) and DR-SB-194-26-28 (240-28627-7) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 09/04/2013 and analyzed on 09/10/2013.

1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene and Naphthalene were detected in method blank MB 240-100739/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Insufficient sample volume was available to meet method-mandated requirements for matrix spike/matrix spike duplicate (MS/MSD) analyses for batch 100739.

A MS/MSD was prepared for batch 100109, but was analyzed in a different analytical batch.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Sample TB-090313 (240-28627-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/09/2013.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Samples DR-SB-196-02-04 (240-28627-2), DR-SB-196-26-28 (240-28627-3), DR-SB-195-04-06 (240-28627-4), DR-SB-195-14-16 (240-28627-5), DR-SB-194-13-15 (240-28627-6) and DR-SB-194-26-28 (240-28627-7) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/11/2013 and analyzed on

09/14/2013.

Di-n-butyl phthalate was detected in method blank MB 240-100978/4-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples DR-SB-196-02-04 (240-28627-2), DR-SB-196-26-28 (240-28627-3), DR-SB-195-04-06 (240-28627-4), DR-SB-195-14-16 (240-28627-5), DR-SB-194-13-15 (240-28627-6) and DR-SB-194-26-28 (240-28627-7) were analyzed for gasoline range organics (GRO) in accordance with EPA-SW-846 Method 8015C - GRO. The samples were analyzed on 09/06/2013, 09/09/2013 and 09/10/2013.

Total Petroleum Hydrocarbons (C6-C10) was detected in method blank MB 240-100428/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-SB-194-13-15 (240-28627-6)[4X] and DR-SB-194-26-28 (240-28627-7)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the GRO analysis. All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)

Samples DR-SB-196-02-04 (240-28627-2), DR-SB-196-26-28 (240-28627-3), DR-SB-195-04-06 (240-28627-4), DR-SB-195-14-16 (240-28627-5), DR-SB-194-13-15 (240-28627-6) and DR-SB-194-26-28 (240-28627-7) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 09/11/2013 and analyzed on 09/12/2013.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

The continuing calibration verification (CCV) for diesel associated with batch 101206 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. DR-SB-194-13-15 (240-28627-6), DR-SB-194-26-28 (240-28627-7), DR-SB-195-04-06 (240-28627-4), DR-SB-195-14-16 (240-28627-5), DR-SB-196-02-04 (240-28627-2), DR-SB-196-26-28 (240-28627-3).

No other difficulties were encountered during the DRO analysis. All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples DR-SB-196-02-04 (240-28627-2), DR-SB-196-26-28 (240-28627-3), DR-SB-195-04-06 (240-28627-4), DR-SB-195-14-16 (240-28627-5), DR-SB-194-13-15 (240-28627-6) and DR-SB-194-26-28 (240-28627-7) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/11/2013 and analyzed on 09/13/2013.

No other difficulties were encountered during the PCBs analysis. All other quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)

Samples DR-SB-196-02-04 (240-28627-2), DR-SB-196-26-28 (240-28627-3), DR-SB-195-04-06 (240-28627-4), DR-SB-195-14-16 (240-28627-5), DR-SB-194-13-15 (240-28627-6) and DR-SB-194-26-28 (240-28627-7) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 09/06/2013 and 09/09/2013 and analyzed on 09/16/2013.

Barium was detected in method blank MB 240-100393/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Barium and Zinc were detected in method blank MB 240-100670/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Cadmium, Cobalt, Lead, Molybdenum, Silver and Zinc exceeded the RPD limit for the duplicate of sample DR-SB-196-02-04DU (240-28627-2). Antimony and Cadmium exceeded the RPD limit for the duplicate of sample DR-SB-195-04-06DU (240-28627-4).

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

MERCURY

Samples DR-SB-196-02-04 (240-28627-2), DR-SB-196-26-28 (240-28627-3), DR-SB-195-04-06 (240-28627-4), DR-SB-195-14-16 (240-28627-5), DR-SB-194-13-15 (240-28627-6) and DR-SB-194-26-28 (240-28627-7) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared on 09/06/2013 and 09/09/2013 and analyzed on 09/06/2013 and 09/10/2013.

No other difficulties were encountered during the mercury analysis. All other quality control parameters were within the acceptance limits.

LEACHABLE ANIONS
Sample DR-SB-196-02-04 (240-28627-2) was analyzed for Leachable anions in accordance with ASTM Method D3987-85/EPA Method 300.0. The samples were leached on 09/17/2013 and analyzed on 09/18/2013.

No difficulties were encountered during the anions analysis. All quality control parameters were within the acceptance limits.

TOTAL PHOSPHORUS
Sample DR-SB-196-02-04 (240-28627-2) was analyzed for total phosphorus in accordance with EPA Method 365.1. The samples were prepared and analyzed on 09/11/2013.

No other difficulties were encountered during the total phosphorus analysis. All other quality control parameters were within the acceptance limits.

PH
Sample DR-SB-196-02-04 (240-28627-2) was analyzed for pH in accordance with EPA SW-846 Method 9045C. The samples were analyzed on 09/04/2013.

No difficulties were encountered during the pH analysis. All quality control parameters were within the acceptance limits.

TOTAL ORGANIC CARBON
Sample DR-SB-196-02-04 (240-28627-2) was analyzed for total organic carbon in accordance with SW-846 Method 9060A. The samples were analyzed on 09/13/2013.

Quality Control (QC) results are not provided for Total Inorganic Carbon (TIC) as this result is taken from a calculation incorporating the Total Carbon (TC) and Total Organic Carbon (TOC) results. The QC results associated with these component parameters are found in their respective section of the final report.

As required by the reference method, soil samples for Total Organic Carbon (TOC) are dried prior to analysis. Since determination of TOC is performed using a pre-dried sample, the final TOC result obtained is not converted to a dry weight basis using results of a % Solids (or % Moisture) determination, as is typically performed for other types of soil analyses. For this reason, this report indicates the TOC results are not dry weight corrected.

Batch 110032 was analyzed without the required sample duplicate (DU) per every 10 samples. The associated laboratory control sample (LCS) precision met acceptance criteria.

No other difficulties were encountered during the TOC analysis. All quality control parameters were within the acceptance limits.

CATION EXCHANGE CAPACITY
Sample DR-SB-196-02-04 (240-28627-2) was analyzed for Cation Exchange Capacity in accordance with EPA SW-846 Method 9081. The samples were prepared and analyzed on 09/11/2013.

No difficulties were encountered during the CEC analysis. All quality control parameters were within the acceptance limits.

PERCENT SOLIDS
Samples DR-SB-196-02-04 (240-28627-2), DR-SB-196-26-28 (240-28627-3), DR-SB-195-04-06 (240-28627-4), DR-SB-195-14-16 (240-28627-5), DR-SB-194-13-15 (240-28627-6) and DR-SB-194-26-28 (240-28627-7) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 09/06/2013.

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

TOTAL KJELDAHL NITROGEN
Sample DR-SB-196-02-04 (240-28627-2) was analyzed for total kjeldahl nitrogen in accordance with SM 4500 NH3 E. The samples were prepared on 09/05/2013 and analyzed on 09/06/2013.

Nitrogen, Kjeldahl was detected in method blank MB 240-100175/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No other difficulties were encountered during the TKN analysis. All other quality control parameters were within the acceptance limits.

DR-SB-194-13-15

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	10000.	50000.	30000.	600000.	600000.	600000.
Low	-1000.	-1000.	-1000.	-1000.	-1000.	-10000.	-10000.

Elem	Mn	Mo	Na3302	Ni	Pb	Se	Sb
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB
Avge	171.2	1.587	904.5	27.82	60.03	.5306	2.105
SDev	.1	.886	134.3	.32	.62	1.741	3.169
%RSD	.0536	55.80	14.84	1.136	1.034	328.2	150.6
#1	171.2	.9611	809.6	27.59	59.60	1.762	-.1363
#2	171.1	2.214	999.4	28.04	60.47	-.7008	4.346

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	30000.	10000.	600000.	50000.	15000.	10000.	10000.
Low	-1000.	-1000.	-10000.	-1000.	-1000.	-1000.	-1000.

Elem	Sn	Tl	V	Zn	2203/1	2203/2	2068/2
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB
Avge	16.65	.7529	770.4	179.6	55.48	62.31	2.883
SDev	.66	.0464	.8	.1	.56	.65	.539
%RSD	3.978	6.157	.1091	.0482	1.010	1.045	18.71
#1	17.12	.7857	771.0	179.5	55.08	61.85	2.501
#2	16.19	.7201	769.8	179.6	55.87	62.77	3.264

Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	NOCHECK
High	50000.	20000.	50000.	10000.			
Low	-1000.	-1000.	-1000.	-1000.			

Elem	2068/1	1960/1	1960/2
Units	PPB	PPB	PPB
Avge	1.716	1.653	-.0299
SDev	4.482	3.652	.7876
%RSD	261.1	220.9	2631.
#1	-1.453	4.236	.5269
#2	4.886	-.9290	-.5868

Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

$$\frac{770\,\mu g}{L} \times \frac{0.1\,L}{1.1\,g} \times \frac{1000\,g}{1\,Kg} \times \frac{1\,mg}{1000\,\mu g} \times \frac{1}{0.857\%S} = 81.6\,\frac{mg}{Kg}$$

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	8590	--	--	--	--	--	--
SDev	5.303301	--	--	--	--	--	--
%RSD	.0617399	--	--	--	--	--	--
#1	8594	--	--	--	--	--	--
#2	8586	--	--	--	--	--	--

TestAmerica Canton Sample Receipt Form/Narrative Login # : 28627
Canton Facility

Client Tetratech Site Name _____ Cooler unpacked by:

Cooler Received on 9-4-13 Opened on 9-4-13

FedEx: 1st Grd (Ex) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF −1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. 1.8 °C	Corrected Cooler Temp. 1.8 °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC376062**
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

Login Sample Receipt Checklist

Client: Tetra Tech, Inc

Job Number: 240-28627-1

Login Number: 28627
List Number: 1
Creator: Ford, Easton

List Source: TestAmerica Nashville
List Creation: 09/05/13 05:45 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

HOLDTIME

SDG 240-28627-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	DR-SB-194-13-15	240-28627-6	NM	09/03/2013	09/09/2013	09/10/2013	6	1	7
HG	MG/KG	DR-SB-194-26-28	240-28627-7	NM	09/03/2013	09/09/2013	09/10/2013	6	1	7
HG	MG/KG	DR-SB-195-04-06	240-28627-4	NM	09/03/2013	09/09/2013	09/10/2013	6	1	7
HG	MG/KG	DR-SB-195-14-16	240-28627-5	NM	09/03/2013	09/09/2013	09/10/2013	6	1	7
HG	MG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/06/2013	09/06/2013	3	0	3
HG	MG/KG	DR-SB-196-26-28	240-28627-3	NM	09/03/2013	09/06/2013	09/06/2013	3	0	3
M	MG/KG	DR-SB-196-26-28	240-28627-3	NM	09/03/2013	09/06/2013	09/16/2013	3	10	13
M	MG/KG	DR-SB-194-13-15	240-28627-6	NM	09/03/2013	09/09/2013	09/16/2013	6	7	13
M	MG/KG	DR-SB-194-26-28	240-28627-7	NM	09/03/2013	09/09/2013	09/16/2013	6	7	13
M	MG/KG	DR-SB-195-04-06	240-28627-4	NM	09/03/2013	09/09/2013	09/16/2013	6	7	13
M	MG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/06/2013	09/16/2013	3	10	13
M	MG/KG	DR-SB-195-14-16	240-28627-5	NM	09/03/2013	09/09/2013	09/16/2013	6	7	13
	MEQ/1	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/11/2013	09/11/2013	8	0	8
	MG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/18/2013	09/18/2013	15	0	15
NH3	MG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/05/2013	09/06/2013	2	1	3

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PH	SU	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/04/2013	09/04/2013	1	0	1
PHO	MG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/11/2013	09/11/2013	8	0	8
TOC	MG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/13/2013	09/13/2013	10	0	10
OS	UG/KG	DR-SB-194-26-28	240-28627-7	NM	09/03/2013	09/11/2013	09/14/2013	8	3	11
OS	UG/KG	DR-SB-195-04-06	240-28627-4	NM	09/03/2013	09/11/2013	09/14/2013	8	3	11
OS	UG/KG	DR-SB-195-14-16	240-28627-5	NM	09/03/2013	09/11/2013	09/14/2013	8	3	11
OS	UG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/11/2013	09/14/2013	8	3	11
OS	UG/KG	DR-SB-196-26-28	240-28627-3	NM	09/03/2013	09/11/2013	09/14/2013	8	3	11
OS	UG/KG	DR-SB-194-13-15	240-28627-6	NM	09/03/2013	09/11/2013	09/14/2013	8	3	11
OV	UG/KG	DR-SB-196-26-28	240-28627-3	NM	09/03/2013	09/04/2013	09/10/2013	1	6	7
OV	UG/KG	DR-SB-194-13-15	240-28627-6	NM	09/03/2013	09/04/2013	09/10/2013	1	6	7
OV	UG/KG	DR-SB-194-26-28	240-28627-7	NM	09/03/2013	09/04/2013	09/10/2013	1	6	7
OV	UG/KG	DR-SB-195-04-06	240-28627-4	NM	09/03/2013	09/04/2013	09/10/2013	1	6	7
OV	UG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/04/2013	09/10/2013	1	6	7
OV	UG/KG	DR-SB-195-14-16	240-28627-5	NM	09/03/2013	09/04/2013	09/10/2013	1	6	7
OV	UG/L	TB-090313	240-28627-1	TB	09/03/2013	09/09/2013	09/09/2013	6	0	6
PCB	UG/KG	DR-SB-195-04-06	240-28627-4	NM	09/03/2013	09/11/2013	09/13/2013	8	2	10
PCB	UG/KG	DR-SB-195-14-16	240-28627-5	NM	09/03/2013	09/11/2013	09/13/2013	8	2	10

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	DR-SB-194-26-28	240-28627-7	NM	09/03/2013	09/11/2013	09/13/2013	8	2	10
PCB	UG/KG	DR-SB-196-26-28	240-28627-3	NM	09/03/2013	09/11/2013	09/13/2013	8	2	10
PCB	UG/KG	DR-SB-194-13-15	240-28627-6	NM	09/03/2013	09/11/2013	09/13/2013	8	2	10
PCB	UG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/11/2013	09/13/2013	8	2	10
	MG/KG	DR-SB-196-26-28	240-28627-3	NM	09/03/2013	09/11/2013	09/12/2013	8	1	9
	MG/KG	DR-SB-194-13-15	240-28627-6	NM	09/03/2013	09/11/2013	09/12/2013	8	1	9
	MG/KG	DR-SB-194-26-28	240-28627-7	NM	09/03/2013	09/11/2013	09/12/2013	8	1	9
	MG/KG	DR-SB-195-04-06	240-28627-4	NM	09/03/2013	09/11/2013	09/12/2013	8	1	9
	MG/KG	DR-SB-195-14-16	240-28627-5	NM	09/03/2013	09/11/2013	09/12/2013	8	1	9
	MG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/11/2013	09/12/2013	8	1	9
	UG/KG	DR-SB-194-26-28	240-28627-7	NM	09/03/2013	09/10/2013	09/10/2013	7	0	7
	UG/KG	DR-SB-195-04-06	240-28627-4	NM	09/03/2013	09/05/2013	09/06/2013	2	1	3
	UG/KG	DR-SB-195-14-16	240-28627-5	NM	09/03/2013	09/05/2013	09/06/2013	2	1	3
	UG/KG	DR-SB-196-02-04	240-28627-2	NM	09/03/2013	09/05/2013	09/06/2013	2	1	3
	UG/KG	DR-SB-196-26-28	240-28627-3	NM	09/03/2013	09/05/2013	09/06/2013	2	1	3
	UG/KG	DR-SB-194-13-15	240-28627-6	NM	09/03/2013	09/06/2013	09/09/2013	3	3	6

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: I6

Method: 6010C MDL Date: 03/01/2011 14:59

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Antimony	206.838	2	0.39
Arsenic	189.042	1.5	0.3
Barium	493.409	20	0.071
Beryllium	313.042	0.5	0.043
Cadmium	226.502	0.5	0.036
Chromium	267.716	1	0.2
Cobalt	228.616	1	0.16
Copper	324.753	2.5	0.74
Lead	220.353	1	0.19
Molybdenum	202.030	4	0.27
Nickel	231.604	4	0.27
Selenium	196.026	2	0.45
Silver	328.068	1	0.1
Thallium	190.864	2	0.55
Vanadium	292.402	1	0.12
Zinc	213.856	5	1

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: I6

Method: 6010C XMDL Date: 03/01/2011 15:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: H1

Method: 7471B MDL Date: 02/16/2010 09:48

Prep Method: 7471B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury	253.7	0.1	0.015

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: H1

Method: 7471B XMDL Date: 02/16/2010 09:48

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.6	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28627-1

SDG No.:

Instrument ID: I6 Date: 10/16/2012 10:27

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Antimony		10000	6010C
Arsenic		10000	6010C
Barium		25000	6010C
Beryllium		4000	6010C
Cadmium		2500	6010C
Chromium		50000	6010C
Cobalt		10000	6010C
Copper		30000	6010C
Lead		15000	6010C
Molybdenum		10000	6010C
Nickel		50000	6010C
Selenium		10000	6010C
Silver		2000	6010C
Thallium		20000	6010C
Vanadium		50000	6010C
Zinc		10000	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28627-1

SDG No.:

Instrument ID: H1 Date: 04/01/2011 10:45

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		50	7471B

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Prep Method: 7471B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-100394/1-A	09/06/2013 11:30	100394	0.60		100
LCS 240-100394/2-A	09/06/2013 11:30	100394	0.60		100
240-28627-2	09/06/2013 11:30	100394	0.56		100
240-28627-2 MS	09/06/2013 11:30	100394	0.56		100
240-28627-2 DU	09/06/2013 11:30	100394	0.56		100
240-28627-3	09/06/2013 11:30	100394	0.66		100

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-100394/1-A

Instrument Code: H1 Batch No.: 100425

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.10	U		7471B

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-100394/2-A

Lab Name: TestAmerica Canton Job No.: 240-28627-1

Sample Matrix: Solid LCS Source: MTHGCALW_00457

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.950		114	80	120		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Prep Method: 7471B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-100675/1-A	09/09/2013 14:30	100675	0.60		100
LCS 240-100675/2-A	09/09/2013 14:30	100675	0.60		100
240-28627-4	09/09/2013 14:30	100675	0.55		100
240-28627-4 DU	09/09/2013 14:30	100675	0.55		100
240-28627-4 MS	09/09/2013 14:30	100675	0.55		100
240-28627-5	09/09/2013 14:30	100675	0.58		100
240-28627-6	09/09/2013 14:30	100675	0.59		100
240-28627-7	09/09/2013 14:30	100675	0.54		100

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-100675/1-A

Instrument Code: H1 Batch No.: 100981

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.10	U		7471B

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-100675/2-A

Lab Name: TestAmerica Canton Job No.: 240-28627-1

Sample Matrix: Solid LCS Source: MTHGCALW_00458

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.873		105	80	120		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-100393/1-A	09/06/2013 09:14	100393	1.00		100
LCS 240-100393/2-A	09/06/2013 09:14	100393	1.00		100
240-28627-2	09/06/2013 09:14	100393	1.08		100
240-28627-2 MS	09/06/2013 09:14	100393	1.08		100
240-28627-2 DU	09/06/2013 09:14	100393	1.08		100
240-28627-3	09/06/2013 09:14	100393	1.15		100

FORM XII-IN

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-100393/1-A

Instrument Code: I6 Batch No.: 101673

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6010C
7440-38-2	Arsenic	1.5	U		6010C
7440-39-3	Barium	0.110	J		6010C
7440-41-7	Beryllium	0.50	U		6010C
7440-43-9	Cadmium	0.50	U		6010C
7440-47-3	Chromium	1.0	U		6010C
7440-48-4	Cobalt	1.0	U		6010C
7440-50-8	Copper	2.5	U		6010C
7439-92-1	Lead	1.0	U		6010C
7439-98-7	Molybdenum	4.0	U		6010C
7440-02-0	Nickel	4.0	U		6010C
7782-49-2	Selenium	2.0	U		6010C
7440-22-4	Silver	1.0	U		6010C
7440-28-0	Thallium	2.0	U		6010C
7440-62-2	Vanadium	1.0	U		6010C
7440-66-6	Zinc	5.0	U		6010C

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-SB-196-02-04 MS
Lab ID: 240-28627-2 MS
Lab Name: TestAmerica Canton
Job No.: 240-28627-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 67.4

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	23.3		0.87	J	68.6	33	75-125	F	6010C
Arsenic	276		9.8		275	97	75-125		6010C
Barium	323		40		275	103	75-125		6010C
Beryllium	7.09		0.31	J	6.86	99	75-125		6010C
Cadmium	6.64		0.31	J	6.86	92	75-125		6010C
Chromium	79.3		42		27.5	137	75-125	F	6010C
Cobalt	71.5		5.6		68.6	96	75-125		6010C
Copper	55.5		18		34.3	110	75-125		6010C
Lead	84.0		22		68.6	90	75-125		6010C
Molybdenum	126		1.7	J	137	91	75-125		6010C
Nickel	78.2		11		68.6	97	75-125		6010C
Selenium	253		2.7	U	275	92	75-125		6010C
Silver	6.76		0.15	J	6.86	96	75-125		6010C
Thallium	258		2.7	U	275	94	75-125		6010C
Vanadium	157		69		68.6	128	75-125	F	6010C
Zinc	129		48		68.6	118	75-125		6010C
Mercury	0.354		0.044	J	0.265	117	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-SB-196-02-04 PDS Lab ID: 240-28627-2 PDS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	21.1		0.87	J	20.6	98	80-120		6010C
Chromium	68.4		42		27.5	97	80-120		6010C
Vanadium	74.6		69		6.86	NC	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: DR-SB-196-02-04 DU | Lab ID: 240-28627-2 DU

Lab Name: TestAmerica Canton | Job No.: 240-28627-1

SDG No.:

% Solids for Sample: 67.4 | % Solids for Duplicate: 67.4

Matrix: Solid | Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	2.7	0.87	J	0.729	J	17		6010C
Arsenic	2.1	9.8		9.26		6		6010C
Barium	27	40		56.9		35		6010C
Beryllium	0.69	0.31	J	0.302	J	3		6010C
Cadmium	0.69	0.31	J	0.151	J	68		6010C
Chromium	1.4	42		42.3		1		6010C
Cobalt	1.4	5.6		3.79		38	F	6010C
Copper	3.4	18		16.2		9		6010C
Lead	1.4	22		31.3		33	F	6010C
Molybdenum	5.5	1.7	J	1.14	J	37		6010C
Nickel	5.5	11		8.56		29		6010C
Selenium	2.7	2.7	U	2.7	U	NC		6010C
Silver	1.4	0.15	J	0.380	J	89		6010C
Thallium	2.7	2.7	U	2.7	U	NC		6010C
Vanadium	1.4	69		81.7		17		6010C
Zinc	6.9	48		35.1		31	F	6010C
Mercury	0.16	0.044	J	0.0389	J	13		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-100393/2-A

Lab Name: TestAmerica Canton Job No.: 240-28627-1

Sample Matrix: Solid LCS Source: MTICP1_00023

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	50.7		101	80	120		6010C
Arsenic	200	203		101	80	120		6010C
Barium	200	206		103	80	120		6010C
Beryllium	5.00	5.14		103	80	120		6010C
Cadmium	5.00	5.00		100	80	120		6010C
Chromium	20.0	20.8		104	80	120		6010C
Cobalt	50.0	50.1		100	80	120		6010C
Copper	25.0	25.8		103	80	120		6010C
Lead	50.0	49.6		99	80	120		6010C
Molybdenum	100	103		103	80	120		6010C
Nickel	50.0	49.8		100	80	120		6010C
Selenium	200	199		99	80	120		6010C
Silver	5.00	5.15		103	80	120		6010C
Thallium	200	205		103	80	120		6010C
Vanadium	50.0	52.1		104	80	120		6010C
Zinc	50.0	52.2		104	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-28627-2

SDG No:

Lab Name: TestAmerica Canton Job No: 240-28627-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.87	J	14	U	NC		6010C
Arsenic	9.8		10.4		NC		6010C
Barium	40		41.5	J	3.4		6010C
Beryllium	0.31	J	3.4	U	NC		6010C
Cadmium	0.31	J	3.4	U	NC		6010C
Chromium	42		43.4		3.8		6010C
Cobalt	5.6		5.65	J	NC		6010C
Copper	18		16.2	J	NC		6010C
Lead	22		24.0		7.7		6010C
Molybdenum	1.7	J	2.02	J	NC		6010C
Nickel	11		11.9	J	NC		6010C
Selenium	2.7	U	14	U	NC		6010C
Silver	0.15	J	6.9	U	NC		6010C
Thallium	2.7	U	14	U	NC		6010C
Vanadium	69		71.2		3.4		6010C
Zinc	48		52.3		NC		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-100670/1-A	09/09/2013 11:53	100670	1.00		100
LCS 240-100670/2-A	09/09/2013 11:53	100670	1.00		100
240-28627-4	09/09/2013 11:53	100670	1.07		100
240-28627-4 DU	09/09/2013 11:53	100670	1.07		100
240-28627-4 MS	09/09/2013 11:53	100670	1.07		100
240-28627-5	09/09/2013 11:53	100670	1.23		100
240-28627-6	09/09/2013 11:53	100670	1.10		100
240-28627-7	09/09/2013 11:53	100670	1.20		100

FORM XII-IN

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-100670/1-A

Instrument Code: I6 Batch No.: 101673

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6010C
7440-38-2	Arsenic	1.5	U		6010C
7440-39-3	Barium	0.116	J		6010C
7440-41-7	Beryllium	0.50	U		6010C
7440-43-9	Cadmium	0.50	U		6010C
7440-47-3	Chromium	1.0	U		6010C
7440-48-4	Cobalt	1.0	U		6010C
7440-50-8	Copper	2.5	U		6010C
7439-92-1	Lead	1.0	U		6010C
7439-98-7	Molybdenum	4.0	U		6010C
7440-02-0	Nickel	4.0	U		6010C
7782-49-2	Selenium	2.0	U		6010C
7440-22-4	Silver	1.0	U		6010C
7440-28-0	Thallium	2.0	U		6010C
7440-62-2	Vanadium	1.0	U		6010C
7440-66-6	Zinc	2.14	J		6010C

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-SB-195-04-06 MS
Lab ID: 240-28627-4 MS
Lab Name: TestAmerica Canton
Job No.: 240-28627-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 84.5

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	18.4		0.46	J	55.3	32	75-125	F	6010C
Arsenic	203		4.0		221	90	75-125		6010C
Barium	218		19	J	221	90	75-125		6010C
Beryllium	5.86		0.97		5.53	88	75-125		6010C
Cadmium	6.99		2.3		5.53	84	75-125		6010C
Chromium	43.7		23		22.1	95	75-125		6010C
Cobalt	57.7		12		55.3	83	75-125		6010C
Copper	34.0		10		27.7	86	75-125		6010C
Lead	59.9		12		55.3	87	75-125		6010C
Molybdenum	87.1		0.89	J	111	78	75-125		6010C
Nickel	63.9		16		55.3	88	75-125		6010C
Selenium	187		2.2	U	221	85	75-125		6010C
Silver	4.97		1.1	U	5.53	90	75-125		6010C
Thallium	174		2.2	U	221	79	75-125		6010C
Vanadium	68.3		20		55.3	87	75-125		6010C
Zinc	108		61		55.3	86	75-125		6010C
Mercury	0.249		0.023	J	0.215	105	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-SB-195-04-06 PDS Lab ID: 240-28627-4 PDS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR C		Sample Result (SR) C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	16.5		0.46	J	16.6	97	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: DR-SB-195-04-06 DU | Lab ID: 240-28627-4 DU

Lab Name: TestAmerica Canton | Job No.: 240-28627-1

SDG No.:

% Solids for Sample: 84.5 | % Solids for Duplicate: 84.5

Matrix: Solid | Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	2.2	0.46	J	0.651	J	34		6010C
Arsenic	1.7	4.0		4.29		6		6010C
Barium	22	19	J	21.5	J	12		6010C
Beryllium	0.55	0.97		0.882		10		6010C
Cadmium	0.55	2.3		1.56		41	F	6010C
Chromium	1.1	23		21.7		4		6010C
Cobalt	1.1	12		10.9		7		6010C
Copper	2.8	10		8.80		14		6010C
Lead	1.1	12		11.1		7		6010C
Molybdenum	4.4	0.89	J	0.751	J	17		6010C
Nickel	4.4	16		14.1		10		6010C
Selenium	2.2	2.2	U	2.2	U	NC		6010C
Silver	1.1	1.1	U	1.1	U	NC		6010C
Thallium	2.2	2.2	U	2.2	U	NC		6010C
Vanadium	1.1	20		20.4		1		6010C
Zinc	5.5	61		68.5		12		6010C
Mercury	0.13	0.023	J	0.0229	J	2		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-100670/2-A

Lab Name: TestAmerica Canton Job No.: 240-28627-1

Sample Matrix: Solid LCS Source: MTICP1_00023

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	50.0		100	80	120		6010C
Arsenic	200	204		102	80	120		6010C
Barium	200	200		100	80	120		6010C
Beryllium	5.00	5.10		102	80	120		6010C
Cadmium	5.00	4.88		98	80	120		6010C
Chromium	20.0	19.9		99	80	120		6010C
Cobalt	50.0	47.6		95	80	120		6010C
Copper	25.0	24.2		97	80	120		6010C
Lead	50.0	48.7		97	80	120		6010C
Molybdenum	100	92.0		92	80	120		6010C
Nickel	50.0	49.5		99	80	120		6010C
Selenium	200	192		96	80	120		6010C
Silver	5.00	5.02		100	80	120		6010C
Thallium	200	182		91	80	120		6010C
Vanadium	50.0	49.0		98	80	120		6010C
Zinc	50.0	51.5		103	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-28627-4

SDG No:

Lab Name: TestAmerica Canton Job No: 240-28627-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.46	J	11	U	NC		6010C
Arsenic	4.0		4.91	J	NC		6010C
Barium	19	J	21.0	J	10		6010C
Beryllium	0.97		0.977	J	NC		6010C
Cadmium	2.3		2.51	J	7.2		6010C
Chromium	23		25.1		11	V	6010C
Cobalt	12		12.7		9.1		6010C
Copper	10		8.98	J	NC		6010C
Lead	12		13.8		16	V	6010C
Molybdenum	0.89	J	22	U	NC		6010C
Nickel	16		17.4	J	12	V	6010C
Selenium	2.2	U	11	U	NC		6010C
Silver	1.1	U	5.5	U	NC		6010C
Thallium	2.2	U	11	U	NC		6010C
Vanadium	20		22.3		10		6010C
Zinc	61		70.3		16	V	6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/06/2013 07:53 End Date: 09/06/2013 19:04

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
IC 240-100432/1-A			07:53	X
IC 240-100432/1-A			07:55	X
IC 240-100432/2-A			07:58	X
IC 240-100432/2-A			07:59	X
IC 240-100432/3-A			08:01	X
IC 240-100432/3-A			08:03	X
IC 240-100432/4-A			08:04	X
IC 240-100432/4-A			08:05	X
IC 240-100432/5-A			08:07	X
IC 240-100432/5-A			08:10	X
IC 240-100432/6-A			08:11	X
IC 240-100432/6-A			08:13	X
IC 240-100432/7-A			08:14	X
IC 240-100432/7-A			08:16	X
ICV 240-100432/8-A	1		08:18	X
ICB 240-100432/9-A	1		08:19	X
CRA 240-100432/10-A	1		08:21	X
ZZZZZZ			08:23	
ZZZZZZ			08:25	
ZZZZZZ			08:26	
ZZZZZZ			08:28	
ZZZZZZ			08:30	
CCV 240-100432/11-A			08:35	
CCB 240-100432/12-A			08:36	
ZZZZZZ			08:38	
ZZZZZZ			08:39	
ZZZZZZ			08:42	
ZZZZZZ			08:43	
ZZZZZZ			08:45	
ZZZZZZ			08:46	
ZZZZZZ			08:49	
ZZZZZZ			08:51	
ZZZZZZ			08:53	
ZZZZZZ			08:55	
CCV 240-100432/11-A			08:57	
CCB 240-100432/12-A			08:59	
ZZZZZZ			09:03	
ZZZZZZ			09:05	
ZZZZZZ			09:07	
ZZZZZZ			09:09	
ZZZZZZ			09:11	
ZZZZZZ			09:12	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/06/2013 07:53 End Date: 09/06/2013 19:04

Lab Sample ID	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			09:14	
ZZZZZZ			09:16	
ZZZZZZ			09:18	
ZZZZZZ			09:20	
CCV 240-100432/11-A			09:21	
CCB 240-100432/12-A			09:22	
ZZZZZZ			09:24	
ZZZZZZ			09:26	
ZZZZZZ			09:27	
ZZZZZZ			09:29	
ZZZZZZ			09:30	
CCV 240-100432/11-A			09:31	
CCB 240-100432/12-A			09:33	
ZZZZZZ			10:01	
ZZZZZZ			10:03	
ZZZZZZ			10:05	
ZZZZZZ			10:07	
CCV 240-100432/11-A			10:08	
CCB 240-100432/12-A			10:10	
ZZZZZZ			10:12	
ZZZZZZ			10:13	
ZZZZZZ			10:16	
ZZZZZZ			10:18	
ZZZZZZ			10:21	
CCV 240-100432/11-A			10:22	
CCB 240-100432/12-A			10:23	
CCV 240-100432/11-A			17:19	
CCB 240-100432/12-A			17:21	
ZZZZZZ			17:23	
ZZZZZZ			17:25	
ZZZZZZ			17:26	
ZZZZZZ			17:28	
ZZZZZZ			17:29	
ZZZZZZ			17:31	
ZZZZZZ			17:32	
ZZZZZZ			17:36	
ZZZZZZ			17:37	
ZZZZZZ			17:39	
CCV 240-100432/11-A			17:41	
CCB 240-100432/12-A			17:43	
ZZZZZZ			17:44	
ZZZZZZ			17:45	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/06/2013 07:53 End Date: 09/06/2013 19:04

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
ZZZZZZ			17:48	
ZZZZZZ			17:49	
ZZZZZZ			17:50	
ZZZZZZ			17:52	
ZZZZZZ			17:53	
ZZZZZZ			17:55	
ZZZZZZ			17:57	
ZZZZZZ			17:59	
CCV 240-100432/11-A	1		18:02	X
CCB 240-100432/12-A	1		18:03	X
ZZZZZZ			18:04	
ZZZZZZ			18:06	
ZZZZZZ			18:07	
MB 240-100394/1-A	1	T	18:09	X
LCS 240-100394/2-A	1	T	18:11	X
240-28627-2	1	T	18:12	X
240-28627-2 MS	1	T	18:14	X
240-28627-2 DU	1	T	18:15	X
240-28627-3	1	T	18:17	X
ZZZZZZ			18:18	
CCV 240-100432/11-A	1		18:21	X
CCB 240-100432/12-A	1		18:22	X
ZZZZZZ			18:24	
ZZZZZZ			18:25	
ZZZZZZ			18:27	
ZZZZZZ			18:30	
ZZZZZZ			18:32	
ZZZZZZ			18:33	
ZZZZZZ			18:35	
ZZZZZZ			18:37	
ZZZZZZ			18:40	
ZZZZZZ			18:41	
CCV 240-100432/11-A			18:43	
CCB 240-100432/12-A			18:44	
ZZZZZZ			18:46	
ZZZZZZ			18:49	
ZZZZZZ			18:50	
ZZZZZZ			18:53	
ZZZZZZ			18:55	
ZZZZZZ			18:57	
ZZZZZZ			18:59	
CCV 240-100432/11-A			19:02	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/06/2013 07:53 End Date: 09/06/2013 19:04

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
CCB 240-100432/12-A			19:04																				

Prep Types

T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00456

Analyte	ICV 240-100432/8-A 09/06/2013 08:18				CCV 240-100432/11-A 09/06/2013 18:02				CCV 240-100432/11-A 09/06/2013 18:21			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.39		5.00	108	11.5		10.0	115	11.6		10.0	116

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Method: 7471B Instrument ID: H1

Lab Sample ID: CRA 240-100432/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00456

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.146	J	73	50-150

Lab Sample ID: CRA 240-100911/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00459

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.197	J	98	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-100432/9-A 09/06/2013 08:19		CCB 240-100432/12-A 09/06/2013 18:03		CCB 240-100432/12-A 09/06/2013 18:22			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.60	0.60	U	0.60	U	0.60	U		

Italicized analytes were not requested for this sequence.

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/10/2013 15:19 End Date: 09/10/2013 17:42

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-100911/1-A			15:19	X																				
IC 240-100911/1-A			15:21	X																				
IC 240-100911/2-A			15:22	X																				
IC 240-100911/2-A			15:23	X																				
IC 240-100911/3-A			15:25	X																				
IC 240-100911/3-A			15:26	X																				
IC 240-100911/4-A			15:28	X																				
IC 240-100911/4-A			15:29	X																				
IC 240-100911/5-A			15:31	X																				
IC 240-100911/5-A			15:32	X																				
IC 240-100911/6-A			15:34	X																				
IC 240-100911/6-A			15:35	X																				
IC 240-100911/7-A			15:37	X																				
IC 240-100911/7-A			15:39	X																				
ICV 240-100911/8-A	1		15:41	X																				
ICB 240-100911/9-A	1		15:42	X																				
CRA 240-100911/10-A	1		15:43	X																				
CCV 240-100911/11-A			15:45																					
CCB 240-100911/12-A			15:47																					
ZZZZZZ			15:48																					
ZZZZZZ			15:50																					
ZZZZZZ			15:51																					
ZZZZZZ			15:53																					
ZZZZZZ			15:55																					
ZZZZZZ			15:56																					
ZZZZZZ			15:57																					
ZZZZZZ			15:59																					
ZZZZZZ			16:01																					
ZZZZZZ			16:04																					
CCV 240-100911/11-A			16:06																					
CCB 240-100911/12-A			16:07																					
ZZZZZZ			16:10																					
ZZZZZZ			16:13																					
ZZZZZZ			16:14																					
ZZZZZZ			16:16																					
ZZZZZZ			16:17																					
ZZZZZZ			16:18																					
ZZZZZZ			16:20																					
ZZZZZZ			16:22																					
ZZZZZZ			16:23																					
ZZZZZZ			16:25																					
CCV 240-100911/11-A	1		16:27	X																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/10/2013 15:19 End Date: 09/10/2013 17:42

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
CCB 240-100911/12-A	1		16:28	X
ZZZZZZ			16:29	
ZZZZZZ			16:31	
ZZZZZZ			16:33	
ZZZZZZ			16:34	
ZZZZZZ			16:36	
ZZZZZZ			16:38	
MB 240-100675/1-A	1	T	16:39	X
LCS 240-100675/2-A	1	T	16:41	X
240-28627-4	1	T	16:42	X
240-28627-4 DU	1	T	16:44	X
CCV 240-100911/11-A	1		16:45	X
CCB 240-100911/12-A	1		16:46	X
240-28627-4 MS	1	T	16:48	X
240-28627-5	1	T	16:49	X
240-28627-6	1	T	16:50	X
240-28627-7	1	T	16:52	X
ZZZZZZ			16:53	
ZZZZZZ			16:55	
ZZZZZZ			16:57	
ZZZZZZ			16:58	
ZZZZZZ			17:00	
ZZZZZZ			17:01	
CCV 240-100911/11-A	1		17:04	X
CCB 240-100911/12-A	1		17:05	X
ZZZZZZ			17:07	
ZZZZZZ			17:08	
ZZZZZZ			17:09	
ZZZZZZ			17:11	
ZZZZZZ			17:12	
ZZZZZZ			17:14	
ZZZZZZ			17:15	
CCV 240-100911/11-A			17:16	
CCB 240-100911/12-A			17:18	
ZZZZZZ			17:24	
ZZZZZZ			17:26	
CCV 240-100911/11-A			17:28	
CCB 240-100911/12-A			17:29	
ZZZZZZ			17:31	
ZZZZZZ			17:33	
ZZZZZZ			17:34	
ZZZZZZ			17:35	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/10/2013 15:19 End Date: 09/10/2013 17:42

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			17:37																				
ZZZZZZ			17:38																				
CCV 240-100911/11-A			17:40																				
CCB 240-100911/12-A			17:42																				

Prep Types
T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00459

Analyte	ICV 240-100911/8-A 09/10/2013 15:41				CCV 240-100911/11-A 09/10/2013 16:27				CCV 240-100911/11-A 09/10/2013 16:45			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.23		5.00	105	10.3		10.0	103	10.3		10.0	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00459

Analyte	CCV 240-100911/11-A 09/10/2013 17:04											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	10.2		10.0	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-100911/9-A 09/10/2013 15:42		CCB 240-100911/12-A 09/10/2013 16:28		CCB 240-100911/12-A 09/10/2013 16:46		CCB 240-100911/12-A 09/10/2013 17:05	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.60	0.60	U	0.60	U	0.60	U	0.60	U

Italicized analytes were not requested for this sequence.

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: I6 Method: 6010C

Start Date: 09/16/2013 08:02 End Date: 09/17/2013 05:30

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
STD 240-101673/1 IC			08:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-101673/2 IC			08:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-101673/3 IC			08:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-101673/4 IC			08:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-101673/5	1		08:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICBIS 240-101673/6	1		08:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-101673/7			08:35																				
CRI 240-101673/8	1		08:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			08:47																				
ICSA 240-101673/10	1		08:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-101673/11	1		09:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-101673/12	1		09:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-101673/13	1		09:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			09:28																				
MB 240-100393/1-A	1	T	09:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-100393/2-A	1	T	09:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-2	1	T	09:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-2 SD	5	T	09:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-2 PDS	1	T	09:58							X					X			X					
240-28627-2 DU	1	T	10:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-2 MS	1	T	10:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-3	1	T	10:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			10:22																				
CCV 240-101673/24	1		10:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-101673/25	1		10:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			10:39																				
ZZZZZZ			10:45																				
ZZZZZZ			10:51																				
ZZZZZZ			10:57																				
ZZZZZZ			11:03																				
ZZZZZZ			11:09																				
ZZZZZZ			11:15																				
ZZZZZZ			11:21																				
ZZZZZZ			11:27																				
ZZZZZZ			11:33																				
CCV 240-101673/36			11:38																				
CCB 240-101673/37			11:44																				
CCV 240-101673/38	1		11:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-101673/39	1		12:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			12:07																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: I6 Method: 6010C

Start Date: 09/16/2013 08:02 End Date: 09/17/2013 05:30

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			12:13																				
ZZZZZZ			12:19																				
ZZZZZZ			12:25																				
ZZZZZZ			12:31																				
ZZZZZZ			12:37																				
ZZZZZZ			12:43																				
ZZZZZZ			12:49																				
MB 240-100670/1-A	1	T	12:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-100670/2-A	1	T	13:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-101673/50	1		13:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-101673/51	1		13:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-4	1	T	13:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-4 SD	5	T	13:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-4 PDS	1	T	13:30												X								
240-28627-4 DU	1	T	13:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-4 MS	1	T	13:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-5	1	T	13:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-6	1	T	13:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-7	1	T	14:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			14:06																				
ZZZZZZ			14:12																				
CCV 240-101673/62	1		14:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-101673/63	1		14:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			14:30																				
ZZZZZZ			14:36																				
ZZZZZZ			14:42																				
ZZZZZZ			14:48																				
ZZZZZZ			14:54																				
ZZZZZZ			15:00																				
ZZZZZZ			15:06																				
ZZZZZZ			15:12																				
ZZZZZZ			15:18																				
ZZZZZZ			15:24																				
CCV 240-101673/74			15:30																				
CCB 240-101673/75			15:36																				
ZZZZZZ			15:42																				
ZZZZZZ			15:48																				
ZZZZZZ			15:54																				
ZZZZZZ			15:59																				
ZZZZZZ			16:05																				
ZZZZZZ			16:11																				
ZZZZZZ			16:17																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: I6 Method: 6010C

Start Date: 09/16/2013 08:02 End Date: 09/17/2013 05:30

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			16:23																				
ZZZZZZ			16:29																				
ZZZZZZ			16:35																				
CCV 240-101673/86			16:41																				
CCB 240-101673/87			16:47																				
ZZZZZZ			16:53																				
ZZZZZZ			16:59																				
ZZZZZZ			17:05																				
ZZZZZZ			17:11																				
ZZZZZZ			17:17																				
ZZZZZZ			17:23																				
ZZZZZZ			17:29																				
CRI 240-101673/95	1		17:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			17:41																				
ZZZZZZ			17:47																				
CCV 240-101673/98			17:53																				
CCB 240-101673/99			17:59																				
ZZZZZZ			18:05																				
ZZZZZZ			18:11																				
ZZZZZZ			18:17																				
ZZZZZZ			18:23																				
ZZZZZZ			18:29																				
ZZZZZZ			18:35																				
ZZZZZZ			18:41																				
ZZZZZZ			18:47																				
ZZZZZZ			18:53																				
ZZZZZZ			18:59																				
CCV 240-101673/110			19:05																				
CCB 240-101673/111			19:11																				
ZZZZZZ			19:17																				
ZZZZZZ			19:23																				
ZZZZZZ			19:29																				
ZZZZZZ			19:35																				
ZZZZZZ			19:41																				
ZZZZZZ			19:47																				
ZZZZZZ			19:53																				
ZZZZZZ			19:59																				
ZZZZZZ			20:04																				
ZZZZZZ			20:10																				
CCV 240-101673/122			20:16																				
CCB 240-101673/123			20:23																				
ZZZZZZ			20:29																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: I6 Method: 6010C

Start Date: 09/16/2013 08:02 End Date: 09/17/2013 05:30

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			20:34																				
ZZZZZZ			20:40																				
ZZZZZZ			20:46																				
ZZZZZZ			20:52																				
ZZZZZZ			20:58																				
ZZZZZZ			21:04																				
ZZZZZZ			21:10																				
ZZZZZZ			21:16																				
ZZZZZZ			21:22																				
CCV 240-101673/134			21:28																				
CCB 240-101673/135			21:34																				
ZZZZZZ			21:40																				
ZZZZZZ			21:46																				
ZZZZZZ			21:52																				
ZZZZZZ			21:58																				
ZZZZZZ			22:04																				
ZZZZZZ			22:10																				
ZZZZZZ			22:16																				
ZZZZZZ			22:22																				
ZZZZZZ			22:28																				
ZZZZZZ			22:34																				
CCV 240-101673/146			22:40																				
CCB 240-101673/147			22:46																				
ZZZZZZ			22:52																				
ZZZZZZ			22:58																				
ZZZZZZ			23:04																				
ZZZZZZ			23:10																				
ZZZZZZ			23:16																				
ZZZZZZ			23:22																				
ZZZZZZ			23:28																				
ZZZZZZ			23:34																				
ZZZZZZ			23:40																				
ZZZZZZ			23:46																				
CCV 240-101673/158			23:52																				
CCB 240-101673/159			23:58																				
ZZZZZZ			00:04																				
ZZZZZZ			00:10																				
ZZZZZZ			00:16																				
ZZZZZZ			00:22																				
ZZZZZZ			00:28																				
ZZZZZZ			00:34																				
ZZZZZZ			00:40																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: I6 Method: 6010C

Start Date: 09/16/2013 08:02 End Date: 09/17/2013 05:30

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn					
ZZZZZZ			00:46																					
ZZZZZZ			00:52																					
ZZZZZZ			00:58																					
CCV 240-101673/170			01:04																					
CCB 240-101673/171			01:10																					
ZZZZZZ			01:16																					
ZZZZZZ			01:22																					
ZZZZZZ			01:28																					
ZZZZZZ			01:34																					
ZZZZZZ			01:40																					
ZZZZZZ			01:46																					
ZZZZZZ			01:52																					
ZZZZZZ			01:58																					
ZZZZZZ			02:04																					
ZZZZZZ			02:10																					
CCV 240-101673/182			02:16																					
CCB 240-101673/183			02:22																					
ZZZZZZ			02:28																					
CCV 240-101673/185			02:34																					
CCB 240-101673/186			02:40																					
CCV 240-101673/187			04:47																					
CCB 240-101673/188			04:54																					
ZZZZZZ			05:00																					
ZZZZZZ			05:06																					
ZZZZZZ			05:12																					
ZZZZZZ			05:18																					
CCV 240-101673/193			05:24																					
CCB 240-101673/194			05:30																					

Prep Types

T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

ICV Source: MT6500ICV_00012 Concentration Units: ug/L

CCV Source: MTICPCCV_00007

Analyte	ICV 240-101673/5 09/16/2013 08:23				CCV 240-101673/12 09/16/2013 09:16				CCV 240-101673/24 09/16/2013 10:27			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	380		375	101	524		500	105	527		500	105
Arsenic	385		375	103	514		500	103	520		500	104
Barium	1550		1500	104	2060		2000	103	2070		2000	103
Beryllium	1580		1500	105	2100		2000	105	2100		2000	105
Cadmium	373		375	99	502		500	100	497		500	99
Chromium	1520		1500	101	2050		2000	103	2040		2000	102
Cobalt	1490		1500	99	2030		2000	102	2020		2000	101
Copper	1530		1500	102	2060		2000	103	2060		2000	103
Lead	376		375	100	501		500	100	495		500	99
Molybdenum	1530		1500	102	2060		2000	103	1990		2000	100
Nickel	1510		1500	100	2000		2000	100	1980		2000	99
Selenium	381		375	102	511		500	102	507		500	101
Silver	775		750	103	1020		1000	102	1020		1000	102
Thallium	749		750	100	1040		1000	104	1030		1000	103
Vanadium	1540		1500	103	2080		2000	104	2070		2000	104
Zinc	1540		1500	102	2050		2000	102	2030		2000	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

ICV Source: MT6500ICV_00012 Concentration Units: ug/L

CCV Source: MTICPCCV_00007

Analyte	CCV 240-101673/38 09/16/2013 11:55				CCV 240-101673/50 09/16/2013 13:07				CCV 240-101673/62 09/16/2013 14:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	527		500	105	534		500	107	526		500	105
Arsenic	519		500	104	542		500	108	539		500	108
Barium	2050		2000	103	2100		2000	105	2110		2000	106
Beryllium	2130		2000	106	2180		2000	109	2180		2000	109
Cadmium	496		500	99	506		500	101	507		500	101
Chromium	2040		2000	102	2050		2000	102	2050		2000	102
Cobalt	2020		2000	101	2020		2000	101	2020		2000	101
Copper	2060		2000	103	2050		2000	103	2060		2000	103
Lead	488		500	98	513		500	103	521		500	104
Molybdenum	1950		2000	97	1910		2000	95	1950		2000	98
Nickel	1970		2000	98	2070		2000	104	2090		2000	105
Selenium	500		500	100	519		500	104	522		500	104
Silver	1020		1000	102	1040		1000	104	1050		1000	105
Thallium	1010		1000	101	961		1000	96	950		1000	95
Vanadium	2070		2000	103	2050		2000	103	2060		2000	103
Zinc	2030		2000	101	2070		2000	103	2080		2000	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Method: 6010C Instrument ID: I6

Lab Sample ID: CRI 240-101673/8 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	20.4		102	70-130
Arsenic	15.0	16.0		106	70-130
Barium	200	206		103	70-130
Beryllium	5.00	4.34	J	87	70-130
Cadmium	5.00	5.06		101	70-130
Chromium	10.0	9.46	J	95	70-130
Cobalt	10.0	11.0		110	70-130
Copper	20.0	19.1	J	95	70-130
Lead	10.0	9.60	J	96	70-130
Molybdenum	40.0	43.2		108	70-130
Nickel	40.0	40.4		101	70-130
Selenium	20.0	21.6		108	70-130
Silver	10.0	10.5		105	70-130
Thallium	20.0	19.7	J	99	70-130
Vanadium	10.0	10.5		105	70-130
Zinc	50.0	53.6		107	70-130

Lab Sample ID: CRI 240-101673/95 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	20.7		104	70-130
Arsenic	15.0	15.7		105	70-130
Barium	200	208		104	70-130
Beryllium	5.00	4.57	J	91	70-130
Cadmium	5.00	5.21		104	70-130
Chromium	10.0	10.3		103	70-130
Cobalt	10.0	10.8		108	70-130
Copper	20.0	20.9	J	104	70-130
Lead	10.0	9.65	J	97	70-130
Molybdenum	40.0	44.8		112	70-130
Nickel	40.0	41.1		103	70-130
Selenium	20.0	21.9		110	70-130
Silver	10.0	10.1		101	70-130
Thallium	20.0	22.1		110	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Method: 6010C Instrument ID: I6

Lab Sample ID: CRI 240-101673/95 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	10.0	10.8		108	70-130
Zinc	50.0	55.1		110	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-101673/51 09/16/2013 13:12		CCB 240-101673/63 09/16/2013 14:24					
		Found	C	Found	C	Found	C	Found	C
Antimony	20	1.91	J	20	U				
Arsenic	15	15	U	15	U				
Barium	200	200	U	200	U				
Beryllium	5.0	5.0	U	5.0	U				
Cadmium	5.0	5.0	U	5.0	U				
Chromium	10	10	U	10	U				
Cobalt	10	10	U	10	U				
Copper	25	25	U	25	U				
Lead	10	10	U	10	U				
Molybdenum	40	8.02	J	7.87	J				
Nickel	40	40	U	40	U				
Selenium	20	20	U	20	U				
Silver	10	10	U	10	U				
Thallium	20	20	U	20	U				
Vanadium	10	10	U	10	U				
Zinc	50	50	U	50	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICBIS 240-101673/6 09/16/2013 08:29		CCB 240-101673/13 09/16/2013 09:22		CCB 240-101673/25 09/16/2013 10:33		CCB 240-101673/39 09/16/2013 12:01	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	20	U	20	U	20	U
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	200	U	200	U
Beryllium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Lead	10	10	U	10	U	10	U	10	U
Molybdenum	40	6.08	J	7.60	J	6.94	J	7.78	J
Nickel	40	40	U	40	U	40	U	40	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	10	U	10	U	10	U	10	U
Zinc	50	50	U	50	U	50	U	50	U

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Lab Sample ID: ICSA 240-101673/10 Instrument ID: I6

Lab File ID: I60916A ICS Source: MTTRICSAW_00019

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**2.99**	
Arsenic		**0.966**	
Barium		**1.58**	
Beryllium		**0.0586**	
Cadmium		**0.754**	
Chromium		**-1.52**	
Cobalt		**-0.335**	
Copper		**2.77**	
Lead		**-3.35**	
Molybdenum		**-0.334**	
Nickel		**-1.15**	
Selenium		**-3.78**	
Silver		**-0.472**	
Thallium		**-1.18**	
Vanadium		**-0.203**	
Zinc		**3.39**	
Aluminum	*500000*	*486762*	*97*
Boron		*2.48*	
Calcium	*500000*	*502449*	*100*
Iron	*200000*	*196369*	*98*
Magnesium	*500000*	*496637*	*99*
Manganese		*3.74*	
Potassium		*11.7*	
Sodium		*-1104*	
Tin		*1.78*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Lab Sample ID: ICSAB 240-101673/11 Instrument ID: I6

Lab File ID: I60916A ICS Source: MTICPICSABW_00001

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**1000**	**1030**	**103**
Arsenic	**1000**	**1060**	**106**
Barium	**500**	**548**	**110**
Beryllium	**500**	**536**	**107**
Cadmium	**1000**	**989**	**99**
Chromium	**500**	**509**	**102**
Cobalt	**500**	**498**	**100**
Copper	**500**	**545**	**109**
Lead	**1000**	**981**	**98**
Molybdenum	**1000**	**1029**	**103**
Nickel	**1000**	**965**	**96**
Selenium	**1000**	**1034**	**103**
Silver	**1000**	**1094**	**109**
Thallium	**1000**	**1025**	**103**
Vanadium	**500**	**522**	**104**
Zinc	**1000**	**1053**	**105**
Aluminum	*500000*	*509044*	*102*
Boron	*500*	*540*	*108*
Calcium	*500000*	*515524*	*103*
Iron	*200000*	*204644*	*102*
Magnesium	*500000*	*515131*	*103*
Manganese	*500*	*526*	*105*
Potassium	*10000*	*11171*	*112*
Sodium	*10000*	*11019*	*110*
Tin	*500*	*511*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: BARNEY

Method: 365.1 MDL Date: 01/27/2010 16:28

Prep Method: 365.2/365.3/365

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Phosphate as PO4		30.7	0.3

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: BARNEY

Method: 365.1 XMDL Date: 01/27/2010 16:28

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Phosphate as PO4		0.307	0.1

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - ASTM LEACH

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: GARFUNKEL

Method: 300.0 MDL Date: 01/27/2010 17:37

Leach Method: D3987-85

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Nitrate as N		5	0.23

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - ASTM LEACH

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: GARFUNKEL

Method: 300.0 XMDL Date: 01/27/2010 17:38

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate as N		0.5	0.023

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: Randolph

Method: 9045C RL Date: 01/28/2010 09:54

Analyte	Wavelength/ Mass	RL (SU)	
pH		0.1	

FORM IX - IN

9-IN

CALIBRATION BLANK DETECTION LIMITS

GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: Randolph

Method: 9045C XRL Date: 01/28/2010 09:54

Analyte	Wavelength/ Mass	XRL (SU)	
pH		0.1	

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	RL (%)	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Solids		10	

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: SM4500_NH3_E MDL Date: 01/27/2010 16:51

Prep Method: SM4500Norg_C

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Nitrogen, Kjeldahl		150	51

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: SM4500_NH3_E XMDL Date: 07/30/2013 09:49

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Kjeldahl		5	1.7

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9060A MDL Date: 07/02/2013 16:54

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Total Inorganic Carbon - Duplicates		1000	1000
Total Organic Carbon - Duplicates		1000	600

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9060A XMDL Date: 01/16/2012 09:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Inorganic Carbon - Duplicates		1	0.14
Total Organic Carbon - Duplicates		1	0.5

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9081 RL Date: 01/16/2012 19:19

Prep Method: 9081

Analyte	Wavelength/ Mass	RL (meq/100gm)	
Cation Exchange Capacity		1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28627-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9081 XRL Date: 01/16/2012 19:20

Analyte	Wavelength/ Mass	XRL (meq/100gm)	
Cation Exchange Capacity		1	

FORM IX - IN

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Prep Method: 365.2/365.3/365

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-100954/10-A	09/11/2013 07:00	100954	0.50		50
LCS 240-100954/11-A	09/11/2013 07:01	100954	0.50		50
240-28747-P-3-B MS	09/11/2013 07:03	100954	0.48		50
240-28747-P-3-C MSD	09/11/2013 07:04	100954	0.48		50
240-28627-2	09/11/2013 07:07	100954	0.49		50

FORM XII-IN

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Prep Method: SM4500Norg_C

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-100175/1-A	09/05/2013 07:50	100175	.52		25
LCS 240-100175/2-A	09/05/2013 07:50	100175	.51		25
180-24611-A-1-I MS	09/05/2013 07:50	100175	.51		25
180-24611-A-1-J MSD	09/05/2013 07:50	100175	.53		25
240-28627-2	09/05/2013 07:50	100175	.51		25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG No.:

Prep Method: 9081

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 490-106125/1-A	09/11/2013 08:36	106125	4.0		100
240-28528-I-19-B DU	09/11/2013 08:36	106125	4.029		100
240-28627-2	09/11/2013 08:36	106125	4.052		100

FORM XII-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 102034	Date: 09/18/2013 19:12						
300.0	MB 240-101798/1-A	Nitrate as N	5.0	U	mg/Kg	5.0	1
Batch ID: 101047	Date: 09/11/2013 13:57	Prep Batch: 100954		Date: 09/11/2013 07:00			
365.1	MB 240-100954/10-A	Phosphate as PO4	31	U	mg/Kg	31	1
Batch ID: 100387	Date: 09/06/2013 14:50	Prep Batch: 100175		Date: 09/05/2013 07:50			
SM4500_NH3 E	MB 240-100175/1-A	Nitrogen, Kjeldahl	55.6	J	mg/Kg	140	1

FORM III-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 110032	Date: 09/13/2013 14:00						
9060A	MB 490-110032/3	Total Organic Carbon - Duplicates	1000	U	mg/Kg	1000	1
Batch ID: 107742	Date: 09/11/2013 08:36	Prep Batch: 106125	Date: 09/11/2013 08:36				
9081	MB 490-106125/1-A	Cation Exchange Capacity	0.040	U	meq/100gm	0.040	1

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 102034	Date: 09/18/2013 20:56										
300.0	240-28678-A-4-D	Nitrate as N	1.9	J	mg/Kg						
300.0	240-28678-A-4-D MS	Nitrate as N	28.9		mg/Kg	25.0	108	80-120			
Batch ID: 101047	Date: 09/11/2013 13:57	Prep Batch: 100954	Date: 09/11/2013 07:03								
365.1	240-28747-P-3-B	Phosphate as PO4	38	U	mg/Kg						
365.1	240-28747-P-3-B MS	Phosphate as PO4	35.9	J	mg/Kg	188	19	90-110			F
Batch ID: 100387	Date: 09/06/2013 14:52	Prep Batch: 100175	Date: 09/05/2013 07:50								
SM4500_NH3_E	180-24611-A-1-I	Nitrogen, Kjeldahl	2900		mg/Kg						B
SM4500_NH3_E	180-24611-A-1-I MS	Nitrogen, Kjeldahl	5960		mg/Kg	3550	87	50-120			

Samples not in SDG

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 102034	Date: 09/18/2013 21:14										
300.0	240-28678-A-4 -D MSD	Nitrate as N	29.8		mg/Kg	25.0	112	80-120	3	20	
Batch ID: 101047	Date: 09/11/2013 13:57	Prep Batch: 100954	Date: 09/11/2013 07:04								
365.1	240-28747-P-3 -C MSD	Phosphate as PO4	8.25	J	mg/Kg	188	4	90-110	125	20	F
Batch ID: 100387	Date: 09/06/2013 14:53	Prep Batch: 100175	Date: 09/05/2013 07:50								
SM4500_ NH3_E	180-24611-A-1 -J MSD	Nitrogen, Kjeldahl	5540		mg/Kg	3420	78	50-120	7	50	

Samples not in SDG

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 100114	Date: 09/04/2013 15:43							
9045C	DR-SB-196-02-04	240-28627-2	pH	3.70	SU			
9045C	DR-SB-196-02-04	240-28627-2 DU	pH	3.630	SU	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG No.:

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 109460	Date: 09/13/2013 13:00							
9060A		240-28528-I-19	Total Inorganic Carbon - Duplicates	1000	mg/Kg			U
9060A		240-28528-I-19 DU	Total Inorganic Carbon - Duplicates	1000	mg/Kg	NC	20	U
Batch ID: 110032	Date: 09/13/2013 14:00							
9060A		240-28528-I-19	Total Organic Carbon - Duplicates	1000	mg/Kg			U
9060A		240-28528-I-19 DU	Total Organic Carbon - Duplicates	1000	mg/Kg	NC	20	U
Batch ID: 107742	Date: 09/11/2013 08:36	Prep Batch: 106125	Date: 09/11/2013 08:36					
9081		240-28528-I-19-B	Cation Exchange Capacity	18	meq/100gm			
9081		240-28528-I-19-B DU	Cation Exchange Capacity	20.8	meq/100gm	13	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 102034	Date: 09/18/2013 19:29										
						LCS Source: WCICLCS_00222					
300.0	LCS 240-101798/2-A	Nitrate as N	26.9		mg/Kg	25.5	106	90-110			
Batch ID: 101047	Date: 09/11/2013 13:57	Prep Batch: 100954	Date: 09/11/2013 07:01								
						LCS Source: P194-525_00004					
365.1	LCS 240-100954/11-A	Phosphate as PO4	143		mg/Kg	138	104	90-110			
Batch ID: 100114	Date: 09/04/2013 13:49										
						LCS Source: WCPHLCS_00007					
9045C	LCS 240-100114/2	pH	6.460		SU	6.34	102	97-103			
Batch ID: 100387	Date: 09/06/2013 14:50	Prep Batch: 100175	Date: 09/05/2013 07:50								
						LCS Source: P194-525_00003					
SM4500_NH3_E	LCS 240-100175/2-A	Nitrogen, Kjeldahl	425		mg/Kg	411	104	70-133			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 110032		Date: 09/13/2013 14:00									
						LCS Source:		MarineSedimen_00002			
9060A	LCS 490-110032/2	Total Organic Carbon - Duplicates	29700		mg/Kg	29900	99	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: BARNEY Method: 365.1

Start Date: 09/11/2013 13:45 End Date: 09/11/2013 14:04

Lab Sample ID	D / F	Type	Time	Analytes
				P-PO4
IC 240-100954/1-A			13:45	X
IC 240-100954/2-A			13:45	X
IC 240-100954/3-A			13:45	X
IC 240-100954/4-A			13:45	X
IC 240-100954/5-A			13:45	X
IC 240-100954/6-A			13:45	X
IC 240-100954/7-A			13:45	X
CCV 240-100954/8-A			13:45	
CCB 240-100954/9-A			13:45	
CCV 240-100954/8-A	1		13:57	X
CCB 240-100954/9-A	1		13:57	X
MB 240-100954/10-A	1	T	13:57	X
LCS 240-100954/11-A	1	T	13:57	X
ZZZZZZ			13:57	
240-28747-P-3-B MS	1	T	13:57	X
240-28747-P-3-C MSD	1	T	13:57	X
ZZZZZZ			13:57	
240-28627-2	1	T	13:57	X
ZZZZZZ			13:57	
ZZZZZZ			13:57	
ZZZZZZ			13:57	
CCV 240-100954/8-A	1		14:00	X
CCB 240-100954/9-A	1		14:00	X
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
CCV 240-100954/8-A			14:03	
CCB 240-100954/9-A			14:03	
ZZZZZZ			14:03	
ZZZZZZ			14:03	
ZZZZZZ			14:03	
ZZZZZZ			14:03	
CCV 240-100954/8-A			14:04	
CCB 240-100954/9-A			14:04	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: BARNEY Method: 365.1

Start Date: 09/11/2013 13:45 End Date: 09/11/2013 14:04

Prep Types
T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Analyst: TPH Batch Start Date: 09/11/2013

Reporting Units: mg/L Analytical Batch No.: 101047

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
10	CCV	13:57	Phosphate as PO4	1.54	1.54	100	90-110		WCPHOS50PPM_00037
11	CCB	13:57	Phosphate as PO4	0.31				U	
22	CCV	14:00	Phosphate as PO4	1.53	1.54	100	90-110		WCPHOS50PPM_00037
23	CCB	14:00	Phosphate as PO4	0.31				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: GARFUNKEL Method: 300.0

Start Date: 09/18/2013 18:37 End Date: 09/19/2013 03:54

Lab Sample ID	D/F	Type	Time	Analytes																					
				NO3																					
CCV 240-102034/1	1		18:37	X																					
CCB 240-102034/2	1		18:54	X																					
MB 240-101798/1-A	1	Y	19:12	X																					
LCS 240-101798/2-A	1	Y	19:29	X																					
ZZZZZZ			19:47																						
ZZZZZZ			20:04																						
ZZZZZZ			20:21																						
ZZZZZZ			20:39																						
240-28678-A-4-D MS	1	Y	20:56	X																					
240-28678-A-4-D MSD	1	Y	21:14	X																					
CCV 240-102034/11	1		21:31	X																					
CCB 240-102034/12	1		21:48	X																					
240-28627-2	1	Y	22:06	X																					
ZZZZZZ			22:23																						
ZZZZZZ			22:41																						
ZZZZZZ			22:58																						
ZZZZZZ			23:15																						
ZZZZZZ			23:33																						
ZZZZZZ			23:50																						
ZZZZZZ			00:08																						
ZZZZZZ			00:25																						
ZZZZZZ			00:42																						
CCV 240-102034/23	1		01:00	X																					
CCB 240-102034/24	1		01:17	X																					
ZZZZZZ			01:34																						
ZZZZZZ			01:52																						
ZZZZZZ			02:09																						
ZZZZZZ			02:27																						
ZZZZZZ			02:44																						
ZZZZZZ			03:01																						
ZZZZZZ			03:19																						
CCV 240-102034/32			03:36																						
CCB 240-102034/33			03:54																						

Prep Types
Y = ASTM Leach

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Analyst: LKG Batch Start Date: 09/18/2013

Reporting Units: mg/L Analytical Batch No.: 101954

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
10	ICV	18:02	Nitrate as N	2.64	2.50	106	90-110		WCICLCS_00223

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Analyst: LKG Batch Start Date: 09/18/2013

Reporting Units: mg/L Analytical Batch No.: 102034

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	18:37	Nitrate as N	2.52	2.50	101	90-110		WCICCCV_00323
2	CCB	18:54	Nitrate as N	0.50				U	
11	CCV	21:31	Nitrate as N	2.59	2.50	104	90-110		WCICCCV_00323
12	CCB	21:48	Nitrate as N	0.50				U	
23	CCV	01:00	Nitrate as N	2.63	2.50	105	90-110		WCICCCV_00323
24	CCB	01:17	Nitrate as N	0.50				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: Randolph Method: 9045C

Start Date: 09/04/2013 13:40 End Date: 09/04/2013 16:30

Lab Sample ID	D / F	Type	Time	Analytes																				
				pH																				
CCV 240-100114/1	1		13:40	X																				
LCS 240-100114/2	1	T	13:49	X																				
ZZZZZZ			13:59																					
ZZZZZZ			14:08																					
ZZZZZZ			14:18																					
ZZZZZZ			14:27																					
ZZZZZZ			14:37																					
ZZZZZZ			14:46																					
ZZZZZZ			14:56																					
ZZZZZZ			15:05																					
CCV 240-100114/11	1		15:14	X																				
ZZZZZZ			15:24																					
ZZZZZZ			15:33																					
240-28627-2 DU	1	T	15:43	X																				
240-28627-2	1	T	15:52	X																				
ZZZZZZ			16:02																					
ZZZZZZ			16:11																					
ZZZZZZ			16:21																					
CCV 240-100114/19	1		16:30	X																				

Prep Types
T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Analyst: BLW Batch Start Date: 09/04/2013

Reporting Units: SU Analytical Batch No.: 100114

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	13:40	pH	7.020	7.00	100	99-101		WCPH7_00042
11	CCV	15:14	pH	7.010	7.00	100	99-101		WCPH7_00042
19	CCV	16:30	pH	7.030	7.00	100	99-101		WCPH7_00042

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG No.:

Instrument ID: NOEQUIP Method: 9060A

Start Date: 09/13/2013 14:00 End Date: 09/26/2013 11:59

Lab Sample ID	D / F	Type	Time	Analytes
				TOCD
CCV 490-110032/1	1		14:00	X
LCS 490-110032/2	1	T	14:00	X
MB 490-110032/3	1	T	14:00	X
ZZZZZZ			14:00	
240-28528-I-19 DU	1	T	14:00	X
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
CCV 490-110032/13	1		14:00	X
CCB 490-110032/14	1		14:00	X
CCV 490-110032/15	1		14:00	X
CCB 490-110032/16	1		14:00	X
240-28627-2	1	T	14:00	X
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
CCV 490-110032/21	1		11:59	X
CCB 490-110032/22	1		11:59	X
CCV 490-110032/23			11:59	
CCB 490-110032/24			11:59	
ZZZZZZ			11:59	
ZZZZZZ			11:59	
ZZZZZZ			11:59	
CCV 490-110032/28			11:59	
CCB 490-110032/29			11:59	

Prep Types

T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG No.:

Analyst: JKF Batch Start Date: 09/13/2013

Reporting Units: mg/L Analytical Batch No.: 110032

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	14:00	Total Organic Carbon - Duplicates	171000	169000	101	90-110		Ammonium_Oxal_00003
13	CCV	14:00	Total Organic Carbon - Duplicates	173000	169000	102	90-110		Ammonium_Oxal_00003
14	CCB	14:00	Total Organic Carbon - Duplicates	1.0				U	
15	CCV	14:00	Total Organic Carbon - Duplicates	166000	169000	98	90-110		Ammonium_Oxal_00003
16	CCB	14:00	Total Organic Carbon - Duplicates	1.0				U	
21	CCV	11:59	Total Organic Carbon - Duplicates	161000	169000	95	90-110		Ammonium_Oxal_00003
22	CCB	11:59	Total Organic Carbon - Duplicates	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG No.:

Instrument ID: NOEQUIP Method: 9081

Start Date: 09/11/2013 08:36 End Date: 09/11/2013 08:36

Lab Sample ID	D / F	Type	Time	Analytes																				
				CEC																				
MB 490-106125/1-A	1	T	08:36	X																				
ZZZZZZ			08:36																					
240-28528-I-19-B DU	1	T	08:36	X																				
240-28627-2	1	T	08:36	X																				
ZZZZZZ			08:36																					
ZZZZZZ			08:36																					
ZZZZZZ			08:36																					
ZZZZZZ			08:36																					
ZZZZZZ			08:36																					
ZZZZZZ			08:36																					
ZZZZZZ			08:36																					
ZZZZZZ			08:36																					
ZZZZZZ			08:36																					

Prep Types
T = Total/NA

CATION EXCHANGE CAPACITY (CEC)

(Reference: EPA 9081, Rev0 September 1986)

ICP data set #: 106125
Analysis Date: ########
Analyst: kj
Reviewd by: rs

$$CEC = \frac{\text{ug/ml } Na^{+} \text{ (in NH4OAc sol'n) x } \mathbf{V} \text{ (mL) x DF}}{\mathbf{22.99} \text{ g/eq x } \mathbf{Wt} \text{ (g)/10}}$$

where:

mg/L Na+ is the Na concentration by ICP in the NH4OAc **extract**

V (mL) is the volume of NH4OAc used, about **100** mL

DF is any additional dilution (default DF is 1)

22.99 is the equivalent weight of Na

Wt (g) is the soil sample weight used, about **4** g

Sample ID	Na+ (mg/L)	V (mL)	DF	Wt (g)	CEC (meq/100 g)
MB106125	0.109	100	10	4.00	0
28528-19	13.800	100	10	4.00	15
28528-19du	15.900	100	10	4.03	17
28627-2	31.900	100	10	4.05	34
28679-3	17.400	100	10	4.09	19
28679-4	14.100	100	10	4.01	15
28680-2	25.800	100	10	4.05	28
28680-5	11.600	100	10	4.10	12
28743-1	19.400	100	10	4.02	21
28743-2	20.600	100	10	4.10	22
28743-3	18.100	100	10	4.05	19
28743-4	30.500	100	10	4.10	32
28747-3	7.840	100	10	4.00	9
28747-6	1.400	100	10	4.01	2

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG No.:

Batch Number: 106125 Batch Start Date: 09/11/13 08:35 Batch Analyst: Bagchi, Debanjali

Batch Method: 9081 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MET_2PROPANOL 00003	MET_NaOAc 00007	MET_NH4OAc 00004	
MB 490-106125/1		9081, 9081		4.0 g	100 mL			100 mL	
240-28528-I-19 DU		9081, 9081	T	4.029 g	100 mL	100 mL	132 mL	100 mL	
240-28627-G-2	DR-SB-196-02-04	9081, 9081	T	4.052 g	100 mL	100 mL	132 mL	100 mL	

Batch Notes	
Ammonium Acetate Rgt ID	634031
Batch Comment	First isopropyl cyle done with Rgt ID- 719694
Isopropyl Alcohol Rgt ID	977799
Sodium Acetate Rgt ID	724504

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG No.:

Instrument ID: NOEQUIP Method: 9060A

Start Date: 09/13/2013 13:00 End Date: 09/13/2013 13:00

Lab Sample ID	D / F	Type	Time	Analytes																				
				TICD																				
ZZZZZZ			13:00																					
240-28528-I-19 DU	1	T	13:00	X																				
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
240-28627-2	1	T	13:00	X																				
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					

Prep Types
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Nashville Job No.: 240-28627-1

SDG No.:

Batch Number: 110032 Batch Start Date: 09/13/13 14:00 Batch Analyst: Frankenfield, Julie

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Ammonium_Oxal 00003	MarineSedimen 00002				
CCV 490-110032/1		9060A		25 mg					
LCS 490-110032/2		9060A			25 mg				
CCV 490-110032/13		9060A		25 mg					
CCV 490-110032/15		9060A		25 mg					
CCV 490-110032/21		9060A		25 mg					

Batch Notes	
Lot # of hydrochloric acid	855241

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Instrument ID: NOEQUIP Method: SM4500_NH3_E

Start Date: 09/06/2013 14:50 End Date: 09/06/2013 15:00

Lab Sample ID	D / F	Type	Time	Analytes																				
				TKN																				
MB 240-100175/1-A	1	T	14:50	X																				
LCS 240-100175/2-A	1	T	14:50	X																				
ZZZZZZ			14:51																					
180-24611-A-1-I MS	1	T	14:52	X																				
180-24611-A-1-J MSD	1	T	14:53	X																				
ZZZZZZ			14:54																					
ZZZZZZ			14:55																					
ZZZZZZ			14:56																					
ZZZZZZ			14:57																					
ZZZZZZ			14:58																					
ZZZZZZ			14:59																					
240-28627-2	1	T	15:00	X																				

Prep Types
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Batch Number: 100175 Batch Start Date: 09/05/13 14:00 Batch Analyst: Kuhle, Julie

Batch Method: SM4500Norg_C Batch End Date: 09/05/13 18:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DigestBlockPos	P194-525 00003	WCNH31000 00025	
MB 240-100175/1		SM4500Norg_C, SM4500_NH3_E		.52 g	25 mL	A1			
LCS 240-100175/2		SM4500Norg_C, SM4500_NH3_E		.51 g	25 mL	A2	25 mL		
180-24611-A-1 MS		SM4500Norg_C, SM4500_NH3_E	T	.51 g	25 mL	A4		0.5 mL	
180-24611-A-1 MSD		SM4500Norg_C, SM4500_NH3_E	T	.53 g	25 mL	A5		0.5 mL	
240-28627-I-2	DR-SB-196-02-04	SM4500Norg_C, SM4500_NH3_E	T	.51 g	25 mL	B2			

Batch Notes	
Batch Comment	BALANCE B043
Block Digestor Name	CAROL
Digestion Solution Used	1047905
Oven, Bath or Block Temperature 1	188.7
Pipette ID	927755

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Batch Number: 100954 Batch Start Date: 09/11/13 06:50 Batch Analyst: Harshman, Tom

Batch Method: 365.2/365.3/365 Batch End Date: 09/11/13 07:28

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	P194-525 00004	WCPHOS50PPM 00037		
CCV 240-100954/8		365.2/365.3/ 365, 365.1		50 mL	50 mL		0.5 mL		
CCB 240-100954/9		365.2/365.3/ 365, 365.1		50 mL	50 mL				
MB 240-100954/10		365.2/365.3/ 365, 365.1		0.50 g	50 mL				
LCS 240-100954/11		365.2/365.3/ 365, 365.1		0.50 g	50 mL	5 mL			
240-28747-P-3 MS		365.2/365.3/ 365, 365.1	T	0.48 g	50 mL		0.5 mL		
240-28747-P-3 MSD		365.2/365.3/ 365, 365.1	T	0.48 g	50 mL		0.5 mL		
240-28627-I-2	DR-SB-196-02-04	365.2/365.3/ 365, 365.1	T	0.49 g	50 mL				

Batch Notes	
Block Digestor Name	Mike
First End time	12:00
Sodium Hydroxide Reagent ID Number	1155695
Ammonium Persulfate Lot #	562270
Oven, Bath or Block Temperature 1	138.1 Centigrade
Phenolphthalein Lot #	1035686
Pipette ID	377823/28
First Start time	7:30
Sulfuric Acid Reagent ID Number	1155697
ID number of the thermometer	CL3512A
Digestion Tube/Cup Lot #	1109870
Uncorrected Temperature	126 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Batch Number: 101047 Batch Start Date: 09/11/13 13:45 Batch Analyst: Harshman, Tom

Batch Method: 365.1 Batch End Date: 09/11/13 14:04

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	CalcMsg			
CCV 240-100954/8-A		365.1		4 mL	4 mL	OK			
CCB 240-100954/9-A		365.1		4 mL	4 mL	OK			
MB 240-100954/10-A		365.1		4 mL	4 mL	OK			
LCS 240-100954/11-A		365.1		4 mL	4 mL	OK			
240-28747-P-3-B MS		365.1	T	4 mL	4 mL	OK			
240-28747-P-3-C MSD		365.1	T	4 mL	4 mL	OK			
240-28627-I-2-B	DR-SB-196-02-04	365.1	T	4 mL	4 mL	OK			
CCV 240-100954/8-A		365.1		4 mL	4 mL	OK			
CCB 240-100954/9-A		365.1		4 mL	4 mL	OK			

Batch Notes	
Ammonium Molybdate Reagent ID Number	1130356
Ascorbic Acid Reagent ID Number	1157954
Batch Comment	combined 1161391 12:00 - 16:00
Potassium Antimonyl Tartrate Reagent ID	1161381
Pipette ID	377859
Perform Calculation (0=No, 1=Yes)	1
Sulfuric Acid Reagent ID Number	1127086

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Batch Number: 101798 Batch Start Date: 09/17/13 15:00 Batch Analyst: Grant, Katie

Batch Method: D3987-85 Batch End Date: 09/17/13 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WCICLCS 00222			
MB 240-101798/1		D3987-85, 300.0		1.9924 g	20 mL				
LCS 240-101798/2		D3987-85, 300.0		1.9621 g	20 mL	20 mL			
240-28627-I-2	DR-SB-196-02-04	D3987-85, 300.0	Y	5.0694 g	50 mL				

Batch Notes	
Balance ID	b044
Blank Soil Lot Number	1016113

Basis	Basis Description
Y	ASTM Leach

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Batch Number: 101954 Batch Start Date: 09/18/13 15:26 Batch Analyst: Grossman, Lucas

Batch Method: 300.0 Batch End Date: 09/18/13 18:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WCICCALSOLN 00127	WCICLCS 00223			
STD1 240-101954/1		300.0		5 mL	0.025 mL				
STD2 240-101954/2		300.0		5 mL	0.125 mL				
STD3 240-101954/3		300.0		5 mL	0.25 mL				
STD4 240-101954/4		300.0		5 mL	0.5 mL				
STD5 240-101954/5		300.0		5 mL	1.25 mL				
STD6 240-101954/6		300.0		5 mL	2 mL				
STD7 240-101954/7		300.0		5 mL	2.5 mL				
STD8 240-101954/8		300.0		5 mL	3.75 mL				
STD9 240-101954/9		300.0		5 mL	5 mL				
ICV 240-101954/10		300.0		5 mL		5 mL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Batch Number: 102034 Batch Start Date: 09/18/13 18:37 Batch Analyst: Grossman, Lucas

Batch Method: 300.0 Batch End Date: 09/19/13 03:54

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WCICCCV 00323	WCICELUENT 00096	WCICSOLNA1 00008	WCICSOLNB1 00008	
CCV 240-102034/1		300.0		5 mL	5 mL				
CCB 240-102034/2		300.0		5 mL		5 mL			
MB 240-101798/1-A		300.0		5 mL					
LCS 240-101798/2-A		300.0		5 mL					
240-28678-A-4-D MS		300.0	Y	5 mL			0.1 mL	0.1 mL	
240-28678-A-4-D MSD		300.0	Y	5 mL			0.1 mL	0.1 mL	
CCV 240-102034/11		300.0		5 mL	5 mL				
CCB 240-102034/12		300.0		5 mL		5 mL			
240-28627-I-2-F	DR-SB-196-02-04	300.0	Y	5 mL					
CCV 240-102034/23		300.0		5 mL	5 mL				
CCB 240-102034/24		300.0		5 mL					

Batch Notes

Basis	Basis Description
Y	ASTM Leach

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Batch Number: 100114 Batch Start Date: 09/04/13 13:40 Batch Analyst: Woodward, Bruce

Batch Method: 9045C Batch End Date: 09/04/13 16:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	pHread1	TempRead1	CalcMsg	WCPH7 00042	WCPHLCS 00007
CCV 240-100114/1		9045C		10 mL	7.02 SU		pH = Read 1	10 mL	
LCS 240-100114/2		9045C		10 mL	6.46 SU		pH = Read 1		10 mL
CCV 240-100114/11		9045C		10 mL	7.01 SU		pH = Read 1	10 mL	
240-28627-H-2 DU	DR-SB-196-02-04	9045C	T	10 mL	3.63 SU	22.8 Celsius	pH = Read 1		
240-28627-H-2	DR-SB-196-02-04	9045C	T	10 mL	3.70 SU	22.9 Celsius	pH = Read 1		
CCV 240-100114/19		9045C		10 mL	7.03 SU		pH = Read 1	10 mL	

Batch Notes	
Batch Comment	5-pt
pH Buffer 1 ID	2-921151
pH Buffer 2 ID	4-945008
pH Buffer 3 ID	7-1126157
pH Buffer 4 ID	10-945018
pH Buffer 5 ID	12-922363
Calibration Date and Time	9/4/13 1340
Electronic Slope	98.5
Instrument ID	Randolph
Probe ID	Orion 8302BUND
Sufficient volume for sample dup	Y

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Batch Number: 100363 Batch Start Date: 09/06/13 07:28 Batch Analyst: Harshman, Tom

Batch Method: Moisture Batch End Date: 09/09/13 10:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-28627-D-2 DU	DR-SB-196-02-04	Moisture	T	4.4640 g	7.1548 g	6.3117 g			
240-28627-D-2	DR-SB-196-02-04	Moisture	T	4.4640 g	6.8656 g	6.0836 g			
240-28627-D-3	DR-SB-196-26-28	Moisture	T	4.4640 g	14.2453 g	12.3133 g			
240-28627-D-4	DR-SB-195-04-06	Moisture	T	4.4640 g	12.4517 g	11.2130 g			
240-28627-D-5	DR-SB-195-14-16	Moisture	T	4.4640 g	18.6570 g	16.3845 g			
240-28627-D-6	DR-SB-194-13-15	Moisture	T	4.4640 g	10.5112 g	9.6467 g			
240-28627-D-7	DR-SB-194-26-28	Moisture	T	4.4640 g	13.0968 g	10.9597 g			

Batch Notes	
Balance ID	B047 No Unit
Date samples were placed in the oven	9/6/13
Oven Temp when samples are put in oven	103.1 Degrees C
Time samples were place in the oven	13:10
Date samples were removed from oven	9/9/13
Oven Temp when samples removed from oven	103.3 Degrees C
Time Samples were removed from oven	5:20
Oven ID	002
ID number of the thermometer	Tempguard Box C #6

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28627-1

SDG No.:

Batch Number: 100387 Batch Start Date: 09/06/13 14:50 Batch Analyst: Kuhle, Julie

Batch Method: SM4500_NH3_E Batch End Date: 09/06/13 15:01

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TitrantVolume1	AnalysisComment		
MB 240-100175/1-A		SM4500_NH3_E		25 mL	25 mL	.1 mL			
LCS 240-100175/2-A		SM4500_NH3_E		25 mL	25 mL	.75 mL			
180-24611-A-1-I MS		SM4500_NH3_E	T	25 mL	25 mL	2.90 mL			
180-24611-A-1-J MSD		SM4500_NH3_E	T	25 mL	25 mL	2.80 mL			
240-28627-I-2-A	DR-SB-196-02-04	SM4500_NH3_E	T	25 mL	25 mL	2.20 mL	waiting for dry weight		

Batch Notes	
Batch Comment	pipets 377722 927756 beakers 1109854
Borate Reagent ID Number	boric acid 1100112
Buffer Reagent ID Number	nathiosulfate 1136249
Color Reagent ID Number	1132525
Potassium Persulfate Lot Number	H2SO4 titrant 1149732
Nominal Amount Used	25 mL
Normality	0.02066 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Tetra Tech INC **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **OCTOBER 25, 2013**

FROM: **J. KALINYAK** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION - VOC / SVOC / PCB / TPH C06-C10 / TPH C10-C32**
INORGANIC DATA VALIDATION - METALS / MISCELLANEOUS
LOCKHEED MIDDLE STATE AIRPORT (MSA) – DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-28680-1

SAMPLES: 1 / Aqueous / VOC

TB-090413-240-28680-1

5 / Soil / VOC / SVOC / PCB / TPH C06-C10 / TPH C10-C32 / Total Metals

DR-SB-48D-19-21	DR-SB-48D-24-26	DR-SB-48D-28-31
DR-SB-48D-34-36	DR-SB-48D-40-42	

2 / Soil / Miscellaneous – pH, total phosphorus as phosphate, cation exchange capacity, nitrate-N, TOC, TIC, total Kjeldahl nitrogen

DR-SB-48D-24-26	DR-SB-48D-40-42

Overview

The sample set for Lockheed MSA Dump Road Source Areas, SDG 240-28680-1, consisted of one (1) aqueous trip blank sample and five (5) soil samples. All samples were analyzed for volatile organic compounds (VOCs). The five (5) soil samples were also analyzed for semi-volatile organic compounds (SVOCs), the total petroleum hydrocarbons (TPH) TPH C06-C10 & TPH C10-C32, polychlorinated biphenyls (PCBs), and total metals, as listed above. Two (2) soil samples were also analyzed for the miscellaneous parameters of pH, phosphate, cation exchange capacity (CEC), nitrate as nitrogen, total organic carbon (TOC), total inorganic carbon (TIC), and total Kjeldahl nitrogen (TKN), as listed above. No field duplicate sample pairs were included in the sample delivery group (SDG).

The samples were collected by Tetra Tech on September 4, 2013 and analyzed by TestAmerica Laboratories, Inc., North Canton and Nashville for all analyses. All analyses were conducted in accordance with EPA SW-846 Methods 8260B for VOCs, 8270D for SVOCs, 8082A for PCBs, and 8015C for TPH C06-C10 & TPH C10-C32, 6010C for metals, 7471B for mercury, 9060A for TOC (TIC calculated using TOC), 9081 for CEC, 9045C for pH, EPA Method 365.1 for total phosphorus, MCAWWW 300.0 for anions, and Standard Method SM4500_NH3_E for total Kjeldahl nitrogen, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate results, internal standard recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- The VOC initial calibration average relative response factors (RRF) were less than the 0.05 criteria for tert-butyl alcohol and vinyl acetate on instrument A3UX11 on 09/05/13, instrument A3UX14 on 09/12/13, and instrument A3UX8 on 09/04/13. The continuing calibration verification (CCV) RRFs for tert-butyl alcohol and vinyl acetate were also all less than the 0.05 criteria for the instruments.
  Affected Sample: All samples
  Action: The affected sample detected and non-detected results for tert-butyl alcohol and vinyl acetate were qualified estimated, (J), and rejected, (UR), respectively.

- Sample DR-SB-48D-28-31 had a positive VOC tentatively identified compound (TIC) result for trimethyl silanol.
  Affected Sample: DR-SB-48D-28-31
  Actions: The sample positive TIC trimethyl silanol result was qualified rejected, (R), as attributable to column bleed.

Minor Problems

- Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

- The following laboratory VOC contaminants were detected in the method blank at the following maximum concentration affecting samples as listed below.

Analytes	Maximum Conc.	Action Level
1,2,4-Trichlorobenzene [(1)]	0.418 µg/kg	2.090 µg/kg
Acetone [(1)]	9.90 µg/kg	99.00 µg/kg
Naphthalene [(1)]	1.07 µg/kg	5.35 µg/kg
Methylene chloride [(1)]	3.07 µg/kg	30.70 µg/kg
Methylene chloride [(2)]	0.797 µg/l	7.97 µg/l
Toluene [(2)]	0.396 µg/l	1.980 µg/l

  [(1)] Method blank MB 240-100925/6 affecting samples DR-SB-48D-28-31 and DR-SB-48D-40-42.
  [(2)] Method blank MB 240-101342/5 affecting sample TB-090413-240-28680-1.

  An action level of ten times the maximum level for acetone and methylene chloride, and five times the maximum level for the other VOC contaminants has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results less than the action level were qualified non-detected, (B), for blank contamination.

- The VOC CCV percent differences (%Ds) were greater than the 20% and less than the 50% quality control limit for acetone and methylene chloride for instrument A3UX14 on 09/13/13 @ 12:52.
  Affected Samples: DR-SB-48D-24-26 and DR-SB-48D-28-31
  Action: The acetone result for sample DR-SB-48D-28-31 was qualified estimated, (J). The non-detected methylene chloride results and the acetone result qualified for method blank contamination, were not qualified.

- The VOC laboratory control sample (LCS) percent recovery (%R) was less than the quality control limit for tert-butyl alcohol and vinyl acetate for LCS 240-100523/2-A.
  Affected Samples:
  DR-SB-48D-19-21 DR-SB-48D-34-36 DR-SB-48D-24-26
  Actions: The sample DR-SB-48D-28-31 tert-butyl alcohol detected result was qualified estimated, (J). No validation action was taken for the aforementioned sample vinyl acetate and sample DR-SB-48D-24-26 tert-butyl alcohol results as they were rejected for RRF criteria non-compliances.

- The VOC laboratory control sample (LCS) percent recoveries (%Rs) were greater than the quality control limit for 1,1-dichloropropene, acetone, and tert-butyl alcohol for LCS 240-100925/6.
  Affected Samples: DR-SB-48D-28-31 and DR-SB-48D-40-42
  Action: The positive acetone result for sample DR-SB-48D-28-31 was qualified estimated, (J). No validation action was taken for the sample non-detected 1,1-dichloropropene and the sample DR-SB-48D-40-42 non-detected acetone results. The sample tert-butyl alcohol results were rejected due to RRF criteria non-compliances and no further action was necessary.

- The VOC results for the following sample included Tentatively Identified Compounds (TIC).

Sample	Analytes
DR-SB-48D-24-26	1,6,7-trimethyl naphthalene, unknown (3.73), unknown (3.90)

  Action: The sample VOC TIC results were qualified estimated, (NJ). The unknown analyte retention times are listed in parenthesis.

- The following laboratory SVOC contaminant was detected in the method blank MB 240-101887/21-A at the following maximum concentration affecting all samples as listed for SVOCs.

Analytes	Maximum Conc.	Action Level
Bis(2-ethylhexyl) phthalate	23.2 µg/kg	232 µg/kg

  An action level of ten times the maximum level for bis(2-ethylhexyl) phthalate has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results less than the action level were qualified non-detected, (B), for blank contamination.

- The SVOC LCS %R was less than the quality control limit for benzaldehyde for LCS 240-101887/22-A.
  Affected Samples: All SVOC samples
  Action: The sample non-detected benzaldehyde results were qualified estimated, (UJ).

- The metals analysis Contract Required Quantitation Limit (CRQL) %R was greater than the 110% quality control limit for molybdenum for CRI 240-101673/95.
  Affected Samples: All total metal samples
  Actions: The sample DR-SB-48D-40-42 total metal molybdenum detection was qualified estimated, (J). No action was taken for the non-detected molybdenum sample results.

- The metals analysis CRQL %R was less than the 90% quality control limit for beryllium for CRI 240-101673/8.
  Affected Samples: All total metal samples
  Actions: All sample beryllium results were non-detected and were qualified biased low, (UL).

- The following metal contaminants were detected in the blank samples at the following maximum concentrations:

Analyte	Maximum Conc. mg/kg	Action Level mg/kg
Barium [1]	0.116	0.580
Zinc [1]	2.14	10.70
Analyte	**Maximum Conc. µg/l**	**Action Level mg/kg**
Antimony [2]	3.10	1.55
Molybdenum [2]	8.34	4.17

[1] Maximum concentrations found in method preparation blank sample (MB) MB 240-100670/1-A affecting all total metal results.
[2] Maximum concentration found in CCB 240-101673/75 affecting all total metal sample results.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors were taken into consideration when evaluating for blank contamination. Sample analyte results less than the action level were qualified (B) for blank contamination.

- The matrix spike (MS) for preparation batch 240-28680-1 had a %R less than the 75% quality control limit for antimony.
  Affected Samples: All total metal samples
  Actions: The post digestion antimony spike and the LCS %R were compliant. Non-detected antimony results were qualified as biased low (UL).

Notes

Sample DR-SB-48D-28-31 was analyzed for VOCs at both a low and a medium level due to the sample trichloroethene result that exceeded the highest level in the low VOC analysis. Only the trichloroethene result was reported from the medium level VOC analysis.

The VOC CCV percent differences (%Ds) were greater than the 20% and less than the 50% quality control limit for 1,1,2-trichlorotrifluoroethane, acetone, carbon disulfide, tert-butyl alcohol, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, 1,2-dibromo-3-chloropropane, 1,2,4-trichloro-benzene, and naphthalene for instrument A3UX11 on 09/13/13 @ 10:59.
Affected Sample: TB-090413-240-28680-1
Action: No validation action was taken as all sample analyte results were non-detected.

The VOC CCV percent difference (%D) was greater than the 20% and less than the 50% quality control limit for sec-butyl benzene for instrument A3UX8 on 09/10/13 @ 03:30. No validation action was taken as no samples were affected. Only a method blank and LCS sample were affected.

The VOC CCV percent difference (%D) was greater than the 20% and less than the 50% quality control limit for vinyl acetate for instrument A3UX8 on 09/11/13 @ 01:56. No validation action was taken as the affected sample vinyl acetate results were qualified rejected for RRF criteria non-compliances.

The VOC MS and MSD for the spiked sample included in the data package had non-compliant %Rs for hexachlorocyclopentadiene. No validation action was taken as the spiked sample was not a sample from the SDG.

The SVOC matrix spike (MS) and MS duplicate (MSD) sample included in the data package had non-compliant %Rs. No validation action was taken as the spiked sample was not a sample from the SDG.

The SVOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for n-nitrosodimethylamine, benzaldehyde, and 2,2'-oxybis(1-chloropropane) for instrument A4AG2 on 09/20/13 @ 07:58.

Affected Samples: All SVOC samples

Action: No validation action was taken as the affected samples had non-detected n-nitrosodimethylamine, benzaldehyde, and 2,2'-oxybis(1-chloropropane) results.

The TPH C10-C32 CCV %D was greater than the 15% and less than the 50% quality control limit for instrument A2HP6F on 09/12/13 @ 23:36 and @ 09/13/13 @ 05:18.

Affected Samples: All TPH C10-C32 samples

Action: The affected samples had non-detected TPH C10-C32 results which were not qualified.

The MS and MSD for a spiked sample included in the data package had non-compliant %Rs for phosphate. No validation action was taken as the spiked sample was not a sample from the SDG.
The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC sample non-detected results were rejected for RRF criteria non-compliances. VOC, SVOC, and metal sample results were qualified for blank contamination. Sample VOC results were qualified for CCV %D non-compliances. Sample VOC and SVOC results were qualified for LCS %R non-compliances. Sample metal results were qualified for a MS %R and CRDL %R non-compliances.

Other Factors Affecting Data Quality: Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to EPA SW-846 Methods 8260B, 8270D, 8015C, 8082A, 8015B, 6010C, 7471B, 9060A, 9081, 9045C, EPA Method 365.1, MCAWWW 300.0, Standard Method SM4500_NH3_E, the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993), and the Region III EPA Functional Guidelines for Organic Data Validation (9/94).

Tetra Tech
Joseph Kalinyak
Data Validator/Environmental Scientist

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Value Qualifier Key (Val Qual)

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	TB-090413-240-28680-1
SDG: 240-28680-1	LAB_ID	240-28680-6
FRACTION: OV	SAMP_DATE	9/4/2013
MEDIA: WATER	QC_TYPE	TB
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U	
1,1-DICHLOROETHANE	0.15	U	
1,1-DICHLOROETHENE	0.19	U	
1,1-DICHLOROPROPENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U	
1,2-DIBROMOETHANE	0.24	U	
1,2-DICHLOROBENZENE	0.13	U	
1,2-DICHLOROETHANE	0.22	U	
1,2-DICHLOROPROPANE	0.18	U	
1,3-DICHLOROBENZENE	0.14	U	
1,3-DICHLOROPROPANE	0.16	U	
1,4-DICHLOROBENZENE	0.13	U	
2,2-DICHLOROPROPANE	0.13	U	
2-BUTANONE	0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U	
2-CHLOROTOLUENE	0.11	U	
2-HEXANONE	0.41	U	
4-CHLOROTOLUENE	0.18	U	
4-ISOPROPYLTOLUENE	0.12	U	
4-METHYL-2-PENTANONE	0.32	U	
ACETONE	1.1	U	
BENZENE	0.13	U	
BROMOBENZENE	0.13	U	
BROMOCHLOROMETHANE	0.29	U	
BROMODICHLOROMETHANE	0.15	U	
BROMOFORM	0.64	U	
BROMOMETHANE	0.41	U	

PROJ_NO: 04882	NSAMPLE	TB-090413-240-28680-1
SDG: 240-28680-1	LAB_ID	240-28680-6
FRACTION: OV	SAMP_DATE	9/4/2013
MEDIA: WATER	QC_TYPE	TB
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
CARBON DISULFIDE	0.13	U	
CARBON TETRACHLORIDE	0.13	U	
CHLOROBENZENE	0.15	U	
CHLORODIBROMOMETHANE	0.18	U	
CHLOROETHANE	0.29	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U	
DIBROMOMETHANE	0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U	
DIISOPROPYL ETHER	1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U	
ETHYLBENZENE	0.17	U	
HEXACHLOROBUTADIENE	0.3	U	
ISOPROPYLBENZENE	0.13	U	
M+P-XYLENES	0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U	
METHYLENE CHLORIDE	0.33	U	
NAPHTHALENE	0.24	U	
N-BUTYLBENZENE	0.12	U	
N-PROPYLBENZENE	0.14	U	
O-XYLENE	0.14	U	
SEC-BUTYLBENZENE	0.13	U	
STYRENE	0.11	U	
TERT-AMYL METHYL ETHER	0.067	U	
TERT-BUTYLBENZENE	0.13	U	
TERTIARY-BUTYL ALCOHOL	3.9	U	
TETRACHLOROETHENE	0.29	U	
TOLUENE	0.13	U	
TOTAL XYLENES	0.14	U	
TRANS-1,2-DICHLOROETHENE	0.19	U	
TRANS-1,3-DICHLOROPROPENE	0.19	U	
TRICHLOROETHENE	0.17	U	
TRICHLOROFLUOROMETHANE	0.21	U	

PROJ_NO: 04882	NSAMPLE	TB-090413-240-28680-1		
SDG: 240-28680-1	LAB_ID	240-28680-6		
FRACTION: OV	SAMP_DATE	9/4/2013		
MEDIA: WATER	QC_TYPE	TB		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
VINYL ACETATE		0.19	U	
VINYL CHLORIDE		0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-19-21			DR-SB-48D-24-26						DR-SB-48D-24-26A		
SDG: 240-28680-1	LAB_ID	240-28680-1			240-28680-2						240-28680-2		
FRACTION: OV	SAMP_DATE	9/4/2013			9/4/2013						9/4/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			TIC			TIC		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	79.2			84.9			84.9			84.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		9.6	U		8.1	U							
1,1,1-TRICHLOROETHANE		22	U		19	U							
1,1,2,2-TETRACHLOROETHANE		9.4	U		7.9	U							
1,1,2-TRICHLOROTRIFLUOROETHANE		41	U		35	U							
1,1-DICHLOROETHANE		18	U		15	U							
1,1-DICHLOROETHENE		19	U		16	U							
1,1-DICHLOROPROPENE		11	U		8.9	U							
1,2,3-TRICHLOROBENZENE		11	U		9.4	J	P						
1,2,3-TRICHLOROPROPANE		22	U		19	U							
1,2,3-TRIMETHYLBENZENE		0.18	U		0.15	U							
1,2,4-TRICHLOROBENZENE		7.7	U		30	J	P						
1,2,4-TRIMETHYLBENZENE		5.3	U		4.4	U							
1,2-DIBROMO-3-CHLOROPROPANE		53	U		44	U							
1,2-DIBROMOETHANE		11	U		8.9	U							
1,2-DICHLOROBENZENE		9.1	U		7.6	U							
1,2-DICHLOROETHANE		11	U		8.9	U							
1,2-DICHLOROPROPANE		8.7	U		7.3	U							
1,3-DICHLOROBENZENE		5.1	U		5.7	J	P						
1,3-DICHLOROPROPANE		23	U		19	U							
1,4-DICHLOROBENZENE		8.5	U		8.4	J	P						
2,2-DICHLOROPROPANE		24	U		20	U							
2-BUTANONE		46	U		38	U							
2-CHLOROETHYL VINYL ETHER		46	U		38	U							
2-CHLOROTOLUENE		9.5	U		8	U							
2-HEXANONE		21	U		18	U							
4-CHLOROTOLUENE		10	U		8.8	U							
4-ISOPROPYLTOLUENE		5.1	U		4.3	U							
4-METHYL-2-PENTANONE		51	U		43	U							
ACETONE		180	U		150	U							
BENZENE		13	U		11	U							
BROMOBENZENE		14	U		12	U							
BROMOCHLOROMETHANE		14	U		12	U							
BROMODICHLOROMETHANE		10	U		8.8	U							
BROMOFORM		20	U		17	U							
BROMOMETHANE		31	U		26	U							

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-28-31			DR-SB-48D-28-31RE2			DR-SB-48D-34-36			DR-SB-48D-40-42		
SDG: 240-28680-1	LAB_ID	240-28680-3			240-28680-3			240-28680-4			240-28680-5		
FRACTION: OV	SAMP_DATE	9/4/2013			9/4/2013			9/4/2013			9/4/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	84.0			84.0			82.8			84.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.64	U					9.3	U		0.72	U	
1,1,1-TRICHLOROETHANE		0.58	U					21	U		0.65	U	
1,1,2,2-TETRACHLOROETHANE		0.35	U					9.1	U		0.39	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		1.3	U					40	U		1.5	U	
1,1-DICHLOROETHANE		0.37	U					17	U		0.42	U	
1,1-DICHLOROETHENE		0.69	J	P				18	U		0.6	U	
1,1-DICHLOROPROPENE		0.31	U					10	U		0.35	U	
1,2,3-TRICHLOROBENZENE		3.8	J	P				10	U		0.44	U	
1,2,3-TRICHLOROPROPANE		0.93	U					21	U		1	U	
1,2,3-TRIMETHYLBENZENE		0.18	U					0.17	U		0.2	U	
1,2,4-TRICHLOROBENZENE		19						29	J	P	0.31	U	
1,2,4-TRIMETHYLBENZENE		0.67	U					5.1	U		0.75	U	
1,2-DIBROMO-3-CHLOROPROPANE		1.3	U					51	U		1.5	U	
1,2-DIBROMOETHANE		0.52	U					10	U		0.58	U	
1,2-DICHLOROBENZENE		0.37	U					8.8	U		0.42	U	
1,2-DICHLOROETHANE		3.9	J	P				10	U		0.47	J	P
1,2-DICHLOROPROPANE		0.71	U					8.4	U		0.8	U	
1,3-DICHLOROBENZENE		0.36	U					4.9	U		0.41	U	
1,3-DICHLOROPROPANE		0.35	U					23	U		0.39	U	
1,4-DICHLOROBENZENE		0.68	U					8.2	U		0.76	U	
2,2-DICHLOROPROPANE		0.97	U					24	U		1.1	U	
2-BUTANONE		1.4	U					44	U		1.6	U	
2-CHLOROETHYL VINYL ETHER		1.4	U					44	U		1.6	U	
2-CHLOROTOLUENE		0.41	U					9.2	U		0.46	U	
2-HEXANONE		0.65	U					20	U		0.73	U	
4-CHLOROTOLUENE		0.42	U					10	U		0.47	U	
4-ISOPROPYLTOLUENE		0.22	U					4.9	U		0.24	U	
4-METHYL-2-PENTANONE		0.56	U					49	U		0.63	U	
ACETONE		200	J	CE				170	U		58	B	A
BENZENE		0.24	U					12	U		0.27	U	
BROMOBENZENE		0.34	U					13	U		0.38	U	
BROMOCHLOROMETHANE		0.73	U					13	U		0.82	U	
BROMODICHLOROMETHANE		0.29	U					10	U		0.32	U	
BROMOFORM		0.34	U					19	U		0.38	U	
BROMOMETHANE		0.56	U					30	U		0.63	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-19-21			DR-SB-48D-24-26						DR-SB-48D-24-26A		
SDG: 240-28680-1	LAB_ID	240-28680-1			240-28680-2						240-28680-2		
FRACTION: OV	SAMP_DATE	9/4/2013			9/4/2013						9/4/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			TIC			TIC		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	79.2			84.9			84.9			84.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		13	U		11	U							
CARBON TETRACHLORIDE		6.8	U		5.7	U							
CHLOROBENZENE		6.8	U		5.7	U							
CHLORODIBROMOMETHANE		13	U		11	U							
CHLOROETHANE		65	U		54	U							
CHLOROFORM		9.3	U		13	J	P						
CHLOROMETHANE		15	U		12	U							
CIS-1,2-DICHLOROETHENE		3400			71	J	P						
CIS-1,3-DICHLOROPROPENE		8.4	U		7	U							
DIBROMOMETHANE		15	U		12	U							
DICHLORODIFLUOROMETHANE		17	U		14	U							
DIISOPROPYL ETHER		53	U		44	U							
ETHYL TERT-BUTYL ETHER		0.23	U		0.19	U							
ETHYLBENZENE		5.7	U		4.8	U							
HEXACHLOROBUTADIENE		15	U		12	U							
ISOPROPYLBENZENE		6.9	U		5.8	U							
M+P-XYLENES		6.6	U		5.5	J	P						
METHYL TERT-BUTYL ETHER		7.5	U		6.3	U							
METHYLENE CHLORIDE		82	U		68	U							
NAPHTHALENE		7.4	J	P	15	J	P						
N-BUTYLBENZENE		8.5	U		7.1	U							
N-PROPYLBENZENE		15	U		12	U							
O-XYLENE		9	U		7.5	U							
SEC-BUTYLBENZENE		5	U		4.2	U							
STYRENE		5.9	U		5	U							
TERT-AMYL METHYL ETHER		0.39	U		0.33	U							
TERT-BUTYLBENZENE		6.9	U		5.8	U							
TERTIARY-BUTYL ALCOHOL		250	UR	CC	210	UR	C						
TETRACHLOROETHENE		13	U		11	U							
TOLUENE		18	U		15	U							
TOTAL XYLENES		6.6	U		5.5	J	P						
TRANS-1,2-DICHLOROETHENE		9.7	U		8.1	U							
TRANS-1,3-DICHLOROPROPENE		21	U		18	U							
TRICHLOROETHENE		170	J	P	610								
TRICHLOROFLUOROMETHANE		17	U		14	U							

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-28-31			DR-SB-48D-28-31RE2			DR-SB-48D-34-36			DR-SB-48D-40-42		
SDG: 240-28680-1	LAB_ID	240-28680-3			240-28680-3			240-28680-4			240-28680-5		
FRACTION: OV	SAMP_DATE	9/4/2013			9/4/2013			9/4/2013			9/4/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	84.0			84.0			82.8			84.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.45	U					12	U		0.51	U	
CARBON TETRACHLORIDE		0.38	U					6.5	U		0.43	U	
CHLOROBENZENE		0.34	U					6.5	U		0.38	U	
CHLORODIBROMOMETHANE		0.57	U					12	U		0.64	U	
CHLOROETHANE		0.89	U					62	U		1	U	
CHLOROFORM		1.7	J	P				9	U		0.34	U	
CHLOROMETHANE		0.42	U					14	U		0.47	U	
CIS-1,2-DICHLOROETHENE		50						80	J	P	11		
CIS-1,3-DICHLOROPROPENE		0.35	U					8.1	U		0.39	U	
DIBROMOMETHANE		0.65	U					14	U		0.73	U	
DICHLORODIFLUOROMETHANE		0.52	U					16	U		0.58	U	
DIISOPROPYL ETHER		1.5	U					51	U		1.7	U	
ETHYL TERT-BUTYL ETHER		0.23	U					0.23	U		0.25	U	
ETHYLBENZENE		0.27	U					5.5	U		0.3	U	
HEXACHLOROBUTADIENE		1.2	U					14	U		1.4	U	
ISOPROPYLBENZENE		0.17	U					6.6	U		0.19	U	
M+P-XYLENES		1.2	U					6.3	U		1.4	U	
METHYL TERT-BUTYL ETHER		0.44	U					7.3	U		0.5	U	
METHYLENE CHLORIDE		0.69	U					79	U		0.78	U	
NAPHTHALENE		0.38	B	A				6.9	U		0.22	U	
N-BUTYLBENZENE		0.24	U					8.2	U		0.27	U	
N-PROPYLBENZENE		0.41	U					14	U		0.46	U	
O-XYLENE		0.36	U					8.7	U		0.41	U	
SEC-BUTYLBENZENE		0.19	U					4.8	U		0.21	U	
STYRENE		0.15	U					5.7	U		0.17	U	
TERT-AMYL METHYL ETHER		0.38	U					0.38	U		0.43	U	
TERT-BUTYLBENZENE		0.3	U					6.6	U		0.34	U	
TERTIARY-BUTYL ALCOHOL		16	J	CP				250	UR	C	8.8	UR	C
TETRACHLOROETHENE		1.5	J	P				12	U		0.6	U	
TOLUENE		0.28	U					17	U		0.31	U	
TOTAL XYLENES		0.36	U					6.3	U		0.41	U	
TRANS-1,2-DICHLOROETHENE		0.42	U					9.4	U		0.47	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U					20	U		0.63	U	
TRICHLOROETHENE					150	J	P	1200			27		
TRICHLOROFLUOROMETHANE		0.35	U					16	U		0.39	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-19-21			DR-SB-48D-24-26						DR-SB-48D-24-26A		
SDG: 240-28680-1	LAB_ID	240-28680-1			240-28680-2						240-28680-2		
FRACTION: OV	SAMP_DATE	9/4/2013			9/4/2013						9/4/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			TIC			TIC		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	79.2			84.9			84.9			84.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN								680	NJ	Z1	270	NJ	Z1
VINYL ACETATE		24	UR	C	20	UR	C						
VINYL CHLORIDE		340			16	U							

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-28-31			DR-SB-48D-28-31RE2			DR-SB-48D-34-36			DR-SB-48D-40-42		
SDG: 240-28680-1	LAB_ID	240-28680-3			240-28680-3			240-28680-4			240-28680-5		
FRACTION: OV	SAMP_DATE	9/4/2013			9/4/2013			9/4/2013			9/4/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	84.0			84.0			82.8			84.1		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN													
VINYL ACETATE		0.26	UR	C				24	UR	C	0.29	UR	C
VINYL CHLORIDE		5.9						18	U		1.8	J	P

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-24-26			DR-SB-48D-28-31		
SDG: 240-28680-1	LAB_ID	240-28680-2			240-28680-3		
FRACTION: TICOV	SAMP_DATE	9/4/2013			9/4/2013		
MEDIA: SOIL	QC_TYPE	TIC			TIC		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	84.9			84.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
NAPHTHALENE, 1,6,7-TRIMETHYL-		470	NJ	Z1			
SILANOL, TRIMETHYL-					6.7	R	Z2

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-19-21			DR-SB-48D-24-26			DR-SB-48D-28-31			DR-SB-48D-34-36		
SDG: 240-28680-1	LAB_ID	240-28680-1			240-28680-2			240-28680-3			240-28680-4		
FRACTION: OS	SAMP_DATE	9/4/2013			9/4/2013			9/4/2013			9/4/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	79.2			84.9			84.0			82.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		4.4	U		4.1	U		4.1	U		4.2	U	
1,4-DIOXANE		28	U		26	U		26	U		26	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		12	U		11	U		11	U		11	U	
2,4,5-TRICHLOROPHENOL		32	U		29	U		29	U		30	U	
2,4,6-TRICHLOROPHENOL		11	U		10	U		10	U		11	U	
2,4-DICHLOROPHENOL		25	U		23	U		24	U		24	U	
2,4-DIMETHYLPHENOL		25	U		23	U		24	U		24	U	
2,4-DINITROPHENOL		27	U		25	U		25	U		25	U	
2,4-DINITROTOLUENE		22	U		20	U		20	U		20	U	
2,6-DINITROTOLUENE		27	U		25	U		25	U		25	U	
2-CHLORONAPHTHALENE		0.57	U		0.53	U		0.53	U		0.54	U	
2-CHLOROPHENOL		10	U		9.6	U		9.6	U		9.8	U	
2-METHYLNAPHTHALENE		5.3	J	P	0.59	U		0.59	U		0.6	U	
2-METHYLPHENOL		14	U		13	U		13	U		13	U	
2-NITROANILINE		12	U		11	U		11	U		11	U	
2-NITROPHENOL		11	U		9.7	U		9.8	U		9.9	U	
3&4-METHYLPHENOL		25	U		23	U		24	U		24	U	
3,3'-DICHLOROBENZIDINE		23	U		21	U		21	U		21	U	
3-NITROANILINE		20	U		19	U		19	U		19	U	
4,6-DINITRO-2-METHYLPHENOL		12	U		11	U		11	U		11	U	
4-BROMOPHENYL PHENYL ETHER		16	U		15	U		15	U		15	U	
4-CHLORO-3-METHYLPHENOL		27	U		25	U		25	U		25	U	
4-CHLOROANILINE		22	U		20	U		20	U		20	U	
4-CHLOROPHENYL PHENYL ETHER		16	U		15	U		15	U		15	U	
4-NITROANILINE		33	U		30	U		31	U		31	U	
4-NITROPHENOL		22	U		20	U		20	U		20	U	
ACENAPHTHENE		8.1	J	P	0.89	U		0.89	U		0.91	U	
ACENAPHTHYLENE		0.44	U		0.41	U		0.41	U		0.42	U	
ACETOPHENONE		12	U		11	U		11	U		11	U	
ANTHRACENE		14			0.91	U		0.92	U		0.93	U	
ATRAZINE		12	U		11	U		11	U		11	U	
BENZALDEHYDE		15	UJ	E	14	UJ	E	14	UJ	E	14	UJ	E
BENZO(A)ANTHRACENE		30			0.74	U		0.74	U		0.75	U	
BENZO(A)PYRENE		24			0.75	U		0.75	U		0.76	U	
BENZO(B)FLUORANTHENE		36			0.69	U		0.69	U		0.7	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-40-42
SDG: 240-28680-1	LAB_ID	240-28680-5
FRACTION: OS	SAMP_DATE	9/4/2013
MEDIA: SOIL	QC_TYPE	NM
	UNITS	UG/KG
	PCT_SOLIDS	84.1
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1-BIPHENYL	4.2	U	
1,4-DIOXANE	26	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	11	U	
2,4,5-TRICHLOROPHENOL	30	U	
2,4,6-TRICHLOROPHENOL	11	U	
2,4-DICHLOROPHENOL	24	U	
2,4-DIMETHYLPHENOL	24	U	
2,4-DINITROPHENOL	25	U	
2,4-DINITROTOLUENE	20	U	
2,6-DINITROTOLUENE	25	U	
2-CHLORONAPHTHALENE	0.54	U	
2-CHLOROPHENOL	9.8	U	
2-METHYLNAPHTHALENE	0.6	U	
2-METHYLPHENOL	13	U	
2-NITROANILINE	11	U	
2-NITROPHENOL	9.9	U	
3&4-METHYLPHENOL	24	U	
3,3'-DICHLOROBENZIDINE	22	U	
3-NITROANILINE	19	U	
4,6-DINITRO-2-METHYLPHENOL	11	U	
4-BROMOPHENYL PHENYL ETHER	16	U	
4-CHLORO-3-METHYLPHENOL	25	U	
4-CHLOROANILINE	20	U	
4-CHLOROPHENYL PHENYL ETHER	16	U	
4-NITROANILINE	31	U	
4-NITROPHENOL	20	U	
ACENAPHTHENE	0.91	U	
ACENAPHTHYLENE	0.42	U	
ACETOPHENONE	11	U	
ANTHRACENE	0.93	U	
ATRAZINE	11	U	
BENZALDEHYDE	14	UJ	E
BENZO(A)ANTHRACENE	0.75	U	
BENZO(A)PYRENE	0.77	U	
BENZO(B)FLUORANTHENE	0.71	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-19-21			DR-SB-48D-24-26			DR-SB-48D-28-31			DR-SB-48D-34-36		
SDG: 240-28680-1	LAB_ID	240-28680-1			240-28680-2			240-28680-3			240-28680-4		
FRACTION: OS	SAMP_DATE	9/4/2013			9/4/2013			9/4/2013			9/4/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	79.2			84.9			84.0			82.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		13			0.41	U		0.41	U		0.42	U	
BENZO(K)FLUORANTHENE		0.86	U		0.8	U		0.8	U		0.81	U	
BIS(2-CHLOROETHOXY)METHANE		28	U		26	U		26	U		26	U	
BIS(2-CHLOROETHYL)ETHER		2.5	U		2.3	U		2.4	U		2.4	U	
BIS(2-ETHYLHEXYL)PHTHALATE		50	B	A	28	B	A	22	U		23	U	
BUTYL BENZYL PHTHALATE		13	U		12	U		12	U		12	U	
CAPROLACTAM		47	U		43	U		44	U		44	U	
CARBAZOLE		34	U		32	U		32	U		32	U	
CHRYSENE		27			1.3	U		1.3	U		1.3	U	
DIBENZO(A,H)ANTHRACENE		0.84	U		0.77	U		0.78	U		0.79	U	
DIBENZOFURAN		7	J	P	0.77	U		0.78	U		0.79	U	
DIETHYL PHTHALATE		20	U		19	U		19	U		19	U	
DIMETHYL PHTHALATE		22	U		20	U		20	U		20	U	
DI-N-BUTYL PHTHALATE		19	U		18	U		18	U		18	U	
DI-N-OCTYL PHTHALATE		10	U		9.2	U		9.3	U		9.4	U	
FLUORANTHENE		62			0.64	U		0.65	U		10		
FLUORENE		9.9			0.62	U		0.62	U		0.63	U	
HEXACHLOROBENZENE		2.7	U		2.5	U		2.5	U		2.5	U	
HEXACHLOROBUTADIENE		7.1	U		6.6	U		6.6	U		6.7	U	
HEXACHLOROCYCLOPENTADIENE		10	U		9.5	U		9.5	U		9.6	U	
HEXACHLOROETHANE		11	U		11	U		11	U		11	U	
INDENO(1,2,3-CD)PYRENE		11			0.41	U		0.41	U		0.42	U	
ISOPHORONE		16	U		15	U		15	U		15	U	
NAPHTHALENE		6.2	J	P	0.96	U		0.96	U		0.98	U	
NITROBENZENE		2.8	U		2.6	U		2.6	U		2.6	U	
N-NITROSODIMETHYLAMINE		20	U		19	U		19	U		19	U	
N-NITROSO-DI-N-PROPYLAMINE		8	U		7.4	U		7.4	U		7.5	U	
N-NITROSODIPHENYLAMINE		27	U		25	U		25	U		25	U	
PENTACHLOROPHENOL		12	U		11	U		11	U		11	U	
PHENANTHRENE		55			0.85	U		0.86	U		0.87	U	
PHENOL		9.3	U		8.5	U		8.6	U		8.7	U	
PYRENE		52			0.52	U		0.52	U		8.6		

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-40-42
SDG: 240-28680-1	LAB_ID	240-28680-5
FRACTION: OS	SAMP_DATE	9/4/2013
MEDIA: SOIL	QC_TYPE	NM
	UNITS	UG/KG
	PCT_SOLIDS	84.1
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE	0.42	U	
BENZO(K)FLUORANTHENE	0.81	U	
BIS(2-CHLOROETHOXY)METHANE	26	U	
BIS(2-CHLOROETHYL)ETHER	2.4	U	
BIS(2-ETHYLHEXYL)PHTHALATE	32	B	A
BUTYL BENZYL PHTHALATE	12	U	
CAPROLACTAM	44	U	
CARBAZOLE	32	U	
CHRYSENE	1.3	U	
DIBENZO(A,H)ANTHRACENE	0.79	U	
DIBENZOFURAN	0.79	U	
DIETHYL PHTHALATE	19	U	
DIMETHYL PHTHALATE	20	U	
DI-N-BUTYL PHTHALATE	18	U	
DI-N-OCTYL PHTHALATE	9.4	U	
FLUORANTHENE	0.66	U	
FLUORENE	0.63	U	
HEXACHLOROBENZENE	2.5	U	
HEXACHLOROBUTADIENE	6.7	U	
HEXACHLOROCYCLOPENTADIENE	9.7	U	
HEXACHLOROETHANE	11	U	
INDENO(1,2,3-CD)PYRENE	0.42	U	
ISOPHORONE	16	U	
NAPHTHALENE	0.98	U	
NITROBENZENE	2.6	U	
N-NITROSODIMETHYLAMINE	19	U	
N-NITROSO-DI-N-PROPYLAMINE	7.5	U	
N-NITROSODIPHENYLAMINE	25	U	
PENTACHLOROPHENOL	11	U	
PHENANTHRENE	0.87	U	
PHENOL	8.7	U	
PYRENE	0.53	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-19-21			DR-SB-48D-24-26			DR-SB-48D-28-31			DR-SB-48D-34-36		
SDG: 240-28680-1	LAB_ID	240-28680-1			240-28680-2			240-28680-3			240-28680-4		
FRACTION: PCB	SAMP_DATE	9/4/2013			9/4/2013			9/4/2013			9/4/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	79.2			84.9			84.0			82.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		26	U		25	U		25	U		26	U	
AROCLOR-1221		20	U		19	U		19	U		19	U	
AROCLOR-1232		18	U		16	U		17	U		17	U	
AROCLOR-1242		16	U		15	U		16	U		16	U	
AROCLOR-1248		21	U		20	U		20	U		21	U	
AROCLOR-1254		21	U		20	U		20	U		21	U	
AROCLOR-1260		21	U		20	U		20	U		21	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-40-42		
SDG: 240-28680-1	LAB_ID	240-28680-5		
FRACTION: PCB	SAMP_DATE	9/4/2013		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	UG/KG		
	PCT_SOLIDS	84.1		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
AROCLOR-1016		25	U	
AROCLOR-1221		19	U	
AROCLOR-1232		17	U	
AROCLOR-1242		16	U	
AROCLOR-1248		20	U	
AROCLOR-1254		20	U	
AROCLOR-1260		20	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-19-21						DR-SB-48D-24-26					
SDG: 240-28680-1	LAB_ID	240-28680-1						240-28680-2					
FRACTION: PET	SAMP_DATE	9/4/2013						9/4/2013					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	79.2			79.2			84.9			84.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					830						53	U	
TPH (C10-C32)		12	U					11	U				

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-28-31			DR-SB-48D-28-31RE2			DR-SB-48D-34-36					
SDG: 240-28680-1	LAB_ID	240-28680-3			240-28680-3			240-28680-4					
FRACTION: PET	SAMP_DATE	9/4/2013			9/4/2013			9/4/2013					
MEDIA: SOIL	QC_TYPE	NM			NM			NM					
	UNITS	UG/KG			MG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	84.0			84.0			82.8			82.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		52	U								79	J	P
TPH (C10-C32)					11	U		11	U				

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-40-42					
SDG: 240-28680-1	LAB_ID	240-28680-5					
FRACTION: PET	SAMP_DATE	9/4/2013					
MEDIA: SOIL	QC_TYPE	NM					
	UNITS	MG/KG			UG/KG		
	PCT_SOLIDS	84.1			84.1		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					54	U	
TPH (C10-C32)		11	U				

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-19-21			DR-SB-48D-24-26			DR-SB-48D-28-31			DR-SB-48D-34-36		
SDG: 240-28680-1	LAB_ID	240-28680-1			240-28680-2			240-28680-3			240-28680-4		
FRACTION: M	SAMP_DATE	9/4/2013			9/4/2013			9/4/2013			9/4/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	79.2			84.9			84.0			82.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.42	UL	D	0.43	UL	D	0.44	UL	D	0.43	UL	D
ARSENIC		0.93	J	P	0.8	J	P	0.56	J	P	1.1	J	P
BARIUM		2.1	J	P	4.2	J	P	0.79	J	P	3.3	J	P
BERYLLIUM		0.047	U		0.047	U		0.048	U		0.048	U	
CADMIUM		0.4	J	P	0.3	J	P	0.069	J	P	0.28	J	P
CHROMIUM		34			5.5			1.8			4.3		
COBALT		2.9			0.62	J	P	0.19	J	P	0.72	J	P
COPPER		3.1			1.1	J	P	1.8	J	P	1.8	J	P
LEAD		1.1			2.1			0.5	J	P	1.5		
MERCURY		0.021	U		0.016	U		0.017	U		0.016	U	
MOLYBDENUM		0.29	U		0.29	U		0.3	U		0.3	U	
NICKEL		0.99	J	P	0.29	J	P	0.3	U		0.36	J	P
SELENIUM		0.49	U		0.49	U		0.51	U		0.5	U	
SILVER		0.11	U		0.11	U		0.11	U		0.11	U	
THALLIUM		0.6	U		0.6	U		0.62	U		0.61	U	
VANADIUM		5.4			8.8			4.3			9.5		
ZINC		10	B	A	2	B	A	4.1	B	A	2.3	B	A

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-40-42
SDG: 240-28680-1	LAB_ID	240-28680-5
FRACTION: M	SAMP_DATE	9/4/2013
MEDIA: SOIL	QC_TYPE	NM
	UNITS	MG/KG
	PCT_SOLIDS	84.1
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
ANTIMONY	0.36	UL	D
ARSENIC	11		
BARIUM	1.8	J	P
BERYLLIUM	0.039	U	
CADMIUM	0.033	U	
CHROMIUM	20		
COBALT	0.26	J	P
COPPER	3.3		
LEAD	2.6		
MERCURY	0.018	U	
MOLYBDENUM	0.25	J	CP
NICKEL	0.25	U	
SELENIUM	0.41	U	
SILVER	0.091	U	
THALLIUM	0.5	U	
VANADIUM	20		
ZINC	3.4	B	A

PROJ_NO: 04882	NSAMPLE	DR-SB-48D-24-26										
SDG: 240-28680-1	LAB_ID	240-28680-2										
FRACTION: MISC	SAMP_DATE	9/4/2013										
MEDIA: SOIL	QC_TYPE	NM										
	UNITS	MEQ/100			MG/KG						S.U.		
	PCT_SOLIDS	84.9			0.0			84.9			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CATION EXCHANGE CAPACITY		33											
NITRATE-N								0.27	U				
PH											5.04		
PHOSPHATE								0.34	U				
TOTAL INORGANIC CARBON					1000	U							
TOTAL KJELDAHL NITROGEN								250					
TOTAL ORGANIC CARBON					600	U							

DR-SB-48D-40-42											
240-28680-5											
9/4/2013											
NM											
MEQ/100			MG/KG						S.U.		
84.1			0.0			84.1			0.0		
RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
14											
						0.27	U				
									4.56		
						34	J	P			
			1000	U							
						130	J	P			
			600	U							

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: TB-090413 | Lab Sample ID: 240-28680-6

Matrix: Water | Lab File ID: UXJ4067.D

Analysis Method: 8260B | Date Collected: 09/04/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 09/13/2013 17:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 101342 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: TB-090413 | Lab Sample ID: 240-28680-6

Matrix: Water | Lab File ID: UXJ4067.D

Analysis Method: 8260B | Date Collected: 09/04/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 09/13/2013 17:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 101342 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: TB-090413 | Lab Sample ID: 240-28680-6

Matrix: Water | Lab File ID: UXJ4067.D

Analysis Method: 8260B | Date Collected: 09/04/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 09/13/2013 17:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 101342 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	113		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: TB-090413 | Lab Sample ID: 240-28680-6

Matrix: Water | Lab File ID: UXJ4067.D

Analysis Method: 8260B | Date Collected: 09/04/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 09/13/2013 17:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 101342 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 | Lab Sample ID: 240-28680-1

Matrix: Solid | Lab File ID: UX87354.D

Analysis Method: 8260B | Date Collected: 09/04/2013 08:45

Sample wt/vol: 5.96(g) | Date Analyzed: 09/11/2013 12:25

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.8 | Level: (low/med) Medium

Analysis Batch No.: 100925 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	260	U	260	9.6
71-55-6	1,1,1-Trichloroethane	260	U	260	22
79-34-5	1,1,2,2-Tetrachloroethane	260	U	260	9.4
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	260	U	260	41
75-34-3	1,1-Dichloroethane	260	U	260	18
75-35-4	1,1-Dichloroethene	260	U	260	19
563-58-6	1,1-Dichloropropene	260	U	260	11
87-61-6	1,2,3-Trichlorobenzene	260	U	260	11
96-18-4	1,2,3-Trichloropropane	260	U	260	22
526-73-8	1,2,3-Trimethylbenzene	260	U	260	0.18
120-82-1	1,2,4-Trichlorobenzene	260	U	260	7.7
95-63-6	1,2,4-Trimethylbenzene	260	U	260	5.3
96-12-8	1,2-Dibromo-3-Chloropropane	530	U	530	53
106-93-4	1,2-Dibromoethane	260	U	260	11
95-50-1	1,2-Dichlorobenzene	260	U	260	9.1
107-06-2	1,2-Dichloroethane	260	U	260	11
78-87-5	1,2-Dichloropropane	260	U	260	8.7
541-73-1	1,3-Dichlorobenzene	260	U	260	5.1
142-28-9	1,3-Dichloropropane	260	U	260	23
106-46-7	1,4-Dichlorobenzene	260	U	260	8.5
594-20-7	2,2-Dichloropropane	260	U	260	24
78-93-3	2-Butanone	1100	U	1100	46
110-75-8	2-Chloroethyl vinyl ether	1100	U	1100	46
95-49-8	2-Chlorotoluene	260	U	260	9.5
591-78-6	2-Hexanone	1100	U	1100	21
106-43-4	4-Chlorotoluene	260	U	260	10
108-10-1	4-Methyl-2-pentanone	1100	U	1100	51
67-64-1	Acetone	1100	U	1100	180
71-43-2	Benzene	260	U	260	13
108-86-1	Bromobenzene	260	U	260	14
74-97-5	Bromochloromethane	260	U	260	14
75-27-4	Bromodichloromethane	260	U	260	10
75-25-2	Bromoform	260	U	260	20
74-83-9	Bromomethane	260	U	260	31
75-15-0	Carbon disulfide	260	U	260	13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 | Lab Sample ID: 240-28680-1

Matrix: Solid | Lab File ID: UX87354.D

Analysis Method: 8260B | Date Collected: 09/04/2013 08:45

Sample wt/vol: 5.96(g) | Date Analyzed: 09/11/2013 12:25

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.8 | Level: (low/med) Medium

Analysis Batch No.: 100925 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	260	U	260	6.8
108-90-7	Chlorobenzene	260	U	260	6.8
75-00-3	Chloroethane	260	U	260	65
67-66-3	Chloroform	260	U	260	9.3
74-87-3	Chloromethane	260	U	260	15
156-59-2	cis-1,2-Dichloroethene	3400		260	7.3
10061-01-5	cis-1,3-Dichloropropene	260	U	260	8.4
124-48-1	Dibromochloromethane	260	U	260	13
74-95-3	Dibromomethane	260	U	260	15
75-71-8	Dichlorodifluoromethane	260	U	260	17
108-20-3	Diisopropyl ether	530	U	530	53
100-41-4	Ethylbenzene	260	U	260	5.7
637-92-3	Ethyl-t-butyl ether (ETBE)	260	U	260	0.23
87-68-3	Hexachlorobutadiene	260	U	260	15
98-82-8	Isopropylbenzene	260	U	260	6.9
1634-04-4	Methyl tert-butyl ether	260	U	260	7.5
75-09-2	Methylene Chloride	260	U	260	82
179601-23-1	m-Xylene & p-Xylene	260	U	260	6.6
91-20-3	Naphthalene	7.4	J	260	7.1
104-51-8	n-Butylbenzene	260	U	260	8.5
103-65-1	n-Propylbenzene	260	U	260	15
95-47-6	o-Xylene	260	U	260	9.0
99-87-6	p-Isopropyltoluene	260	U	260	5.1
135-98-8	sec-Butylbenzene	260	U	260	5.0
100-42-5	Styrene	260	U	260	5.9
994-05-8	Tert-amyl-methyl ether (TAME)	260	U	260	0.39
75-65-0	tert-Butyl alcohol	11000	U *	11000	250
98-06-6	tert-Butylbenzene	260	U	260	6.9
127-18-4	Tetrachloroethene	260	U	260	13
108-88-3	Toluene	260	U	260	18
156-60-5	trans-1,2-Dichloroethene	260	U	260	9.7
10061-02-6	trans-1,3-Dichloropropene	260	U	260	21
79-01-6	Trichloroethene	170	J	260	10
75-69-4	Trichlorofluoromethane	260	U	260	17
108-05-4	Vinyl acetate	530	U *	530	24
75-01-4	Vinyl chloride	340		260	19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 Lab Sample ID: 240-28680-1

Matrix: Solid Lab File ID: UX87354.D

Analysis Method: 8260B Date Collected: 09/04/2013 08:45

Sample wt/vol: 5.96(g) Date Analyzed: 09/11/2013 12:25

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.8 Level: (low/med) Medium

Analysis Batch No.: 100925 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	530	U	530	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		39-128
460-00-4	4-Bromofluorobenzene (Surr)	69		26-141
1868-53-7	Dibromofluoromethane (Surr)	67		30-122
2037-26-5	Toluene-d8 (Surr)	70		33-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 Lab Sample ID: 240-28680-1

Matrix: Solid Lab File ID: UX87354.D

Analysis Method: 8260B Date Collected: 09/04/2013 08:45

Sample wt/vol: 5.96(g) Date Analyzed: 09/11/2013 12:25

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.8 Level: (low/med) Medium

Analysis Batch No.: 100925 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 | Lab Sample ID: 240-28680-2

Matrix: Solid | Lab File ID: 144636.D

Analysis Method: 8260B | Date Collected: 09/04/2013 09:10

Sample wt/vol: 6.65(g) | Date Analyzed: 09/13/2013 14:40

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.1 | Level: (low/med) Medium

Analysis Batch No.: 101375 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	220	U	220	8.1
71-55-6	1,1,1-Trichloroethane	220	U	220	19
79-34-5	1,1,2,2-Tetrachloroethane	220	U	220	7.9
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	220	U	220	35
75-34-3	1,1-Dichloroethane	220	U	220	15
75-35-4	1,1-Dichloroethene	220	U	220	16
563-58-6	1,1-Dichloropropene	220	U	220	8.9
87-61-6	1,2,3-Trichlorobenzene	9.4	J	220	8.9
96-18-4	1,2,3-Trichloropropane	220	U	220	19
526-73-8	1,2,3-Trimethylbenzene	220	U	220	0.15
120-82-1	1,2,4-Trichlorobenzene	30	J	220	6.5
95-63-6	1,2,4-Trimethylbenzene	220	U	220	4.4
96-12-8	1,2-Dibromo-3-Chloropropane	440	U	440	44
106-93-4	1,2-Dibromoethane	220	U	220	8.9
95-50-1	1,2-Dichlorobenzene	220	U	220	7.6
107-06-2	1,2-Dichloroethane	220	U	220	8.9
78-87-5	1,2-Dichloropropane	220	U	220	7.3
541-73-1	1,3-Dichlorobenzene	5.7	J	220	4.3
142-28-9	1,3-Dichloropropane	220	U	220	19
106-46-7	1,4-Dichlorobenzene	8.4	J	220	7.1
594-20-7	2,2-Dichloropropane	220	U	220	20
78-93-3	2-Butanone	890	U	890	38
110-75-8	2-Chloroethyl vinyl ether	890	U	890	38
95-49-8	2-Chlorotoluene	220	U	220	8.0
591-78-6	2-Hexanone	890	U	890	18
106-43-4	4-Chlorotoluene	220	U	220	8.8
108-10-1	4-Methyl-2-pentanone	890	U	890	43
67-64-1	Acetone	890	U	890	150
71-43-2	Benzene	220	U	220	11
108-86-1	Bromobenzene	220	U	220	12
74-97-5	Bromochloromethane	220	U	220	12
75-27-4	Bromodichloromethane	220	U	220	8.8
75-25-2	Bromoform	220	U	220	17
74-83-9	Bromomethane	220	U	220	26
75-15-0	Carbon disulfide	220	U	220	11

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 | Lab Sample ID: 240-28680-2

Matrix: Solid | Lab File ID: 144636.D

Analysis Method: 8260B | Date Collected: 09/04/2013 09:10

Sample wt/vol: 6.65(g) | Date Analyzed: 09/13/2013 14:40

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.1 | Level: (low/med) Medium

Analysis Batch No.: 101375 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	220	U	220	5.7
108-90-7	Chlorobenzene	220	U	220	5.7
75-00-3	Chloroethane	220	U	220	54
67-66-3	Chloroform	13	J	220	7.8
74-87-3	Chloromethane	220	U	220	12
156-59-2	cis-1,2-Dichloroethene	71	J	220	6.1
10061-01-5	cis-1,3-Dichloropropene	220	U	220	7.0
124-48-1	Dibromochloromethane	220	U	220	11
74-95-3	Dibromomethane	220	U	220	12
75-71-8	Dichlorodifluoromethane	220	U	220	14
108-20-3	Diisopropyl ether	440	U	440	44
100-41-4	Ethylbenzene	220	U	220	4.8
637-92-3	Ethyl-t-butyl ether (ETBE)	220	U	220	0.19
87-68-3	Hexachlorobutadiene	220	U	220	12
98-82-8	Isopropylbenzene	220	U	220	5.8
1634-04-4	Methyl tert-butyl ether	220	U	220	6.3
75-09-2	Methylene Chloride	220	U	220	68
179601-23-1	m-Xylene & p-Xylene	5.5	J	220	5.5
91-20-3	Naphthalene	15	J	220	5.9
104-51-8	n-Butylbenzene	220	U	220	7.1
103-65-1	n-Propylbenzene	220	U	220	12
95-47-6	o-Xylene	220	U	220	7.5
99-87-6	p-Isopropyltoluene	220	U	220	4.3
135-98-8	sec-Butylbenzene	220	U	220	4.2
100-42-5	Styrene	220	U	220	5.0
994-05-8	Tert-amyl-methyl ether (TAME)	220	U	220	0.33
75-65-0	tert-Butyl alcohol	8900	U *	8900	210
98-06-6	tert-Butylbenzene	220	U	220	5.8
127-18-4	Tetrachloroethene	220	U	220	11
108-88-3	Toluene	220	U	220	15
156-60-5	trans-1,2-Dichloroethene	220	U	220	8.1
10061-02-6	trans-1,3-Dichloropropene	220	U	220	18
79-01-6	Trichloroethene	610		220	8.6
75-69-4	Trichlorofluoromethane	220	U	220	14
108-05-4	Vinyl acetate	440	U *	440	20
75-01-4	Vinyl chloride	220	U	220	16

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 Lab Sample ID: 240-28680-2

Matrix: Solid Lab File ID: 144636.D

Analysis Method: 8260B Date Collected: 09/04/2013 09:10

Sample wt/vol: 6.65(g) Date Analyzed: 09/13/2013 14:40

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.1 Level: (low/med) Medium

Analysis Batch No.: 101375 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	5.5	J	440	5.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	72		39-128
460-00-4	4-Bromofluorobenzene (Surr)	76		26-141
1868-53-7	Dibromofluoromethane (Surr)	75		30-122
2037-26-5	Toluene-d8 (Surr)	78		33-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 | Lab Sample ID: 240-28680-2

Matrix: Solid | Lab File ID: 144636.D

Analysis Method: 8260B | Date Collected: 09/04/2013 09:10

Sample wt/vol: 6.65(g) | Date Analyzed: 09/13/2013 14:40

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.1 | Level: (low/med) Medium

Analysis Batch No.: 101375 | Units: ug/Kg

Number TICs Found: 3 | TIC Result Total: 1420

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	3.73	270	T J
	Unknown	3.90	680	T J
2245-38-7	Naphthalene, 1,6,7-trimethyl-	13.66	470	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 Lab Sample ID: 240-28680-3

Matrix: Solid Lab File ID: UX87336.D

Analysis Method: 8260B Date Collected: 09/04/2013 09:50

Sample wt/vol: 5.76(g) Date Analyzed: 09/11/2013 06:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.0 Level: (low/med) Low

Analysis Batch No.: 100925 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.2	U	5.2	0.64
71-55-6	1,1,1-Trichloroethane	5.2	U	5.2	0.58
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U	5.2	0.35
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.2	U	5.2	1.3
75-34-3	1,1-Dichloroethane	5.2	U	5.2	0.37
75-35-4	1,1-Dichloroethene	0.69	J	5.2	0.54
563-58-6	1,1-Dichloropropene	5.2	U *	5.2	0.31
87-61-6	1,2,3-Trichlorobenzene	3.8	J	5.2	0.39
96-18-4	1,2,3-Trichloropropane	5.2	U	5.2	0.93
526-73-8	1,2,3-Trimethylbenzene	5.2	U	5.2	0.18
120-82-1	1,2,4-Trichlorobenzene	19	B	5.2	0.28
95-63-6	1,2,4-Trimethylbenzene	5.2	U	5.2	0.67
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	1.3
106-93-4	1,2-Dibromoethane	5.2	U	5.2	0.52
95-50-1	1,2-Dichlorobenzene	5.2	U	5.2	0.37
107-06-2	1,2-Dichloroethane	3.9	J	5.2	0.35
78-87-5	1,2-Dichloropropane	5.2	U	5.2	0.71
541-73-1	1,3-Dichlorobenzene	5.2	U	5.2	0.36
142-28-9	1,3-Dichloropropane	5.2	U	5.2	0.35
106-46-7	1,4-Dichlorobenzene	5.2	U	5.2	0.68
594-20-7	2,2-Dichloropropane	5.2	U	5.2	0.97
78-93-3	2-Butanone	21	U	21	1.4
110-75-8	2-Chloroethyl vinyl ether	52	U	52	1.4
95-49-8	2-Chlorotoluene	5.2	U	5.2	0.41
591-78-6	2-Hexanone	21	U	21	0.65
106-43-4	4-Chlorotoluene	5.2	U	5.2	0.42
108-10-1	4-Methyl-2-pentanone	21	U	21	0.56
67-64-1	Acetone	200	B *	21	6.5
71-43-2	Benzene	5.2	U	5.2	0.24
108-86-1	Bromobenzene	5.2	U	5.2	0.34
74-97-5	Bromochloromethane	5.2	U	5.2	0.73
75-27-4	Bromodichloromethane	5.2	U	5.2	0.29
75-25-2	Bromoform	5.2	U	5.2	0.34
74-83-9	Bromomethane	5.2	U	5.2	0.56
75-15-0	Carbon disulfide	5.2	U	5.2	0.45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 | Lab Sample ID: 240-28680-3

Matrix: Solid | Lab File ID: UX87336.D

Analysis Method: 8260B | Date Collected: 09/04/2013 09:50

Sample wt/vol: 5.76(g) | Date Analyzed: 09/11/2013 06:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.0 | Level: (low/med) Low

Analysis Batch No.: 100925 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	5.2	U	5.2	0.38
108-90-7	Chlorobenzene	5.2	U	5.2	0.34
75-00-3	Chloroethane	5.2	U	5.2	0.89
67-66-3	Chloroform	1.7	J	5.2	0.30
74-87-3	Chloromethane	5.2	U	5.2	0.42
156-59-2	cis-1,2-Dichloroethene	50		5.2	0.37
10061-01-5	cis-1,3-Dichloropropene	5.2	U	5.2	0.35
124-48-1	Dibromochloromethane	5.2	U	5.2	0.57
74-95-3	Dibromomethane	5.2	U	5.2	0.65
75-71-8	Dichlorodifluoromethane	5.2	U	5.2	0.52
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	5.2	U	5.2	0.27
637-92-3	Ethyl-t-butyl ether (ETBE)	5.2	U	5.2	0.23
87-68-3	Hexachlorobutadiene	5.2	U	5.2	1.2
98-82-8	Isopropylbenzene	5.2	U	5.2	0.17
1634-04-4	Methyl tert-butyl ether	5.2	U	5.2	0.44
75-09-2	Methylene Chloride	5.2	U	5.2	0.69
179601-23-1	m-Xylene & p-Xylene	10	U	10	1.2
91-20-3	Naphthalene	0.38	J B	5.2	0.20
104-51-8	n-Butylbenzene	5.2	U	5.2	0.24
103-65-1	n-Propylbenzene	5.2	U	5.2	0.41
95-47-6	o-Xylene	5.2	U	5.2	0.36
99-87-6	p-Isopropyltoluene	5.2	U	5.2	0.22
135-98-8	sec-Butylbenzene	5.2	U	5.2	0.19
100-42-5	Styrene	5.2	U	5.2	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	5.2	U	5.2	0.38
75-65-0	tert-Butyl alcohol	16	J *	210	7.9
98-06-6	tert-Butylbenzene	5.2	U	5.2	0.30
127-18-4	Tetrachloroethene	1.5	J	5.2	0.54
108-88-3	Toluene	5.2	U	5.2	0.28
156-60-5	trans-1,2-Dichloroethene	5.2	U	5.2	0.42
10061-02-6	trans-1,3-Dichloropropene	5.2	U	5.2	0.56
79-01-6	Trichloroethene	500	E	5.2	0.43
75-69-4	Trichlorofluoromethane	5.2	U	5.2	0.35
108-05-4	Vinyl acetate	10	U	10	0.26
75-01-4	Vinyl chloride	5.9		5.2	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 Lab Sample ID: 240-28680-3

Matrix: Solid Lab File ID: UX87336.D

Analysis Method: 8260B Date Collected: 09/04/2013 09:50

Sample wt/vol: 5.76(g) Date Analyzed: 09/11/2013 06:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.0 Level: (low/med) Low

Analysis Batch No.: 100925 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	10	U	10	0.36

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		58-123
460-00-4	4-Bromofluorobenzene (Surr)	95		52-136
1868-53-7	Dibromofluoromethane (Surr)	99		37-132
2037-26-5	Toluene-d8 (Surr)	100		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 | Lab Sample ID: 240-28680-3

Matrix: Solid | Lab File ID: UX87336.D

Analysis Method: 8260B | Date Collected: 09/04/2013 09:50

Sample wt/vol: 5.76(g) | Date Analyzed: 09/11/2013 06:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.0 | Level: (low/med) Low

Analysis Batch No.: 100925 | Units: ug/Kg

Number TICs Found: 1 | TIC Result Total: 6.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.16	6.7	T J N

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 | Lab Sample ID: 240-28680-3

Matrix: Solid | Lab File ID: 144637.D

Analysis Method: 8260B | Date Collected: 09/04/2013 09:50

Sample wt/vol: 5.12(g) | Date Analyzed: 09/13/2013 15:01

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.0 | Level: (low/med) Medium

Analysis Batch No.: 101375 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	290	U	290	11
71-55-6	1,1,1-Trichloroethane	290	U	290	24
79-34-5	1,1,2,2-Tetrachloroethane	290	U	290	10
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	290	U	290	45
75-34-3	1,1-Dichloroethane	290	U	290	20
75-35-4	1,1-Dichloroethene	290	U	290	21
563-58-6	1,1-Dichloropropene	290	U	290	12
87-61-6	1,2,3-Trichlorobenzene	290	U	290	12
96-18-4	1,2,3-Trichloropropane	290	U	290	24
526-73-8	1,2,3-Trimethylbenzene	290	U	290	0.20
120-82-1	1,2,4-Trichlorobenzene	19	J	290	8.5
95-63-6	1,2,4-Trimethylbenzene	7.4	J	290	5.8
96-12-8	1,2-Dibromo-3-Chloropropane	580	U	580	58
106-93-4	1,2-Dibromoethane	290	U	290	12
95-50-1	1,2-Dichlorobenzene	290	U	290	10
107-06-2	1,2-Dichloroethane	290	U	290	12
78-87-5	1,2-Dichloropropane	290	U	290	9.5
541-73-1	1,3-Dichlorobenzene	290	U	290	5.6
142-28-9	1,3-Dichloropropane	290	U	290	26
106-46-7	1,4-Dichlorobenzene	9.3	J	290	9.3
594-20-7	2,2-Dichloropropane	290	U	290	27
78-93-3	2-Butanone	1200	U	1200	50
110-75-8	2-Chloroethyl vinyl ether	1200	U	1200	50
95-49-8	2-Chlorotoluene	290	U	290	10
591-78-6	2-Hexanone	1200	U	1200	23
106-43-4	4-Chlorotoluene	290	U	290	12
108-10-1	4-Methyl-2-pentanone	1200	U	1200	56
67-64-1	Acetone	1200	U	1200	200
71-43-2	Benzene	290	U	290	14
108-86-1	Bromobenzene	290	U	290	15
74-97-5	Bromochloromethane	290	U	290	15
75-27-4	Bromodichloromethane	290	U	290	12
75-25-2	Bromoform	290	U	290	22
74-83-9	Bromomethane	290	U	290	34
75-15-0	Carbon disulfide	290	U	290	14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 | Lab Sample ID: 240-28680-3

Matrix: Solid | Lab File ID: 144637.D

Analysis Method: 8260B | Date Collected: 09/04/2013 09:50

Sample wt/vol: 5.12(g) | Date Analyzed: 09/13/2013 15:01

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.0 | Level: (low/med) Medium

Analysis Batch No.: 101375 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	290	U	290	7.4
108-90-7	Chlorobenzene	290	U	290	7.4
75-00-3	Chloroethane	290	U	290	71
67-66-3	Chloroform	15	J	290	10
74-87-3	Chloromethane	290	U	290	16
156-59-2	cis-1,2-Dichloroethene	25	J	290	8.0
10061-01-5	cis-1,3-Dichloropropene	290	U	290	9.2
124-48-1	Dibromochloromethane	290	U	290	14
74-95-3	Dibromomethane	290	U	290	16
75-71-8	Dichlorodifluoromethane	290	U	290	19
108-20-3	Diisopropyl ether	580	U	580	58
100-41-4	Ethylbenzene	7.6	J	290	6.3
637-92-3	Ethyl-t-butyl ether (ETBE)	290	U	290	0.26
87-68-3	Hexachlorobutadiene	290	U	290	16
98-82-8	Isopropylbenzene	290	U	290	7.6
1634-04-4	Methyl tert-butyl ether	290	U	290	8.3
75-09-2	Methylene Chloride	290	U	290	90
179601-23-1	m-Xylene & p-Xylene	26	J	290	7.2
91-20-3	Naphthalene	13	J	290	7.8
104-51-8	n-Butylbenzene	290	U	290	9.3
103-65-1	n-Propylbenzene	290	U	290	16
95-47-6	o-Xylene	290	U	290	9.9
99-87-6	p-Isopropyltoluene	290	U	290	5.6
135-98-8	sec-Butylbenzene	290	U	290	5.5
100-42-5	Styrene	290	U	290	6.5
994-05-8	Tert-amyl-methyl ether (TAME)	290	U	290	0.43
75-65-0	tert-Butyl alcohol	12000	U *	12000	280
98-06-6	tert-Butylbenzene	290	U	290	7.6
127-18-4	Tetrachloroethene	22	J	290	14
108-88-3	Toluene	26	J	290	20
156-60-5	trans-1,2-Dichloroethene	290	U	290	11
10061-02-6	trans-1,3-Dichloropropene	290	U	290	23
79-01-6	Trichloroethene	150	J	290	11
75-69-4	Trichlorofluoromethane	290	U	290	19
108-05-4	Vinyl acetate	580	U *	580	27
75-01-4	Vinyl chloride	290	U	290	21

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 Lab Sample ID: 240-28680-3

Matrix: Solid Lab File ID: 144637.D

Analysis Method: 8260B Date Collected: 09/04/2013 09:50

Sample wt/vol: 5.12(g) Date Analyzed: 09/13/2013 15:01

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.0 Level: (low/med) Medium

Analysis Batch No.: 101375 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	26	J	580	7.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	76		39-128
460-00-4	4-Bromofluorobenzene (Surr)	79		26-141
1868-53-7	Dibromofluoromethane (Surr)	80		30-122
2037-26-5	Toluene-d8 (Surr)	80		33-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 Lab Sample ID: 240-28680-3

Matrix: Solid Lab File ID: 144637.D

Analysis Method: 8260B Date Collected: 09/04/2013 09:50

Sample wt/vol: 5.12(g) Date Analyzed: 09/13/2013 15:01

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.0 Level: (low/med) Medium

Analysis Batch No.: 101375 Units: ug/Kg

Number TICs Found: 3 TIC Result Total: 1810

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	2.04	470	T J
	Unknown	3.73	450	T J
	Unknown	3.90	890	T J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 | Lab Sample ID: 240-28680-4

Matrix: Solid | Lab File ID: UX87355.D

Analysis Method: 8260B | Date Collected: 09/04/2013 10:45

Sample wt/vol: 5.9(g) | Date Analyzed: 09/11/2013 12:46

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.2 | Level: (low/med) Medium

Analysis Batch No.: 100925 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	260	U	260	9.3
71-55-6	1,1,1-Trichloroethane	260	U	260	21
79-34-5	1,1,2,2-Tetrachloroethane	260	U	260	9.1
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	260	U	260	40
75-34-3	1,1-Dichloroethane	260	U	260	17
75-35-4	1,1-Dichloroethene	260	U	260	18
563-58-6	1,1-Dichloropropene	260	U	260	10
87-61-6	1,2,3-Trichlorobenzene	260	U	260	10
96-18-4	1,2,3-Trichloropropane	260	U	260	21
526-73-8	1,2,3-Trimethylbenzene	260	U	260	0.17
120-82-1	1,2,4-Trichlorobenzene	29	J	260	7.5
95-63-6	1,2,4-Trimethylbenzene	260	U	260	5.1
96-12-8	1,2-Dibromo-3-Chloropropane	510	U	510	51
106-93-4	1,2-Dibromoethane	260	U	260	10
95-50-1	1,2-Dichlorobenzene	260	U	260	8.8
107-06-2	1,2-Dichloroethane	260	U	260	10
78-87-5	1,2-Dichloropropane	260	U	260	8.4
541-73-1	1,3-Dichlorobenzene	260	U	260	4.9
142-28-9	1,3-Dichloropropane	260	U	260	23
106-46-7	1,4-Dichlorobenzene	260	U	260	8.2
594-20-7	2,2-Dichloropropane	260	U	260	24
78-93-3	2-Butanone	1000	U	1000	44
110-75-8	2-Chloroethyl vinyl ether	1000	U	1000	44
95-49-8	2-Chlorotoluene	260	U	260	9.2
591-78-6	2-Hexanone	1000	U	1000	20
106-43-4	4-Chlorotoluene	260	U	260	10
108-10-1	4-Methyl-2-pentanone	1000	U	1000	49
67-64-1	Acetone	1000	U	1000	170
71-43-2	Benzene	260	U	260	12
108-86-1	Bromobenzene	260	U	260	13
74-97-5	Bromochloromethane	260	U	260	13
75-27-4	Bromodichloromethane	260	U	260	10
75-25-2	Bromoform	260	U	260	19
74-83-9	Bromomethane	260	U	260	30
75-15-0	Carbon disulfide	260	U	260	12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 Lab Sample ID: 240-28680-4

Matrix: Solid Lab File ID: UX87355.D

Analysis Method: 8260B Date Collected: 09/04/2013 10:45

Sample wt/vol: 5.9(g) Date Analyzed: 09/11/2013 12:46

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.2 Level: (low/med) Medium

Analysis Batch No.: 100925 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	260	U	260	6.5
108-90-7	Chlorobenzene	260	U	260	6.5
75-00-3	Chloroethane	260	U	260	62
67-66-3	Chloroform	260	U	260	9.0
74-87-3	Chloromethane	260	U	260	14
156-59-2	cis-1,2-Dichloroethene	80	J	260	7.1
10061-01-5	cis-1,3-Dichloropropene	260	U	260	8.1
124-48-1	Dibromochloromethane	260	U	260	12
74-95-3	Dibromomethane	260	U	260	14
75-71-8	Dichlorodifluoromethane	260	U	260	16
108-20-3	Diisopropyl ether	510	U	510	51
100-41-4	Ethylbenzene	260	U	260	5.5
637-92-3	Ethyl-t-butyl ether (ETBE)	260	U	260	0.23
87-68-3	Hexachlorobutadiene	260	U	260	14
98-82-8	Isopropylbenzene	260	U	260	6.6
1634-04-4	Methyl tert-butyl ether	260	U	260	7.3
75-09-2	Methylene Chloride	260	U	260	79
179601-23-1	m-Xylene & p-Xylene	260	U	260	6.3
91-20-3	Naphthalene	260	U	260	6.9
104-51-8	n-Butylbenzene	260	U	260	8.2
103-65-1	n-Propylbenzene	260	U	260	14
95-47-6	o-Xylene	260	U	260	8.7
99-87-6	p-Isopropyltoluene	260	U	260	4.9
135-98-8	sec-Butylbenzene	260	U	260	4.8
100-42-5	Styrene	260	U	260	5.7
994-05-8	Tert-amyl-methyl ether (TAME)	260	U	260	0.38
75-65-0	tert-Butyl alcohol	10000	U *	10000	250
98-06-6	tert-Butylbenzene	260	U	260	6.6
127-18-4	Tetrachloroethene	260	U	260	12
108-88-3	Toluene	260	U	260	17
156-60-5	trans-1,2-Dichloroethene	260	U	260	9.4
10061-02-6	trans-1,3-Dichloropropene	260	U	260	20
79-01-6	Trichloroethene	1200		260	9.9
75-69-4	Trichlorofluoromethane	260	U	260	16
108-05-4	Vinyl acetate	510	U *	510	24
75-01-4	Vinyl chloride	260	U	260	18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 | Lab Sample ID: 240-28680-4

Matrix: Solid | Lab File ID: UX87355.D

Analysis Method: 8260B | Date Collected: 09/04/2013 10:45

Sample wt/vol: 5.9(g) | Date Analyzed: 09/11/2013 12:46

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.2 | Level: (low/med) Medium

Analysis Batch No.: 100925 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	510	U	510	6.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		39-128
460-00-4	4-Bromofluorobenzene (Surr)	69		26-141
1868-53-7	Dibromofluoromethane (Surr)	70		30-122
2037-26-5	Toluene-d8 (Surr)	75		33-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 | Lab Sample ID: 240-28680-4

Matrix: Solid | Lab File ID: UX87355.D

Analysis Method: 8260B | Date Collected: 09/04/2013 10:45

Sample wt/vol: 5.9(g) | Date Analyzed: 09/11/2013 12:46

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.2 | Level: (low/med) Medium

Analysis Batch No.: 100925 | Units: ug/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 | Lab Sample ID: 240-28680-5

Matrix: Solid | Lab File ID: UX87337.D

Analysis Method: 8260B | Date Collected: 09/04/2013 11:33

Sample wt/vol: 5.13(g) | Date Analyzed: 09/11/2013 06:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 | Level: (low/med) Low

Analysis Batch No.: 100925 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.8	U	5.8	0.72
71-55-6	1,1,1-Trichloroethane	5.8	U	5.8	0.65
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U	5.8	0.39
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.8	U	5.8	1.5
75-34-3	1,1-Dichloroethane	5.8	U	5.8	0.42
75-35-4	1,1-Dichloroethene	5.8	U	5.8	0.60
563-58-6	1,1-Dichloropropene	5.8	U *	5.8	0.35
87-61-6	1,2,3-Trichlorobenzene	5.8	U	5.8	0.44
96-18-4	1,2,3-Trichloropropane	5.8	U	5.8	1.0
526-73-8	1,2,3-Trimethylbenzene	5.8	U	5.8	0.20
120-82-1	1,2,4-Trichlorobenzene	5.8	U	5.8	0.31
95-63-6	1,2,4-Trimethylbenzene	5.8	U	5.8	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	12	U	12	1.5
106-93-4	1,2-Dibromoethane	5.8	U	5.8	0.58
95-50-1	1,2-Dichlorobenzene	5.8	U	5.8	0.42
107-06-2	1,2-Dichloroethane	0.47	J	5.8	0.39
78-87-5	1,2-Dichloropropane	5.8	U	5.8	0.80
541-73-1	1,3-Dichlorobenzene	5.8	U	5.8	0.41
142-28-9	1,3-Dichloropropane	5.8	U	5.8	0.39
106-46-7	1,4-Dichlorobenzene	5.8	U	5.8	0.76
594-20-7	2,2-Dichloropropane	5.8	U	5.8	1.1
78-93-3	2-Butanone	23	U	23	1.6
110-75-8	2-Chloroethyl vinyl ether	58	U	58	1.6
95-49-8	2-Chlorotoluene	5.8	U	5.8	0.46
591-78-6	2-Hexanone	23	U	23	0.73
106-43-4	4-Chlorotoluene	5.8	U	5.8	0.47
108-10-1	4-Methyl-2-pentanone	23	U	23	0.63
67-64-1	Acetone	58	B *	23	7.3
71-43-2	Benzene	5.8	U	5.8	0.27
108-86-1	Bromobenzene	5.8	U	5.8	0.38
74-97-5	Bromochloromethane	5.8	U	5.8	0.82
75-27-4	Bromodichloromethane	5.8	U	5.8	0.32
75-25-2	Bromoform	5.8	U	5.8	0.38
74-83-9	Bromomethane	5.8	U	5.8	0.63
75-15-0	Carbon disulfide	5.8	U	5.8	0.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Matrix: Solid Lab File ID: UX87337.D

Analysis Method: 8260B Date Collected: 09/04/2013 11:33

Sample wt/vol: 5.13(g) Date Analyzed: 09/11/2013 06:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 Level: (low/med) Low

Analysis Batch No.: 100925 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	5.8	U	5.8	0.43
108-90-7	Chlorobenzene	5.8	U	5.8	0.38
75-00-3	Chloroethane	5.8	U	5.8	1.0
67-66-3	Chloroform	5.8	U	5.8	0.34
74-87-3	Chloromethane	5.8	U	5.8	0.47
156-59-2	cis-1,2-Dichloroethene	11		5.8	0.42
10061-01-5	cis-1,3-Dichloropropene	5.8	U	5.8	0.39
124-48-1	Dibromochloromethane	5.8	U	5.8	0.64
74-95-3	Dibromomethane	5.8	U	5.8	0.73
75-71-8	Dichlorodifluoromethane	5.8	U	5.8	0.58
108-20-3	Diisopropyl ether	12	U	12	1.7
100-41-4	Ethylbenzene	5.8	U	5.8	0.30
637-92-3	Ethyl-t-butyl ether (ETBE)	5.8	U	5.8	0.25
87-68-3	Hexachlorobutadiene	5.8	U	5.8	1.4
98-82-8	Isopropylbenzene	5.8	U	5.8	0.19
1634-04-4	Methyl tert-butyl ether	5.8	U	5.8	0.50
75-09-2	Methylene Chloride	5.8	U	5.8	0.78
179601-23-1	m-Xylene & p-Xylene	12	U	12	1.4
91-20-3	Naphthalene	5.8	U	5.8	0.22
104-51-8	n-Butylbenzene	5.8	U	5.8	0.27
103-65-1	n-Propylbenzene	5.8	U	5.8	0.46
95-47-6	o-Xylene	5.8	U	5.8	0.41
99-87-6	p-Isopropyltoluene	5.8	U	5.8	0.24
135-98-8	sec-Butylbenzene	5.8	U	5.8	0.21
100-42-5	Styrene	5.8	U	5.8	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.8	U	5.8	0.43
75-65-0	tert-Butyl alcohol	230	U *	230	8.8
98-06-6	tert-Butylbenzene	5.8	U	5.8	0.34
127-18-4	Tetrachloroethene	5.8	U	5.8	0.60
108-88-3	Toluene	5.8	U	5.8	0.31
156-60-5	trans-1,2-Dichloroethene	5.8	U	5.8	0.47
10061-02-6	trans-1,3-Dichloropropene	5.8	U	5.8	0.63
79-01-6	Trichloroethene	27		5.8	0.49
75-69-4	Trichlorofluoromethane	5.8	U	5.8	0.39
108-05-4	Vinyl acetate	12	U	12	0.29
75-01-4	Vinyl chloride	1.8	J	5.8	0.45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Matrix: Solid Lab File ID: UX87337.D

Analysis Method: 8260B Date Collected: 09/04/2013 11:33

Sample wt/vol: 5.13(g) Date Analyzed: 09/11/2013 06:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 Level: (low/med) Low

Analysis Batch No.: 100925 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	12	U	12	0.41

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		58-123
460-00-4	4-Bromofluorobenzene (Surr)	93		52-136
1868-53-7	Dibromofluoromethane (Surr)	98		37-132
2037-26-5	Toluene-d8 (Surr)	99		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Matrix: Solid Lab File ID: UX87337.D

Analysis Method: 8260B Date Collected: 09/04/2013 11:33

Sample wt/vol: 5.13(g) Date Analyzed: 09/11/2013 06:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.9 Level: (low/med) Low

Analysis Batch No.: 100925 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 | Lab Sample ID: 240-28680-1

Matrix: Solid | Lab File ID: 0920020.D

Analysis Method: 8270D | Date Collected: 09/04/2013 08:45

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 29.89(g) | Date Analyzed: 09/20/2013 14:31

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 20.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	63	U	63	4.4
123-91-1	1,4-Dioxane	130	U	130	28
88-06-2	2,4,6-Trichlorophenol	190	U	190	11
95-95-4	2,4,5-Trichlorophenol	190	U	190	32
120-83-2	2,4-Dichlorophenol	190	U	190	25
105-67-9	2,4-Dimethylphenol	190	U	190	25
51-28-5	2,4-Dinitrophenol	420	U	420	27
121-14-2	2,4-Dinitrotoluene	250	U	250	22
91-58-7	2-Chloronaphthalene	63	U	63	0.57
95-57-8	2-Chlorophenol	63	U	63	10
91-57-6	2-Methylnaphthalene	5.3	J	8.5	0.63
95-48-7	2-Methylphenol	250	U	250	14
88-74-4	2-Nitroaniline	250	U	250	12
88-75-5	2-Nitrophenol	63	U	63	11
15831-10-4	3 & 4 Methylphenol	510	U	510	25
91-94-1	3,3'-Dichlorobenzidine	130	U	130	23
99-09-2	3-Nitroaniline	250	U	250	20
534-52-1	4,6-Dinitro-2-methylphenol	190	U	190	12
101-55-3	4-Bromophenyl phenyl ether	63	U	63	16
59-50-7	4-Chloro-3-methylphenol	190	U	190	27
106-47-8	4-Chloroaniline	190	U	190	22
7005-72-3	4-Chlorophenyl phenyl ether	63	U	63	16
100-01-6	4-Nitroaniline	250	U	250	33
83-32-9	Acenaphthene	8.1	J	8.5	0.96
208-96-8	Acenaphthylene	8.5	U	8.5	0.44
98-86-2	Acetophenone	130	U	130	12
120-12-7	Anthracene	14		8.5	0.99
1912-24-9	Atrazine	250	U	250	12
100-52-7	Benzaldehyde	130	U *	130	15
56-55-3	Benzo[a]anthracene	30		8.5	0.80
50-32-8	Benzo[a]pyrene	24		8.5	0.81
205-99-2	Benzo[b]fluoranthene	36		8.5	0.75
191-24-2	Benzo[g,h,i]perylene	13		8.5	0.44
207-08-9	Benzo[k]fluoranthene	8.5	U	8.5	0.86

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 | Lab Sample ID: 240-28680-1

Matrix: Solid | Lab File ID: 0920020.D

Analysis Method: 8270D | Date Collected: 09/04/2013 08:45

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 29.89(g) | Date Analyzed: 09/20/2013 14:31

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 20.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	130	U	130	28
111-44-4	Bis(2-chloroethyl)ether	130	U	130	2.5
117-81-7	Bis(2-ethylhexyl) phthalate	50	J B	89	24
85-68-7	Butyl benzyl phthalate	89	U	89	13
105-60-2	Caprolactam	420	U	420	47
86-74-8	Carbazole	63	U	63	34
218-01-9	Chrysene	27		8.5	1.4
84-74-2	Di-n-butyl phthalate	89	U	89	19
117-84-0	Di-n-octyl phthalate	89	U	89	10
53-70-3	Dibenzo(a,h)anthracene	8.5	U	8.5	0.84
132-64-9	Dibenzofuran	7.0	J	63	0.84
84-66-2	Diethyl phthalate	89	U	89	20
131-11-3	Dimethyl phthalate	89	U	89	22
206-44-0	Fluoranthene	62		8.5	0.70
86-73-7	Fluorene	9.9		8.5	0.67
118-74-1	Hexachlorobenzene	8.5	U	8.5	2.7
87-68-3	Hexachlorobutadiene	63	U	63	7.1
77-47-4	Hexachlorocyclopentadiene	420	U	420	10
67-72-1	Hexachloroethane	63	U	63	11
193-39-5	Indeno[1,2,3-cd]pyrene	11		8.5	0.44
78-59-1	Isophorone	63	U	63	16
621-64-7	N-Nitrosodi-n-propylamine	63	U	63	8.0
62-75-9	N-Nitrosodimethylamine	130	U	130	20
86-30-6	N-Nitrosodiphenylamine	63	U	63	27
91-20-3	Naphthalene	6.2	J	8.5	1.0
98-95-3	Nitrobenzene	130	U	130	2.8
87-86-5	Pentachlorophenol	190	U	190	12
85-01-8	Phenanthrene	55		8.5	0.93
108-95-2	Phenol	63	U	63	9.3
129-00-0	Pyrene	52		8.5	0.56
108-60-1	2,2'-oxybis[1-chloropropane]	130	U	130	12
606-20-2	2,6-Dinitrotoluene	250	U	250	27
100-02-7	4-Nitrophenol	420	U	420	22

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 Lab Sample ID: 240-28680-1

Matrix: Solid Lab File ID: 0920020.D

Analysis Method: 8270D Date Collected: 09/04/2013 08:45

Extract. Method: 3540C Date Extracted: 09/18/2013 09:10

Sample wt/vol: 29.89(g) Date Analyzed: 09/20/2013 14:31

Con. Extract Vol.: 2.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 20.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	87		36-110
4165-62-2	Phenol-d5 (Surr)	70		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	67		20-110
367-12-4	2-Fluorophenol (Surr)	68		24-110
321-60-8	2-Fluorobiphenyl (Surr)	62		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	50		10-110

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 | Lab Sample ID: 240-28680-2

Matrix: Solid | Lab File ID: 0920021.D

Analysis Method: 8270D | Date Collected: 09/04/2013 09:10

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.18(g) | Date Analyzed: 09/20/2013 14:53

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	59	U	59	4.1
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	10
95-95-4	2,4,5-Trichlorophenol	180	U	180	29
120-83-2	2,4-Dichlorophenol	180	U	180	23
105-67-9	2,4-Dimethylphenol	180	U	180	23
51-28-5	2,4-Dinitrophenol	390	U	390	25
121-14-2	2,4-Dinitrotoluene	230	U	230	20
91-58-7	2-Chloronaphthalene	59	U	59	0.53
95-57-8	2-Chlorophenol	59	U	59	9.6
91-57-6	2-Methylnaphthalene	7.8	U	7.8	0.59
95-48-7	2-Methylphenol	230	U	230	13
88-74-4	2-Nitroaniline	230	U	230	11
88-75-5	2-Nitrophenol	59	U	59	9.7
15831-10-4	3 & 4 Methylphenol	470	U	470	23
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	230	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	11
101-55-3	4-Bromophenyl phenyl ether	59	U	59	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	59	U	59	15
100-01-6	4-Nitroaniline	230	U	230	30
83-32-9	Acenaphthene	7.8	U	7.8	0.89
208-96-8	Acenaphthylene	7.8	U	7.8	0.41
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.8	U	7.8	0.91
1912-24-9	Atrazine	230	U	230	11
100-52-7	Benzaldehyde	120	U *	120	14
56-55-3	Benzo[a]anthracene	7.8	U	7.8	0.74
50-32-8	Benzo[a]pyrene	7.8	U	7.8	0.75
205-99-2	Benzo[b]fluoranthene	7.8	U	7.8	0.69
191-24-2	Benzo[g,h,i]perylene	7.8	U	7.8	0.41
207-08-9	Benzo[k]fluoranthene	7.8	U	7.8	0.80

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 | Lab Sample ID: 240-28680-2

Matrix: Solid | Lab File ID: 0920021.D

Analysis Method: 8270D | Date Collected: 09/04/2013 09:10

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.18(g) | Date Analyzed: 09/20/2013 14:53

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	28	J B	82	22
85-68-7	Butyl benzyl phthalate	82	U	82	12
105-60-2	Caprolactam	390	U	390	43
86-74-8	Carbazole	59	U	59	32
218-01-9	Chrysene	7.8	U	7.8	1.3
84-74-2	Di-n-butyl phthalate	82	U	82	18
117-84-0	Di-n-octyl phthalate	82	U	82	9.2
53-70-3	Dibenzo(a,h)anthracene	7.8	U	7.8	0.77
132-64-9	Dibenzofuran	59	U	59	0.77
84-66-2	Diethyl phthalate	82	U	82	19
131-11-3	Dimethyl phthalate	82	U	82	20
206-44-0	Fluoranthene	7.8	U	7.8	0.64
86-73-7	Fluorene	7.8	U	7.8	0.62
118-74-1	Hexachlorobenzene	7.8	U	7.8	2.5
87-68-3	Hexachlorobutadiene	59	U	59	6.6
77-47-4	Hexachlorocyclopentadiene	390	U	390	9.5
67-72-1	Hexachloroethane	59	U	59	11
193-39-5	Indeno[1,2,3-cd]pyrene	7.8	U	7.8	0.41
78-59-1	Isophorone	59	U	59	15
621-64-7	N-Nitrosodi-n-propylamine	59	U	59	7.4
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	59	U	59	25
91-20-3	Naphthalene	7.8	U	7.8	0.96
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	11
85-01-8	Phenanthrene	7.8	U	7.8	0.85
108-95-2	Phenol	59	U	59	8.5
129-00-0	Pyrene	7.8	U	7.8	0.52
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	230	U	230	25
100-02-7	4-Nitrophenol	390	U	390	20

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 Lab Sample ID: 240-28680-2

Matrix: Solid Lab File ID: 0920021.D

Analysis Method: 8270D Date Collected: 09/04/2013 09:10

Extract. Method: 3540C Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.18(g) Date Analyzed: 09/20/2013 14:53

Con. Extract Vol.: 2.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 15.1 GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	68		36-110
4165-62-2	Phenol-d5 (Surr)	52		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	52		20-110
367-12-4	2-Fluorophenol (Surr)	45		24-110
321-60-8	2-Fluorobiphenyl (Surr)	48		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	28		10-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 | Lab Sample ID: 240-28680-3

Matrix: Solid | Lab File ID: 0920022.D

Analysis Method: 8270D | Date Collected: 09/04/2013 09:50

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.37(g) | Date Analyzed: 09/20/2013 15:15

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	59	U	59	4.1
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	10
95-95-4	2,4,5-Trichlorophenol	180	U	180	29
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	390	U	390	25
121-14-2	2,4-Dinitrotoluene	240	U	240	20
91-58-7	2-Chloronaphthalene	59	U	59	0.53
95-57-8	2-Chlorophenol	59	U	59	9.6
91-57-6	2-Methylnaphthalene	7.8	U	7.8	0.59
95-48-7	2-Methylphenol	240	U	240	13
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	59	U	59	9.8
15831-10-4	3 & 4 Methylphenol	470	U	470	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	11
101-55-3	4-Bromophenyl phenyl ether	59	U	59	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	59	U	59	15
100-01-6	4-Nitroaniline	240	U	240	31
83-32-9	Acenaphthene	7.8	U	7.8	0.89
208-96-8	Acenaphthylene	7.8	U	7.8	0.41
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.8	U	7.8	0.92
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U *	120	14
56-55-3	Benzo[a]anthracene	7.8	U	7.8	0.74
50-32-8	Benzo[a]pyrene	7.8	U	7.8	0.75
205-99-2	Benzo[b]fluoranthene	7.8	U	7.8	0.69
191-24-2	Benzo[g,h,i]perylene	7.8	U	7.8	0.41
207-08-9	Benzo[k]fluoranthene	7.8	U	7.8	0.80

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 | Lab Sample ID: 240-28680-3

Matrix: Solid | Lab File ID: 0920022.D

Analysis Method: 8270D | Date Collected: 09/04/2013 09:50

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.37(g) | Date Analyzed: 09/20/2013 15:15

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	82	U	82	22
85-68-7	Butyl benzyl phthalate	82	U	82	12
105-60-2	Caprolactam	390	U	390	44
86-74-8	Carbazole	59	U	59	32
218-01-9	Chrysene	7.8	U	7.8	1.3
84-74-2	Di-n-butyl phthalate	82	U	82	18
117-84-0	Di-n-octyl phthalate	82	U	82	9.3
53-70-3	Dibenzo(a,h)anthracene	7.8	U	7.8	0.78
132-64-9	Dibenzofuran	59	U	59	0.78
84-66-2	Diethyl phthalate	82	U	82	19
131-11-3	Dimethyl phthalate	82	U	82	20
206-44-0	Fluoranthene	7.8	U	7.8	0.65
86-73-7	Fluorene	7.8	U	7.8	0.62
118-74-1	Hexachlorobenzene	7.8	U	7.8	2.5
87-68-3	Hexachlorobutadiene	59	U	59	6.6
77-47-4	Hexachlorocyclopentadiene	390	U	390	9.5
67-72-1	Hexachloroethane	59	U	59	11
193-39-5	Indeno[1,2,3-cd]pyrene	7.8	U	7.8	0.41
78-59-1	Isophorone	59	U	59	15
621-64-7	N-Nitrosodi-n-propylamine	59	U	59	7.4
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	59	U	59	25
91-20-3	Naphthalene	7.8	U	7.8	0.96
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	11
85-01-8	Phenanthrene	7.8	U	7.8	0.86
108-95-2	Phenol	59	U	59	8.6
129-00-0	Pyrene	7.8	U	7.8	0.52
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	390	U	390	20

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 | Lab Sample ID: 240-28680-3

Matrix: Solid | Lab File ID: 0920022.D

Analysis Method: 8270D | Date Collected: 09/04/2013 09:50

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.37(g) | Date Analyzed: 09/20/2013 15:15

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	57		36-110
4165-62-2	Phenol-d5 (Surr)	44		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	42		20-110
367-12-4	2-Fluorophenol (Surr)	43		24-110
321-60-8	2-Fluorobiphenyl (Surr)	39		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	31		10-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 | Lab Sample ID: 240-28680-4

Matrix: Solid | Lab File ID: 0920023.D

Analysis Method: 8270D | Date Collected: 09/04/2013 10:45

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.40(g) | Date Analyzed: 09/20/2013 15:37

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	60	U	60	4.2
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	11
95-95-4	2,4,5-Trichlorophenol	180	U	180	30
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	390	U	390	25
121-14-2	2,4-Dinitrotoluene	240	U	240	20
91-58-7	2-Chloronaphthalene	60	U	60	0.54
95-57-8	2-Chlorophenol	60	U	60	9.8
91-57-6	2-Methylnaphthalene	7.9	U	7.9	0.60
95-48-7	2-Methylphenol	240	U	240	13
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	60	U	60	9.9
15831-10-4	3 & 4 Methylphenol	480	U	480	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	11
101-55-3	4-Bromophenyl phenyl ether	60	U	60	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	60	U	60	15
100-01-6	4-Nitroaniline	240	U	240	31
83-32-9	Acenaphthene	7.9	U	7.9	0.91
208-96-8	Acenaphthylene	7.9	U	7.9	0.42
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.9	U	7.9	0.93
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U *	120	14
56-55-3	Benzo[a]anthracene	7.9	U	7.9	0.75
50-32-8	Benzo[a]pyrene	7.9	U	7.9	0.76
205-99-2	Benzo[b]fluoranthene	7.9	U	7.9	0.70
191-24-2	Benzo[g,h,i]perylene	7.9	U	7.9	0.42
207-08-9	Benzo[k]fluoranthene	7.9	U	7.9	0.81

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 | Lab Sample ID: 240-28680-4

Matrix: Solid | Lab File ID: 0920023.D

Analysis Method: 8270D | Date Collected: 09/04/2013 10:45

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.40(g) | Date Analyzed: 09/20/2013 15:37

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	83	U	83	23
85-68-7	Butyl benzyl phthalate	83	U	83	12
105-60-2	Caprolactam	390	U	390	44
86-74-8	Carbazole	60	U	60	32
218-01-9	Chrysene	7.9	U	7.9	1.3
84-74-2	Di-n-butyl phthalate	83	U	83	18
117-84-0	Di-n-octyl phthalate	83	U	83	9.4
53-70-3	Dibenzo(a,h)anthracene	7.9	U	7.9	0.79
132-64-9	Dibenzofuran	60	U	60	0.79
84-66-2	Diethyl phthalate	83	U	83	19
131-11-3	Dimethyl phthalate	83	U	83	20
206-44-0	Fluoranthene	10		7.9	0.66
86-73-7	Fluorene	7.9	U	7.9	0.63
118-74-1	Hexachlorobenzene	7.9	U	7.9	2.5
87-68-3	Hexachlorobutadiene	60	U	60	6.7
77-47-4	Hexachlorocyclopentadiene	390	U	390	9.6
67-72-1	Hexachloroethane	60	U	60	11
193-39-5	Indeno[1,2,3-cd]pyrene	7.9	U	7.9	0.42
78-59-1	Isophorone	60	U	60	15
621-64-7	N-Nitrosodi-n-propylamine	60	U	60	7.5
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	60	U	60	25
91-20-3	Naphthalene	7.9	U	7.9	0.98
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	11
85-01-8	Phenanthrene	7.9	U	7.9	0.87
108-95-2	Phenol	60	U	60	8.7
129-00-0	Pyrene	8.6		7.9	0.52
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	390	U	390	20

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 | Lab Sample ID: 240-28680-4

Matrix: Solid | Lab File ID: 0920023.D

Analysis Method: 8270D | Date Collected: 09/04/2013 10:45

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.40(g) | Date Analyzed: 09/20/2013 15:37

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	71		36-110
4165-62-2	Phenol-d5 (Surr)	53		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	50		20-110
367-12-4	2-Fluorophenol (Surr)	51		24-110
321-60-8	2-Fluorobiphenyl (Surr)	47		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	41		10-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 | Lab Sample ID: 240-28680-5

Matrix: Solid | Lab File ID: 0920024.D

Analysis Method: 8270D | Date Collected: 09/04/2013 11:33

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 29.82(g) | Date Analyzed: 09/20/2013 15:59

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	60	U	60	4.2
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	11
95-95-4	2,4,5-Trichlorophenol	180	U	180	30
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	390	U	390	25
121-14-2	2,4-Dinitrotoluene	240	U	240	20
91-58-7	2-Chloronaphthalene	60	U	60	0.54
95-57-8	2-Chlorophenol	60	U	60	9.8
91-57-6	2-Methylnaphthalene	8.0	U	8.0	0.60
95-48-7	2-Methylphenol	240	U	240	13
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	60	U	60	9.9
15831-10-4	3 & 4 Methylphenol	480	U	480	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	22
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	11
101-55-3	4-Bromophenyl phenyl ether	60	U	60	16
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	60	U	60	16
100-01-6	4-Nitroaniline	240	U	240	31
83-32-9	Acenaphthene	8.0	U	8.0	0.91
208-96-8	Acenaphthylene	8.0	U	8.0	0.42
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	8.0	U	8.0	0.93
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U *	120	14
56-55-3	Benzo[a]anthracene	8.0	U	8.0	0.75
50-32-8	Benzo[a]pyrene	8.0	U	8.0	0.77
205-99-2	Benzo[b]fluoranthene	8.0	U	8.0	0.71
191-24-2	Benzo[g,h,i]perylene	8.0	U	8.0	0.42
207-08-9	Benzo[k]fluoranthene	8.0	U	8.0	0.81

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 | Lab Sample ID: 240-28680-5

Matrix: Solid | Lab File ID: 0920024.D

Analysis Method: 8270D | Date Collected: 09/04/2013 11:33

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 29.82(g) | Date Analyzed: 09/20/2013 15:59

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	32	J B	84	23
85-68-7	Butyl benzyl phthalate	84	U	84	12
105-60-2	Caprolactam	390	U	390	44
86-74-8	Carbazole	60	U	60	32
218-01-9	Chrysene	8.0	U	8.0	1.3
84-74-2	Di-n-butyl phthalate	84	U	84	18
117-84-0	Di-n-octyl phthalate	84	U	84	9.4
53-70-3	Dibenzo(a,h)anthracene	8.0	U	8.0	0.79
132-64-9	Dibenzofuran	60	U	60	0.79
84-66-2	Diethyl phthalate	84	U	84	19
131-11-3	Dimethyl phthalate	84	U	84	20
206-44-0	Fluoranthene	8.0	U	8.0	0.66
86-73-7	Fluorene	8.0	U	8.0	0.63
118-74-1	Hexachlorobenzene	8.0	U	8.0	2.5
87-68-3	Hexachlorobutadiene	60	U	60	6.7
77-47-4	Hexachlorocyclopentadiene	390	U	390	9.7
67-72-1	Hexachloroethane	60	U	60	11
193-39-5	Indeno[1,2,3-cd]pyrene	8.0	U	8.0	0.42
78-59-1	Isophorone	60	U	60	16
621-64-7	N-Nitrosodi-n-propylamine	60	U	60	7.5
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	60	U	60	25
91-20-3	Naphthalene	8.0	U	8.0	0.98
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	11
85-01-8	Phenanthrene	8.0	U	8.0	0.87
108-95-2	Phenol	60	U	60	8.7
129-00-0	Pyrene	8.0	U	8.0	0.53
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	390	U	390	20

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Matrix: Solid Lab File ID: 0920024.D

Analysis Method: 8270D Date Collected: 09/04/2013 11:33

Extract. Method: 3540C Date Extracted: 09/18/2013 09:10

Sample wt/vol: 29.82(g) Date Analyzed: 09/20/2013 15:59

Con. Extract Vol.: 2.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 15.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	93		36-110
4165-62-2	Phenol-d5 (Surr)	65		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	58		20-110
367-12-4	2-Fluorophenol (Surr)	61		24-110
321-60-8	2-Fluorobiphenyl (Surr)	54		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	50		10-110

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 Lab Sample ID: 240-28680-1

Matrix: Solid Lab File ID: YF090621.D

Analysis Method: 8015C Date Collected: 09/04/2013 08:45

Sample wt/vol: 5.25(g) Date Analyzed: 09/07/2013 03:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 20.8 Level: (low/med) Low

Analysis Batch No.: 100469 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	830		120	55

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	99		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 | Lab Sample ID: 240-28680-2

Matrix: Solid | Lab File ID: YF090622.D

Analysis Method: 8015C | Date Collected: 09/04/2013 09:10

Sample wt/vol: 5.08(g) | Date Analyzed: 09/07/2013 03:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 15.1 | Level: (low/med) Low

Analysis Batch No.: 100469 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	53

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	102		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 Lab Sample ID: 240-28680-3

Matrix: Solid Lab File ID: YF090623.D

Analysis Method: 8015C Date Collected: 09/04/2013 09:50

Sample wt/vol: 5.30(g) Date Analyzed: 09/07/2013 04:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 16.0 Level: (low/med) Low

Analysis Batch No.: 100469 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	110	U	110	52

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	103		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 | Lab Sample ID: 240-28680-4

Matrix: Solid | Lab File ID: YF090624.D

Analysis Method: 8015C | Date Collected: 09/04/2013 10:45

Sample wt/vol: 5.29(g) | Date Analyzed: 09/07/2013 04:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 17.2 | Level: (low/med) Low

Analysis Batch No.: 100469 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	79	J	110	52

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	97		10-150

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Matrix: Solid Lab File ID: YF090625.D

Analysis Method: 8015C Date Collected: 09/04/2013 11:33

Sample wt/vol: 5.07(g) Date Analyzed: 09/07/2013 05:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 15.9 Level: (low/med) Low

Analysis Batch No.: 100469 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	54

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	104		10-150

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 Lab Sample ID: 240-28680-1

Matrix: Solid Lab File ID: P6F91219.D

Analysis Method: 8015C Date Collected: 09/04/2013 08:45

Extraction Method: 3550C Date Extracted: 09/11/2013 07:38

Sample wt/vol: 29.85(g) Date Analyzed: 09/13/2013 01:09

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 20.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101206 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	21	U	21	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	29		10-110

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 Lab Sample ID: 240-28680-2

Matrix: Solid Lab File ID: P6F91220.D

Analysis Method: 8015C Date Collected: 09/04/2013 09:10

Extraction Method: 3550C Date Extracted: 09/11/2013 07:38

Sample wt/vol: 30.15(g) Date Analyzed: 09/13/2013 01:40

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 15.1 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101206 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	25		10-110

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 Lab Sample ID: 240-28680-3

Matrix: Solid Lab File ID: P6F91223.D

Analysis Method: 8015C Date Collected: 09/04/2013 09:50

Extraction Method: 3550C Date Extracted: 09/11/2013 07:38

Sample wt/vol: 30.46(g) Date Analyzed: 09/13/2013 03:14

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 16.0 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101206 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	24		10-110

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 Lab Sample ID: 240-28680-4

Matrix: Solid Lab File ID: P6F91224.D

Analysis Method: 8015C Date Collected: 09/04/2013 10:45

Extraction Method: 3550C Date Extracted: 09/11/2013 07:38

Sample wt/vol: 29.86(g) Date Analyzed: 09/13/2013 03:45

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 17.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101206 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	27		10-110

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Matrix: Solid Lab File ID: P6F91225.D

Analysis Method: 8015C Date Collected: 09/04/2013 11:33

Extraction Method: 3550C Date Extracted: 09/11/2013 07:38

Sample wt/vol: 30.24(g) Date Analyzed: 09/13/2013 04:16

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 15.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101206 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	30		10-110

FORM I 8015C

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 Lab Sample ID: 240-28680-1

Matrix: Solid Lab File ID: P1000015.D

Analysis Method: 8082A Date Collected: 09/04/2013 08:45

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 30.24(g) Date Analyzed: 09/17/2013 10:53

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 20.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	41	U	41	26
11104-28-2	Aroclor-1221	41	U	41	20
11141-16-5	Aroclor-1232	41	U	41	18
53469-21-9	Aroclor-1242	41	U	41	16
12672-29-6	Aroclor-1248	41	U	41	21
11097-69-1	Aroclor-1254	41	U	41	21
11096-82-5	Aroclor-1260	41	U	41	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	79		29-151
2051-24-3	Decachlorobiphenyl	78		14-163

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-19-21 Lab Sample ID: 240-28680-1

Matrix: Solid Lab File ID: P1000015.D

Analysis Method: 8082A Date Collected: 09/04/2013 08:45

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 30.24(g) Date Analyzed: 09/17/2013 10:53

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 20.8 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	102		29-151
2051-24-3	Decachlorobiphenyl	79		14-163

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 Lab Sample ID: 240-28680-2

Matrix: Solid Lab File ID: P1000016.D

Analysis Method: 8082A Date Collected: 09/04/2013 09:10

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 30.20(g) Date Analyzed: 09/17/2013 11:08

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 15.1 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	39	U	39	25
11104-28-2	Aroclor-1221	39	U	39	19
11141-16-5	Aroclor-1232	39	U	39	16
53469-21-9	Aroclor-1242	39	U	39	15
12672-29-6	Aroclor-1248	39	U	39	20
11097-69-1	Aroclor-1254	39	U	39	20
11096-82-5	Aroclor-1260	39	U	39	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	74		29-151
2051-24-3	Decachlorobiphenyl	81		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-24-26 Lab Sample ID: 240-28680-2

Matrix: Solid Lab File ID: P1000016.D

Analysis Method: 8082A Date Collected: 09/04/2013 09:10

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 30.20(g) Date Analyzed: 09/17/2013 11:08

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 15.1 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	76		29-151
2051-24-3	Decachlorobiphenyl	84		14-163

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 Lab Sample ID: 240-28680-3

Matrix: Solid Lab File ID: P1000017.D

Analysis Method: 8082A Date Collected: 09/04/2013 09:50

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 29.78(g) Date Analyzed: 09/17/2013 11:23

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 16.0 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	40	U	40	25
11104-28-2	Aroclor-1221	40	U	40	19
11141-16-5	Aroclor-1232	40	U	40	17
53469-21-9	Aroclor-1242	40	U	40	16
12672-29-6	Aroclor-1248	40	U	40	20
11097-69-1	Aroclor-1254	40	U	40	20
11096-82-5	Aroclor-1260	40	U	40	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	74		29-151
2051-24-3	Decachlorobiphenyl	83		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-28-31 Lab Sample ID: 240-28680-3

Matrix: Solid Lab File ID: P1000017.D

Analysis Method: 8082A Date Collected: 09/04/2013 09:50

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 29.78(g) Date Analyzed: 09/17/2013 11:23

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 16.0 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	74		29-151
2051-24-3	Decachlorobiphenyl	85		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 Lab Sample ID: 240-28680-4

Matrix: Solid Lab File ID: P1000018.D

Analysis Method: 8082A Date Collected: 09/04/2013 10:45

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 29.74(g) Date Analyzed: 09/17/2013 11:38

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 17.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	40	U	40	26
11104-28-2	Aroclor-1221	40	U	40	19
11141-16-5	Aroclor-1232	40	U	40	17
53469-21-9	Aroclor-1242	40	U	40	16
12672-29-6	Aroclor-1248	40	U	40	21
11097-69-1	Aroclor-1254	40	U	40	21
11096-82-5	Aroclor-1260	40	U	40	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	74		29-151
2051-24-3	Decachlorobiphenyl	81		14-163

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-34-36 Lab Sample ID: 240-28680-4

Matrix: Solid Lab File ID: P1000018.D

Analysis Method: 8082A Date Collected: 09/04/2013 10:45

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 29.74(g) Date Analyzed: 09/17/2013 11:38

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 17.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	75		29-151
2051-24-3	Decachlorobiphenyl	84		14-163

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Matrix: Solid Lab File ID: P1000019.D

Analysis Method: 8082A Date Collected: 09/04/2013 11:33

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 29.58(g) Date Analyzed: 09/17/2013 11:54

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 15.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	40	U	40	25
11104-28-2	Aroclor-1221	40	U	40	19
11141-16-5	Aroclor-1232	40	U	40	17
53469-21-9	Aroclor-1242	40	U	40	16
12672-29-6	Aroclor-1248	40	U	40	20
11097-69-1	Aroclor-1254	40	U	40	20
11096-82-5	Aroclor-1260	40	U	40	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	72		29-151
2051-24-3	Decachlorobiphenyl	79		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Matrix: Solid Lab File ID: P1000019.D

Analysis Method: 8082A Date Collected: 09/04/2013 11:33

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 29.58(g) Date Analyzed: 09/17/2013 11:54

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 15.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	75		29-151
2051-24-3	Decachlorobiphenyl	79		14-163

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-48D-19-21 Lab Sample ID: 240-28680-1

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 08:45

Reporting Basis: DRY Date Received: 09/05/2013 09:30

% Solids: 79.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.2	2.2	0.42	mg/Kg	U		1	6010C
7440-38-2	Arsenic	0.93	1.6	0.33	mg/Kg	J		1	6010C
7440-39-3	Barium	2.1	22	0.077	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.54	0.54	0.047	mg/Kg	U		1	6010C
7440-43-9	Cadmium	0.40	0.54	0.039	mg/Kg	J		1	6010C
7440-47-3	Chromium	34	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	2.9	1.1	0.17	mg/Kg			1	6010C
7440-50-8	Copper	3.1	2.7	0.81	mg/Kg			1	6010C
7439-92-1	Lead	1.1	1.1	0.21	mg/Kg			1	6010C
7439-98-7	Molybdenum	4.4	4.4	0.29	mg/Kg	U		1	6010C
7440-02-0	Nickel	0.99	4.4	0.29	mg/Kg	J		1	6010C
7782-49-2	Selenium	2.2	2.2	0.49	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.60	mg/Kg	U		1	6010C
7440-62-2	Vanadium	5.4	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	10	5.4	1.1	mg/Kg		B	1	6010C
7439-97-6	Mercury	0.14	0.14	0.021	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-48D-24-26 Lab Sample ID: 240-28680-2

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 09:10

Reporting Basis: DRY Date Received: 09/05/2013 09:30

% Solids: 84.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.2	2.2	0.43	mg/Kg	U		1	6010C
7440-38-2	Arsenic	0.80	1.6	0.33	mg/Kg	J		1	6010C
7440-39-3	Barium	4.2	22	0.077	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.55	0.55	0.047	mg/Kg	U		1	6010C
7440-43-9	Cadmium	0.30	0.55	0.039	mg/Kg	J		1	6010C
7440-47-3	Chromium	5.5	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	0.62	1.1	0.17	mg/Kg	J		1	6010C
7440-50-8	Copper	1.1	2.7	0.81	mg/Kg	J		1	6010C
7439-92-1	Lead	2.1	1.1	0.21	mg/Kg			1	6010C
7439-98-7	Molybdenum	4.4	4.4	0.29	mg/Kg	U		1	6010C
7440-02-0	Nickel	0.29	4.4	0.29	mg/Kg	J		1	6010C
7782-49-2	Selenium	2.2	2.2	0.49	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.60	mg/Kg	U		1	6010C
7440-62-2	Vanadium	8.8	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	2.0	5.5	1.1	mg/Kg	J	B	1	6010C
7439-97-6	Mercury	0.11	0.11	0.016	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-48D-28-31 Lab Sample ID: 240-28680-3

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 09:50

Reporting Basis: DRY Date Received: 09/05/2013 09:30

% Solids: 84.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.2	2.2	0.44	mg/Kg	U		1	6010C
7440-38-2	Arsenic	0.56	1.7	0.34	mg/Kg	J		1	6010C
7440-39-3	Barium	0.79	22	0.080	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.56	0.56	0.048	mg/Kg	U		1	6010C
7440-43-9	Cadmium	0.069	0.56	0.040	mg/Kg	J		1	6010C
7440-47-3	Chromium	1.8	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	0.19	1.1	0.18	mg/Kg	J		1	6010C
7440-50-8	Copper	1.8	2.8	0.83	mg/Kg	J		1	6010C
7439-92-1	Lead	0.50	1.1	0.21	mg/Kg	J		1	6010C
7439-98-7	Molybdenum	4.5	4.5	0.30	mg/Kg	U		1	6010C
7440-02-0	Nickel	4.5	4.5	0.30	mg/Kg	U		1	6010C
7782-49-2	Selenium	2.2	2.2	0.51	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.62	mg/Kg	U		1	6010C
7440-62-2	Vanadium	4.3	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	4.1	5.6	1.1	mg/Kg	J	B	1	6010C
7439-97-6	Mercury	0.11	0.11	0.017	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-48D-34-36 Lab Sample ID: 240-28680-4

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 10:45

Reporting Basis: DRY Date Received: 09/05/2013 09:30

% Solids: 82.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.2	2.2	0.43	mg/Kg	U		1	6010C
7440-38-2	Arsenic	1.1	1.7	0.33	mg/Kg	J		1	6010C
7440-39-3	Barium	3.3	22	0.079	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.55	0.55	0.048	mg/Kg	U		1	6010C
7440-43-9	Cadmium	0.28	0.55	0.040	mg/Kg	J		1	6010C
7440-47-3	Chromium	4.3	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	0.72	1.1	0.18	mg/Kg	J		1	6010C
7440-50-8	Copper	1.8	2.8	0.82	mg/Kg	J		1	6010C
7439-92-1	Lead	1.5	1.1	0.21	mg/Kg			1	6010C
7439-98-7	Molybdenum	4.4	4.4	0.30	mg/Kg	U		1	6010C
7440-02-0	Nickel	0.36	4.4	0.30	mg/Kg	J		1	6010C
7782-49-2	Selenium	2.2	2.2	0.50	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.61	mg/Kg	U		1	6010C
7440-62-2	Vanadium	9.5	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	2.3	5.5	1.1	mg/Kg	J	B	1	6010C
7439-97-6	Mercury	0.11	0.11	0.016	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 11:33

Reporting Basis: DRY Date Received: 09/05/2013 09:30

% Solids: 84.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	1.8	1.8	0.36	mg/Kg	U		1	6010C
7440-38-2	Arsenic	11	1.4	0.27	mg/Kg			1	6010C
7440-39-3	Barium	1.8	18	0.065	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.46	0.46	0.039	mg/Kg	U		1	6010C
7440-43-9	Cadmium	0.46	0.46	0.033	mg/Kg	U		1	6010C
7440-47-3	Chromium	20	0.91	0.18	mg/Kg			1	6010C
7440-48-4	Cobalt	0.26	0.91	0.15	mg/Kg	J		1	6010C
7440-50-8	Copper	3.3	2.3	0.68	mg/Kg			1	6010C
7439-92-1	Lead	2.6	0.91	0.17	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.25	3.7	0.25	mg/Kg	J		1	6010C
7440-02-0	Nickel	3.7	3.7	0.25	mg/Kg	U		1	6010C
7782-49-2	Selenium	1.8	1.8	0.41	mg/Kg	U		1	6010C
7440-22-4	Silver	0.91	0.91	0.091	mg/Kg	U		1	6010C
7440-28-0	Thallium	1.8	1.8	0.50	mg/Kg	U		1	6010C
7440-62-2	Vanadium	20	0.91	0.11	mg/Kg			1	6010C
7440-66-6	Zinc	3.4	4.6	0.91	mg/Kg	J	B	1	6010C
7439-97-6	Mercury	0.12	0.12	0.018	mg/Kg	U		1	7471B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-48D-24-26 Lab Sample ID: 240-28680-2

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 09:10

Reporting Basis: DRY Date Received: 09/05/2013 09:30

% Solids: 84.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Phosphate as PO4	35	35	0.34	mg/Kg	U		1	365.1
	Nitrogen, Kjeldahl	250	160	55	mg/Kg			1	SM4500_NH3_E

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 11:33

Reporting Basis: DRY Date Received: 09/05/2013 09:30

% Solids: 84.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Phosphate as PO4	34	36	0.36	mg/Kg	J		1	365.1
	Nitrogen, Kjeldahl	130	170	59	mg/Kg	J		1	SM4500_NH3_E

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-48D-24-26 Lab Sample ID: 240-28680-2

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 09:10

Reporting Basis: WET Date Received: 09/05/2013 09:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	pH	5.04	0.100		SU			1	9045C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 11:33

Reporting Basis: WET Date Received: 09/05/2013 09:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	pH	4.56	0.100		SU			1	9045C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - ASTM LEACH

Client Sample ID: DR-SB-48D-24-26 Lab Sample ID: 240-28680-2

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 09:10

Reporting Basis: DRY Date Received: 09/05/2013 09:30

% Solids: 84.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
14797-55-8	Nitrate as N	5.9	5.9	0.27	mg/Kg	U		1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - ASTM LEACH

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 11:33

Reporting Basis: DRY Date Received: 09/05/2013 09:30

% Solids: 84.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
14797-55-8	Nitrate as N	5.8	5.8	0.27	mg/Kg	U		1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-48D-24-26
Lab Sample ID: 240-28680-2
Lab Name: TestAmerica Nashville
Job No.: 240-28680-1
SDG ID.:
Matrix: Solid
Date Sampled: 09/04/2013 09:10
Reporting Basis: DRY
Date Received: 09/05/2013 09:30
% Solids: 84.9

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Cation Exchange Capacity	33	0.047		meq/100 gm			1	9081

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Lab Name: TestAmerica Nashville Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 11:33

Reporting Basis: DRY Date Received: 09/05/2013 09:30

% Solids: 84.1

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Cation Exchange Capacity	14	0.048		meq/100 gm			1	9081

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-48D-24-26 Lab Sample ID: 240-28680-2

Lab Name: TestAmerica Nashville Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 09:10

Reporting Basis: WET Date Received: 09/05/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Inorganic Carbon - Duplicates	1000	1000	1000	mg/Kg	U		1	9060A
7440-44-0	Total Organic Carbon - Duplicates	1000	1000	600	mg/Kg	U		1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DR-SB-48D-40-42 Lab Sample ID: 240-28680-5

Lab Name: TestAmerica Nashville Job No.: 240-28680-1

SDG ID.:

Matrix: Solid Date Sampled: 09/04/2013 11:33

Reporting Basis: WET Date Received: 09/05/2013 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Inorganic Carbon - Duplicates	1000	1000	1000	mg/Kg	U		1	9060A
7440-44-0	Total Organic Carbon - Duplicates	1000	1000	600	mg/Kg	U		1	9060A

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 240-28680-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	DR-SB-48D-19-21	240-28680-1	NM	09/04/2013	09/09/2013	09/10/2013	5	1	6
HG	MG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/09/2013	09/10/2013	5	1	6
HG	MG/KG	DR-SB-48D-28-31	240-28680-3	NM	09/04/2013	09/09/2013	09/10/2013	5	1	6
HG	MG/KG	DR-SB-48D-34-36	240-28680-4	NM	09/04/2013	09/09/2013	09/10/2013	5	1	6
HG	MG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/09/2013	09/10/2013	5	1	6
M	MG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/09/2013	09/16/2013	5	7	12
M	MG/KG	DR-SB-48D-19-21	240-28680-1	NM	09/04/2013	09/09/2013	09/16/2013	5	7	12
M	MG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/09/2013	09/16/2013	5	7	12
M	MG/KG	DR-SB-48D-28-31	240-28680-3	NM	09/04/2013	09/09/2013	09/16/2013	5	7	12
M	MG/KG	DR-SB-48D-34-36	240-28680-4	NM	09/04/2013	09/09/2013	09/16/2013	5	7	12
	MEQ/1	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/11/2013	09/11/2013	7	0	7
	MEQ/1	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/11/2013	09/11/2013	7	0	7
	MG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/18/2013	09/18/2013	14	0	14
	MG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/18/2013	09/18/2013	14	0	14
NH3	MG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/09/2013	09/10/2013	5	1	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
NH3	MG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/09/2013	09/10/2013	5	1	6
PH	SU	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/05/2013	09/05/2013	1	0	1
PH	SU	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/05/2013	09/05/2013	1	0	1
PHO	MG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/11/2013	09/11/2013	7	0	7
PHO	MG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/11/2013	09/11/2013	7	0	7
TOC	MG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/13/2013	09/13/2013	9	0	9
TOC	MG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/13/2013	09/13/2013	9	0	9
OS	UG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/18/2013	09/20/2013	14	2	16
OS	UG/KG	DR-SB-48D-34-36	240-28680-4	NM	09/04/2013	09/18/2013	09/20/2013	14	2	16
OS	UG/KG	DR-SB-48D-28-31	240-28680-3	NM	09/04/2013	09/18/2013	09/20/2013	14	2	16
OS	UG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/18/2013	09/20/2013	14	2	16
OS	UG/KG	DR-SB-48D-19-21	240-28680-1	NM	09/04/2013	09/18/2013	09/20/2013	14	2	16
OV	UG/KG	DR-SB-48D-28-31	240-28680-3	NM	09/04/2013	09/05/2013	09/11/2013	1	6	7
OV	UG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/05/2013	09/11/2013	1	6	7
OV	UG/KG	DR-SB-48D-28-31	240-28680-3	NM	09/04/2013	09/06/2013	09/13/2013	2	7	9
OV	UG/KG	DR-SB-48D-19-21	240-28680-1	NM	09/04/2013	09/06/2013	09/11/2013	2	5	7
OV	UG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/06/2013	09/13/2013	2	7	9
OV	UG/KG	DR-SB-48D-34-36	240-28680-4	NM	09/04/2013	09/06/2013	09/11/2013	2	5	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-090413	240-28680-6	TB	09/04/2013	09/13/2013	09/13/2013	9	0	9
PCB	UG/KG	DR-SB-48D-34-36	240-28680-4	NM	09/04/2013	09/13/2013	09/17/2013	9	4	13
PCB	UG/KG	DR-SB-48D-28-31	240-28680-3	NM	09/04/2013	09/13/2013	09/17/2013	9	4	13
PCB	UG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/13/2013	09/17/2013	9	4	13
PCB	UG/KG	DR-SB-48D-19-21	240-28680-1	NM	09/04/2013	09/13/2013	09/17/2013	9	4	13
PCB	UG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/13/2013	09/17/2013	9	4	13
	MG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/11/2013	09/13/2013	7	2	9
	MG/KG	DR-SB-48D-34-36	240-28680-4	NM	09/04/2013	09/11/2013	09/13/2013	7	2	9
	MG/KG	DR-SB-48D-28-31	240-28680-3	NM	09/04/2013	09/11/2013	09/13/2013	7	2	9
	MG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/11/2013	09/13/2013	7	2	9
	MG/KG	DR-SB-48D-19-21	240-28680-1	NM	09/04/2013	09/11/2013	09/13/2013	7	2	9
	UG/KG	DR-SB-48D-40-42	240-28680-5	NM	09/04/2013	09/06/2013	09/07/2013	2	1	3
	UG/KG	DR-SB-48D-34-36	240-28680-4	NM	09/04/2013	09/06/2013	09/07/2013	2	1	3
	UG/KG	DR-SB-48D-28-31	240-28680-3	NM	09/04/2013	09/06/2013	09/07/2013	2	1	3
	UG/KG	DR-SB-48D-24-26	240-28680-2	NM	09/04/2013	09/06/2013	09/07/2013	2	1	3
	UG/KG	DR-SB-48D-19-21	240-28680-1	NM	09/04/2013	09/06/2013	09/07/2013	2	1	3

Chain of Custody Record

4.2 (4.1)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
TETRA TECH, INC.	TONY APANAVAGE	9/4/13	015010
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Project Name and Location (State)	**Carrier/Waybill Number**		
DUMP ROAD AREA, MARTIN STATE AIRPORT, MD			
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	METHANOL	VOC	GRO	SVOC, PCB, DRO	METALS	TOC	TIVC	CEC	NITRATES	PHOSPHATES	TKN	pH
DR-SB-48D-19-21	9/4/13	0845				X	6						1	X	X	X	X							
DR-SB-48D-24-26		0910					7						1	X	X	X	X	X	X	X	X	X	X	X
DR-SB-48D-28-31		0950					6						1	X	X	X	X							
DR-SB-48D-34-36		1045					6						1	X	X	X	X							
DR-SB-48D-40-42		1133					7						1	X	X	X	X	X	X	X	X	X	X	X
TB-090413	—	—		X						2				X										

Special Instructions/ Conditions of Receipt

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240-28680 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	9/4/13	1530	1. Received By Paul Mylard	9/4/13	1530
2. Relinquished By Paul Mylard	9/4/13	1600	2. Received By	9/5/13	930
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Canton Sample Receipt Form/Narrative Login # : 28680
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 9-5-13 Opened on 9-5-13

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   - IR GUN# A (CF -1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   - IR GUN# 4 (CF 0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   - IR GUN# 5 (CF +1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   - IR GUN# 8 (CF -0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

   [X] See Multiple Cooler Form
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 ea (Yes) No
   - -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   - -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes (No)
12. Were air bubbles >6 mm in any VOA vials? Yes No (NA)
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Ref: SOP NC-SC-0005, Sample Receiving
\\Cansvr10\public\QAQC\SOPS\Work Instructions\WI-NC-099-061413, Rev 1 Cooler Receipt Form.doc rls

TestAmerica Multiple Cooler Receipt Form/Narrative
Canton Facility

Login # : 28680

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client Cooler	8	4.2	4.2	ice
K586	8	4.1	4.1	ice

Login Sample Receipt Checklist

Client: Tetra Tech, Inc

Job Number: 240-28680-1

Login Number: 28680
List Number: 1
Creator: Huckaba, Jimmy

List Source: TestAmerica Nashville
List Creation: 09/06/13 10:56 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Did not receive -05.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Tetra Tech, Inc

Job Number: 240-28680-1

Login Number: 28680
List Number: 2
Creator: Huckaba, Jimmy

List Source: TestAmerica Nashville
List Creation: 09/07/13 10:29 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Area, Martin State Airport, MD

Report Number: 240-28680-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 9060A TOC, 9060 TIC, and 9081 CEC analysis were performed at the TestAmerica Nashville Laboratory.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 09/05/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 4.1 and 4.2 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-SB-48D-19-21 (240-28680-1), DR-SB-48D-24-26 (240-28680-2), DR-SB-48D-28-31 (240-28680-3), DR-SB-48D-34-36 (240-28680-4) and DR-SB-48D-40-42 (240-28680-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 09/05/2013 and 09/06/2013 and analyzed on 09/11/2013 and 09/13/2013.

1,2,4-Trichlorobenzene, Acetone, Methylene Chloride and Naphthalene were detected in method blank MB 240-100925/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) for batch 100523 recovered outside control limits for the following analyte(s): 2-methyl-2-propanol, and vinyl acetate. These analytes have been identified as a poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

The laboratory control sample (LCS) for batch 100925 recovered outside control limits for the following analyte: 1,1-Dichloropropene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 100925 recovered outside control limits for the following analytes: 2-Methyl-2-Propanol and Acetone. These compounds has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Insufficient sample volume was available to meet method-mandated requirements for matrix spike/matrix spike duplicate (MS/MSD) analyses for batch 100523.

Insufficient sample volume was available to meet method-mandated requirements for matrix spike/matrix spike duplicate (MS/MSD) analyses for prep. batch 100523 on these samples DR-SB-48D-24-26 (240-28680-2), DR-SB-48D-28-31 (240-28680-3).

Two analyses were used to report the sample DR-SB-48D-28-31 (240-28680-3) due to high analyte concentrations.

Two analyses were used to report samples DR-SB-48D-28-31 (240-28680-3) due to high analyte concentrations.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample TB-090413 (240-28680-6) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/13/2013.

Methylene Chloride and Toluene were detected in method blank MB 240-101342/5 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-SB-48D-19-21 (240-28680-1), DR-SB-48D-24-26 (240-28680-2), DR-SB-48D-28-31 (240-28680-3), DR-SB-48D-34-36 (240-28680-4) and DR-SB-48D-40-42 (240-28680-5) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/18/2013 and analyzed on 09/20/2013.

Bis(2-ethylhexyl) phthalate was detected in method blank MB 240-101887/21-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) for batch 101887 recovered outside control limits for the following analytes: Benzaldehyde. Since this is a non-controlling analyte, no corrective action was taken.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples DR-SB-48D-19-21 (240-28680-1), DR-SB-48D-24-26 (240-28680-2), DR-SB-48D-28-31 (240-28680-3), DR-SB-48D-34-36 (240-28680-4) and DR-SB-48D-40-42 (240-28680-5) were analyzed for gasoline range organics (GRO) in accordance with EPA-SW-846 Method 8015C - GRO. The samples were analyzed on 09/07/2013.

No difficulties were encountered during the GRO analysis. All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)

Samples DR-SB-48D-19-21 (240-28680-1), DR-SB-48D-24-26 (240-28680-2), DR-SB-48D-28-31 (240-28680-3), DR-SB-48D-34-36 (240-28680-4) and DR-SB-48D-40-42 (240-28680-5) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 09/11/2013 and analyzed on 09/13/2013.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

The continuing calibration verification (CCV) for diesel associated with batch 101206 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. DR-SB-48D-19-21 (240-28680-1), DR-SB-48D-24-26 (240-28680-2), DR-SB-48D-28-31 (240-28680-3), DR-SB-48D-34-36 (240-28680-4), DR-SB-48D-40-42 (240-28680-5).

No other difficulties were encountered during the DRO analysis. All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples DR-SB-48D-19-21 (240-28680-1), DR-SB-48D-24-26 (240-28680-2), DR-SB-48D-28-31 (240-28680-3), DR-SB-48D-34-36 (240-28680-4) and DR-SB-48D-40-42 (240-28680-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/13/2013 and analyzed on 09/17/2013.

No difficulties were encountered during the PCBs analysis. All quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)

Samples DR-SB-48D-19-21 (240-28680-1), DR-SB-48D-24-26 (240-28680-2), DR-SB-48D-28-31 (240-28680-3), DR-SB-48D-34-36 (240-28680-4) and DR-SB-48D-40-42 (240-28680-5) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 09/09/2013 and analyzed on 09/16/2013.

Barium and Zinc were detected in method blank MB 240-100670/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

MERCURY
Samples DR-SB-48D-19-21 (240-28680-1), DR-SB-48D-24-26 (240-28680-2), DR-SB-48D-28-31 (240-28680-3), DR-SB-48D-34-36 (240-28680-4) and DR-SB-48D-40-42 (240-28680-5) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared on 09/09/2013 and analyzed on 09/10/2013.

No other difficulties were encountered during the mercury analysis. All other quality control parameters were within the acceptance limits.

LEACHABLE ANIONS
Samples DR-SB-48D-24-26 (240-28680-2) and DR-SB-48D-40-42 (240-28680-5) were analyzed for Leachable anions in accordance with ASTM Method D3987-85/EPA Method 300.0. The samples were leached on 09/17/2013 and analyzed on 09/18/2013.

No difficulties were encountered during the anions analysis. All quality control parameters were within the acceptance limits.

TOTAL PHOSPHORUS
Samples DR-SB-48D-24-26 (240-28680-2) and DR-SB-48D-40-42 (240-28680-5) were analyzed for total phosphorus in accordance with EPA Method 365.1. The samples were prepared and analyzed on 09/11/2013.

No other difficulties were encountered during the total phosphorus analysis. All other quality control parameters were within the acceptance limits.

PH
Samples DR-SB-48D-24-26 (240-28680-2) and DR-SB-48D-40-42 (240-28680-5) were analyzed for pH in accordance with EPA SW-846 Method 9045C. The samples were analyzed on 09/05/2013.

No difficulties were encountered during the pH analysis. All quality control parameters were within the acceptance limits.

TOTAL ORGANIC CARBON
Samples DR-SB-48D-24-26 (240-28680-2) and DR-SB-48D-40-42 (240-28680-5) were analyzed for total organic carbon in accordance with SW-846 Method 9060A. The samples were analyzed on 09/13/2013.

Quality Control (QC) results are not provided for Total Inorganic Carbon (TIC) as this result is taken from a calculation incorporating the Total Carbon (TC) and Total Organic Carbon (TOC) results. The QC results associated with these component parameters are found in their respective section of the final report.

As required by the reference method, soil samples for Total Organic Carbon (TOC) are dried prior to analysis. Since determination of TOC is performed using a pre-dried sample, the final TOC result obtained is not converted to a dry weight basis using results of a % Solids (or % Moisture) determination, as is typically performed for other types of soil analyses. For this reason, this report indicates the TOC results are not dry weight corrected.

Batch 110032 was analyzed without the required sample duplicate (DU) per every 10 samples. The associated laboratory control sample (LCS) precision met acceptance criteria.

No other difficulties were encountered during the TOC analysis. All quality control parameters were within the acceptance limits.

CATION EXCHANGE CAPACITY
Samples DR-SB-48D-24-26 (240-28680-2) and DR-SB-48D-40-42 (240-28680-5) were analyzed for Cation Exchange Capacity in accordance with EPA SW-846 Method 9081. The samples were prepared and analyzed on 09/11/2013.

No difficulties were encountered during the CEC analysis. All quality control parameters were within the acceptance limits.

PERCENT SOLIDS
Samples DR-SB-48D-19-21 (240-28680-1), DR-SB-48D-24-26 (240-28680-2), DR-SB-48D-28-31 (240-28680-3), DR-SB-48D-34-36 (240-28680-4) and DR-SB-48D-40-42 (240-28680-5) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 09/06/2013.

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

TOTAL KJELDAHL NITROGEN
Samples DR-SB-48D-24-26 (240-28680-2) and DR-SB-48D-40-42 (240-28680-5) were analyzed for total kjeldahl nitrogen in accordance with SM 4500 NH3 E. The samples were prepared on 09/09/2013 and analyzed on 09/10/2013.

No difficulties were encountered during the TKN analysis. All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28680-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-28680-1	DR-SB-48D-19-21	Solid	09/04/2013 0845	09/05/2013 0930
240-28680-2	DR-SB-48D-24-26	Solid	09/04/2013 0910	09/05/2013 0930
240-28680-3	DR-SB-48D-28-31	Solid	09/04/2013 0950	09/05/2013 0930
240-28680-4	DR-SB-48D-34-36	Solid	09/04/2013 1045	09/05/2013 0930
240-28680-5	DR-SB-48D-40-42	Solid	09/04/2013 1133	09/05/2013 0930
240-28680-6TB	TB-090413	Water	09/04/2013 0000	09/05/2013 0930

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28680-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Closed System Purge and Trap	TAL CAN		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL CAN	SW846 8270D	
Soxhlet Extraction	TAL CAN		SW846 3540C
Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	TAL CAN	SW846 8015C	
Purge and Trap	TAL CAN		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL CAN	SW846 8015C	
Ultrasonic Extraction	TAL CAN		SW846 3550C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL CAN	SW846 8082A	
Soxhlet Extraction	TAL CAN		SW846 3540C
Metals (ICP)	TAL CAN	SW846 6010C	
Preparation, Metals	TAL CAN		SW846 3050B
Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	TAL CAN	SW846 7471B	
Preparation, Mercury	TAL CAN		SW846 7471B
Anions, Ion Chromatography	TAL CAN	MCAWW 300.0	
ASTM Leaching Procedure	TAL CAN		ASTM D3987-85
Phosphorus, Total	TAL CAN	EPA 365.1	
Phosphorus, Total	TAL CAN		MCAWW 365.2/365.3/365
pH	TAL CAN	SW846 9045C	
Percent Moisture	TAL CAN	EPA Moisture	
Kjeldahl Nitrogen, Total	TAL CAN	SM SM4500_NH3_E	
Preparation, Nitrogen -Total Kjeldahl	TAL CAN		SM SM4500Norg_C
Organic Carbon, Total (TOC)	TAL NSH	SW846 9060A	
Cation Exchange Capacity (CEC)	TAL NSH	SW846 9081	
Cation Exchange Capacity (CEC)	TAL NSH		SW846 9081
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

TAL NSH = TestAmerica Nashville

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28680-1

Description	Lab Location	Method	Preparation Method

Method References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-28680-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD exceeds the control limits
	F	MS/MSD Recovery and/or RPD exceeds the control limits
	E	Result exceeded calibration range.
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD exceeds the control limits
	F	MS/MSD Recovery and/or RPD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC VOA		
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-28680-1

Lab Section	Qualifier	Description
Metals		
	B	Compound was found in the blank and sample.
	F	Duplicate RPD exceeds the control limit
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery and/or RPD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	V	Serial Dilution exceeds the control limits
General Chemistry		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery and/or RPD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: BFB199.D BFB Injection Date: 09/05/2013

Instrument ID: A3UX11 BFB Injection Time: 12:23

Analysis Batch No.: 100285

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.8	
75	30.0 - 60.0 % of mass 95	53.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.2	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	80.8	
175	5.0 - 9.0 % of mass 174	6.0	(7.4)1
176	95.0 - 101.0 % of mass 174	80.4	(99.5)1
177	5.0 - 9.0 % of mass 176	5.2	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-100285/2	UXJ3891.D	09/05/2013	12:48
	STD8260 240-100285/3	UXJ3892.D	09/05/2013	13:11
	STD8260 240-100285/4	UXJ3893.D	09/05/2013	13:35
	STD8260 240-100285/5	UXJ3894.D	09/05/2013	13:59
	STD8260 240-100285/6	UXJ3895.D	09/05/2013	14:22
	STD8260 240-100285/7	UXJ3896.D	09/05/2013	14:46
	STD6 240-100285/8	UXJ3897.D	09/05/2013	15:10
	STD5 240-100285/9	UXJ3898.D	09/05/2013	15:34
	STD4 240-100285/10	UXJ3899.D	09/05/2013	15:57
	STD3 240-100285/11	UXJ3900.D	09/05/2013	16:21
	STD2 240-100285/12	UXJ3901.D	09/05/2013	16:45
	STD1 240-100285/13	UXJ3902.D	09/05/2013	17:09
	ICV 240-100285/14	UXJ3903.D	09/05/2013	17:32

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-28680-1 | Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 12:48 | Calibration End Date: 09/05/2013 14:46 | Calibration ID: 17246

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-100285/7	UXJ3896.D
Level 2	STD8260 240-100285/6	UXJ3895.D
Level 3	STD8260 240-100285/5	UXJ3894.D
Level 4	STD8260 240-100285/4	UXJ3893.D
Level 5	STD8260 240-100285/3	UXJ3892.D
Level 6	STD8260 240-100285/2	UXJ3891.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1521 0.1769	0.1543	0.1570	0.1627	0.1590	Ave		0.1603				5.6		15.0			
Chloromethane	0.3548 0.3586	0.3269	0.3524	0.3331	0.3555	Ave		0.3469			0.1000	3.9		15.0			
Vinyl chloride	0.2809 0.2831	0.2807	0.2836	0.2760	0.2798	Ave		0.2807				1.0		15.0			
Bromomethane	0.0684 0.0917	0.0787	0.0852	0.0816	0.0934	Ave		0.0832				11.0		15.0			
Chloroethane	0.0981 0.1274	0.1179	0.1281	0.1262	0.1279	Ave		0.1209				9.8		15.0			
Trichlorofluoromethane	0.2608 0.2613	0.2518	0.2710	0.2579	0.2715	Ave		0.2624				2.9		15.0			
~~Acrolein~~	0.0420 0.0375	0.0418	0.0389	0.0380	0.0393	Ave		~~0.0396~~				4.8		15.0			
1,1-Dichloroethene	0.2497 0.2258	0.2657	0.2457	0.2231	0.2352	Ave		0.2409				6.7		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1209 0.1364	0.1202	0.1244	0.1165	0.1275	Ave		0.1243				5.7		15.0			
Acetone	0.2265 0.1197	0.1538	0.1500	0.1186	0.1262	Lin1	0.2015	0.1176							0.9970		0.9900
Iodomethane	0.3189 0.3046	0.3252	0.3477	0.3049	0.3174	Ave		0.3198				5.0		15.0			
Carbon disulfide	0.6250 0.5428	0.5736	0.6174	0.5457	0.5645	Ave		0.5782				6.1		15.0			
~~Acetonitrile~~	0.0590 0.0378	0.0481	0.0419	0.0413	0.0410	Lin1	0.2119	~~0.0392~~							0.9990		0.9900
Methyl acetate	0.4734 0.3755	0.4114	0.3831	0.3695	0.3887	Ave		0.4003				9.6		15.0			
Methylene Chloride	0.6179 0.2554	0.4373	0.3278	0.2767	0.2729	Lin1	0.3739	0.2478							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 12:48 Calibration End Date: 09/05/2013 14:46 Calibration ID: 17246

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0266 0.0191	0.0209	0.0222	0.0213	0.0219	Ave		0.0220				11.0		15.0			
Acrylonitrile	0.1739 0.1500	0.1680	0.1587	0.1515	0.1509	Ave		0.1588				6.3		15.0			
Methyl tert-butyl ether	0.8600 0.7817	0.8067	0.7797	0.7175	0.8038	Ave		0.7916				5.9		15.0			
trans-1,2-Dichloroethene	0.3478 0.3316	0.3236	0.3428	0.2988	0.3308	Ave		0.3292				5.3		15.0			
Hexane	0.0532 0.0670	0.0761	0.0610	0.0529	0.0586	Ave		0.0614				14.0		15.0			
1,1-Dichloroethane	0.7275 0.7203	0.6945	0.7063	0.6542	0.6924	Ave		0.6992			0.1000	3.7		15.0			
Vinyl acetate	0.0207 0.0368	0.0326	0.0375	0.0346	0.0368	Lin1	-0.013	0.0372							0.9990		0.9900
cis-1,2-Dichloroethene	0.3894 0.3560	0.3566	0.3625	0.3244	0.3519	Ave		0.3568				5.8		15.0			
2-Butanone	0.2166 0.1609	0.1698	0.1662	0.1559	0.1760	Ave		0.1742				13.0		15.0			
2,2-Dichloropropane	0.3645 0.3008	0.3321	0.3223	0.3126	0.3203	Ave		0.3254				6.7		15.0			
Bromochloromethane	0.2236 0.1910	0.1822	0.1995	0.1786	0.1896	Ave		0.1941				8.3		15.0			
Tetrahydrofuran	0.1400 0.0976	0.1260	0.1120	0.1008	0.1026	Ave		0.1132				15.0		15.0			
Chloroform	0.6451 0.5973	0.5974	0.5993	0.5549	0.5890	Ave		0.5972				4.8		15.0			
1,1,1-Trichloroethane	0.4801 0.4392	0.4811	0.4858	0.4269	0.4493	Ave		0.4604				5.5		15.0			
Cyclohexane	0.5183 0.6167	0.5444	0.5660	0.5386	0.5817	Ave		0.5610				6.3		15.0			
1,1-Dichloropropene	0.4128 0.4585	0.4145	0.4213	0.4060	0.4351	Ave		0.4247				4.5		15.0			
Carbon tetrachloride	0.4630 0.4342	0.4191	0.4348	0.3968	0.4269	Ave		0.4291				5.1		15.0			
Benzene	1.2195 1.3256	1.2376	1.2377	1.1832	1.2996	Ave		1.2506				4.2		15.0			
1,2-Dichloroethane	0.5478 0.5587	0.5495	0.5877	0.5160	0.5604	Ave		0.5534				4.2		15.0			
Trichloroethene	0.4424 0.3903	0.3987	0.3906	0.3509	0.3862	Ave		0.3932				7.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 12:48 Calibration End Date: 09/05/2013 14:46 Calibration ID: 17246

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.3584 0.4230	0.3282	0.3438	0.3321	0.3853	Ave		0.3618				10.0		15.0			
1,2-Dichloropropane	0.3678 0.4030	0.4058	0.3886	0.3621	0.3944	Ave		0.3870				4.7		15.0			
Dibromomethane	0.2040 0.1870	0.2026	0.1790	0.1815	0.1830	Ave		0.1895				5.8		15.0			
~~1,4-Dioxane~~	0.0016 0.0015	0.0017	0.0018	0.0015	0.0018	Ave		~~0.0017~~				8.6		15.0			
Bromodichloromethane	0.4326 0.4274	0.4130	0.4029	0.3955	0.4180	Ave		0.4149				3.4		15.0			
2-Chloroethyl vinyl ether	0.1621 0.2000	0.1695	0.1745	0.1767	0.2016	Ave		0.1807				9.0		15.0			
cis-1,3-Dichloropropene	0.4410 0.4963	0.4412	0.4650	0.4406	0.4894	Ave		0.4623				5.5		15.0			
4-Methyl-2-pentanone	0.3162 0.3124	0.3015	0.3091	0.2990	0.3403	Ave		0.3131				4.7		15.0			
Toluene	2.1647 2.3826	2.0653	2.1950	2.0745	2.3314	Ave		2.2023				5.9		15.0			
trans-1,3-Dichloropropene	0.5664 0.6649	0.6058	0.6252	0.5862	0.6835	Ave		0.6220				7.3		15.0			
Ethyl methacrylate	0.4254 0.5310	0.4365	0.4985	0.4569	0.5589	Ave		0.4845				11.0		15.0			
1,1,2-Trichloroethane	0.4197 0.3833	0.3992	0.4013	0.3635	0.4016	Ave		0.3948				4.9		15.0			
1,3-Dichloropropane	0.6878 0.6742	0.6842	0.6782	0.6421	0.6910	Ave		0.6762				2.6		15.0			
Tetrachloroethene	0.3966 0.4037	0.3831	0.3895	0.3529	0.3971	Ave		0.3871				4.7		15.0			
2-Hexanone	0.2819 0.2991	0.2708	0.2708	0.2807	0.3291	Ave		0.2887				7.7		15.0			
Dibromochloromethane	0.4893 0.4865	0.4687	0.4612	0.4517	0.5027	Ave		0.4767				4.0		15.0			
1,2-Dibromoethane	0.3791 0.3519	0.3695	0.3652	0.3410	0.3738	Ave		0.3634				3.9		15.0			
Chlorobenzene	1.3408 1.2458	1.2278	1.2504	1.1653	1.2741	Ave		1.2507			0.3000	4.6		15.0			
1,1,1,2-Tetrachloroethane	0.5370 0.4655	0.4692	0.4765	0.4375	0.4926	Ave		0.4797				6.9		15.0			
Ethylbenzene	0.6040 0.6621	0.5639	0.6204	0.5676	0.6636	Ave		0.6136				7.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 12:48 Calibration End Date: 09/05/2013 14:46 Calibration ID: 17246

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6333 0.8039	0.6457	0.7162	0.7003	0.7958	Ave		0.7159				10.0		15.0			
o-Xylene	0.5237 0.6814	0.5679	0.6027	0.5944	0.6893	Ave		0.6099				11.0		15.0			
Styrene	0.8119 1.0799	0.8297	0.9469	0.9353	1.0861	Ave		0.9483				12.0		15.0			
Bromoform	0.1904 0.1800	0.1817	0.1803	0.1656	0.1834	Ave		0.1802			0.1000	4.5		15.0			
Isopropylbenzene	1.2798 1.5103	1.2006	1.3408	1.3149	1.5219	Ave		1.3614				9.5		15.0			
1,1,2,2-Tetrachloroethane	0.8613 0.6827	0.7999	0.8193	0.6830	0.7734	Ave		0.7699			0.3000	9.5		15.0			
Bromobenzene	1.0109 0.9305	0.9283	0.9975	0.9278	0.9803	Ave		0.9626				4.0		15.0			
1,2,3-Trichloropropane	0.4852 0.2505	0.2627	0.2807	0.2407	0.2770	Lin1	0.1620	0.2488							0.9920		0.9900
trans-1,4-Dichloro-2-butene	0.2478 0.2847	0.3221	0.2843	0.2724	0.3198	Ave		0.2885				9.9		15.0			
n-Propylbenzene	0.8326 0.9272	0.7349	0.8299	0.9134	1.0028	Ave		0.8735				11.0		15.0			
2-Chlorotoluene	0.9093 0.8590	0.8785	0.9294	0.8036	0.9118	Ave		0.8819				5.2		15.0			
1,3,5-Trimethylbenzene	2.1088 2.6517	2.2279	2.4244	2.3939	2.7235	Ave		2.4217				9.8		15.0			
4-Chlorotoluene	0.8536 0.9213	0.8498	0.9339	0.8759	0.9693	Ave		0.9006				5.4		15.0			
tert-Butylbenzene	1.6920 2.2636	2.1520	2.0132	1.8699	2.1456	Ave		2.0227				10.0		15.0			
1,2,4-Trimethylbenzene	2.0665 2.6657	2.2793	2.3833	2.3035	2.7054	Ave		2.4006				10.0		15.0			
sec-Butylbenzene	2.4681 2.8746	2.3578	2.5424	2.4637	2.8168	Ave		2.5872				8.1		15.0			
1,3-Dichlorobenzene	1.7811 1.6313	1.6183	1.6687	1.5132	1.6676	Ave		1.6467				5.3		15.0			
p-Isopropyltoluene	1.8639 2.5967	1.8536	2.2834	2.1645	2.5267	Ave		2.2148				14.0		15.0			
1,4-Dichlorobenzene	1.7577 1.7477	1.7436	1.6987	1.5939	1.7366	Ave		1.7130				3.6		15.0			
n-Butylbenzene	1.6766 2.0626	1.6630	1.6996	1.6902	1.9858	Ave		1.7963				9.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 12:48 Calibration End Date: 09/05/2013 14:46 Calibration ID: 17246

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.7378 1.6178	1.5549	1.6705	1.4823	1.6948	Ave		1.6264				5.8		15.0			
1,2-Dibromo-3-Chloropropane	0.1329 0.1382	0.1733	0.1445	0.1432	0.1628	Ave		0.1491				10.0		15.0			
1,3,5-Trichlorobenzene	1.0119 0.9263	0.9909	0.9667	0.8814	0.9888	Ave		0.9610				5.1		15.0			
1,2,4-Trichlorobenzene	1.0661 0.7863	0.9494	0.8317	0.8040	0.8172	Ave		0.8758				13.0		15.0			
Hexachlorobutadiene	0.3588 0.2869	0.3851	0.3725	0.3142	0.3332	Ave		0.3418				11.0		15.0			
Naphthalene	2.1458 2.0165	2.1313	1.9844	1.9287	2.2975	Ave		2.0840				6.4		15.0			
1,2,3-Trichlorobenzene	0.7641 0.6698	0.6912	0.7765	0.7118	0.8108	Ave		0.7374				7.4		15.0			
Dibromofluoromethane (Surr)	0.3471 0.3311	0.3046	0.3337	0.2982	0.3311	Ave		0.3243				5.8		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4011 0.4172	0.4393	0.3895	0.3866	0.4039	Ave		0.4063				4.8		15.0			
Toluene-d8 (Surr)	1.6945 1.9323	1.5982	1.6997	1.7247	1.9039	Ave		1.7589				7.4		15.0			
4-Bromofluorobenzene (Surr)	0.3197 0.3841	0.3573	0.3554	0.3463	0.3848	Ave		0.3579				6.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:10 Calibration End Date: 09/05/2013 17:09 Calibration ID: 17248

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-100285/13	UXJ3902.D
Level 2	STD2 240-100285/12	UXJ3901.D
Level 3	STD3 240-100285/11	UXJ3900.D
Level 4	STD4 240-100285/10	UXJ3899.D
Level 5	STD5 240-100285/9	UXJ3898.D
Level 6	STD6 240-100285/8	UXJ3897.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.2813 0.2412	0.2611	0.2469	0.2399	0.2474	Ave		0.2530				6.2		15.0			
Ethyl ether	0.3774 0.3369	0.3363	0.3574	0.3387	0.3487	Ave		0.3492				4.6		15.0			
3-Chloro-1-propene	0.1786 0.1551	0.1590	0.1639	0.1595	0.1681	Ave		0.1640				5.1		15.0			
Diisopropyl ether	0.2668 0.2901	0.2751	0.2906	0.2671	0.2979	Ave		0.2813				4.8		15.0			
2-Chloro-1,3-butadiene	0.8091 0.7856	0.7850	0.7930	0.7820	0.7965	Ave		0.7919				1.3		15.0			
Ethyl-t-butyl ether (ETBE)	1.1227 1.1769	1.2028	1.1450	1.1041	1.1915	Ave		1.1572				3.4		15.0			
Ethyl acetate	0.4102 0.3681	0.4197	0.3637	0.3637	0.3791	Ave		0.3841				6.4		15.0			
~~Propionitrile~~	0.0503 0.0461	0.0459	0.0471	0.0457	0.0481	Ave		~~0.0472~~				3.8		15.0			
Methacrylonitrile	0.2814 0.2403	0.2636	0.2442	0.2372	0.2463	Ave		0.2522				6.8		15.0			
~~Isobutyl alcohol~~	0.0147 0.0153	0.0181	0.0152	0.0145	0.0162	Ave		~~0.0157~~				8.5		15.0			
Tert-amyl-methyl ether (TAME)	0.6393 0.7448	0.6864	0.7047	0.7036	0.7627	Ave		0.7069				6.2		15.0			
n-Heptane	0.0484 0.0586	0.0537	0.0554	0.0553	0.0597	Ave		0.0552				7.3		15.0			
~~n-Butanol~~	0.0103 0.0093	0.0103	0.0105	0.0096	0.0104	Ave		~~0.0101~~				4.8		15.0			
Methyl methacrylate	0.3134 0.3435	0.3388	0.3166	0.3112	0.3380	Ave		0.3269				4.5		15.0			
2-Nitropropane	0.1011 0.0990	0.1040	0.1049	0.0943	0.0999	Ave		0.1005				3.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:10 Calibration End Date: 09/05/2013 17:09 Calibration ID: 17248

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1536 0.1808	0.1486	0.1687	0.1498	0.1662	Ave		0.1613				7.9		15.0			
1,2,3-Trimethylbenzene	2.0052 2.9861	2.0404	2.3540	2.4898	2.7492	Lin1	-1.473	2.8977							0.9960		0.9900
2-Methylnaphthalene	0.7984 1.0949	0.8414	0.8390	0.9107	1.0026	Ave		0.9145				12.0		15.0			
n-Butyl acetate	0.3718 0.5050	0.3758	0.3988	0.4204	0.4667	Ave		0.4231				13.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: BFB206D.D BFB Injection Date: 09/13/2013

Instrument ID: A3UX11 BFB Injection Time: 10:33

Analysis Batch No.: 101342

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.4	
75	30.0 - 60.0 % of mass 95	51.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	81.6	
175	5.0 - 9.0 % of mass 174	6.5	(7.9)1
176	95.0 - 101.0 % of mass 174	77.7	(95.2)1
177	5.0 - 9.0 % of mass 176	4.9	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-101342/2	UXJ4050.D	09/13/2013	10:59
	LCS 240-101342/4	UXJ4051.D	09/13/2013	11:23
	CCV 240-101342/3	UXJ4052.D	09/13/2013	11:47
	MB 240-101342/5	UXJ4053.D	09/13/2013	12:09
TB-090413	240-28680-6	UXJ4067.D	09/13/2013	17:39

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-101342/2 Calibration Date: 09/13/2013 10:59

Instrument ID: A3UX11 Calib Start Date: 09/05/2013 12:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/05/2013 14:46

Lab File ID: UXJ4050.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1603	0.1894		1.00	0.0100	18.1	50.0
Chloromethane	Ave	0.3469	0.3123	0.1000	1.00	0.0100	-10.0	50.0
Vinyl chloride	Ave	0.2807	0.2582		1.00	0.0100	-8.0	20.0
Bromomethane	Ave	0.0832	0.0921		1.00	0.0100	10.7	50.0
Chloroethane	Ave	0.1209	0.1190		1.00	0.0100	-1.6	50.0
Trichlorofluoromethane	Ave	0.2624	0.2896		1.00	0.0100	10.4	50.0
Acrolein	Ave	0.0396	0.0327		20.0	0.100	-17.4	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1243	0.1584		1.00	0.0100	27.4	50.0
1,1-Dichloroethene	Ave	0.2409	0.1956		1.00	0.0100	-18.8	20.0
Acetone	Lin1		0.1008		10.0	0.0200	-22.9	50.0
Iodomethane	Ave	0.3198	0.2621		1.00	0.0100	-18.0	50.0
Carbon disulfide	Ave	0.5782	0.4342		1.00	0.0100	-24.9	50.0
Acetonitrile	Lin1		0.0355		20.0	0.100	-12.8	50.0
Methyl acetate	Ave	0.4003	0.3288		10.0	0.0200	-17.9	50.0
Methylene Chloride	Lin1		0.2548		1.00	0.0100	-12.3	50.0
tert-Butyl alcohol	Ave	0.0220	0.0159		50.0	0.200	-27.7	50.0
Acrylonitrile	Ave	0.1588	0.1370		20.0	0.0200	-13.7	50.0
Methyl tert-butyl ether	Ave	0.7916	0.6890		1.00	0.0100	-13.0	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3149		1.00	0.0100	-4.3	50.0
Hexane	Ave	0.0614	0.0712		1.00	0.0100	15.9	20.0
1,1-Dichloroethane	Ave	0.6992	0.6697	0.1000	1.00	0.0100	-4.2	50.0
Vinyl acetate	Lin1		0.0315		2.00	0.0100	-11.9	50.0
2-Butanone	Ave	0.1742	0.1265		10.0	0.0200	-27.4	50.0
2,2-Dichloropropane	Ave	0.3254	0.2747		1.00	0.0100	-15.6	50.0
cis-1,2-Dichloroethene	Ave	0.3568	0.3293		1.00	0.0100	-7.7	50.0
Bromochloromethane	Ave	0.1941	0.1873		1.00	0.0100	-3.5	50.0
Tetrahydrofuran	Ave	0.1132	0.0840		5.00	0.0100	-25.7	50.0
Chloroform	Ave	0.5972	0.5469		1.00	0.0100	-8.4	20.0
1,1,1-Trichloroethane	Ave	0.4604	0.4072		1.00	0.0100	-11.5	50.0
Cyclohexane	Ave	0.5610	0.5272		1.00	0.0100	-6.0	50.0
1,1-Dichloropropene	Ave	0.4247	0.3948		1.00	0.0100	-7.1	50.0
Carbon tetrachloride	Ave	0.4291	0.4424		1.00	0.0100	3.1	50.0
1,2-Dichloroethane	Ave	0.5534	0.5172		1.00	0.0100	-6.5	50.0
Benzene	Ave	1.251	1.174		1.00	0.0100	-6.1	50.0
Trichloroethene	Ave	0.3932	0.3679		1.00	0.0100	-6.4	50.0
Methylcyclohexane	Ave	0.3618	0.3755		1.00	0.0100	3.8	50.0
1,2-Dichloropropane	Ave	0.3870	0.3510		1.00	0.0100	-9.3	20.0
1,4-Dioxane	Ave	0.0017	0.0010		50.0	0.500	-37.2	50.0
Dibromomethane	Ave	0.1895	0.1766		1.00	0.0100	-6.8	50.0
Bromodichloromethane	Ave	0.4149	0.3974		1.00	0.0100	-4.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-101342/2 Calibration Date: 09/13/2013 10:59

Instrument ID: A3UX11 Calib Start Date: 09/05/2013 12:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/05/2013 14:46

Lab File ID: UXJ4050.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1807	0.1481		10.0	0.0200	-18.1	50.0
cis-1,3-Dichloropropene	Ave	0.4623	0.4103		1.00	0.0100	-11.2	50.0
4-Methyl-2-pentanone	Ave	0.3131	0.2378		10.0	0.0200	-24.1	50.0
Toluene	Ave	2.202	2.109		1.00	0.0100	-4.2	20.0
trans-1,3-Dichloropropene	Ave	0.6220	0.5592		1.00	0.0100	-10.1	50.0
Ethyl methacrylate	Ave	0.4845	0.3866		1.00	0.0100	-20.2	50.0
1,1,2-Trichloroethane	Ave	0.3948	0.3567		1.00	0.0100	-9.7	50.0
1,3-Dichloropropane	Ave	0.6762	0.5979		1.00	0.0100	-11.6	50.0
Tetrachloroethene	Ave	0.3871	0.3940		1.00	0.0100	1.8	50.0
2-Hexanone	Ave	0.2887	0.2154		10.0	0.0200	-25.4	50.0
Dibromochloromethane	Ave	0.4767	0.4468		1.00	0.0100	-6.3	50.0
1,2-Dibromoethane	Ave	0.3634	0.3216		1.00	0.0100	-11.5	50.0
Chlorobenzene	Ave	1.251	1.131	0.3000	1.00	0.0100	-9.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4797	0.4431		1.00	0.0100	-7.6	50.0
Ethylbenzene	Ave	0.6136	0.5697		1.00	0.0100	-7.2	20.0
m-Xylene & p-Xylene	Ave	0.7159	0.6903		2.00	0.0200	-3.6	50.0
o-Xylene	Ave	0.6099	0.5478		1.00	0.0100	-10.2	50.0
Styrene	Ave	0.9483	0.8823		1.00	0.0100	-7.0	50.0
Bromoform	Ave	0.1802	0.1668	0.1000	1.00	0.0100	-7.4	50.0
Isopropylbenzene	Ave	1.361	1.243		1.00	0.0100	-8.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7699	0.6380	0.3000	1.00	0.0100	-17.1	50.0
Bromobenzene	Ave	0.9626	0.8920		1.00	0.0100	-7.3	50.0
1,2,3-Trichloropropane	Lin1		0.2369		1.00	0.0100	-11.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2885	0.2367		1.00	0.0100	-18.0	50.0
n-Propylbenzene	Ave	0.8735	0.8237		1.00	0.0100	-5.7	50.0
2-Chlorotoluene	Ave	0.8819	0.8044		1.00	0.0100	-8.8	50.0
1,3,5-Trimethylbenzene	Ave	2.422	2.234		1.00	0.0100	-7.8	50.0
4-Chlorotoluene	Ave	0.9006	0.8227		1.00	0.0100	-8.7	50.0
tert-Butylbenzene	Ave	2.023	1.821		1.00	0.0100	-10.0	50.0
1,2,4-Trimethylbenzene	Ave	2.401	2.188		1.00	0.0100	-8.9	50.0
sec-Butylbenzene	Ave	2.587	2.308		1.00	0.0100	-10.8	50.0
1,3-Dichlorobenzene	Ave	1.647	1.460		1.00	0.0100	-11.3	50.0
p-Isopropyltoluene	Ave	2.215	2.029		1.00	0.0100	-8.4	50.0
1,4-Dichlorobenzene	Ave	1.713	1.521		1.00	0.0100	-11.2	50.0
n-Butylbenzene	Ave	1.796	1.484		1.00	0.0100	-17.4	50.0
1,2-Dichlorobenzene	Ave	1.626	1.417		1.00	0.0100	-12.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1491	0.1172		2.00	0.0100	-21.4	50.0
1,3,5-Trichlorobenzene	Ave	0.9610	0.7904		1.00	0.0100	-17.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8758	0.6313		1.00	0.0100	-27.9	50.0
Hexachlorobutadiene	Ave	0.3418	0.2810		1.00	0.0100	-17.8	50.0
Naphthalene	Ave	2.084	1.465		1.00	0.0100	-29.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-101342/2 Calibration Date: 09/13/2013 10:59

Instrument ID: A3UX11 Calib Start Date: 09/05/2013 12:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/05/2013 14:46

Lab File ID: UXJ4050.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7374	0.6233		1.00	0.0100	-15.5	50.0
Dibromofluoromethane (Surr)	Ave	0.3243	0.3199		0.00823	0.00834	-1.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4063	0.3864		0.00793	0.00834	-4.9	50.0
Toluene-d8 (Surr)	Ave	1.759	1.620		0.00768	0.00834	-7.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3579	0.3390		0.00790	0.00834	-5.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101342/3 Calibration Date: 09/13/2013 11:47

Instrument ID: A3UX11 Calib Start Date: 09/05/2013 15:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/05/2013 17:09

Lab File ID: UXJ4052.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2530	0.2139		2.00	0.0100	-15.4	50.0
Ethyl ether	Ave	0.3492	0.3114		2.00	0.0100	-10.8	50.0
3-Chloro-1-propene	Ave	0.1640	0.1505		2.00	0.0100	-8.3	50.0
Diisopropyl ether	Ave	0.2813	0.2618		10.0	0.0500	-6.9	50.0
2-Chloro-1,3-butadiene	Ave	0.7919	0.7651		2.00	0.0100	-3.4	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.157	1.058		5.00	0.0100	-8.6	50.0
Ethyl acetate	Ave	0.3841	0.3279		4.00	0.0200	-14.6	50.0
Propionitrile	Ave	0.0472	0.0420		4.00	0.0200	-11.0	50.0
Methacrylonitrile	Ave	0.2522	0.2116		2.00	0.0100	-16.1	50.0
Isobutyl alcohol	Ave	0.0157	0.0129		50.0	0.200	-17.8	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7069	0.6541		5.00	0.0100	-7.5	50.0
n-Heptane	Ave	0.0552	0.0741		1.00	0.0100	34.2	50.0
n-Butanol	Ave	0.0101	0.0067		50.0	0.200	-33.9	50.0
Methyl methacrylate	Ave	0.3269	0.2789		2.00	0.0100	-14.7	50.0
2-Nitropropane	Ave	0.1005	0.0845		2.00	0.0200	-16.0	50.0
Cyclohexanone	Ave	0.1613	0.1072		20.0	0.100	-33.5	50.0
1,2,3-Trimethylbenzene	Lin1		2.194		0.00808	0.0100	-19.2	50.0
2-Methylnaphthalene	Ave	0.9145	0.4965		5.00	0.0200	-45.7	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: BFB8353.D BFB Injection Date: 09/04/2013

Instrument ID: A3UX8 BFB Injection Time: 00:28

Analysis Batch No.: 100002

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.2	
75	30.0 - 60.0 % of mass 95	46.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	71.5	
175	5.0 - 9.0 % of mass 174	5.3	(7.4)1
176	95.0 - 101.0 % of mass 174	68.7	(96.1)1
177	5.0 - 9.0 % of mass 176	4.7	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-100002/3	UX87157.D	09/04/2013	01:29
	STD8260 240-100002/4	UX87158.D	09/04/2013	01:50
	STD8260 240-100002/5	UX87159.D	09/04/2013	02:12
	ICIS 240-100002/6	UX87160.D	09/04/2013	02:33
	STD8260 240-100002/7	UX87161.D	09/04/2013	02:54
	STD8260 240-100002/8	UX87162.D	09/04/2013	03:15
	STD8260 240-100002/9	UX87163.D	09/04/2013	03:36
	STD8260 240-100002/10	UX87164.D	09/04/2013	03:58
	STDA9 240-100002/11	UX87165.D	09/04/2013	04:19
	STDA9 240-100002/12	UX87166.D	09/04/2013	04:40
	STDA9 240-100002/13	UX87167.D	09/04/2013	05:01
	STDA9 240-100002/14	UX87168.D	09/04/2013	05:23
	STDA9 240-100002/15	UX87169.D	09/04/2013	05:44
	STDA9 240-100002/16	UX87170.D	09/04/2013	06:05
	ICV 240-100002/17	UX87171.D	09/04/2013	06:26

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 01:29 Calibration End Date: 09/04/2013 03:58 Calibration ID: 17222

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-100002/10	UX87164.D
Level 2	STD8260 240-100002/9	UX87163.D
Level 3	STD8260 240-100002/8	UX87162.D
Level 4	STD8260 240-100002/7	UX87161.D
Level 5	ICIS 240-100002/6	UX87160.D
Level 6	STD8260 240-100002/5	UX87159.D
Level 7	STD8260 240-100002/4	UX87158.D
Level 8	STD8260 240-100002/3	UX87157.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1947 0.1935	0.2057 0.1971	0.1819 0.1973	0.1887	0.1898	Ave		0.1936				3.6		15.0			
Chloromethane	0.1767 0.1969	0.2189 0.1933	0.1861 0.1927	0.2007	0.1992	Ave		0.1956			0.1000	6.3		15.0			
Vinyl chloride	0.1601 0.1684	0.1809 0.1627	0.1627 0.1649	0.1668	0.1676	Ave		0.1668				3.8		15.0			
Bromomethane	0.1199 0.1021	0.1109 0.0711	0.1111	0.1105	0.1099	Ave		0.1051				15.0		15.0			
Chloroethane	0.1067 0.0993	0.1136 0.0933	0.1072 0.0761	0.1027	0.1033	Ave		0.1003				11.0		15.0			
Dichlorofluoromethane	+++++ 0.2608	0.2935 0.2530	0.2517 0.2417	0.2670	0.2645	Ave		0.2617				6.3		15.0			
Trichlorofluoromethane	0.2407 0.2331	0.2433 0.2395	0.2146 0.2385	0.2281	0.2336	Ave		0.2339				3.9		15.0			
Ethyl ether	0.2470 0.2106	0.2186 0.1865	0.1817 0.1981	0.1850	0.1802	Ave		0.2010				12.0		15.0			
~~Acrolein~~	+++++ 0.0201	0.0207 0.0184	0.0202 0.0206	0.0185	0.0201	Ave		~~0.0198~~				4.8		15.0			
1,1-Dichloroethene	0.1911 0.1791	0.1747 0.1730	0.1684 0.1804	0.1615	0.1721	Ave		0.1750				5.0		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.0946 0.1302	0.1344 0.1279	0.1209 0.1280	0.1241	0.1255	Ave		0.1232				9.9		15.0			
Acetone	+++++ 0.0744	+++++ 0.0582	0.1306 0.0631	0.0934	0.0776	Lin1	0.7069	0.0602							0.9940		0.9900
Iodomethane	0.3151 0.3257	0.3288 0.2958	0.2910 0.3128	0.2856	0.3054	Ave		0.3075				5.2		15.0			
Carbon disulfide	0.4417 0.5378	0.4608 0.5058	0.4671 0.5456	0.4508	0.4849	Ave		0.4868				8.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 01:29 Calibration End Date: 09/04/2013 03:58 Calibration ID: 17222

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	+++++ 0.1114	0.0854 0.1081	0.0873 0.1130	0.0868	0.1027	Ave		0.0993				12.0		15.0			
Methyl acetate	0.1684 0.1886	0.1843 0.1550	0.1527 0.1706	0.1639	0.1643	Ave		0.1685				7.5		15.0			
Methylene Chloride	+++++ 0.2705	+++++ 0.2277	0.6300 0.2341	0.3300	0.2792	Lin1	1.6761	0.2210							0.9930		0.9900
tert-Butyl alcohol	0.0172 0.0213	0.0190 0.0163	0.0149 0.0173	0.0159	0.0162	Ave		0.0173				12.0		15.0			
Acrylonitrile	0.0839 0.0941	0.0930 0.0770	0.0764 0.0831	0.0818	0.0826	Ave		0.0840				7.7		15.0			
Methyl tert-butyl ether	0.5484 0.6550	0.5614 0.5772	0.5072 0.6186	0.5377	0.5461	Ave		0.5690				8.3		15.0			
trans-1,2-Dichloroethene	0.2089 0.2132	0.2141 0.1999	0.1931 0.2048	0.1881	0.2057	Ave		0.2035				4.5		15.0			
Hexane	0.0673 0.0561	0.0746 0.0570	0.0607 0.0574	0.0553	0.0563	Ave		0.0606				11.0		15.0			
1,1-Dichloroethane	0.3578 0.3589	0.3709 0.3293	0.3308 0.3507	0.3228	0.3371	Ave		0.3448			0.1000	5.0		15.0			
Vinyl acetate	+++++ 0.0396	0.0163 0.0352	0.0305 0.0396	0.0293	0.0321	Lin1	-0.051	0.0385							0.9960		0.9900
2-Butanone	+++++ 0.1036	0.1076 0.0859	0.0827 0.0932	0.0945	0.0894	Ave		0.0938				9.7		15.0			
cis-1,2-Dichloroethene	0.2119 0.2467	0.2309 0.2251	0.2169 0.2334	0.2208	0.2231	Ave		0.2261				4.8		15.0			
2,2-Dichloropropane	0.1613 0.1867	0.1609 0.1714	0.1543 0.1650	0.1633	0.1776	Ave		0.1676				6.2		15.0			
Bromochloromethane	0.1181 0.1217	0.1133 0.1094	0.1023 0.1170	0.1084	0.1078	Ave		0.1122				5.7		15.0			
Tetrahydrofuran	0.0618 0.0740	0.0633 0.0598	0.0542 0.0655	0.0598	0.0614	Ave		0.0625				9.1		15.0			
Chloroform	+++++ 0.3669	0.3614 0.3357	0.3366 0.3515	0.3219	0.3346	Ave		0.3441				4.7		15.0			
1,1,1-Trichloroethane	0.2360 0.2804	0.2660 0.2679	0.2275 0.2783	0.2356	0.2565	Ave		0.2560				8.0		15.0			
Cyclohexane	0.3748 0.3172	0.3800 0.3126	0.2773 0.3184	0.2854	0.3072	Ave		0.3216				12.0		15.0			
1,1-Dichloropropene	0.2126 0.2370	0.2124 0.2277	0.2048 0.2383	0.2141	0.2194	Ave		0.2208				5.6		15.0			
Carbon tetrachloride	0.1751 0.2217	0.2029 0.2173	0.1833 0.2325	0.1865	0.2011	Ave		0.2025				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 01:29 Calibration End Date: 09/04/2013 03:58 Calibration ID: 17222

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	+++++ 0.0077	+++++ 0.0061	0.0051 0.0065	0.0061	0.0062	Ave		0.0063				14.0		15.0			
1,2-Dichloroethane	0.2798 0.3118	0.2957 0.2771	0.2676 0.2937	0.2779	0.2697	Ave		0.2842				5.3		15.0			
Benzene	0.7818 0.7983	0.8208 0.7450	0.7346 0.7757	0.7371	0.7383	Ave		0.7665				4.2		15.0			
n-Heptane	+++++ 0.0641	+++++ 0.0647	0.0519 0.0669	0.0605	0.0581	Ave		0.0610				8.9		15.0			
Trichloroethene	0.2379 0.2084	0.2218 0.1996	0.1934 0.2090	0.1924	0.1972	Ave		0.2075				7.6		15.0			
Methylcyclohexane	0.3031 0.3282	0.3648 0.3296	0.2833 0.3405	0.2860	0.3102	Ave		0.3182				8.8		15.0			
1,2-Dichloropropane	0.1689 0.2039	0.1942 0.1858	0.1777 0.1934	0.1820	0.1815	Ave		0.1859				5.9		15.0			
1,4-Dioxane	+++++ 0.0024	0.0019 0.0020	0.0019 0.0024	0.0020	0.0018	Ave		0.0021				12.0		15.0			
Dibromomethane	0.1218 0.1312	0.1222 0.1182	0.1060 0.1265	0.1137	0.1084	Ave		0.1185				7.4		15.0			
Bromodichloromethane	+++++ 0.2620	0.1858 0.2453	0.1928 0.2689	0.2146	0.2148	Ave		0.2263				15.0		15.0			
2-Chloroethyl vinyl ether	+++++ 0.1290	0.0959 0.1166	0.0934 0.1268	0.1060	0.1024	Ave		0.1100				13.0		15.0			
cis-1,3-Dichloropropene	0.1893 0.2985	0.2165 0.2840	0.1974 0.3057	0.2288	0.2394	Lin1	-0.217	0.2961							0.9960		0.9900
4-Methyl-2-pentanone	+++++ 0.2069	0.1585 0.1692	0.1440 0.1823	0.1707	0.1721	Ave		0.1720				11.0		15.0			
Toluene	+++++ 1.4340	+++++ 1.3243	1.3730 1.4148	1.3093	1.3143	Ave		1.3616				4.0		15.0			
trans-1,3-Dichloropropene	0.2151 0.4110	0.2556 0.3827	0.2546 0.4363	0.2993	0.3074	Lin1	-0.395	0.4134							0.9920		0.9900
Ethyl methacrylate	0.2026 0.4476	0.2580 0.3890	0.2613 0.4359	0.3335	0.3320	Lin1	-0.377	0.4213							0.9940		0.9900
1,1,2-Trichloroethane	0.3113 0.3130	0.2960 0.2756	0.2686 0.3038	0.2846	0.2698	Ave		0.2904				6.3		15.0			
1,3-Dichloropropane	+++++ 0.5209	0.4738 0.4507	0.4283 0.4927	0.4713	0.4394	Ave		0.4682				6.8		15.0			
Tetrachloroethene	0.2287 0.2474	0.2560 0.2405	0.2065 0.2515	0.2240	0.2330	Ave		0.2359				6.9		15.0			
2-Hexanone	+++++ 0.2344	0.1701 0.1879	0.1505 0.2125	0.1861	0.1906	Ave		0.1903				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 01:29 Calibration End Date: 09/04/2013 03:58 Calibration ID: 17222

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	0.1741 0.3102	0.2157 0.2874	0.2080 0.3226	0.2288	0.2415	Lin1	-0.253	0.3081							0.9940		0.9900
1,2-Dibromoethane	+++++ 0.3054	0.2494 0.2612	0.2223 0.2881	0.2576	0.2478	Ave		0.2617				10.0		15.0			
Chlorobenzene	0.9165 0.9036	0.8916 0.8142	0.8029 0.8599	0.8245	0.8167	Ave		0.8537			0.3000	5.3		15.0			
1,1,1,2-Tetrachloroethane	0.2209 0.3018	0.2375 0.2776	0.2275 0.2994	0.2551	0.2576	Ave		0.2597				12.0		15.0			
Ethylbenzene	0.4124 0.4644	0.4344 0.4364	0.4085 0.4608	0.4229	0.4321	Ave		0.4340				4.7		15.0			
m-Xylene & p-Xylene	0.5021 0.5770	0.5152 0.5357	0.5230 0.5666	0.5177	0.5272	Ave		0.5331				4.9		15.0			
o-Xylene	0.3786 0.5630	0.4676 0.5099	0.4393 0.5316	0.4873	0.5124	Ave		0.4862				12.0		15.0			
Styrene	+++++ 0.9938	0.6709 0.8901	0.7227 0.9488	0.8001	0.8423	Ave		0.8384				14.0		15.0			
Bromoform	+++++ 0.1754	0.0940 0.1611	0.1059 0.1877	0.1202	0.1265	Lin1	-0.315	0.1785			0.1000				0.9920		0.9900
Isopropylbenzene	+++++ 1.3709	1.0947 1.2956	1.0056 1.3686	1.1812	1.2569	Ave		1.2248				11.0		15.0			
1,1,2,2-Tetrachloroethane	0.5160 0.7068	0.6134 0.6137	0.5657 0.6665	0.6250	0.6200	Ave		0.6159			0.3000	9.4		15.0			
Bromobenzene	0.6417 0.7992	0.6505 0.7226	0.6531 0.7294	0.6812	0.7164	Ave		0.6992				7.6		15.0			
1,2,3-Trichloropropane	0.1599 0.2531	0.2329 0.2116	0.2111 0.2239	0.2195	0.2281	Ave		0.2175				12.0		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2250	0.1328 0.2020	0.1463 0.2241	0.1693	0.1769	Lin1	-0.285	0.2183							0.9960		0.9900
n-Propylbenzene	+++++ 0.7860	0.5814 0.7555	0.5911 0.7618	0.6802	0.7453	Ave		0.7002				12.0		15.0			
2-Chlorotoluene	+++++ 0.6868	0.5633 0.6354	0.5580 0.6536	0.6273	0.6409	Ave		0.6236				7.5		15.0			
1,3,5-Trimethylbenzene	1.5860 2.2993	1.7173 2.2007	1.6904 2.2966	1.9708	2.1383	Ave		1.9874				15.0		15.0			
4-Chlorotoluene	+++++ 0.7423	0.5953 0.6806	0.5756 0.6981	0.6423	0.6877	Ave		0.6603				9.0		15.0			
tert-Butylbenzene	1.4292 1.9370	1.6262 1.8506	1.4175 2.0050	1.6663	1.9125	Ave		1.7306				13.0		15.0			
1,2,4-Trimethylbenzene	+++++ 2.4322	1.7629 2.2397	1.7390 2.4194	2.0548	2.2618	Ave		2.1300				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 01:29 Calibration End Date: 09/04/2013 03:58 Calibration ID: 17222

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	1.8739 2.6937	1.9971 2.6212	2.0289 2.8147	2.4056	2.6625	Ave		2.3872				15.0		15.0			
1,3-Dichlorobenzene	+++++ 1.4222	1.3162 1.3146	1.1700 1.3982	1.2848	1.3453	Ave		1.3216				6.3		15.0			
p-Isopropyltoluene	+++++ 2.3364	1.7454 2.2388	1.6834 2.4443	2.0098	2.2805	Ave		2.1055				14.0		15.0			
1,4-Dichlorobenzene	+++++ 1.4539	1.4366 1.3351	1.2577 1.4336	1.3155	1.3536	Ave		1.3694				5.4		15.0			
n-Butylbenzene	1.4948 2.1213	1.5329 2.0571	1.4278 2.3180	1.7481	2.0106	Lin1	-1.574	2.2097							0.9960		0.9900
1,2-Dichlorobenzene	1.2722 1.3163	1.2608 1.1727	1.1591 1.3160	1.2217	1.2423	Ave		1.2451				4.7		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0927	+++++ 0.0836	0.0771 0.1057	0.0793	0.0821	Ave		0.0868				12.0		15.0			
1,2,4-Trichlorobenzene	0.6023 0.6326	0.6608 0.5787	0.5956 0.6854	0.6489	0.6508	Ave		0.6319				5.8		15.0			
Hexachlorobutadiene	0.3383 0.2632	0.3978 0.2452	0.3004 0.3277	0.3463	0.3272	Ave		0.3183				15.0		15.0			
Naphthalene	1.2373 1.5340	1.3327 1.3772	1.2677 1.5443	1.4739	1.4835	Ave		1.4063				8.5		15.0			
1,2,3-Trichlorobenzene	0.5631 0.4975	0.6333 0.4418	0.6069 0.4956	0.6251	0.5760	Ave		0.5549				13.0		15.0			
Dibromofluoromethane (Surr)	+++++ 0.2019	0.4318 0.1867	0.2758 0.1974	0.2172	0.2116	Lin1	0.4371	0.1908							0.9990		0.9900
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2429	+++++ 0.2325	0.3653 0.2542	0.3002	0.2710	Lin1	0.5576	0.2419							0.9970		0.9900
Toluene-d8 (Surr)	+++++ 1.3934	2.9620 1.2373	1.8546 1.3044	1.5030	1.4181	Lin1	3.1595	1.2681							0.9990		0.9900
4-Bromofluorobenzene (Surr)	+++++ 0.4619	+++++ 0.4280	0.6693 0.4496	0.5446	0.5290	Lin1	1.2080	0.4362							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 04:19 Calibration End Date: 09/04/2013 06:05 Calibration ID: 17224

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-100002/16	UX87170.D
Level 2	STDA9 240-100002/15	UX87169.D
Level 3	STDA9 240-100002/14	UX87168.D
Level 4	STDA9 240-100002/13	UX87167.D
Level 5	STDA9 240-100002/12	UX87166.D
Level 6	STDA9 240-100002/11	UX87165.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylal	0.2087 0.2341	0.2096	0.2063	0.2274	0.2177	Ave		0.2173				5.2		15.0			
~~Acetonitrile~~	0.0319 0.0273	0.0303	0.0276	0.0309	0.0278	Ave		~~0.0293~~				6.7		15.0			
Diisopropyl ether	0.1895 0.2083	0.1975	0.1850	0.2141	0.2103	Ave		0.2008				5.9		15.0			
2-Chloro-1,3-butadiene	0.2818 0.3122	0.2888	0.2616	0.3103	0.3190	Ave		0.2956				7.5		15.0			
Ethyl-t-butyl ether (ETBE)	0.5645 0.6424	0.6111	0.5611	0.6583	0.6531	Ave		0.6151				7.1		15.0			
Ethyl acetate	0.1645 0.1754	0.1596	0.1562	0.1722	0.1623	Ave		0.1650				4.5		15.0			
~~Propionitrile~~	0.0349 0.0315	0.0323	0.0326	0.0348	0.0315	Ave		0.~~0330~~				4.7		15.0			
Methacrylonitrile	0.1411 0.1302	0.1377	0.1343	0.1401	0.1292	Ave		0.1354				3.7		15.0			
Tert-amyl-methyl ether (TAME)	0.4564 0.5158	0.4723	0.4489	0.5307	0.5222	Ave		0.4911				7.3		15.0			
~~n-Butanol~~	0.0047 0.0045	0.0037	0.0047	0.0048	0.0044	Ave		~~0.0045~~				8.7		15.0			
Ethyl acrylate	0.2130 0.2534	0.2087	0.2155	0.2319	0.2325	Ave		0.2258				7.4		15.0			
Methyl methacrylate	0.1615 0.1793	0.1594	0.1656	0.1766	0.1724	Ave		0.1691				4.8		15.0			
~~2-Nitropropane~~	0.0261 0.0421	0.0254	0.0261	0.0324	0.0351	Qua	-0.075	~~0.0289~~	0						1.0000		0.9900
Tetrahydrothiophene	0.1918 0.3519	0.2625	0.2920	0.3308	0.3265	Lin1	-0.874	0.3486							0.9990		0.9900
1-Chlorohexane	0.3094 0.3873	0.3599	0.3284	0.3652	0.3672	Ave		0.3529				8.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 04:19 Calibration End Date: 09/04/2013 06:05 Calibration ID: 17224

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,4-Dichlorobutane	0.0949 0.1182	0.1035	0.1093	0.1177	0.1189	Ave		0.1104				8.8		15.0			
Cyclohexanone	0.0514 0.0598	0.0541	0.0550	0.0604	0.0590	Ave		0.0566				6.4		15.0			
Pentachloroethane	0.1334 0.2563	0.1085	0.1171	0.2413	0.2547	Qua	-3.360	0.2728	0						0.9980		0.9900
1,2,3-Trimethylbenzene	2.2948 2.4224	2.3162	2.2109	2.4465	2.4311	Ave		2.3536				4.0		15.0			
Benzyl chloride	0.0639 0.1909	0.0692	0.0942	0.1296	0.1484	Qua	-0.387	0.1135	0.0004						1.0000		0.9900
1,3,5-Trichlorobenzene	0.8460 0.8165	0.8203	0.7434	0.7927	0.7677	Ave		0.7978				4.7		15.0			
2-Methylnaphthalene	0.6379 0.6192	0.6505	0.8577	0.6922	0.6493	Ave		0.6845				13.0		15.0			
n-Butyl acetate	0.1851 0.2526	0.1886	0.2105	0.2496	0.2433	Ave		0.2216				14.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: BFB8358.D BFB Injection Date: 09/10/2013

Instrument ID: A3UX8 BFB Injection Time: 02:53

Analysis Batch No.: 100739

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.6	
75	30.0 - 60.0 % of mass 95	44.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.3	(0.3)1
174	50.0 - 120.00 % of mass 95	80.7	
175	5.0 - 9.0 % of mass 174	6.2	(7.6)1
176	95.0 - 101.0 % of mass 174	79.1	(98.0)1
177	5.0 - 9.0 % of mass 176	5.1	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-100739/3	UX87292.D	09/10/2013	03:30
	CCV 240-100739/4	UX87293.D	09/10/2013	03:51
	MB 240-100523/1-A	UX87317.D	09/10/2013	12:42
	LCS 240-100523/2-A	UX87318.D	09/10/2013	13:03

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-100739/3 Calibration Date: 09/10/2013 03:30

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 01:29

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 03:58

Lab File ID: UX87292.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1936	0.2250		1.00	0.0200	16.2	50.0
Chloromethane	Ave	0.1956	0.2066	0.1000	1.00	0.0200	5.6	50.0
Vinyl chloride	Ave	0.1668	0.1843		1.00	0.0200	10.5	20.0
Bromomethane	Ave	0.1051	0.1175		1.00	0.0200	11.8	50.0
Chloroethane	Ave	0.1003	0.1091		1.00	0.0200	8.8	50.0
Dichlorofluoromethane	Ave	0.2617	0.2735		2.00	0.0200	4.5	50.0
Trichlorofluoromethane	Ave	0.2339	0.2645		1.00	0.0200	13.1	50.0
Ethyl ether	Ave	0.2010	0.1938		2.00	0.0200	-3.5	50.0
Acrolein	Ave	0.0198	0.0230		20.0	0.100	15.9	50.0
1,1-Dichloroethene	Ave	0.1750	0.1877		1.00	0.0200	7.2	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1232	0.1374		1.00	0.0200	11.5	50.0
Acetone	Lin1		0.0833		10.0	0.0400	9.0	50.0
Iodomethane	Ave	0.3075	0.3135		1.00	0.0200	1.9	50.0
Carbon disulfide	Ave	0.4868	0.5308		1.00	0.0200	9.0	50.0
3-Chloro-1-propene	Ave	0.0993	0.0989		2.00	0.0200	-0.4	50.0
Methyl acetate	Ave	0.1685	0.1763		10.0	0.100	4.6	50.0
Methylene Chloride	Lin1		0.2787		1.00	0.0200	-11.8	50.0
tert-Butyl alcohol	Ave	0.0173	0.0159		50.0	0.200	-8.0	50.0
Acrylonitrile	Ave	0.0840	0.0879		20.0	0.200	4.6	50.0
Methyl tert-butyl ether	Ave	0.5690	0.5854		1.00	0.0200	2.9	50.0
trans-1,2-Dichloroethene	Ave	0.2035	0.2175		1.00	0.0200	6.9	50.0
Hexane	Ave	0.0606	0.0617		1.00	0.0200	1.8	20.0
1,1-Dichloroethane	Ave	0.3448	0.3560	0.1000	1.00	0.0200	3.2	50.0
Vinyl acetate	Lin1		0.0331		2.00	0.0192	-7.3	50.0
2-Butanone	Ave	0.0938	0.1038		10.0	0.0400	10.6	50.0
cis-1,2-Dichloroethene	Ave	0.2261	0.2339		1.00	0.0200	3.4	50.0
2,2-Dichloropropane	Ave	0.1676	0.1795		1.00	0.0200	7.1	50.0
Bromochloromethane	Ave	0.1122	0.1127		1.00	0.0200	0.4	50.0
Tetrahydrofuran	Ave	0.0625	0.0663		3.00	0.0400	6.2	50.0
Chloroform	Ave	0.3441	0.3604		1.00	0.0200	4.7	20.0
1,1,1-Trichloroethane	Ave	0.2560	0.2888		1.00	0.0200	12.8	50.0
Cyclohexane	Ave	0.3216	0.3335		1.00	0.0200	3.7	50.0
1,1-Dichloropropene	Ave	0.2208	0.2546		1.00	0.0200	15.3	50.0
Carbon tetrachloride	Ave	0.2025	0.2393		1.00	0.0200	18.1	50.0
Isobutyl alcohol	Ave	0.0063	0.0061		50.0	0.500	-3.4	50.0
1,2-Dichloroethane	Ave	0.2842	0.2951		1.00	0.0200	3.8	50.0
Benzene	Ave	0.7665	0.8265		1.00	0.0200	7.8	50.0
n-Heptane	Ave	0.0610	0.0656		1.00	0.0200	7.4	50.0
Trichloroethene	Ave	0.2075	0.2238		1.00	0.0200	7.9	50.0
Methylcyclohexane	Ave	0.3182	0.3513		1.00	0.0200	10.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-100739/3 Calibration Date: 09/10/2013 03:30

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 01:29

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 03:58

Lab File ID: UX87292.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.1859	0.1947		1.00	0.0200	4.7	20.0
1,4-Dioxane	Ave	0.0021	0.0021		50.0	0.400	-1.6	50.0
Dibromomethane	Ave	0.1185	0.1241		1.00	0.0200	4.7	50.0
Bromodichloromethane	Ave	0.2263	0.2534		1.00	0.0200	12.0	50.0
2-Chloroethyl vinyl ether	Ave	0.1100	0.1188		10.0	0.0400	8.0	50.0
cis-1,3-Dichloropropene	Lin1		0.2811		1.00	0.0200	-1.4	50.0
4-Methyl-2-pentanone	Ave	0.1720	0.1991		10.0	0.0400	15.8	50.0
Toluene	Ave	1.362	1.444		1.00	0.0200	6.1	20.0
trans-1,3-Dichloropropene	Lin1		0.3657		1.00	0.0200	-6.7	50.0
Ethyl methacrylate	Lin1		0.3883		1.00	0.0200	-3.4	50.0
1,1,2-Trichloroethane	Ave	0.2904	0.3067		1.00	0.0200	5.6	50.0
1,3-Dichloropropane	Ave	0.4682	0.5011		1.00	0.0200	7.0	50.0
Tetrachloroethene	Ave	0.2359	0.2775		1.00	0.0200	17.6	50.0
2-Hexanone	Ave	0.1903	0.2194		10.0	0.0400	15.3	50.0
Dibromochloromethane	Lin1		0.2848		1.00	0.0200	-3.5	50.0
1,2-Dibromoethane	Ave	0.2617	0.2738		1.00	0.0200	4.6	50.0
Chlorobenzene	Ave	0.8537	0.8838	0.3000	1.00	0.0200	3.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2597	0.2912		1.00	0.0200	12.1	50.0
Ethylbenzene	Ave	0.4340	0.4651		1.00	0.0200	7.2	20.0
m-Xylene & p-Xylene	Ave	0.5331	0.5782		2.00	0.0200	8.5	50.0
o-Xylene	Ave	0.4862	0.5459		1.00	0.0200	12.3	50.0
Styrene	Ave	0.8384	0.9120		1.00	0.0200	8.8	50.0
Bromoform	Lin1		0.1566	0.1000	1.00	0.0200	-3.4	50.0
Isopropylbenzene	Ave	1.225	1.413		1.00	0.0200	15.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6159	0.7056	0.3000	1.00	0.0200	14.6	50.0
Bromobenzene	Ave	0.6992	0.7691		1.00	0.0200	10.0	50.0
1,2,3-Trichloropropane	Ave	0.2175	0.2444		1.00	0.0200	12.4	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1938		1.00	0.0200	-4.7	50.0
n-Propylbenzene	Ave	0.7002	0.8404		1.00	0.0200	20.0	50.0
2-Chlorotoluene	Ave	0.6236	0.7086		1.00	0.0200	13.6	50.0
1,3,5-Trimethylbenzene	Ave	1.987	2.390		1.00	0.0200	20.3	50.0
4-Chlorotoluene	Ave	0.6603	0.7684		1.00	0.0200	16.4	50.0
tert-Butylbenzene	Ave	1.731	2.013		1.00	0.0200	16.3	50.0
1,2,4-Trimethylbenzene	Ave	2.130	2.473		1.00	0.0200	16.1	50.0
sec-Butylbenzene	Ave	2.387	2.894		1.00	0.0200	21.2	50.0
1,3-Dichlorobenzene	Ave	1.322	1.424		1.00	0.0200	7.7	50.0
p-Isopropyltoluene	Ave	2.106	2.509		1.00	0.0200	19.1	50.0
1,4-Dichlorobenzene	Ave	1.369	1.415		1.00	0.0200	3.3	50.0
n-Butylbenzene	Lin1		2.200		1.00	0.0200	3.1	50.0
1,2-Dichlorobenzene	Ave	1.245	1.320		1.00	0.0200	6.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0868	0.0982		2.00	0.0200	13.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-100739/3 Calibration Date: 09/10/2013 03:30

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 01:29

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 03:58

Lab File ID: UX87292.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Ave	0.6319	0.6939		1.00	0.0200	9.8	50.0
Hexachlorobutadiene	Ave	0.3183	0.3486		1.00	0.0200	9.5	50.0
Naphthalene	Ave	1.406	1.604		1.00	0.0200	14.0	50.0
1,2,3-Trichlorobenzene	Ave	0.5549	0.6171		1.00	0.0200	11.2	50.0
Dibromofluoromethane (Surr)	Lin1		0.2220		0.0559	0.0500	11.8	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2806		0.0557	0.0500	11.4	50.0
Toluene-d8 (Surr)	Lin1		1.442		0.0544	0.0500	8.7	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.4770		0.0519	0.0500	3.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-100739/4 Calibration Date: 09/10/2013 03:51

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 04:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 06:05

Lab File ID: UX87293.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0293	0.0285		20.0	0.200	-2.7	50.0
Diisopropyl ether	Ave	0.2008	0.1943		10.0	0.0200	-3.2	50.0
2-Chloro-1,3-butadiene	Ave	0.2956	0.3030		1.00	0.0200	2.5	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6151	0.5899		5.00	0.0200	-4.1	50.0
Ethyl acetate	Ave	0.1650	0.1763		4.00	0.0400	6.8	50.0
Propionitrile	Ave	0.0330	0.0330		5.00	0.200	0.1	50.0
Methacrylonitrile	Ave	0.1354	0.1442		2.00	0.200	6.5	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.4911	0.4744		5.00	0.0200	-3.4	50.0
n-Butanol	Ave	0.0045	0.0039		50.0	0.500	-13.2	50.0
Ethyl acrylate	Ave	0.2258	0.2408		1.00	0.0200	6.6	50.0
Methyl methacrylate	Ave	0.1691	0.1788		2.00	0.0400	5.7	50.0
2-Nitropropane	Qua		0.0378		2.00	0.0400	28.6	50.0
Cyclohexanone	Ave	0.0566	0.0063		20.0	0.200	-89.1*	50.0
1,2,3-Trimethylbenzene	Ave	2.354	2.373		0.0202	0.0200	0.8	50.0
Benzyl chloride	Qua		0.1293		5.00	0.0200	20.7	50.0
1,3,5-Trichlorobenzene	Ave	0.7978	0.9240		1.00	0.0200	15.8	50.0
2-Methylnaphthalene	Ave	0.6845	0.6716		5.00	0.0400	-1.9	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: BFB8359.D BFB Injection Date: 09/11/2013

Instrument ID: A3UX8 BFB Injection Time: 01:24

Analysis Batch No.: 100925

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
75	30.0 - 60.0 % of mass 95	45.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	78.3	
175	5.0 - 9.0 % of mass 174	5.7	(7.2)1
176	95.0 - 101.0 % of mass 174	76.0	(97.1)1
177	5.0 - 9.0 % of mass 176	5.1	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-100925/3	UX87325.D	09/11/2013	01:56
	CCV 240-100925/4	UX87326.D	09/11/2013	02:18
	LCS 240-100925/5	UX87327.D	09/11/2013	02:39
	MB 240-100925/6	UX87328.D	09/11/2013	03:00
DR-SB-48D-28-31	240-28680-3	UX87336.D	09/11/2013	06:03
DR-SB-48D-40-42	240-28680-5	UX87337.D	09/11/2013	06:24
	240-28747-E-3-A MS	UX87348.D	09/11/2013	10:18
	240-28747-F-3-A MSD	UX87349.D	09/11/2013	10:39
DR-SB-48D-19-21	240-28680-1	UX87354.D	09/11/2013	12:25
DR-SB-48D-34-36	240-28680-4	UX87355.D	09/11/2013	12:46

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-100925/3 Calibration Date: 09/11/2013 01:56

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 01:29

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 03:58

Lab File ID: UX87325.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1936	0.2303		1.00	0.0200	18.9	50.0
Chloromethane	Ave	0.1956	0.2092	0.1000	1.00	0.0200	7.0	50.0
Vinyl chloride	Ave	0.1668	0.1845		1.00	0.0200	10.7	20.0
Bromomethane	Ave	0.1051	0.1204		1.00	0.0200	14.6	50.0
Chloroethane	Ave	0.1003	0.1105		1.00	0.0200	10.1	50.0
Dichlorofluoromethane	Ave	0.2617	0.2787		2.00	0.0200	6.5	50.0
Trichlorofluoromethane	Ave	0.2339	0.2704		1.00	0.0200	15.6	50.0
Ethyl ether	Ave	0.2010	0.1964		2.00	0.0200	-2.3	50.0
~~Acrolein~~	Ave	0.0198	~~0.0186~~		20.0	0.100	-6.8	50.0
1,1-Dichloroethene	Ave	0.1750	0.1950		1.00	0.0200	11.4	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1232	0.1365		1.00	0.0200	10.8	50.0
Acetone	Lin1		0.0764		10.0	0.0400	-2.4	50.0
Iodomethane	Ave	0.3075	0.3183		1.00	0.0200	3.5	50.0
Carbon disulfide	Ave	0.4868	0.5325		1.00	0.0200	9.4	50.0
3-Chloro-1-propene	Ave	0.0993	0.1007		2.00	0.0200	1.5	50.0
Methyl acetate	Ave	0.1685	0.1725		10.0	0.100	2.4	50.0
Methylene Chloride	Lin1		0.2912		1.00	0.0200	-6.2	50.0
tert-Butyl alcohol	Ave	0.0173	0.0142		50.0	0.200	-17.5	50.0
Acrylonitrile	Ave	0.0840	0.0847		20.0	0.200	0.8	50.0
Methyl tert-butyl ether	Ave	0.5690	0.5670		1.00	0.0200	-0.3	50.0
trans-1,2-Dichloroethene	Ave	0.2035	0.2255		1.00	0.0200	10.8	50.0
Hexane	Ave	0.0606	0.0603		1.00	0.0200	-0.5	20.0
1,1-Dichloroethane	Ave	0.3448	0.3698	0.1000	1.00	0.0200	7.3	50.0
Vinyl acetate	Lin1		0.0275		2.00	0.0192	-21.8	50.0
2-Butanone	Ave	0.0938	0.0961		10.0	0.0400	2.4	50.0
cis-1,2-Dichloroethene	Ave	0.2261	0.2473		1.00	0.0200	9.4	50.0
2,2-Dichloropropane	Ave	0.1676	0.1760		1.00	0.0200	5.0	50.0
Bromochloromethane	Ave	0.1122	0.1162		1.00	0.0200	3.5	50.0
Tetrahydrofuran	Ave	0.0625	0.0616		5.00	0.0400	-1.5	50.0
Chloroform	Ave	0.3441	0.3753		1.00	0.0200	9.1	20.0
1,1,1-Trichloroethane	Ave	0.2560	0.2919		1.00	0.0200	14.0	50.0
Cyclohexane	Ave	0.3216	0.3440		1.00	0.0200	7.0	50.0
1,1-Dichloropropene	Ave	0.2208	0.2548		1.00	0.0200	15.4	50.0
Carbon tetrachloride	Ave	0.2025	0.2383		1.00	0.0200	17.7	50.0
~~Isobutyl alcohol~~	Ave	0.0063	~~0.0058~~		50.0	0.500	-5.1	50.0
1,2-Dichloroethane	Ave	0.2842	0.2917		1.00	0.0200	2.7	50.0
Benzene	Ave	0.7665	0.8541		1.00	0.0200	11.4	50.0
n-Heptane	Ave	0.0610	0.0670		1.00	0.0200	9.8	50.0
Trichloroethene	Ave	0.2075	0.2331		1.00	0.0200	12.4	50.0
Methylcyclohexane	Ave	0.3182	0.3622		1.00	0.0200	13.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-100925/3 Calibration Date: 09/11/2013 01:56

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 01:29

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 03:58

Lab File ID: UX87325.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.1859	0.2028		1.00	0.0200	9.1	20.0
~~1,4-Dioxane~~	Ave	0.0021	~~0.0019~~		50.0	0.400	-10.4	50.0
Dibromomethane	Ave	0.1185	0.1211		1.00	0.0200	2.2	50.0
Bromodichloromethane	Ave	0.2263	0.2403		1.00	0.0200	6.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1100	0.1131		10.0	0.0400	2.8	50.0
cis-1,3-Dichloropropene	Lin1		0.2606		1.00	0.0200	-8.3	50.0
4-Methyl-2-pentanone	Ave	0.1720	0.1860		10.0	0.0400	8.1	50.0
Toluene	Ave	1.362	1.457		1.00	0.0200	7.0	20.0
trans-1,3-Dichloropropene	Lin1		0.3310		1.00	0.0200	-15.1	50.0
Ethyl methacrylate	Lin1		0.3588		1.00	0.0200	-10.4	50.0
1,1,2-Trichloroethane	Ave	0.2904	0.3002		1.00	0.0200	3.4	50.0
1,3-Dichloropropane	Ave	0.4682	0.4810		1.00	0.0200	2.7	50.0
Tetrachloroethene	Ave	0.2359	0.2776		1.00	0.0200	17.7	50.0
2-Hexanone	Ave	0.1903	0.2048		10.0	0.0400	7.6	50.0
Dibromochloromethane	Lin1		0.2725		1.00	0.0200	-7.5	50.0
1,2-Dibromoethane	Ave	0.2617	0.2718		1.00	0.0200	3.9	50.0
Chlorobenzene	Ave	0.8537	0.8855	0.3000	1.00	0.0200	3.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2597	0.2872		1.00	0.0200	10.6	50.0
Ethylbenzene	Ave	0.4340	0.4784		1.00	0.0200	10.2	20.0
m-Xylene & p-Xylene	Ave	0.5331	0.5823		2.00	0.0200	9.2	50.0
o-Xylene	Ave	0.4862	0.5643		1.00	0.0200	16.1	50.0
Styrene	Ave	0.8384	0.9071		1.00	0.0200	8.2	50.0
Bromoform	Lin1		0.1511	0.1000	1.00	0.0200	-6.5	50.0
Isopropylbenzene	Ave	1.225	1.388		1.00	0.0200	13.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6159	0.6537	0.3000	1.00	0.0200	6.1	50.0
Bromobenzene	Ave	0.6992	0.7314		1.00	0.0200	4.6	50.0
1,2,3-Trichloropropane	Ave	0.2175	0.2296		1.00	0.0200	5.6	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1687		1.00	0.0200	-16.2	50.0
n-Propylbenzene	Ave	0.7002	0.8192		1.00	0.0200	17.0	50.0
2-Chlorotoluene	Ave	0.6236	0.6675		1.00	0.0200	7.0	50.0
1,3,5-Trimethylbenzene	Ave	1.987	2.312		1.00	0.0200	16.3	50.0
4-Chlorotoluene	Ave	0.6603	0.7450		1.00	0.0200	12.8	50.0
tert-Butylbenzene	Ave	1.731	2.009		1.00	0.0200	16.1	50.0
1,2,4-Trimethylbenzene	Ave	2.130	2.399		1.00	0.0200	12.6	50.0
sec-Butylbenzene	Ave	2.387	2.862		1.00	0.0200	19.9	50.0
1,3-Dichlorobenzene	Ave	1.322	1.368		1.00	0.0200	3.5	50.0
p-Isopropyltoluene	Ave	2.106	2.493		0.0237	0.0200	18.4	50.0
1,4-Dichlorobenzene	Ave	1.369	1.403		1.00	0.0200	2.4	50.0
n-Butylbenzene	Lin1		2.170		1.00	0.0200	1.8	50.0
1,2-Dichlorobenzene	Ave	1.245	1.284		1.00	0.0200	3.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0868	0.0830		2.00	0.0200	-4.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-100925/3 Calibration Date: 09/11/2013 01:56

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 01:29

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 03:58

Lab File ID: UX87325.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Ave	0.6319	0.6494		1.00	0.0200	2.8	50.0
Hexachlorobutadiene	Ave	0.3183	0.3544		1.00	0.0200	11.4	50.0
Naphthalene	Ave	1.406	1.462		1.00	0.0200	3.9	50.0
1,2,3-Trichlorobenzene	Ave	0.5549	0.5882		1.00	0.0200	6.0	50.0
Dibromofluoromethane (Surr)	Lin1		0.2299		0.0580	0.0500	15.9	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2860		0.0568	0.0500	13.6	50.0
Toluene-d8 (Surr)	Lin1		1.465		0.0553	0.0500	10.5	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.4742		0.0516	0.0500	3.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-100925/4 Calibration Date: 09/11/2013 02:18

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 04:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 06:05

Lab File ID: UX87326.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
~~Acetonitrile~~	Ave	0.0293	~~0.0288~~		20.0	0.200	-1.7	50.0
Diisopropyl ether	Ave	0.2008	0.1908		10.0	0.0200	-5.0	50.0
2-Chloro-1,3-butadiene	Ave	0.2956	0.2959		2.00	0.0200	0.0	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6151	0.5777		5.00	0.0200	-6.1	50.0
Ethyl acetate	Ave	0.1650	0.1747		4.00	0.0400	5.8	50.0
~~Propionitrile~~	Ave	0.0330	~~0.0332~~		4.00	0.200	0.9	50.0
Methacrylonitrile	Ave	0.1354	0.1408		2.00	0.200	4.0	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.4911	0.4757		5.00	0.0200	-3.1	50.0
~~n-Butanol~~	Ave	0.0045	~~0.0042~~		50.0	0.500	-4.9	50.0
Ethyl acrylate	Ave	0.2258	0.2349		1.00	0.0200	4.0	50.0
Methyl methacrylate	Ave	0.1691	0.1780		2.00	0.0400	5.2	50.0
~~2-Nitropropane~~	Qua		~~0.0333~~		2.00	0.0400	15.5	50.0
~~Cyclohexanone~~	Ave	0.0566	~~0.0066~~		20.0	0.200	~~-88.3~~	50.0
Pentachloroethane	Qua		0.2272		1.00	0.0400	14.4	50.0
1,2,3-Trimethylbenzene	Ave	2.354	2.371		0.0201	0.0200	0.7	50.0
Benzyl chloride	Qua		0.1209		1.00	0.0200	14.4	50.0
1,3,5-Trichlorobenzene	Ave	0.7978	0.9059		1.00	0.0200	13.6	50.0
2-Methylnaphthalene	Ave	0.6845	0.6866		5.00	0.0400	0.3	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: BFB14516.D BFB Injection Date: 09/12/2013

Instrument ID: A3UX14 BFB Injection Time: 14:06

Analysis Batch No.: 101218

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.4	
75	30.0 - 60.0 % of mass 95	52.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	83.5	
175	5.0 - 9.0 % of mass 174	5.9	(7.1)1
176	95.0 - 101.0 % of mass 174	80.4	(96.3)1
177	5.0 - 9.0 % of mass 176	5.3	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-101218/3	144598.D	09/12/2013	14:48
	IC 240-101218/4	144599.D	09/12/2013	15:10
	IC 240-101218/5	144600.D	09/12/2013	15:31
	ICIS 240-101218/6	144601.D	09/12/2013	15:53
	IC 240-101218/7	144602.D	09/12/2013	16:14
	IC 240-101218/8	144603.D	09/12/2013	16:36
	IC 240-101218/9	144604.D	09/12/2013	16:57
	IC 240-101218/10	144605.D	09/12/2013	17:19
	IC 240-101218/11	144606.D	09/12/2013	17:40
	IC 240-101218/12	144607.D	09/12/2013	18:02
	IC 240-101218/13	144608.D	09/12/2013	18:23
	IC 240-101218/14	144609.D	09/12/2013	18:45
	IC 240-101218/15	144610.D	09/12/2013	19:07
	IC 240-101218/16	144611.D	09/12/2013	19:28
	IC 240-101218/17	144612.D	09/12/2013	19:50
	IC 240-101218/18	144613.D	09/12/2013	20:11
	IC 240-101218/19	144614.D	09/12/2013	20:33
	IC 240-101218/20	144615.D	09/12/2013	20:54
	ICV 240-101218/21	144616.D	09/12/2013	21:16

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-28680-1 | Analy Batch No.: 101218

SDG No.:

Instrument ID: A3UX14 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) Y

Calibration Start Date: 09/12/2013 14:48 | Calibration End Date: 09/12/2013 17:40 | Calibration ID: 17432

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-101218/11	144606.D
Level 2	IC 240-101218/10	144605.D
Level 3	IC 240-101218/9	144604.D
Level 4	IC 240-101218/8	144603.D
Level 5	IC 240-101218/7	144602.D
Level 6	ICIS 240-101218/6	144601.D
Level 7	IC 240-101218/5	144600.D
Level 8	IC 240-101218/4	144599.D
Level 9	IC 240-101218/3	144598.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2954 0.3640	0.3083 0.3705	0.3741 0.3818	0.3767 0.3851	0.3423	Ave		0.3554				9.3		15.0			
Chloromethane	0.4354 0.4828	0.4579 0.4796	0.5122 0.4779	0.4874 0.4515	0.4535	Ave		0.4709			0.1000	5.0		15.0			
Vinyl chloride	0.2728 0.3252	0.2921 0.3219	0.3414 0.3173	0.3405 0.2991	0.3129	Ave		0.3137				7.2		15.0			
Bromomethane	0.1420 0.1034	0.1250 0.1051	0.1264 0.1093	0.1091 0.1076	0.1015	Ave		0.1144				12.0		15.0			
Chloroethane	0.1921 0.1188	0.1205 0.1264	0.1288 0.1296	0.1338 0.1305	0.1044	Lin1	0.0190	0.1277							0.9980		0.9900
Dichlorofluoromethane	0.4226 0.3760	0.3577 0.3848	0.4095 0.3938	0.3897 0.3970	0.3469	Ave		0.3864				6.1		15.0			
Trichlorofluoromethane	0.2150 0.3677	0.2644 0.3873	0.3529 0.4182	0.3384 0.4269	0.3303	Lin1	-0.321	0.4120							0.9970		0.9900
Ethyl ether	0.3111 0.2121	0.2535 0.2041	0.2411 0.2077	0.2243 0.1991	0.2093	Lin1	0.1234	0.2032							0.9990		0.9900
~~Acrolein~~	0.0173 0.0141	0.0198 0.0132	0.0155 0.0139	0.0169 0.0130	0.0152	Ave		~~0.0154~~				14.0		15.0			
1,1-Dichloroethene	0.2423 0.2221	0.1733 0.2120	0.2257 0.2085	0.2191 0.2126	0.1907	Ave		0.2118				9.5		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1734 0.2156	0.1741 0.1967	0.2035 0.1988	0.2137 0.2032	0.1822	Ave		0.1957				8.1		15.0			
Acetone	0.7894 0.0867	0.3432 0.0742	0.1882 0.0707	0.1334 0.0671	0.1118	Lin1	1.3373	0.0669							0.9940		0.9900
Iodomethane	0.3782 0.3744	0.3508 0.3658	0.3848 0.3570	0.3610 0.3537	0.3346	Ave		0.3623				4.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101218

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/12/2013 14:48 Calibration End Date: 09/12/2013 17:40 Calibration ID: 17432

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Carbon disulfide	0.5755 0.6888	0.5547 0.6848	0.6307 0.6914	0.6281 0.6694	0.5893	Ave		0.6347				8.2		15.0			
3-Chloro-1-propene	0.1424 0.1520	0.1434 0.1521	0.1497 0.1509	0.1444 0.1490	0.1325	Ave		0.1463				4.4		15.0			
Methyl acetate	0.2783 0.2214	0.2288 0.2060	0.2455 0.2211	0.2324 0.2072	0.2552	Ave		0.2329				10.0		15.0			
Methylene Chloride	+++++ 0.3781	+++++ 0.2869	1.5015 0.2641	0.8687 0.2519	0.4218	Qua	5.6509	0.2428	0						0.9980		0.9900
tert-Butyl alcohol	0.0286 0.0252	0.0232 0.0218	0.0258 0.0234	0.0245 0.0217	0.0311	Ave		0.0250				12.0		15.0			
Acrylonitrile	0.1158 0.1019	0.1008 0.0962	0.1072 0.0999	0.1056 0.0948	0.1165	Ave		0.1043				7.5		15.0			
trans-1,2-Dichloroethene	0.3074 0.2768	0.2509 0.2739	0.2774 0.2643	0.2696 0.2675	0.2472	Ave		0.2705				6.4		15.0			
Methyl tert-butyl ether	0.7656 0.7005	0.6375 0.6732	0.7328 0.7119	0.7034 0.7046	0.7154	Ave		0.7050				5.1		15.0			
Hexane	0.1409 0.0753	0.0812 0.0739	0.0990 0.0734	0.0852 0.0727	0.0645	Lin1	0.0589	0.0728							0.9980		0.9900
1,1-Dichloroethane	0.6070 0.5619	0.5271 0.5670	0.5594 0.5758	0.5467 0.5831	0.5101	Ave		0.5598			0.1000	5.2		15.0			
Vinyl acetate	0.0311 0.0275	0.0198 0.0268	0.0257 0.0296	0.0239 0.0276	0.0297	Ave		0.0269				13.0		15.0			
2,2-Dichloropropane	0.1997 0.2444	0.2026 0.2488	0.2330 0.2521	0.2240 0.2512	0.2117	Ave		0.2297				9.2		15.0			
cis-1,2-Dichloroethene	0.3022 0.2871	0.2847 0.2822	0.2979 0.2813	0.2751 0.2817	0.2560	Ave		0.2831				4.7		15.0			
2-Butanone	0.1908 0.1160	0.1355 0.1079	0.1236 0.1189	0.1220 0.1100	0.1379	Lin1	0.1518	0.1132							0.9970		0.9900
Bromochloromethane	0.1539 0.1302	0.1200 0.1246	0.1322 0.1253	0.1179 0.1243	0.1223	Ave		0.1278				8.4		15.0			
Tetrahydrofuran	0.1224 0.0858	0.0985 0.0781	0.0960 0.0844	0.0932 0.0791	0.1017	Ave		0.0932				15.0		15.0			
Chloroform	0.5319 0.4845	0.4989 0.4849	0.5065 0.4981	0.4798 0.5023	0.4346	Ave		0.4913				5.4		15.0			
1,1,1-Trichloroethane	0.3680 0.3981	0.3251 0.4080	0.3859 0.4215	0.3835 0.4167	0.3536	Ave		0.3845				8.2		15.0			
Cyclohexane	0.6351 0.6673	0.6032 0.6652	0.6872 0.6784	0.6428 0.6779	0.6094	Ave		0.6518				4.7		15.0			
1,1-Dichloropropene	0.3309 0.3641	0.3124 0.3611	0.3604 0.3646	0.3436 0.3631	0.3271	Ave		0.3475				5.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101218

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/12/2013 14:48 Calibration End Date: 09/12/2013 17:40 Calibration ID: 17432

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Carbon tetrachloride	0.2950 0.3702	0.2900 0.3813	0.3485 0.3975	0.3362 0.3987	0.3297	Ave		0.3497				12.0		15.0			
~~Isobutyl alcohol~~	0.0071 0.0093	0.0075 0.0082	0.0084 0.0090	0.0090 0.0081	0.0115	Ave		~~0.0087~~				15.0		15.0			
Benzene	1.1343 1.0485	1.0434 1.0472	1.0536 1.0510	1.0243 1.0425	0.9735	Ave		1.0465				3.9		15.0			
1,2-Dichloroethane	0.4759 0.3956	0.4040 0.3947	0.4247 0.4156	0.4080 0.4139	0.3829	Ave		0.4128				6.5		15.0			
n-Heptane	0.1475 0.0829	0.1042 0.0791	0.0914 0.0823	0.0901 0.0795	0.0735	Lin1	0.0585	0.0800							0.9990		0.9900
Trichloroethene	0.3081 0.2855	0.2704 0.2852	0.2940 0.2830	0.2710 0.2794	0.2635	Ave		0.2822				4.8		15.0			
Methylcyclohexane	0.5125 0.5160	0.4753 0.5123	0.5352 0.5103	0.4903 0.4982	0.4628	Ave		0.5014				4.4		15.0			
1,2-Dichloropropane	0.2929 0.2847	0.3043 0.2870	0.2937 0.2926	0.2706 0.2830	0.2700	Ave		0.2865				3.9		15.0			
Dibromomethane	0.1512 0.1335	0.1518 0.1268	0.1466 0.1357	0.1296 0.1317	0.1332	Ave		0.1378				6.9		15.0			
~~1,4-Dioxane~~	0.0030 0.0022	0.0026 0.0020	0.0020 0.0021	0.0024 0.0020	0.0024	Lin1	0.0258	~~0.0020~~							0.9980		0.9900
Bromodichloromethane	0.2926 0.3301	0.2799 0.3379	0.2889 0.3584	0.2863 0.3583	0.2896	Ave		0.3135				10.0		15.0			
2-Chloroethyl vinyl ether	0.1046 0.1319	0.1100 0.1305	0.1244 0.1472	0.1202 0.1342	0.1372	Ave		0.1267				11.0		15.0			
cis-1,3-Dichloropropene	0.3423 0.3683	0.2978 0.3740	0.3127 0.4068	0.3218 0.3881	0.3307	Ave		0.3492				11.0		15.0			
4-Methyl-2-pentanone	0.3586 0.3845	0.3008 0.3611	0.3766 0.3889	0.3762 0.3772	0.4462	Ave		0.3745				10.0		15.0			
Toluene	+++++ 1.7336	+++++ 1.7406	2.0445 1.6559	1.8373 1.5835	1.6271	Ave		1.7461				8.9		15.0			
trans-1,3-Dichloropropene	0.4285 0.4605	0.3604 0.4744	0.3952 0.5038	0.4196 0.5084	0.4354	Ave		0.4429				11.0		15.0			
Ethyl methacrylate	0.3059 0.3364	0.2498 0.3399	0.2977 0.3647	0.2969 0.3513	0.3479	Ave		0.3212				11.0		15.0			
1,1,2-Trichloroethane	0.4241 0.2824	0.3440 0.2637	0.3339 0.2724	0.2880 0.2706	0.2835	Lin1	0.1753	0.2702							1.0000		0.9900
Tetrachloroethene	0.3492 0.3484	0.3200 0.3537	0.3363 0.3430	0.3384 0.3489	0.3188	Ave		0.3396				3.7		15.0			
1,3-Dichloropropane	0.4805 0.4833	0.5013 0.4734	0.5132 0.4825	0.4863 0.4771	0.4989	Ave		0.4885				2.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101218

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/12/2013 14:48 Calibration End Date: 09/12/2013 17:40 Calibration ID: 17432

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Hexanone	0.1824 0.2278	0.1859 0.2097	0.2227 0.2402	0.2128 0.2236	0.2654	Ave		0.2190				12.0		15.0			
Dibromochloromethane	0.2941 0.3263	0.2413 0.3368	0.2727 0.3535	0.2721 0.3633	0.3076	Ave		0.3075				13.0		15.0			
1,2-Dibromoethane	0.2644 0.2780	0.2612 0.2642	0.2703 0.2749	0.2746 0.2715	0.2829	Ave		0.2713				2.6		15.0			
Chlorobenzene	1.2287 1.0486	1.0692 1.0549	1.0937 1.0639	1.0383 1.0799	1.0051	Ave		1.0758			0.3000	5.8		15.0			
1,1,1,2-Tetrachloroethane	0.4140 0.4127	0.3690 0.3977	0.3572 0.3891	0.3821 0.4070	0.3682	Ave		0.3886				5.4		15.0			
Ethylbenzene	0.6030 0.5856	0.4994 0.5766	0.5627 0.5777	0.5407 0.5896	0.5312	Ave		0.5629				5.9		15.0			
m-Xylene & p-Xylene	0.7058 0.7047	0.6475 0.7147	0.6802 0.7137	0.6660 0.7257	0.6549	Ave		0.6903				4.2		15.0			
o-Xylene	0.6820 0.7204	0.6232 0.6865	0.6913 0.6575	0.6772 0.6686	0.6718	Ave		0.6754				3.9		15.0			
Styrene	0.9721 1.0764	0.8472 1.0651	0.9662 1.0833	0.9740 1.0869	0.9719	Ave		1.0048				8.0		15.0			
Bromoform	0.1583 0.1907	0.1292 0.1927	0.1704 0.2111	0.1609 0.2118	0.1809	Ave		0.1785			0.1000	15.0		15.0			
Isopropylbenzene	1.7943 2.0329	1.5876 2.0233	1.8906 1.7577	1.8418 1.7147	1.8424	Ave		1.8317				7.7		15.0			
1,1,2,2-Tetrachloroethane	0.6359 0.6466	0.5472 0.6040	0.6068 0.6239	0.6179 0.5961	0.6989	Ave		0.6197			0.3000	6.6		15.0			
Bromobenzene	0.8811 0.8510	0.8780 0.8498	0.8647 0.8411	0.8227 0.8425	0.8057	Ave		0.8485				2.9		15.0			
1,2,3-Trichloropropane	0.2951 0.2061	0.2249 0.1974	0.2282 0.1983	0.1943 0.1920	0.2297	Ave		0.2184				15.0		15.0			
trans-1,4-Dichloro-2-butene	0.2799 0.2439	0.2132 0.2306	0.2211 0.2578	0.2208 0.2505	0.2511	Ave		0.2410				8.9		15.0			
n-Propylbenzene	0.8128 1.0492	0.8284 1.0318	0.9682 1.0072	0.8636 1.0158	0.8979	Ave		0.9417				9.8		15.0			
2-Chlorotoluene	0.7587 0.8551	0.7384 0.8395	0.8032 0.8165	0.7921 0.8344	0.7750	Ave		0.8014				4.9		15.0			
1,3,5-Trimethylbenzene	2.7643 3.3606	2.5740 3.3978	3.0456 3.0592	3.0044 2.9297	2.9235	Ave		3.0066				8.7		15.0			
4-Chlorotoluene	0.9247 0.8454	0.7721 0.8240	0.8094 0.8260	0.7954 0.8300	0.7960	Ave		0.8248				5.3		15.0			
tert-Butylbenzene	2.1756 3.1910	2.1893 3.1852	2.6325 3.0863	2.6384 3.1432	2.6292	Ave		2.7634				15.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101218

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/12/2013 14:48 Calibration End Date: 09/12/2013 17:40 Calibration ID: 17432

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.8575 3.3791	2.6459 3.4383	3.0350 3.3168	3.0318 3.1370	2.9677	Ave		3.0899				8.3		15.0			
sec-Butylbenzene	3.1301 4.4089	3.2769 4.4279	3.6604 3.5101	3.8282 3.4065	3.8161	Ave		3.7183				12.0		15.0			
1,3-Dichlorobenzene	1.8992 1.6455	1.6918 1.6315	1.7048 1.6295	1.6153 1.6670	1.4952	Ave		1.6644				6.4		15.0			
p-Isopropyltoluene	2.6608 3.7151	2.7224 3.7497	3.3148 3.1734	3.2529 3.0169	3.2603	Ave		3.2074				12.0		15.0			
1,4-Dichlorobenzene	1.9283 1.6160	1.6810 1.6310	1.6846 1.5982	1.6232 1.6554	1.5724	Ave		1.6656				6.3		15.0			
n-Butylbenzene	2.5881 3.2421	2.4585 3.3415	2.8931 3.0298	2.9219 2.8721	2.8407	Ave		2.9098				9.6		15.0			
1,2-Dichlorobenzene	1.9109 1.5727	1.5121 1.5482	1.6301 1.5095	1.5259 1.5414	1.4838	Ave		1.5816				8.3		15.0			
1,2-Dibromo-3-Chloropropane	0.1350 0.1347	0.0992 0.1322	0.1079 0.1455	0.1265 0.1451	0.1526	Ave		0.1310				13.0		15.0			
1,2,4-Trichlorobenzene	1.3365 1.2405	1.0745 1.2292	1.2537 1.1806	1.1322 1.2311	1.1801	Ave		1.2065				6.3		15.0			
Hexachlorobutadiene	0.7088 0.7442	0.6396 0.7282	0.7636 0.6902	0.6821 0.7440	0.6714	Ave		0.7080				5.7		15.0			
Naphthalene	2.6253 2.5443	1.9829 2.4506	2.3730 2.4868	2.3126 2.4824	2.6141	Ave		2.4302				8.1		15.0			
1,2,3-Trichlorobenzene	1.1987 1.1321	1.0886 1.1213	1.1905 1.0620	1.0783 1.1077	1.1026	Ave		1.1202				4.2		15.0			
Dibromofluoromethane (Surr)	0.9789 0.2448	0.5557 0.2432	0.3223 0.2571	0.3207 0.2504	0.2763	Lin1	0.6525	0.2463							0.9980		0.9900
1,2-Dichloroethane-d4 (Surr)	1.3538 0.2966	0.7787 0.2992	0.4047 0.3229	0.4045 0.3189	0.3616	Lin1	0.9337	0.3086							0.9970		0.9900
Toluene-d8 (Surr)	5.9339 1.4681	3.4036 1.4964	1.8569 1.5299	1.8635 1.4631	1.6272	Lin1	3.9656	1.4613							0.9990		0.9900
4-Bromofluorobenzene (Surr)	4.3680 0.9975	2.4549 1.0284	1.3250 1.0684	1.3451 1.0558	1.1546	Lin1	2.9317	1.0289							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101218

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/12/2013 18:02 Calibration End Date: 09/12/2013 20:54 Calibration ID: 17434

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-101218/20	144615.D
Level 2	IC 240-101218/19	144614.D
Level 3	IC 240-101218/18	144613.D
Level 4	IC 240-101218/17	144612.D
Level 5	IC 240-101218/16	144611.D
Level 6	IC 240-101218/15	144610.D
Level 7	IC 240-101218/14	144609.D
Level 8	IC 240-101218/13	144608.D
Level 9	IC 240-101218/12	144607.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
~~Acetonitrile~~	0.0417 0.0323	0.0323 0.0299	0.0368 0.0344	0.0313 0.0304	0.0333	Ave		~~0.0336~~				11.0		15.0			
2-Chloro-1,3-butadiene	0.5327 0.6059	0.4804 0.6099	0.5674 0.6141	0.5440 0.5832	0.5680	Ave		0.5673				7.6		15.0			
Diisopropyl ether	0.2297 0.2461	0.2026 0.2408	0.2288 0.2355	0.2327 0.2152	0.2346	Ave		0.2296				5.8		15.0			
Ethyl-t-butyl ether (ETBE)	1.0054 1.0109	0.9263 1.0248	0.9912 1.0598	0.9557 0.9789	0.9977	Ave		0.9945				3.9		15.0			
~~Propionitrile~~	0.0413 0.0397	0.0413 0.0389	0.0430 0.0414	0.0388 0.0361	0.0403	Ave		~~0.0401~~				5.0		15.0			
Ethyl acetate	0.2116 0.2247	0.2119 0.2284	0.2353 0.2405	0.2167 0.2066	0.2249	Ave		0.2223				5.2		15.0			
Methacrylonitrile	0.1704 0.1825	0.1660 0.1815	0.1852 0.1652	0.1747 0.1382	0.1822	Ave		0.1718				8.5		15.0			
Tert-amyl-methyl ether (TAME)	0.6219 0.6892	0.6059 0.6837	0.6726 0.7199	0.6473 0.6607	0.6627	Ave		0.6627				5.2		15.0			
~~n-Butanol~~	0.0141 0.0114	0.0100 0.0114	0.0106 0.0130	0.0083 0.0108	0.0113	Ave		~~0.0112~~				15.0		15.0			
Methyl methacrylate	0.2037 0.2331	0.2074 0.2450	0.2126 0.2513	0.2208 0.2172	0.2223	Ave		0.2237				7.3		15.0			
2-Nitropropane	0.0721 0.0500	0.0549 0.0533	0.0579 0.0603	0.0458 0.0518	0.0467	Ave		0.0548				15.0		15.0			
~~Cyclohexanone~~	0.0142 0.0127	0.0111 0.0132	0.0120 0.0150	0.0102 0.0127	0.0116	Ave		~~0.0123~~				12.0		15.0			
1,2,3-Trimethylbenzene	2.9752 3.3029	2.8927 3.4342	3.0690 3.2713	3.0591 2.8697	3.1218	Ave		3.1107				6.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101218

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/12/2013 18:02 Calibration End Date: 09/12/2013 20:54 Calibration ID: 17434

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,3,5-Trichlorobenzene	1.5560 1.3313	1.4112 1.3006	1.3809 1.2806	1.2727 1.2351	1.3056	Ave		1.3416				7.2		15.0			
2-Methylnaphthalene	1.4918 1.6991	1.5380 1.6897	1.5050 1.5950	1.3893 1.3472	1.6266	Ave		1.5424				8.0		15.0			
n-Butyl acetate	0.5095 0.4741	0.4614 0.5235	0.4289 0.5500	0.4545 0.4624	0.4491	Ave		0.4793				8.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: BFB14517.D BFB Injection Date: 09/13/2013

Instrument ID: A3UX14 BFB Injection Time: 12:10

Analysis Batch No.: 101375

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.4	
75	30.0 - 60.0 % of mass 95	47.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.2	(0.3)1
174	50.0 - 120.00 % of mass 95	82.6	
175	5.0 - 9.0 % of mass 174	6.1	(7.4)1
176	95.0 - 101.0 % of mass 174	79.6	(96.4)1
177	5.0 - 9.0 % of mass 176	5.3	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-101375/3	144631.D	09/13/2013	12:52
	CCV 240-101375/4	144632.D	09/13/2013	13:14
DR-SB-48D-24-26	240-28680-2	144636.D	09/13/2013	14:40
DR-SB-48D-28-31	240-28680-3	144637.D	09/13/2013	15:01

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-101375/3 Calibration Date: 09/13/2013 12:52

Instrument ID: A3UX14 Calib Start Date: 09/12/2013 14:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/12/2013 17:40

Lab File ID: 144631.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3554	0.3454		1.00	0.0500	-2.8	50.0
Chloromethane	Ave	0.4709	0.4811	0.1000	1.00	0.0500	2.2	50.0
Vinyl chloride	Ave	0.3137	0.3508		1.00	0.0500	11.8	20.0
Bromomethane	Ave	0.1144	0.0943		1.00	0.0500	-17.5	50.0
Chloroethane	Lin1		0.1309		1.00	0.0500	2.2	50.0
Dichlorofluoromethane	Ave	0.3864	0.3884		2.00	0.0500	0.5	50.0
Trichlorofluoromethane	Lin1		0.3482		1.00	0.0500	-13.9	50.0
Ethyl ether	Lin1		0.2070		2.00	0.0500	0.7	50.0
Acrolein	Ave	0.0154	0.0123		20.0	0.250	-20.4	50.0
1,1-Dichloroethene	Ave	0.2118	0.2209		1.00	0.0500	4.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1957	0.2052		1.00	0.0500	4.8	50.0
Acetone	Lin1		0.0666		10.0	0.100	-20.4	50.0
Iodomethane	Ave	0.3623	0.3767		1.00	0.0500	4.0	50.0
Carbon disulfide	Ave	0.6347	0.6989		1.00	0.0500	10.1	50.0
3-Chloro-1-propene	Ave	0.1463	0.1547		2.00	0.0500	5.8	50.0
Methyl acetate	Ave	0.2329	0.1976		10.0	0.250	-15.2	50.0
Methylene Chloride	Qua		0.2919		1.00	0.0500	-25.8	50.0
tert-Butyl alcohol	Ave	0.0250	0.0210		50.0	0.500	-16.1	50.0
Acrylonitrile	Ave	0.1043	0.0937		20.0	0.500	-10.2	50.0
trans-1,2-Dichloroethene	Ave	0.2705	0.2715		1.00	0.0500	0.4	50.0
Methyl tert-butyl ether	Ave	0.7050	0.6532		1.00	0.0500	-7.3	50.0
Hexane	Lin1		0.0703		1.00	0.0500	-4.9	20.0
1,1-Dichloroethane	Ave	0.5598	0.5547	0.1000	1.00	0.0500	-0.9	50.0
Vinyl acetate	Ave	0.0269	0.0242		2.00	0.0480	-9.9	50.0
2,2-Dichloropropane	Ave	0.2297	0.2397		1.00	0.0500	4.3	50.0
cis-1,2-Dichloroethene	Ave	0.2831	0.2799		1.00	0.0500	-1.2	50.0
2-Butanone	Lin1		0.0986		10.0	0.100	-14.3	50.0
Bromochloromethane	Ave	0.1278	0.1182		1.00	0.0500	-7.5	50.0
Tetrahydrofuran	Ave	0.0932	0.0730		3.00	0.100	-21.7	50.0
Chloroform	Ave	0.4913	0.4504		1.00	0.0500	-8.3	20.0
1,1,1-Trichloroethane	Ave	0.3845	0.3776		1.00	0.0500	-1.8	50.0
Cyclohexane	Ave	0.6518	0.6651		1.00	0.0500	2.0	50.0
1,1-Dichloropropene	Ave	0.3475	0.3465		1.00	0.0500	-0.3	50.0
Carbon tetrachloride	Ave	0.3497	0.3517		1.00	0.0500	0.6	50.0
Isobutyl alcohol	Ave	0.0087	0.0073		50.0	1.25	-15.9	50.0
Benzene	Ave	1.046	1.023		1.00	0.0500	-2.2	50.0
1,2-Dichloroethane	Ave	0.4128	0.3474		1.00	0.0500	-15.8	50.0
n-Heptane	Lin1		0.0773		1.00	0.0500	-4.9	50.0
Trichloroethene	Ave	0.2822	0.2688		1.00	0.0500	-4.8	50.0
Methylcyclohexane	Ave	0.5014	0.5140		1.00	0.0500	2.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-101375/3 Calibration Date: 09/13/2013 12:52

Instrument ID: A3UX14 Calib Start Date: 09/12/2013 14:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/12/2013 17:40

Lab File ID: 144631.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2865	0.2796		1.00	0.0500	-2.4	20.0
Dibromomethane	Ave	0.1378	0.1198		1.00	0.0500	-13.1	50.0
1,4-Dioxane	Lin1		0.0018		50.0	1.00	-13.4	50.0
Bromodichloromethane	Ave	0.3135	0.2918		1.00	0.0500	-6.9	50.0
2-Chloroethyl vinyl ether	Ave	0.1267	0.1221		10.0	0.100	-3.6	50.0
cis-1,3-Dichloropropene	Ave	0.3492	0.3400		1.00	0.0500	-2.6	50.0
4-Methyl-2-pentanone	Ave	0.3745	0.3352		10.0	0.100	-10.5	50.0
Toluene	Ave	1.746	1.633		1.00	0.0500	-6.5	20.0
trans-1,3-Dichloropropene	Ave	0.4429	0.4132		1.00	0.0500	-6.7	50.0
Ethyl methacrylate	Ave	0.3212	0.3177		1.00	0.0500	-1.1	50.0
1,1,2-Trichloroethane	Lin1		0.2555		1.00	0.0500	-6.7	50.0
Tetrachloroethene	Ave	0.3396	0.3334		1.00	0.0500	-1.8	50.0
1,3-Dichloropropane	Ave	0.4885	0.4586		1.00	0.0500	-6.1	50.0
2-Hexanone	Ave	0.2190	0.1971		10.0	0.100	-10.0	50.0
Dibromochloromethane	Ave	0.3075	0.2909		1.00	0.0500	-5.4	50.0
1,2-Dibromoethane	Ave	0.2713	0.2533		1.00	0.0500	-6.7	50.0
Chlorobenzene	Ave	1.076	1.018	0.3000	1.00	0.0500	-5.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3886	0.3763		1.00	0.0500	-3.1	50.0
Ethylbenzene	Ave	0.5629	0.5692		1.00	0.0500	1.1	20.0
m-Xylene & p-Xylene	Ave	0.6903	0.7013		2.00	0.0500	1.6	50.0
o-Xylene	Ave	0.6754	0.6925		1.00	0.0500	2.5	50.0
Styrene	Ave	1.005	1.041		1.00	0.0500	3.6	50.0
Bromoform	Ave	0.1785	0.1641	0.1000	1.00	0.0500	-8.0	50.0
Isopropylbenzene	Ave	1.832	1.961		1.00	0.0500	7.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6197	0.5966	0.3000	1.00	0.0500	-3.7	50.0
Bromobenzene	Ave	0.8485	0.8047		1.00	0.0500	-5.2	50.0
1,2,3-Trichloropropane	Ave	0.2184	0.1771		1.00	0.0500	-18.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2410	0.2056		1.00	0.0500	-14.7	50.0
n-Propylbenzene	Ave	0.9417	0.997		1.00	0.0500	5.9	50.0
2-Chlorotoluene	Ave	0.8014	0.8192		1.00	0.0500	2.2	50.0
1,3,5-Trimethylbenzene	Ave	3.007	3.219		1.00	0.0500	7.1	50.0
4-Chlorotoluene	Ave	0.8248	0.8030		1.00	0.0500	-2.6	50.0
tert-Butylbenzene	Ave	2.763	2.851		1.00	0.0500	3.2	50.0
1,2,4-Trimethylbenzene	Ave	3.090	3.260		1.00	0.0500	5.5	50.0
sec-Butylbenzene	Ave	3.718	4.247		1.00	0.0500	14.2	50.0
1,3-Dichlorobenzene	Ave	1.664	1.579		1.00	0.0500	-5.1	50.0
p-Isopropyltoluene	Ave	3.207	3.574		1.00	0.0500	11.4	50.0
1,4-Dichlorobenzene	Ave	1.666	1.556		1.00	0.0500	-6.6	50.0
n-Butylbenzene	Ave	2.910	3.154		1.00	0.0500	8.4	50.0
1,2-Dichlorobenzene	Ave	1.582	1.474		1.00	0.0500	-6.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1310	0.1137		2.00	0.0500	-13.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVIS 240-101375/3 Calibration Date: 09/13/2013 12:52

Instrument ID: A3UX14 Calib Start Date: 09/12/2013 14:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/12/2013 17:40

Lab File ID: 144631.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Ave	1.206	1.165		1.00	0.0500	-3.5	50.0
Hexachlorobutadiene	Ave	0.7080	0.7243		1.00	0.0500	2.3	50.0
Naphthalene	Ave	2.430	2.188		1.00	0.0500	-9.9	50.0
1,2,3-Trichlorobenzene	Ave	1.120	1.040		1.00	0.0500	-7.2	50.0
Dibromofluoromethane (Surr)	Lin1		0.2322		0.0445	0.0500	-11.0	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2646		0.0399	0.0500	-20.3	50.0
Toluene-d8 (Surr)	Lin1		1.424		0.0460	0.0500	-7.9	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.9424		0.0430	0.0500	-14.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101375/4 Calibration Date: 09/13/2013 13:14

Instrument ID: A3UX14 Calib Start Date: 09/12/2013 18:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/12/2013 20:54

Lab File ID: 144632.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
~~Acetonitrile~~	Ave	0.0336	~~0.0357~~		20.0	0.500	6.1	50.0
2-Chloro-1,3-butadiene	Ave	0.5673	0.6075		1.00	0.0500	7.1	50.0
Diisopropyl ether	Ave	0.2296	0.2543		10.0	0.0500	10.8	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.9945	1.029		5.00	0.0500	3.5	50.0
~~Propionitrile~~	Ave	0.0401	~~0.0406~~		5.00	0.500	1.3	50.0
Ethyl acetate	Ave	0.2223	0.2169		4.00	0.100	-2.4	50.0
Methacrylonitrile	Ave	0.1718	0.1748		2.00	0.500	1.7	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6627	0.6881		5.00	0.0500	3.8	50.0
~~n-Butanol~~	Ave	0.0112	~~0.0110~~		50.0	1.25	-1.8	50.0
Methyl methacrylate	Ave	0.2237	0.2237		2.00	0.100	-0.0	50.0
~~2-Nitropropane~~	Ave	0.0548	~~0.0466~~		2.00	0.100	-14.8	50.0
~~Cyclohexanone~~	Ave	0.0125	~~0.0123~~		20.0	0.500	-1.8	50.0
1,2,3-Trimethylbenzene	Ave	3.111	3.459		0.0556	0.0500	11.2	50.0
1,3,5-Trichlorobenzene	Ave	1.342	1.413		1.00	0.0500	5.3	50.0
2-Methylnaphthalene	Ave	1.542	1.674		5.00	0.100	8.5	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: UXJ4053.D Lab Sample ID: MB 240-101342/5

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX11 Date Analyzed: 09/13/2013 12:09

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-101342/4	UXJ4051.D	09/13/2013 11:23
TB-090413	240-28680-6	UXJ4067.D	09/13/2013 17:39

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-101342/5

Matrix: Water | Lab File ID: UXJ4053.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/13/2013 12:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 101342 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-101342/5

Matrix: Water Lab File ID: UXJ4053.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/13/2013 12:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 101342 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
75-09-2	Methylene Chloride	0.797	J	1.0	0.33
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.396	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
75-65-0	tert-Butyl alcohol	50	U	50	3.9
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-101342/5

Matrix: Water Lab File ID: UXJ4053.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/13/2013 12:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 101342 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	83		74-115
1868-53-7	Dibromofluoromethane (Surr)	103		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-101342/5

Matrix: Water | Lab File ID: UXJ4053.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/13/2013 12:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 101342 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 12.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
71-36-3	n-Butanol	5.67	12.5	J

FORM I-TIC 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ4051.D

Lab ID: LCS 240-101342/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.88	99	72-116	
1,1,1-Trichloroethane	10.0	9.77	98	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.18	92	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.2	112	74-151	
1,1-Dichloroethane	10.0	10.0	100	82-115	
1,1-Dichloroethene	10.0	8.52	85	78-131	
1,1-Dichloropropene	10.0	9.24	92	83-114	
1,2,3-Trichlorobenzene	10.0	9.13	91	54-126	
1,2,3-Trichloropropane	10.0	10.2	102	73-129	
1,2,3-Trimethylbenzene	10.0	9.24	92	70-130	
1,2,4-Trichlorobenzene	10.0	8.30	83	48-135	
1,2,4-Trimethylbenzene	10.0	9.80	98	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.78	88	42-136	
1,2-Dichlorobenzene	10.0	9.85	98	81-110	
1,2-Dichloroethane	10.0	10.1	101	71-127	
1,2-Dichloropropane	10.0	9.76	98	81-115	
1,3-Dichlorobenzene	10.0	9.62	96	80-110	
1,3-Dichloropropane	10.0	9.30	93	79-116	
1,4-Dichlorobenzene	10.0	9.57	96	82-110	
2,2-Dichloropropane	10.0	9.75	97	50-129	
2-Chloroethyl vinyl ether	10.0	7.86 J	79	52-131	
2-Chlorotoluene	10.0	9.37	94	76-116	
2-Hexanone	20.0	15.8	79	55-133	
4-Chlorotoluene	10.0	10.2	102	77-115	
Acetone	20.0	16.9	85	43-136	
Benzene	10.0	10.2	102	83-112	
Bromobenzene	10.0	10.1	101	76-115	
Bromochloromethane	10.0	10.4	104	77-120	
Bromoform	10.0	9.99	100	40-131	
Bromomethane	10.0	8.75	88	11-185	
Carbon disulfide	10.0	8.32	83	62-142	
Carbon tetrachloride	10.0	10.5	105	66-128	
Chlorobenzene	10.0	9.54	95	85-110	
Chloroethane	10.0	8.69	87	25-153	
Chloroform	10.0	9.85	98	79-117	
Chloromethane	10.0	7.83	78	44-126	
cis-1,2-Dichloroethene	10.0	9.87	99	80-113	
Bromodichloromethane	10.0	10.3	103	72-121	
cis-1,3-Dichloropropene	10.0	9.33	93	61-115	
1,2-Dibromoethane	10.0	9.50	95	79-113	
Dibromomethane	10.0	9.48	95	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ4051.D

Lab ID: LCS 240-101342/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	8.86	89	19-129	
Diisopropyl ether	10.0	9.89 J	99	77-118	
Ethylbenzene	10.0	9.53	95	83-112	
Hexachlorobutadiene	10.0	8.85	88	36-134	
Isopropylbenzene	10.0	9.27	93	75-114	
2-Butanone	20.0	17.0	85	60-126	
4-Methyl-2-pentanone	20.0	16.4	82	63-128	
m-Xylene & p-Xylene	20.0	20.3	101	83-113	
Methyl tert-butyl ether	10.0	9.49	95	52-144	
Naphthalene	10.0	7.79	78	32-141	
n-Butylbenzene	10.0	9.59	96	66-125	
Methylene Chloride	10.0	9.85	98	66-131	
n-Propylbenzene	10.0	11.1	111	74-121	
o-Xylene	10.0	9.97	100	83-113	
p-Isopropyltoluene	10.0	10.1	101	74-120	
sec-Butylbenzene	10.0	9.59	96	70-117	
Styrene	10.0	10.5	105	79-114	
tert-Butylbenzene	10.0	9.71	97	71-115	
Tetrachloroethene	10.0	9.82	98	79-114	
Toluene	10.0	9.98	100	84-111	
trans-1,2-Dichloroethene	10.0	9.97	100	83-117	
trans-1,3-Dichloropropene	10.0	9.35	94	58-117	
Trichloroethene	10.0	9.80	98	76-117	
Trichlorofluoromethane	10.0	9.24	92	49-157	
tert-Butyl alcohol	200	171	86	70-130	
Vinyl acetate	10.0	12.6	126	46-161	
Vinyl chloride	10.0	8.07	81	53-127	
Dibromochloromethane	10.0	9.85	99	64-119	
Xylenes, Total	30.0	30.3	101	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: UX87317.D Lab Sample ID: MB 240-100523/1-A

Matrix: Solid Heated Purge: (Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 09/10/2013 12:42

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-100523/2-A	UX87318.D	09/10/2013 13:03
DR-SB-48D-19-21	240-28680-1	UX87354.D	09/11/2013 12:25
DR-SB-48D-34-36	240-28680-4	UX87355.D	09/11/2013 12:46
DR-SB-48D-24-26	240-28680-2	144636.D	09/13/2013 14:40
DR-SB-48D-28-31 RE	240-28680-3	144637.D	09/13/2013 15:01

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100523/1-A

Matrix: Solid | Lab File ID: UX87317.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 09/10/2013 12:42

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 100739 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	250	U	250	9.1
71-55-6	1,1,1-Trichloroethane	250	U	250	21
79-34-5	1,1,2,2-Tetrachloroethane	250	U	250	8.9
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	250	U	250	39
75-34-3	1,1-Dichloroethane	250	U	250	17
75-35-4	1,1-Dichloroethene	250	U	250	18
563-58-6	1,1-Dichloropropene	250	U	250	10
87-61-6	1,2,3-Trichlorobenzene	250	U	250	10
96-18-4	1,2,3-Trichloropropane	250	U	250	21
526-73-8	1,2,3-Trimethylbenzene	250	U	250	0.17
120-82-1	1,2,4-Trichlorobenzene	250	U	250	7.3
95-63-6	1,2,4-Trimethylbenzene	250	U	250	5.0
96-12-8	1,2-Dibromo-3-Chloropropane	500	U	500	50
95-50-1	1,2-Dichlorobenzene	250	U	250	8.6
107-06-2	1,2-Dichloroethane	250	U	250	10
78-87-5	1,2-Dichloropropane	250	U	250	8.2
541-73-1	1,3-Dichlorobenzene	250	U	250	4.8
142-28-9	1,3-Dichloropropane	250	U	250	22
106-46-7	1,4-Dichlorobenzene	250	U	250	8.0
594-20-7	2,2-Dichloropropane	250	U	250	23
110-75-8	2-Chloroethyl vinyl ether	1000	U	1000	43
95-49-8	2-Chlorotoluene	250	U	250	9.0
591-78-6	2-Hexanone	1000	U	1000	20
106-43-4	4-Chlorotoluene	250	U	250	9.9
67-64-1	Acetone	1000	U	1000	170
71-43-2	Benzene	250	U	250	12
108-86-1	Bromobenzene	250	U	250	13
74-97-5	Bromochloromethane	250	U	250	13
75-25-2	Bromoform	250	U	250	19
74-83-9	Bromomethane	250	U	250	29
75-15-0	Carbon disulfide	250	U	250	12
56-23-5	Carbon tetrachloride	250	U	250	6.4
108-90-7	Chlorobenzene	250	U	250	6.4
75-00-3	Chloroethane	250	U	250	61
67-66-3	Chloroform	250	U	250	8.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100523/1-A

Matrix: Solid | Lab File ID: UX87317.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 09/10/2013 12:42

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 100739 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	250	U	250	14
156-59-2	cis-1,2-Dichloroethene	250	U	250	6.9
75-27-4	Bromodichloromethane	250	U	250	9.9
10061-01-5	cis-1,3-Dichloropropene	250	U	250	7.9
106-93-4	1,2-Dibromoethane	250	U	250	10
74-95-3	Dibromomethane	250	U	250	14
75-71-8	Dichlorodifluoromethane	250	U	250	16
108-20-3	Diisopropyl ether	500	U	500	50
100-41-4	Ethylbenzene	250	U	250	5.4
87-68-3	Hexachlorobutadiene	250	U	250	14
98-82-8	Isopropylbenzene	250	U	250	6.5
78-93-3	2-Butanone	1000	U	1000	43
108-10-1	4-Methyl-2-pentanone	1000	U	1000	48
179601-23-1	m-Xylene & p-Xylene	250	U	250	6.2
1634-04-4	Methyl tert-butyl ether	250	U	250	7.1
91-20-3	Naphthalene	250	U	250	6.7
104-51-8	n-Butylbenzene	250	U	250	8.0
75-09-2	Methylene Chloride	250	U	250	77
103-65-1	n-Propylbenzene	250	U	250	14
95-47-6	o-Xylene	250	U	250	8.5
99-87-6	p-Isopropyltoluene	250	U	250	4.8
135-98-8	sec-Butylbenzene	250	U	250	4.7
637-92-3	Ethyl-t-butyl ether (ETBE)	250	U	250	0.22
100-42-5	Styrene	250	U	250	5.6
994-05-8	Tert-amyl-methyl ether (TAME)	250	U	250	0.37
98-06-6	tert-Butylbenzene	250	U	250	6.5
127-18-4	Tetrachloroethene	250	U	250	12
108-88-3	Toluene	250	U	250	17
156-60-5	trans-1,2-Dichloroethene	250	U	250	9.2
10061-02-6	trans-1,3-Dichloropropene	250	U	250	20
79-01-6	Trichloroethene	250	U	250	9.7
75-69-4	Trichlorofluoromethane	250	U	250	16
75-65-0	tert-Butyl alcohol	10000	U	10000	240
108-05-4	Vinyl acetate	500	U	500	23
75-01-4	Vinyl chloride	250	U	250	18
124-48-1	Dibromochloromethane	250	U	250	12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100523/1-A

Matrix: Solid | Lab File ID: UX87317.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 09/10/2013 12:42

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 100739 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	500	U	500	6.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		39-128
460-00-4	4-Bromofluorobenzene (Surr)	91		26-141
2037-26-5	Toluene-d8 (Surr)	94		33-134
1868-53-7	Dibromofluoromethane (Surr)	90		30-122

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100523/1-A

Matrix: Solid Lab File ID: UX87317.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5.00(g) Date Analyzed: 09/10/2013 12:42

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Medium

Analysis Batch No.: 100739 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I-TIC 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: UX87318.D

Lab ID: LCS 240-100523/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	500	432	86	27-121	
1,1,1-Trichloroethane	500	421	84	38-122	
1,1,2,2-Tetrachloroethane	500	512	102	54-121	
1,1,2-Trichloro-1,2,2-trichfluoroethane	500	405	81	48-151	
1,1-Dichloroethane	500	472	94	63-117	
1,1-Dichloroethene	500	380	76	44-143	
1,1-Dichloropropene	500	493	99	60-123	
1,2,3-Trichlorobenzene	500	491	98	43-129	
1,2,3-Trichloropropane	500	559	112	74-124	
1,2,4-Trichlorobenzene	500	407	81	41-135	
1,2,4-Trimethylbenzene	500	457	91	62-133	
1,2-Dibromo-3-Chloropropane	500	447 J	89	10-129	
1,2-Dichlorobenzene	500	480	96	68-118	
1,2-Dichloroethane	500	496	99	68-119	
1,2-Dichloropropane	500	498	100	73-113	
1,3-Dichlorobenzene	500	456	91	66-121	
1,3-Dichloropropane	500	510	102	74-119	
1,4-Dichlorobenzene	500	473	95	65-119	
2,2-Dichloropropane	500	318	64	25-123	
2-Chloroethyl vinyl ether	1000	946 J	95	25-140	
2-Chlorotoluene	500	481	96	68-122	
2-Hexanone	1000	1080	108	43-130	
4-Chlorotoluene	500	490	98	68-122	
Acetone	1000	774 J	77	16-156	
Benzene	500	502	100	70-117	
Bromobenzene	500	505	101	72-120	
Bromochloromethane	500	489	98	56-128	
Bromoform	500	361	72	10-117	
Bromomethane	500	264	53	10-114	
Carbon disulfide	500	232 J	46	10-132	
Carbon tetrachloride	500	385	77	29-118	
Chlorobenzene	500	494	99	71-116	
Chloroethane	500	274	55	10-120	
Chloroform	500	485	97	63-116	
Chloromethane	500	303	61	25-110	
cis-1,2-Dichloroethene	500	479	96	60-125	
Bromodichloromethane	500	393	79	28-123	
cis-1,3-Dichloropropene	500	378	76	25-120	
1,2-Dibromoethane	500	464	93	47-123	
Dibromomethane	500	483	97	68-118	
Dichlorodifluoromethane	500	193 J	39	10-110	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: UX87318.D

Lab ID: LCS 240-100523/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	500	475	95	66-119	
Hexachlorobutadiene	500	400	80	34-135	
Isopropylbenzene	500	468	94	61-123	
2-Butanone	1000	1060	106	10-199	
4-Methyl-2-pentanone	1000	997 J	100	49-121	
m-Xylene & p-Xylene	500	462	92	67-118	
Methyl tert-butyl ether	500	472	94	34-157	
Naphthalene	500	510	102	37-126	
n-Butylbenzene	500	370	74	51-137	
Methylene Chloride	500	348	70	27-172	
n-Propylbenzene	500	476	95	64-130	
o-Xylene	500	512	102	68-120	
p-Isopropyltoluene	500	442	88	56-136	
sec-Butylbenzene	500	482	96	58-131	
Styrene	500	448	90	60-120	
tert-Butylbenzene	500	505	101	58-128	
Tetrachloroethene	500	478	96	58-131	
Toluene	500	497	99	66-123	
trans-1,2-Dichloroethene	500	448	90	58-121	
trans-1,3-Dichloropropene	500	394	79	22-122	
Trichloroethene	500	475	95	59-124	
Trichlorofluoromethane	500	323	65	17-145	
tert-Butyl alcohol	5000	2000 J	40	70-130	*
Vinyl acetate	800	466 J	58	60-125	*
Vinyl chloride	500	333	67	33-110	
Dibromochloromethane	500	347	69	22-113	
Xylenes, Total	1000	974	97	68-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: UX87328.D Lab Sample ID: MB 240-100925/6

Matrix: Solid Heated Purge: (Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 09/11/2013 03:00

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-100925/5	UX87327.D	09/11/2013 02:39
DR-SB-48D-28-31	240-28680-3	UX87336.D	09/11/2013 06:03
DR-SB-48D-40-42	240-28680-5	UX87337.D	09/11/2013 06:24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100925/6

Matrix: Solid | Lab File ID: UX87328.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/11/2013 03:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100925 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	0.62
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.34
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	1.3
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.36
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.52
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.30
87-61-6	1,2,3-Trichlorobenzene	5.0	U	5.0	0.38
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	0.90
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.17
120-82-1	1,2,4-Trichlorobenzene	0.418	J	5.0	0.27
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	1.3
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.36
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.34
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.69
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.35
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.34
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.66
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.94
110-75-8	2-Chloroethyl vinyl ether	50	U	50	1.4
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.40
591-78-6	2-Hexanone	20	U	20	0.63
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.41
67-64-1	Acetone	9.90	J	20	6.3
71-43-2	Benzene	5.0	U	5.0	0.23
108-86-1	Bromobenzene	5.0	U	5.0	0.33
74-97-5	Bromochloromethane	5.0	U	5.0	0.71
75-25-2	Bromoform	5.0	U	5.0	0.33
74-83-9	Bromomethane	5.0	U	5.0	0.54
75-15-0	Carbon disulfide	5.0	U	5.0	0.44
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.37
108-90-7	Chlorobenzene	5.0	U	5.0	0.33
75-00-3	Chloroethane	5.0	U	5.0	0.86
67-66-3	Chloroform	5.0	U	5.0	0.29

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100925/6

Matrix: Solid Lab File ID: UX87328.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 09/11/2013 03:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 100925 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.0	U	5.0	0.41
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.36
75-27-4	Bromodichloromethane	5.0	U	5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.34
106-93-4	1,2-Dibromoethane	5.0	U	5.0	0.50
74-95-3	Dibromomethane	5.0	U	5.0	0.63
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	0.50
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	5.0	U	5.0	0.26
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.2
98-82-8	Isopropylbenzene	5.0	U	5.0	0.16
78-93-3	2-Butanone	20	U	20	1.4
108-10-1	4-Methyl-2-pentanone	20	U	20	0.54
179601-23-1	m-Xylene & p-Xylene	10	U	10	1.2
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.43
91-20-3	Naphthalene	1.07	J	5.0	0.19
104-51-8	n-Butylbenzene	5.0	U	5.0	0.23
75-09-2	Methylene Chloride	3.07	J	5.0	0.67
103-65-1	n-Propylbenzene	5.0	U	5.0	0.40
95-47-6	o-Xylene	5.0	U	5.0	0.35
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.21
135-98-8	sec-Butylbenzene	5.0	U	5.0	0.18
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.22
100-42-5	Styrene	5.0	U	5.0	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.37
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.29
127-18-4	Tetrachloroethene	5.0	U	5.0	0.52
108-88-3	Toluene	5.0	U	5.0	0.27
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.41
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.54
79-01-6	Trichloroethene	5.0	U	5.0	0.42
75-69-4	Trichlorofluoromethane	5.0	U	5.0	0.34
75-65-0	tert-Butyl alcohol	200	U	200	7.6
108-05-4	Vinyl acetate	10	U	10	0.25
75-01-4	Vinyl chloride	5.0	U	5.0	0.39
124-48-1	Dibromochloromethane	5.0	U	5.0	0.55

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100925/6

Matrix: Solid | Lab File ID: UX87328.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/11/2013 03:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100925 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	10	U	10	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		58-123
460-00-4	4-Bromofluorobenzene (Surr)	96		52-136
2037-26-5	Toluene-d8 (Surr)	101		67-125
1868-53-7	Dibromofluoromethane (Surr)	104		37-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100925/6

Matrix: Solid | Lab File ID: UX87328.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/11/2013 03:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100925 | Units: ug/Kg

Number TICs Found: 1 | TIC Result Total: 0.892

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
60-29-7	Ethyl ether	2.75	0.892	J

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87327.D

Lab ID: LCS 240-100925/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	55.1	110	81-119	
1,1,1-Trichloroethane	50.0	55.1	110	77-126	
1,1,2,2-Tetrachloroethane	50.0	55.6	111	77-123	
1,1,2-Trichloro-1,2,2-trichfluoroethane	50.0	55.7	111	82-138	
1,1-Dichloroethane	50.0	52.1	104	76-115	
1,1-Dichloroethene	50.0	53.2	106	75-135	
1,1-Dichloropropene	50.0	60.5	121	80-120	*
1,2,3-Trichlorobenzene	50.0	43.1	86	61-121	
1,2,3-Trichloropropane	50.0	57.4	115	84-126	
1,2,4-Trichlorobenzene	50.0	47.9	96	64-124	
1,2,4-Trimethylbenzene	50.0	51.6	103	80-129	
1,2-Dibromo-3-Chloropropane	50.0	58.0	116	61-132	
1,2-Dichlorobenzene	50.0	48.7	97	76-110	
1,2-Dichloroethane	50.0	51.5	103	72-120	
1,2-Dichloropropane	50.0	52.1	104	87-113	
1,3-Dichlorobenzene	50.0	49.5	99	78-111	
1,3-Dichloropropane	50.0	52.3	105	82-118	
1,4-Dichlorobenzene	50.0	48.7	97	75-110	
2,2-Dichloropropane	50.0	51.0	102	69-135	
2-Chloroethyl vinyl ether	120	140	117	28-173	
2-Chlorotoluene	50.0	51.8	104	78-119	
2-Hexanone	100	134	134	64-136	
4-Chlorotoluene	50.0	51.7	103	79-118	
Acetone	100	138	138	41-137	*
Benzene	50.0	52.8	106	79-112	
Bromobenzene	50.0	51.6	103	81-115	
Bromochloromethane	50.0	52.9	106	79-111	
Bromoform	50.0	50.1	100	62-133	
Bromomethane	50.0	48.7	97	42-136	
Carbon disulfide	50.0	55.8	112	62-146	
Carbon tetrachloride	50.0	59.9	120	71-129	
Chlorobenzene	50.0	49.9	100	78-110	
Chloroethane	50.0	48.5	97	58-117	
Chloroform	50.0	52.2	104	77-114	
Chloromethane	50.0	45.9	92	50-110	
cis-1,2-Dichloroethene	50.0	53.4	107	76-113	
Bromodichloromethane	50.0	54.0	108	84-122	
cis-1,3-Dichloropropene	50.0	49.4	99	74-128	
1,2-Dibromoethane	50.0	55.3	111	83-117	
Dibromomethane	50.0	54.6	109	85-120	
Dichlorodifluoromethane	50.0	48.4	97	26-113	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87327.D

Lab ID: LCS 240-100925/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	50.0	52.7	105	79-117	
Hexachlorobutadiene	50.0	40.1	80	54-131	
Isopropylbenzene	50.0	55.7	111	76-122	
2-Butanone	100	124	124	52-131	
4-Methyl-2-pentanone	100	131	131	67-135	
m-Xylene & p-Xylene	50.0	51.8	104	80-117	
Methyl tert-butyl ether	50.0	54.2	108	49-165	
Naphthalene	50.0	54.3	109	65-123	
n-Butylbenzene	50.0	46.9	94	68-135	
Methylene Chloride	50.0	53.9	108	75-118	
n-Propylbenzene	50.0	53.3	107	81-129	
o-Xylene	50.0	55.5	111	80-120	
p-Isopropyltoluene	50.0	53.8	108	77-131	
sec-Butylbenzene	50.0	55.9	112	74-129	
Styrene	50.0	53.9	108	87-117	
tert-Butylbenzene	50.0	54.3	109	76-126	
Tetrachloroethene	50.0	54.2	108	79-114	
Toluene	50.0	51.2	102	75-111	
trans-1,2-Dichloroethene	50.0	53.9	108	78-117	
trans-1,3-Dichloropropene	50.0	51.1	102	73-131	
Trichloroethene	50.0	53.5	107	79-113	
Trichlorofluoromethane	50.0	52.4	105	57-146	
tert-Butyl alcohol	500	641	128	60-125	*
Vinyl acetate	80.0	73.1	91	70-130	
Vinyl chloride	50.0	48.8	98	57-114	
Dibromochloromethane	50.0	50.0	100	72-127	
Xylenes, Total	100	107	107	80-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87348.D

Lab ID: 240-28747-E-3-A MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	26.3	5.6 U	26.3	100	34-135	
1,1,1-Trichloroethane	26.3	5.6 U	26.8	102	51-128	
1,1,2,2-Tetrachloroethane	26.3	5.6 U	26.9	103	16-179	
1,1,2-Trichloro-1,2,2-trichfluoroethane	26.3	5.6 U	27.9	106	50-147	
1,1-Dichloroethane	26.3	5.6 U	26.8	102	54-122	
1,1-Dichloroethene	26.3	5.6 U	26.7	102	49-157	
1,1-Dichloropropene	26.3	5.6 U	29.4	112	50-122	
1,2,3-Trichlorobenzene	26.3	5.6 U	20.9	80	10-110	
1,2,3-Trichloropropane	26.3	5.6 U	26.1	100	32-174	
1,2,4-Trichlorobenzene	26.3	5.6 U	19.9	76	10-111	
1,2,4-Trimethylbenzene	26.3	5.6 U	20.9	79	10-173	
1,2-Dibromo-3-Chloropropane	26.3	11 U	25.4	97	10-153	
1,2-Dichlorobenzene	26.3	5.6 U	21.7	83	17-122	
1,2-Dichloroethane	26.3	5.6 U	26.0	99	49-123	
1,2-Dichloropropane	26.3	5.6 U	26.3	100	61-117	
1,3-Dichlorobenzene	26.3	5.6 U	20.4	78	16-126	
1,3-Dichloropropane	26.3	5.6 U	25.5	97	54-128	
1,4-Dichlorobenzene	26.3	5.6 U	20.2	77	15-121	
2,2-Dichloropropane	26.3	5.6 U	24.5	93	49-132	
2-Chloroethyl vinyl ether	63.0	56 U	60.1	95	10-162	
2-Chlorotoluene	26.3	5.6 U	22.0	84	11-162	
2-Hexanone	52.5	22 U	53.6	102	37-147	
4-Chlorotoluene	26.3	5.6 U	21.6	82	15-149	
Acetone	52.5	57	187	246	24-140	F
Benzene	26.3	5.6 U	26.6	101	53-118	
Bromobenzene	26.3	5.6 U	22.9	87	24-144	
Bromochloromethane	26.3	5.6 U	26.0	99	53-116	
Bromoform	26.3	5.6 U	21.6	82	18-129	
Bromomethane	26.3	5.6 U	26.3	100	33-130	
Carbon disulfide	26.3	0.73 J	27.4	101	20-151	
Carbon tetrachloride	26.3	5.6 U	28.0	107	32-137	
Chlorobenzene	26.3	5.6 U	23.6	90	37-116	
Chloroethane	26.3	5.6 U	25.4	97	45-118	
Chloroform	26.3	5.6 U	27.1	103	53-119	
Chloromethane	26.3	5.6 U	24.0	91	34-117	
cis-1,2-Dichloroethene	26.3	5.1 J	33.4	108	50-119	
Bromodichloromethane	26.3	5.6 U	26.2	100	35-132	
cis-1,3-Dichloropropene	26.3	5.6 U	22.9	87	27-133	
1,2-Dibromoethane	26.3	5.6 U	25.4	97	45-127	
Dibromomethane	26.3	5.6 U	26.3	100	52-123	
Dichlorodifluoromethane	26.3	5.6 U	23.7	90	17-115	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87348.D

Lab ID: 240-28747-E-3-A MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Ethylbenzene	26.3	5.6 U	21.9	83	30-131	
Hexachlorobutadiene	26.3	5.6 U	17.1	65	10-131	
Isopropylbenzene	26.3	5.6 U	22.4	85	21-134	
2-Butanone	52.5	22 U	56.7	108	30-143	
4-Methyl-2-pentanone	52.5	22 U	53.5	102	43-147	
m-Xylene & p-Xylene	26.3	11 U	22.6	86	29-131	
Methyl tert-butyl ether	26.3	5.6 U	25.8	98	51-157	
Naphthalene	26.3	5.6 U	23.5	89	10-124	
n-Butylbenzene	26.3	5.6 U	16.3	62	10-148	
Methylene Chloride	26.3	5.6 U	25.9	99	54-115	
n-Propylbenzene	26.3	5.6 U	20.9	80	10-178	
o-Xylene	26.3	5.6 U	24.4	93	29-134	
p-Isopropyltoluene	26.3	5.6 U	19.8	75	10-165	
sec-Butylbenzene	26.3	5.6 U	21.7	83	10-172	
Styrene	26.3	5.6 U	22.9	87	27-127	
tert-Butylbenzene	26.3	5.6 U	22.4	85	10-163	
Tetrachloroethene	26.3	5.6 U	24.1	92	31-135	
Toluene	26.3	5.6 U	25.2	96	39-129	
trans-1,2-Dichloroethene	26.3	5.6 U	27.7	105	50-123	
trans-1,3-Dichloropropene	26.3	5.6 U	23.4	89	28-137	
Trichloroethene	26.3	3.6 J	28.7	96	10-177	
Trichlorofluoromethane	26.3	5.6 U	25.4	97	36-142	
tert-Butyl alcohol	263	220 U	217	83	60-125	
Vinyl acetate	42.0	11 U	33.6	80	70-130	
Vinyl chloride	26.3	2.2 J	28.9	102	42-117	
Dibromochloromethane	26.3	5.6 U	23.3	89	29-135	
Xylenes, Total	52.5	11 U	47.0	89	30-131	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87349.D

Lab ID: 240-28747-F-3-A MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	26.6	28.4	107	8	30	34-135	
1,1,1-Trichloroethane	26.6	26.9	101	1	30	51-128	
1,1,2,2-Tetrachloroethane	26.6	26.6	100	1	30	16-179	
1,1,2-Trichloro-1,2,2-trichfluoroethane	26.6	26.7	100	5	30	50-147	
1,1-Dichloroethane	26.6	26.5	100	1	30	54-122	
1,1-Dichloroethene	26.6	25.4	96	5	30	49-157	
1,1-Dichloropropene	26.6	28.8	109	2	30	50-122	
1,2,3-Trichlorobenzene	26.6	24.4	92	15	30	10-110	
1,2,3-Trichloropropane	26.6	26.0	98	0	30	32-174	
1,2,4-Trichlorobenzene	26.6	23.0	86	14	30	10-111	
1,2,4-Trimethylbenzene	26.6	26.3	99	23	30	10-173	
1,2-Dibromo-3-Chloropropane	26.6	24.6	93	3	30	10-153	
1,2-Dichlorobenzene	26.6	25.7	97	17	30	17-122	
1,2-Dichloroethane	26.6	26.7	100	2	30	49-123	
1,2-Dichloropropane	26.6	27.7	104	5	30	61-117	
1,3-Dichlorobenzene	26.6	24.7	93	19	30	16-126	
1,3-Dichloropropane	26.6	26.2	99	3	30	54-128	
1,4-Dichlorobenzene	26.6	24.6	93	20	30	15-121	
2,2-Dichloropropane	26.6	24.4	92	0	30	49-132	
2-Chloroethyl vinyl ether	63.7	65.9	103	9	30	10-162	
2-Chlorotoluene	26.6	26.8	101	20	30	11-162	
2-Hexanone	53.1	53.5	101	0	30	37-147	
4-Chlorotoluene	26.6	25.6	97	17	30	15-149	
Acetone	53.1	53.6	-7	111	30	24-140	F
Benzene	26.6	27.3	103	2	30	53-118	
Bromobenzene	26.6	27.3	103	18	30	24-144	
Bromochloromethane	26.6	26.5	100	2	30	53-116	
Bromoform	26.6	22.6	85	4	30	18-129	
Bromomethane	26.6	28.0	105	6	30	33-130	
Carbon disulfide	26.6	25.9	95	5	30	20-151	
Carbon tetrachloride	26.6	27.7	104	1	30	32-137	
Chlorobenzene	26.6	26.2	99	10	30	37-116	
Chloroethane	26.6	26.7	100	5	30	45-118	
Chloroform	26.6	26.8	101	1	30	53-119	
Chloromethane	26.6	25.0	94	4	30	34-117	
cis-1,2-Dichloroethene	26.6	31.5	100	6	30	50-119	
Bromodichloromethane	26.6	27.4	103	5	30	35-132	
cis-1,3-Dichloropropene	26.6	24.8	93	8	30	27-133	
1,2-Dibromoethane	26.6	26.0	98	3	30	45-127	
Dibromomethane	26.6	26.4	99	0	30	52-123	
Dichlorodifluoromethane	26.6	23.7	89	0	30	17-115	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87349.D

Lab ID: 240-28747-F-3-A MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethylbenzene	26.6	26.0	98	17	30	30-131	
Hexachlorobutadiene	26.6	24.8	93	37	30	10-131	F
Isopropylbenzene	26.6	27.3	103	20	30	21-134	
2-Butanone	53.1	50.1	94	12	30	30-143	
4-Methyl-2-pentanone	53.1	54.0	102	1	30	43-147	
m-Xylene & p-Xylene	26.6	26.5	100	16	30	29-131	
Methyl tert-butyl ether	26.6	25.5	96	1	30	51-157	
Naphthalene	26.6	25.2	95	7	30	10-124	
n-Butylbenzene	26.6	22.2	84	31	30	10-148	F
Methylene Chloride	26.6	23.4	88	10	30	54-115	
n-Propylbenzene	26.6	26.9	101	25	30	10-178	
o-Xylene	26.6	28.1	106	14	30	29-134	
p-Isopropyltoluene	26.6	26.6	100	29	30	10-165	
sec-Butylbenzene	26.6	28.1	106	26	30	10-172	
Styrene	26.6	26.9	101	16	30	27-127	
tert-Butylbenzene	26.6	28.2	106	23	30	10-163	
Tetrachloroethene	26.6	26.6	100	10	30	31-135	
Toluene	26.6	26.1	98	4	30	39-129	
trans-1,2-Dichloroethene	26.6	26.8	101	3	30	50-123	
trans-1,3-Dichloropropene	26.6	24.2	91	3	30	28-137	
Trichloroethene	26.6	31.2	104	8	30	10-177	
Trichlorofluoromethane	26.6	25.4	96	0	30	36-142	
tert-Butyl alcohol	266	215	81	1	30	60-125	
Vinyl acetate	42.5	34.3	81	2	30	70-130	
Vinyl chloride	26.6	28.1	98	3	30	42-117	
Dibromochloromethane	26.6	24.2	91	4	30	29-135	
Xylenes, Total	53.1	54.6	103	15	30	30-131	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-SB-48D-28-31	240-28680-3	99	101	100	95
DR-SB-48D-40-42	240-28680-5	98	94	99	93
	MB 240-100925/6	104	103	101	96
	LCS 240-100925/5	107	106	106	101
	240-28747-E-3-A MS	100	92	101	98
	240-28747-F-3-A MSD	98	91	102	98

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	37-132
DCA = 1,2-Dichloroethane-d4 (Surr)	58-123
TOL = Toluene-d8 (Surr)	67-125
BFB = 4-Bromofluorobenzene (Surr)	52-136

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Medium

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-SB-48D-19-21	240-28680-1	67	80	70	69
DR-SB-48D-24-26	240-28680-2	75	72	78	76
DR-SB-48D-28-31	240-28680-3	80	76	80	79
DR-SB-48D-34-36	240-28680-4	70	82	75	69
	MB 240-100523/1-A	90	105	94	91
	LCS 240-100523/2-A	86	94	87	85

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	30-122
DCA = 1,2-Dichloroethane-d4 (Surr)	39-128
TOL = Toluene-d8 (Surr)	33-134
BFB = 4-Bromofluorobenzene (Surr)	26-141

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-090413	240-28680-6	113	100	90	76
	MB 240-101342/5	103	93	83	79
	LCS 240-101342/4	95	88	92	97

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: STD8260 240-100285/4 Date Analyzed: 09/05/2013 13:35

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3893.D Heated Purge: (Y/N) N

Calibration ID: 17246

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1121773	5.47	713560	8.15	252235	10.40
UPPER LIMIT		2243546	5.97	1427120	8.65	504470	10.90
LOWER LIMIT		560887	4.97	356780	7.65	126118	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-100285/14		1119942	5.47	705382	8.15	260322	10.40
CCVIS 240-101342/2		1481285	5.47	931641	8.15	343963	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: CCVIS 240-101342/2 Date Analyzed: 09/13/2013 10:59

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ4050.D Heated Purge: (Y/N) N

Calibration ID: 17248

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1481285	5.47	931641	8.15	343963	10.40
UPPER LIMIT		2962570	5.97	1863282	8.65	687926	10.90
LOWER LIMIT		740643	4.97	465821	7.65	171982	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-101342/4		1400569	5.47	872487	8.15	307197	10.40
CCV 240-101342/3		1429229	5.47	825474	8.15	232470	10.40
MB 240-101342/5		1220901	5.47	763813	8.15	213206	10.40
240-28680-6	TB-090413	1058663	5.47	650799	8.15	190083	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: ICIS 240-101218/6 Date Analyzed: 09/12/2013 15:53

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 144601.D Heated Purge: (Y/N) Y

Calibration ID: 17432

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		3060473	6.78	1927251	9.49	978369	11.47
UPPER LIMIT		6120946	7.28	3854502	9.99	1956738	11.97
LOWER LIMIT		1530237	6.28	963626	8.99	489185	10.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-101218/21		2520673	6.77	1658413	9.49	851636	11.46
CCVIS 240-101375/3		3570481	6.77	2259993	9.49	1155005	11.46

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: CCVIS 240-101375/3 Date Analyzed: 09/13/2013 12:52

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 144631.D Heated Purge: (Y/N) Y

Calibration ID: 17434

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		3570481	6.77	2259993	9.49	1155005	11.46
UPPER LIMIT		7140962	7.27	4519986	9.99	2310010	11.96
LOWER LIMIT		1785241	6.27	1129997	8.99	577503	10.96
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-101375/4		3328136	6.77	2168316	9.49	1103015	11.46
240-28680-2	DR-SB-48D-24-26	3357071	6.77	2114104	9.49	1114232	11.46
240-28680-3	DR-SB-48D-28-31	3165734	6.77	2006811	9.49	1062059	11.46

FB = Fluorobenzene

FB = Fluorobenzene

CBZ = Chlorobenzene-d5

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

DCB = 1,4-Dichlorobenzene-d4

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: ICIS 240-100002/6 Date Analyzed: 09/04/2013 02:33

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX87160.D Heated Purge: (Y/N) Y

Calibration ID: 17222

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1583670	5.16	963618	7.68	465238	9.88
UPPER LIMIT		3167340	5.66	1927236	8.18	930476	10.38
LOWER LIMIT		791835	4.66	481809	7.18	232619	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-100002/17		1556113	5.16	980722	7.68	475753	9.88
CCVIS 240-100739/3		1810187	5.16	1115281	7.68	529388	9.88
CCVIS 240-100925/3		1633035	5.16	1003889	7.69	502929	9.88

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: CCVIS 240-100739/3 Date Analyzed: 09/10/2013 03:30

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX87292.D Heated Purge: (Y/N) Y

Calibration ID: 17224

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1810187	5.16	1115281	7.68	529388	9.88
UPPER LIMIT		3620374	5.66	2230562	8.18	1058776	10.38
LOWER LIMIT		905094	4.66	557641	7.18	264694	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-100739/4		1760436	5.16	1100826	7.68	515483	9.87
MB 240-100523/1-A		1752784	5.16	1058701	7.69	496706	9.88
LCS 240-100523/2-A		1895031	5.16	1127241	7.69	540954	9.88

FB = Fluorobenzene
FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4
Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: CCVIS 240-100925/3 Date Analyzed: 09/11/2013 01:56

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX87325.D Heated Purge: (Y/N) Y

Calibration ID: 17224

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1633035	5.16	1003889	7.69	502929	9.88
UPPER LIMIT		3266070	5.66	2007778	8.19	1005858	10.38
LOWER LIMIT		816518	4.66	501945	7.19	251465	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-100925/4		1624301	5.15	1006696	7.68	472046	9.88
LCS 240-100925/5		1632588	5.16	1000959	7.69	512440	9.88
MB 240-100925/6		1597876	5.16	1008684	7.68	489775	9.88
240-28680-3	DR-SB-48D-28-31	1671502	5.16	1022792	7.69	505237	9.88
240-28680-5	DR-SB-48D-40-42	1654635	5.16	1024254	7.69	480573	9.88
240-28747-E-3-A MS		1704303	5.16	1038070	7.68	514424	9.88
240-28747-F-3-A MSD		1652384	5.16	1034021	7.69	516521	9.88
240-28680-1	DR-SB-48D-19-21	1599112	5.15	1015534	7.68	489723	9.88
240-28680-4	DR-SB-48D-34-36	1757572	5.15	1046600	7.68	472551	9.88

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4
DCB = 1,4-Dichlorobenzene-d4
Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: 0913001.D DFTPP Injection Date: 09/13/2013

Instrument ID: A4AG2 DFTPP Injection Time: 07:46

Analysis Batch No.: 101294

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	42.9	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	48.8	
70	Less than 2.0% of mass 69	0.3	(0.6)1
127	25.0 - 75.0% of mass 198	55.6	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.0	
275	10.0- 30.0% of mass 198	24.9	
365	Greater than 0.75% of mass 198	3.1	
441	Present, but less than mass 443	10.5	
442	40.0 - 110.0% of mass 198	70.2	
443	15.0 - 24.0% of mass 442	13.7	(19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD9 240-101294/2	0913002.D	09/13/2013	08:02
	STD8 240-101294/3	0913003.D	09/13/2013	08:24
	STD7 240-101294/4	0913004.D	09/13/2013	08:46
	STD6 240-101294/5	0913005.D	09/13/2013	09:07
	STD5 240-101294/6	0913006.D	09/13/2013	09:29
	STD4 240-101294/7	0913007.D	09/13/2013	09:50
	STD3 240-101294/8	0913008.D	09/13/2013	10:12
	STD2 240-101294/9	0913009.D	09/13/2013	10:34
	STD1 240-101294/10	0913010.D	09/13/2013	10:55
	ICV 240-101294/11	0913011.D	09/13/2013	11:17

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101294

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2013 08:02 Calibration End Date: 09/13/2013 10:55 Calibration ID: 17426

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-101294/10	0913010.D
Level 2	STD2 240-101294/9	0913009.D
Level 3	STD3 240-101294/8	0913008.D
Level 4	STD4 240-101294/7	0913007.D
Level 5	STD5 240-101294/6	0913006.D
Level 6	STD6 240-101294/5	0913005.D
Level 7	STD7 240-101294/4	0913004.D
Level 8	STD8 240-101294/3	0913003.D
Level 9	STD9 240-101294/2	0913002.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5433	0.3679 0.5325	0.3907 0.5819	0.4873 0.6060	0.5709	Ave		0.5101				17.0		20.0			
N-Nitrosodimethylamine	0.7807	0.5316 0.7849	0.5503 0.8454	0.7727 0.8717	0.7829	Ave		0.7400				17.0		20.0			
Pyridine	1.3572	0.9087 1.2904	1.0076 1.4146	1.2964 1.4700	1.3162	Ave		1.2576				16.0		20.0			
Benzaldehyde	1.0559 1.0936	1.0283 1.0179	1.0022 1.0430	1.0514 1.0544	1.0903	Ave		1.0486			0.0100	2.9		20.0			
Phenol	1.6226	1.5969 1.6193	1.6192 1.7484	1.5957 1.7707	1.6630	Ave		1.6545			0.8000	4.1		20.0			
Aniline	2.0241	1.8927 1.8495	1.9392 1.9606	1.9623 1.9648	1.9396	Ave		1.9416				2.7		20.0			
Bis(2-chloroethyl)ether	1.2920	1.3448 1.2858	1.2730 1.3829	1.3436 1.3898	1.3152	Ave		1.3284			0.7000	3.3		20.0			
2-Chlorophenol	1.3162	1.2679 1.3012	1.3140 1.4325	1.3205 1.4321	1.3055	Ave		1.3362			0.8000	4.6		20.0			
1,3-Dichlorobenzene	1.3965	1.4381 1.4051	1.3829 1.5255	1.4470 1.5376	1.4453	Ave		1.4472				3.9		20.0			
1,4-Dichlorobenzene	1.4260	1.4300 1.4352	1.4655 1.5316	1.4617 1.5274	1.4458	Ave		1.4654				2.9		20.0			
Benzyl alcohol	0.8705	0.7895 0.8790	0.8326 0.9420	0.8714 0.9650	0.8682	Ave		0.8773				6.4		20.0			
1,2-Dichlorobenzene	1.3534	1.4202 1.3579	1.3936 1.4595	1.3935 1.4777	1.3870	Ave		1.4054				3.2		20.0			
2-Methylphenol	1.2142	1.1421 1.1982	1.1477 1.2777	1.2160 1.2681	1.2395	Ave		1.2129			0.7000	4.1		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101294

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2013 08:02 Calibration End Date: 09/13/2013 10:55 Calibration ID: 17426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Indene	2.3527	2.3443 2.2881	2.3351 2.4149	2.3744 2.4173	2.3712	Ave		2.3623				1.8		20.0			
2,2'-oxybis[1-chloropropane]	1.5456	1.5890 1.5239	1.5475 1.6297	1.5975 1.6615	1.5804	Ave		1.5844				2.9		20.0			
3 & 4 Methylphenol	1.2728	1.2829 1.2525	1.2006 1.3502	1.2382 1.3666	1.2853	Ave		1.2811				4.3		20.0			
N-Nitrosodi-n-propylamine	1.0051	1.0021 0.9843	1.0079 1.0531	1.0201 1.0681	0.9963	Ave		1.0171			0.5000	2.8		20.0			
Acetophenone	1.8181	1.8916 1.8359	1.9403 1.9215	1.9037 1.9673	1.8616	Ave		1.8925			0.0100	2.7		20.0			
Hexachloroethane	0.5509	0.5179 0.5701	0.5556 0.6079	0.5817 0.6204	0.5934	Ave		0.5747			0.3000	5.8		20.0			
Nitrobenzene	0.3547	0.3311 0.3561	0.3640 0.3921	0.3482 0.3999	0.3658	Ave		0.3640			0.2000	6.2		20.0			
Isophorone	0.6541	0.6382 0.6413	0.6471 0.7060	0.6406 0.7113	0.6470	Ave		0.6607			0.4000	4.5		20.0			
2-Nitrophenol	0.1685	0.1250 0.1697	0.1359 0.1844	0.1509 0.1881	0.1672	Ave		0.1612			0.1000	14.0		20.0			
2,4-Dimethylphenol	0.3276	0.2846 0.2542	0.2997 0.2724	0.2568 0.2724	0.2708	Ave		0.2798			0.2000	8.6		20.0			
Benzoic acid	0.1917	0.0717 0.1946	0.0852 0.2244	0.1019 0.2318	0.1417	Lin	-0.567	0.2347							0.9920		0.9900
Bis(2-chloroethoxy)methane	0.3975	0.3949 0.3813	0.4021 0.4156	0.3877 0.4239	0.3976	Ave		0.4001			0.3000	3.5		20.0			
2,4-Dichlorophenol	0.2634	0.2286 0.2611	0.2474 0.2884	0.2567 0.2889	0.2647	Ave		0.2624			0.2000	7.6		20.0			
1,2,4-Trichlorobenzene	0.2759	0.2854 0.2723	0.2876 0.3011	0.2758 0.2996	0.2731	Ave		0.2839				4.1		20.0			
Naphthalene	1.1338 0.9612	0.9948 0.9591	0.9685 1.0372	0.9921 1.0415	0.9593	Ave		1.0053			0.7000	5.7		20.0			
4-Chloroaniline	0.4145	0.4009 0.3956	0.4099 0.4319	0.4008 0.4396	0.4039	Ave		0.4121			0.0100	3.8		20.0			
Hexachlorobutadiene	0.1545	0.1589 0.1563	0.1621 0.1693	0.1545 0.1682	0.1556	Ave		0.1599			0.0100	3.7		20.0			
Caprolactam	0.0966	0.0979 0.0863	0.0996 0.0947	0.1020 0.0928	0.1036	Ave		0.0967			0.0100	5.7		20.0			
4-Chloro-3-methylphenol	0.2893	0.2508 0.2851	0.2686 0.3080	0.2701 0.3137	0.2848	Ave		0.2838			0.2000	7.3		20.0			
2-Methylnaphthalene	0.6686 0.6433	0.6360 0.6270	0.6806 0.6866	0.6625 0.7009	0.6512	Ave		0.6618			0.4000	3.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101294

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2013 08:02 Calibration End Date: 09/13/2013 10:55 Calibration ID: 17426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.6516 0.5952	0.5837 0.5903	0.6129 0.6403	0.6090 0.6493	0.6149	Ave		0.6163				4.1		20.0			
Hexachlorocyclopentadiene	0.2413	0.1113 0.2496	0.1438 0.2796	0.1590 0.2841	0.2064	Lin1	-0.129	0.2730			0.0500				0.9930		0.9900
1,2,4,5-Tetrachlorobenzene	0.4390	0.4462 0.4434	0.4575 0.4851	0.4584 0.4709	0.4577	Ave		0.4573			0.0100	3.3		20.0			
2,4,6-Trichlorophenol	0.3061	0.2253 0.3143	0.2697 0.3402	0.2805 0.3360	0.3022	Ave		0.2968			0.2000	13.0		20.0			
2,4,5-Trichlorophenol	0.3204	0.2481 0.3329	0.3267 0.3647	0.3060 0.3619	0.3108	Ave		0.3214			0.2000	11.0		20.0			
1,1'-Biphenyl	1.4626 1.2736	1.3153 1.2894	1.3145 1.3819	1.3024 1.3721	1.3126	Ave		1.3360			0.0100	4.4		20.0			
2-Chloronaphthalene	1.1065 0.9737	1.0170 0.9944	1.0333 1.0742	0.9887 1.0690	0.9792	Ave		1.0262			0.8000	4.6		20.0			
2-Nitroaniline	0.3280	0.2661 0.3310	0.2864 0.3594	0.3143 0.3590	0.3238	Ave		0.3210			0.0100	10.0		20.0			
Dimethyl phthalate	1.1546	1.1744 1.1740	1.1834 1.2644	1.1699 1.2580	1.1590	Ave		1.1922			0.0100	3.7		20.0			
1,3-Dinitrobenzene	0.1855	0.1114 0.1967	0.1374 0.2180	0.1482 0.2145	0.1817	Lin1	-0.073	0.2103							0.9960		0.9900
2,6-Dinitrotoluene	0.2660	0.2098 0.2736	0.2381 0.2938	0.2486 0.2969	0.2648	Ave		0.2614				11.0		20.0			
Acenaphthylene	1.7120 1.6216	1.5510 1.6424	1.6252 1.7871	1.6330 1.7407	1.6241	Ave		1.6597			0.9000	4.4		20.0			
3-Nitroaniline	0.3096	0.2733 0.3160	0.2856 0.3390	0.3040 0.3422	0.3109	Ave		0.3101			0.0100	7.6		20.0			
Acenaphthene	1.2032 1.0038	1.0578 1.0091	1.0795 1.0673	1.0069 1.0504	1.0365	Ave		1.0572			0.9000	5.8		20.0			
2,4-Dinitrophenol	0.1285	+++++ 0.1493	+++++ 0.1640	0.0573 0.1655	0.1013	Lin1	-0.552	0.1717			0.0100				0.9950		0.9900
4-Nitrophenol	0.1755	0.1227 0.1810	0.1386 0.1970	0.1567 0.1961	0.1788	Ave		0.1683				16.0		20.0			
2,4-Dinitrotoluene	0.3553	0.2439 0.3649	0.2996 0.3951	0.3273 0.3932	0.3501	Ave		0.3412			0.2000	15.0		20.0			
Dibenzofuran	1.7921 1.4128	1.4852 1.4392	1.4740 1.5506	1.4564 1.5194	1.4637	Ave		1.5104			0.8000	7.5		20.0			
2,3,4,6-Tetrachlorophenol	0.2686	0.1822 0.2774	0.2101 0.2965	0.2470 0.2906	0.2653	Ave		0.2547			0.0100	16.0		20.0			
Diethyl phthalate	1.1547	1.1052 1.1620	1.1992 1.2652	1.1884 1.2520	1.2096	Ave		1.1920			0.0100	4.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101294

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2013 08:02 Calibration End Date: 09/13/2013 10:55 Calibration ID: 17426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chlorophenyl phenyl ether	0.5292	0.5428 0.5341	0.5537 0.5762	0.5354 0.5756	0.5495	Ave		0.5496			0.4000	3.3		20.0			
4-Nitroaniline	0.3116	0.2678 0.3157	0.2714 0.3348	0.3070 0.3307	0.3178	Ave		0.3071			0.0100	8.1		20.0			
Fluorene	1.3792 1.1653	1.2602 1.1759	1.2246 1.2539	1.2348 1.2355	1.1991	Ave		1.2365			0.9000	5.1		20.0			
4,6-Dinitro-2-methylphenol	0.1203	+++++ 0.1241	0.0495 0.1390	0.0673 0.1454	0.1013	Lin1	-0.250	0.1416			0.0100				0.9940		0.9900
N-Nitrosodiphenylamine	0.5301	0.5384 0.5121	0.5417 0.5491	0.5450 0.5554	0.5309	Ave		0.5378			0.0100	2.5		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.8341	0.7620 0.7952	0.8174 0.8637	0.8235 0.8802	0.8090	Ave		0.8231				4.5		20.0			
Azobenzene	0.8341	0.7620 0.7952	0.8174 0.8637	0.8235 0.8802	0.8090	Ave		0.8231				4.5		20.0			
4-Bromophenyl phenyl ether	0.1888	0.1694 0.1884	0.1738 0.2029	0.1844 0.2066	0.1914	Ave		0.1882			0.1000	6.8		20.0			
Hexachlorobenzene	0.2110 0.1994	0.1899 0.1929	0.1924 0.2147	0.2019 0.2158	0.1923	Ave		0.2012			0.1000	5.1		20.0			
Atrazine	0.1897	0.1763 0.1682	0.1887 0.1717	0.1934 0.1669	0.1834	Ave		0.1798			0.0100	5.8		20.0			
Pentachlorophenol	0.1323	0.0675 0.1315	0.0852 0.1445	0.1031 0.1458	0.1209	Lin1	-0.106	0.1425			0.0500				0.9970		0.9900
Phenanthrene	1.2479 1.0178	1.0413 0.9987	1.0237 1.0653	1.0163 1.0803	1.0168	Ave		1.0564			0.7000	7.2		20.0			
Anthracene	1.1326 1.0525	0.9828 1.0037	1.0282 1.0902	1.0275 1.0956	1.0219	Ave		1.0483			0.7000	4.6		20.0			
Carbazole	0.9911	0.9970 0.9623	0.9886 1.0362	1.0139 1.0579	0.9709	Ave		1.0022			0.0100	3.2		20.0			
Di-n-butyl phthalate	1.2702	1.1344 1.2420	1.1801 1.3412	1.2354 1.3560	1.2522	Ave		1.2514			0.0100	5.9		20.0			
Fluoranthene	1.2164 1.1160	1.1047 1.0726	1.0678 1.1714	1.0872 1.1838	1.0908	Ave		1.1234			0.6000	4.8		20.0			
Benzidine		0.2363	0.2650	0.2182 +++++	0.2536	Ave		0.2433				8.4		20.0			
Pyrene	1.2261 1.0806	1.0233 1.0644	1.0822 1.1397	1.0543 1.1221	1.0434	Ave		1.0929			0.6000	5.7		20.0			
Butyl benzyl phthalate	0.5282	0.4165 0.5310	0.4655 0.5701	0.4797 0.5683	0.5060	Ave		0.5082			0.0100	10.0		20.0			
3,3'-Dichlorobenzidine	0.3835	0.2829 0.3735	0.3118 0.3997	0.3075 0.3992	0.3524	Ave		0.3513			0.0100	13.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 101294

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2013 08:02 Calibration End Date: 09/13/2013 10:55 Calibration ID: 17426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Bis(2-ethylhexyl) phthalate	0.7507	0.6378 0.7370	0.6669 0.7946	0.6911 0.7929	0.7246	Ave		0.7245			0.0100	7.8		20.0			
Benzo[a]anthracene	1.1803 1.0035	0.9331 0.9905	1.0067 1.0619	0.9737 1.0306	0.9721	Ave		1.0169			0.8000	7.0		20.0			
Chrysene	1.1114 0.9391	0.9147 0.9187	0.9713 1.0110	0.9259 0.9974	0.9035	Ave		0.9659			0.7000	6.9		20.0			
Di-n-octyl phthalate	1.4170	0.8438 1.4182	0.9956 1.5910	1.1593 1.5944	1.3153	Lin1	-0.520	1.5490			0.0100				0.9960		0.9900
Benzo[b]fluoranthene	0.8968 1.0994	0.8833 1.1364	0.9096 1.2255	1.0059 1.1692	1.0128	Ave		1.0376			0.7000	12.0		20.0			
Benzo[k]fluoranthene	1.1963 1.1768	1.1216 1.1411	1.0286 1.2771	1.1699 1.2924	1.1673	Ave		1.1746			0.7000	6.7		20.0			
Benzo[a]pyrene	0.9007 1.0744	0.8488 1.0438	0.9307 1.1492	0.9521 1.1422	0.9882	Ave		1.0034			0.7000	11.0		20.0			
Indeno[1,2,3-cd]pyrene	0.8608 1.1453	0.8644 1.1777	0.9179 1.2891	1.0414 1.2985	1.0586	Ave		1.0726			0.5000	16.0		20.0			
Dibenzo(a,h)anthracene	0.7123 0.8999	0.6465 0.9279	0.6784 1.0275	0.7935 1.0354	0.8325	Ave		0.8393			0.4000	17.0		20.0			
Benzo[g,h,i]perylene	0.9011 0.9733	0.7836 0.9785	0.8250 1.0809	0.8543 1.0860	0.8876	Ave		0.9300			0.5000	12.0		20.0			
2-Fluorophenol (Surr)	1.1462	1.2262 1.2156	1.1612 1.3097	1.2217 1.3386	1.2073	Ave		1.2283				5.4		20.0			
Phenol-d5 (Surr)	1.5321	1.5252 1.5983	1.5716 1.7084	1.5905 1.7530	1.6170	Ave		1.6120				5.0		20.0			
Nitrobenzene-d5 (Surr)	0.3331 0.3526	0.3517 0.3675	0.3596 0.4103	0.3700 0.4068	0.3699	Ave		0.3690				6.8		20.0			
2-Fluorobiphenyl (Surr)	1.2710 1.1109	1.1629 1.1681	1.2030 1.2737	1.1801 1.2761	1.1911	Ave		1.2041				4.8		20.0			
2,4,6-Tribromophenol (Surr)	0.1439	0.1140 0.1558	0.1261 0.1729	0.1308 0.1690	0.1433	Ave		0.1445				14.0		20.0			
Terphenyl-d14 (Surr)	0.7355 0.6088	0.5808 0.6406	0.6319 0.6955	0.6146 0.6752	0.6152	Ave		0.6442				7.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-101294/11 Calibration Date: 09/13/2013 11:17

Instrument ID: A4AG2 Calib Start Date: 09/13/2013 08:02

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/13/2013 10:55

Lab File ID: 0913011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5101	0.5724		11.2	10.0	12.2	30.0
N-Nitrosodimethylamine	Ave	0.7400	0.8063		10.9	10.0	9.0	30.0
Pyridine	Ave	1.258	1.458		11.6	10.0	15.9	30.0
Benzaldehyde	Ave	1.049	1.167	0.0100	22.3	20.0	11.3	30.0
Phenol	Ave	1.654	1.709	0.8000	10.3	10.0	3.3	30.0
Aniline	Ave	1.942	2.162		11.1	10.0	11.3	30.0
Bis(2-chloroethyl)ether	Ave	1.328	1.354	0.7000	10.2	10.0	1.9	30.0
2-Chlorophenol	Ave	1.336	1.374	0.8000	10.3	10.0	2.8	30.0
1,3-Dichlorobenzene	Ave	1.447	1.466		10.1	10.0	1.3	30.0
1,4-Dichlorobenzene	Ave	1.465	1.535		10.5	10.0	4.8	30.0
Benzyl alcohol	Ave	0.8773	0.9168		10.5	10.0	4.5	30.0
1,2-Dichlorobenzene	Ave	1.405	1.440		10.2	10.0	2.5	30.0
2-Methylphenol	Ave	1.213	1.303	0.7000	10.7	10.0	7.4	30.0
Indene	Ave	2.362	2.455		20.8	20.0	3.9	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.584	1.611		7.32	7.20	1.6	30.0
3 & 4 Methylphenol	Ave	1.281	1.360		10.6	10.0	6.2	30.0
N-Nitrosodi-n-propylamine	Ave	1.017	1.050	0.5000	10.3	10.0	3.2	30.0
Acetophenone	Ave	1.893	1.921	0.0100	10.2	10.0	1.5	30.0
Hexachloroethane	Ave	0.5747	0.6065	0.3000	10.6	10.0	5.5	30.0
Nitrobenzene	Ave	0.3640	0.3844	0.2000	10.6	10.0	5.6	30.0
Isophorone	Ave	0.6607	0.7212	0.4000	10.9	10.0	9.2	30.0
2-Nitrophenol	Ave	0.1612	0.1762	0.1000	10.9	10.0	9.3	30.0
2,4-Dimethylphenol	Ave	0.2798	0.3272	0.2000	11.7	10.0	17.0	30.0
Benzoic acid	Lin		0.1897		18.6	20.0	-7.1	30.0
Bis(2-chloroethoxy)methane	Ave	0.4001	0.3929	0.3000	9.82	10.0	-1.8	30.0
2,4-Dichlorophenol	Ave	0.2624	0.2722	0.2000	10.4	10.0	3.8	30.0
1,2,4-Trichlorobenzene	Ave	0.2839	0.2949		10.4	10.0	3.9	30.0
Naphthalene	Ave	1.005	1.020	0.7000	10.1	10.0	1.4	30.0
4-Chloroaniline	Ave	0.4121	0.4234	0.0100	10.3	10.0	2.7	30.0
Hexachlorobutadiene	Ave	0.1599	0.1603	0.0100	10.0	10.0	0.2	30.0
Caprolactam	Ave	0.0967	0.1020	0.0100	21.1	20.0	5.5	30.0
4-Chloro-3-methylphenol	Ave	0.2838	0.3037	0.2000	10.7	10.0	7.0	30.0
2-Methylnaphthalene	Ave	0.6618	0.6656	0.4000	10.1	10.0	0.6	30.0
1-Methylnaphthalene	Ave	0.6163	0.6258		10.2	10.0	1.5	30.0
Hexachlorocyclopentadiene	Lin1		0.2478	0.0500	9.55	10.0	-4.5	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4573	0.4679	0.0100	10.2	10.0	2.3	30.0
2,4,6-Trichlorophenol	Ave	0.2968	0.3398	0.2000	11.4	10.0	14.5	30.0
2,4,5-Trichlorophenol	Ave	0.3214	0.3474	0.2000	10.8	10.0	8.1	30.0
1,1'-Biphenyl	Ave	1.336	1.366	0.0100	10.2	10.0	2.2	30.0
2-Chloronaphthalene	Ave	1.026	1.054	0.8000	10.3	10.0	2.7	30.0
2-Nitroaniline	Ave	0.3210	0.3600	0.0100	11.2	10.0	12.1	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-101294/11 Calibration Date: 09/13/2013 11:17

Instrument ID: A4AG2 Calib Start Date: 09/13/2013 08:02

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/13/2013 10:55

Lab File ID: 0913011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.192	1.258	0.0100	10.6	10.0	5.5	30.0
1,3-Dinitrobenzene	Lin1		0.1924		9.49	10.0	-5.1	30.0
2,6-Dinitrotoluene	Ave	0.2614	0.2954		11.3	10.0	13.0	30.0
Acenaphthylene	Ave	1.660	1.771	0.9000	10.7	10.0	6.7	30.0
3-Nitroaniline	Ave	0.3101	0.3302	0.0100	10.6	10.0	6.5	30.0
2,4-Dinitrophenol	Lin1		0.1233	0.0100	17.6	20.0	-12.1	30.0
Acenaphthene	Ave	1.057	1.106	0.9000	10.5	10.0	4.6	30.0
4-Nitrophenol	Ave	0.1683	0.1928		22.9	20.0	14.6	30.0
2,4-Dinitrotoluene	Ave	0.3412	0.3922	0.2000	11.5	10.0	15.0	30.0
Dibenzofuran	Ave	1.510	1.547	0.8000	10.2	10.0	2.5	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.2547	0.2843	0.0100	11.2	10.0	11.6	30.0
Diethyl phthalate	Ave	1.192	1.283	0.0100	10.8	10.0	7.7	30.0
4-Chlorophenyl phenyl ether	Ave	0.5496	0.5831	0.4000	10.6	10.0	6.1	30.0
4-Nitroaniline	Ave	0.3071	0.3366	0.0100	11.0	10.0	9.6	30.0
Fluorene	Ave	1.237	1.300	0.9000	10.5	10.0	5.2	30.0
4,6-Dinitro-2-methylphenol	Lin1		0.1254	0.0100	19.5	20.0	-2.7	30.0
N-Nitrosodiphenylamine	Ave	0.5378	0.5853	0.0100	21.8	20.0	8.8	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8231	0.8972		10.9	10.0	9.0	30.0
4-Bromophenyl phenyl ether	Ave	0.1882	0.2054	0.1000	10.9	10.0	9.1	30.0
Hexachlorobenzene	Ave	0.2012	0.2116	0.1000	10.5	10.0	5.2	30.0
Atrazine	Ave	0.1798	0.2111	0.0100	23.5	20.0	17.4	30.0
Pentachlorophenol	Lin1		0.1476	0.0500	21.5	20.0	7.3	30.0
Phenanthrene	Ave	1.056	1.107	0.7000	10.5	10.0	4.7	30.0
Anthracene	Ave	1.048	1.143	0.7000	10.9	10.0	9.0	30.0
Carbazole	Ave	1.002	1.058	0.0100	10.6	10.0	5.5	30.0
Di-n-butyl phthalate	Ave	1.251	1.383	0.0100	11.1	10.0	10.5	30.0
Fluoranthene	Ave	1.123	1.194	0.6000	10.6	10.0	6.3	30.0
Pyrene	Ave	1.093	1.170	0.6000	10.7	10.0	7.0	30.0
Butyl benzyl phthalate	Ave	0.5082	0.5880	0.0100	11.6	10.0	15.7	30.0
3,3'-Dichlorobenzidine	Ave	0.3513	0.4217	0.0100	24.0	20.0	20.0	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7245	0.8254	0.0100	11.4	10.0	13.9	30.0
Benzo[a]anthracene	Ave	1.017	1.094	0.8000	10.8	10.0	7.6	30.0
Chrysene	Ave	0.9659	1.081	0.7000	11.2	10.0	12.0	30.0
Di-n-octyl phthalate	Lin1		1.567	0.0100	10.5	10.0	4.5	30.0
Benzo[b]fluoranthene	Ave	1.038	1.185	0.7000	11.4	10.0	14.2	30.0
Benzo[k]fluoranthene	Ave	1.175	1.301	0.7000	11.1	10.0	10.8	30.0
Benzo[a]pyrene	Ave	1.003	1.156	0.7000	11.5	10.0	15.3	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.073	1.204	0.5000	11.2	10.0	12.2	30.0
Dibenzo(a,h)anthracene	Ave	0.8393	0.9767	0.4000	11.6	10.0	16.4	30.0
Benzo[g,h,i]perylene	Ave	0.9300	1.048	0.5000	11.3	10.0	12.6	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-101294/11 Calibration Date: 09/13/2013 11:17

Instrument ID: A4AG2 Calib Start Date: 09/13/2013 08:02

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/13/2013 10:55

Lab File ID: 0913011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzidine	Ave	0.2433			0.00500	20.0		30.0
2-Fluorophenol (Surr)	Ave	1.228	1.232		10.0	10.0	0.3	30.0
Phenol-d5 (Surr)	Ave	1.612	1.617		10.0	10.0	0.3	30.0
Nitrobenzene-d5 (Surr)	Ave	0.3690	0.3778		10.2	10.0	2.4	30.0
2-Fluorobiphenyl (Surr)	Ave	1.204	1.206		10.0	10.0	0.2	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1445	0.1532		10.6	10.0	6.0	30.0
Terphenyl-d14 (Surr)	Ave	0.6442	0.6955		10.8	10.0	8.0	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: 0920001.D DFTPP Injection Date: 09/20/2013

Instrument ID: A4AG2 DFTPP Injection Time: 07:42

Analysis Batch No.: 102195

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	50.5	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	56.4	
70	Less than 2.0% of mass 69	0.2	(0.3)1
127	25.0 - 75.0% of mass 198	56.6	
197	Less than 1.0% of mass 198	0.4	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	24.2	
365	Greater than 0.75% of mass 198	2.7	
441	Present, but less than mass 443	9.2	
442	40.0 - 110.0% of mass 198	61.4	
443	15.0 - 24.0% of mass 442	11.9	(19.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD6 240-102195/2	0920002.D	09/20/2013	07:58
	MB 240-101887/21-A	0920003.D	09/20/2013	08:20
	LCS 240-101887/22-A	0920004.D	09/20/2013	08:41
DR-SB-48D-19-21	240-28680-1	0920020.D	09/20/2013	14:31
DR-SB-48D-24-26	240-28680-2	0920021.D	09/20/2013	14:53
DR-SB-48D-28-31	240-28680-3	0920022.D	09/20/2013	15:15
DR-SB-48D-34-36	240-28680-4	0920023.D	09/20/2013	15:37
DR-SB-48D-40-42	240-28680-5	0920024.D	09/20/2013	15:59
	240-28747-O-3-H MS	0920028.D	09/20/2013	17:27
	240-28747-O-3-I MSD	0920029.D	09/20/2013	17:49

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: STD6 240-102195/2 Calibration Date: 09/20/2013 07:58

Instrument ID: A4AG2 Calib Start Date: 09/13/2013 08:02

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/13/2013 10:55

Lab File ID: 0920002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5101	0.5897		11.6	10.0	15.6	20.0
N-Nitrosodimethylamine	Ave	0.7400	0.9113		12.3	10.0	23.1*	20.0
Pyridine	Ave	1.258	1.586		12.6	10.0	26.1*	20.0
Benzaldehyde	Ave	1.049	1.286	0.0100	24.5	20.0	22.6*	20.0
Phenol	Ave	1.654	1.819	0.8000	11.0	10.0	9.9	20.0
Aniline	Ave	1.942	2.300		11.8	10.0	18.4	20.0
Bis(2-chloroethyl)ether	Ave	1.328	1.444	0.7000	10.9	10.0	8.7	20.0
2-Chlorophenol	Ave	1.336	1.387	0.8000	10.4	10.0	3.8	20.0
1,3-Dichlorobenzene	Ave	1.447	1.484		10.3	10.0	2.5	20.0
1,4-Dichlorobenzene	Ave	1.465	1.510		10.3	10.0	3.1	20.0
Benzyl alcohol	Ave	0.8773	0.9270		10.6	10.0	5.7	20.0
1,2-Dichlorobenzene	Ave	1.405	1.429		10.2	10.0	1.7	20.0
2-Methylphenol	Ave	1.213	1.300	0.7000	10.7	10.0	7.2	20.0
Indene	Ave	2.362	2.563		21.7	20.0	8.5	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.584	1.964		12.4	10.0	23.9*	20.0
3 & 4 Methylphenol	Ave	1.281	1.395		10.9	10.0	8.9	20.0
N-Nitrosodi-n-propylamine	Ave	1.017	1.181	0.5000	11.6	10.0	16.1	20.0
Acetophenone	Ave	1.893	2.009	0.0100	10.6	10.0	6.2	20.0
Hexachloroethane	Ave	0.5747	0.6208	0.3000	10.8	10.0	8.0	20.0
Nitrobenzene	Ave	0.3640	0.3995	0.2000	11.0	10.0	9.7	20.0
Isophorone	Ave	0.6607	0.7136	0.4000	10.8	10.0	8.0	20.0
2-Nitrophenol	Ave	0.1612	0.1740	0.1000	10.8	10.0	8.0	20.0
2,4-Dimethylphenol	Ave	0.2798	0.3276	0.2000	11.7	10.0	17.1	20.0
Benzoic acid	Lin		0.1954		19.1	20.0	-4.7	20.0
Bis(2-chloroethoxy)methane	Ave	0.4001	0.4192	0.3000	10.5	10.0	4.8	20.0
2,4-Dichlorophenol	Ave	0.2624	0.2624	0.2000	10.0	10.0	0.0	20.0
1,2,4-Trichlorobenzene	Ave	0.2839	0.2749		9.68	10.0	-3.2	20.0
Naphthalene	Ave	1.005	0.9851	0.7000	9.80	10.0	-2.0	20.0
4-Chloroaniline	Ave	0.4121	0.4171	0.0100	10.1	10.0	1.2	20.0
Hexachlorobutadiene	Ave	0.1599	0.1585	0.0100	9.91	10.0	-0.9	20.0
Caprolactam	Ave	0.0967	0.1066	0.0100	22.1	20.0	10.3	20.0
4-Chloro-3-methylphenol	Ave	0.2838	0.2905	0.2000	10.2	10.0	2.3	20.0
2-Methylnaphthalene	Ave	0.6618	0.6454	0.4000	9.75	10.0	-2.5	20.0
1-Methylnaphthalene	Ave	0.6163	0.5990		9.72	10.0	-2.8	20.0
Hexachlorocyclopentadiene	Lin1		0.2605	0.0500	10.0	10.0	0.1	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4573	0.4653	0.0100	10.2	10.0	1.8	20.0
2,4,6-Trichlorophenol	Ave	0.2968	0.3022	0.2000	10.2	10.0	1.8	20.0
2,4,5-Trichlorophenol	Ave	0.3214	0.3165	0.2000	9.85	10.0	-1.5	20.0
1,1'-Biphenyl	Ave	1.336	1.275	0.0100	9.55	10.0	-4.5	20.0
2-Chloronaphthalene	Ave	1.026	1.000	0.8000	9.74	10.0	-2.6	20.0
2-Nitroaniline	Ave	0.3210	0.3595	0.0100	11.2	10.0	12.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: STD6 240-102195/2 Calibration Date: 09/20/2013 07:58

Instrument ID: A4AG2 Calib Start Date: 09/13/2013 08:02

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/13/2013 10:55

Lab File ID: 0920002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.192	1.155	0.0100	9.69	10.0	-3.1	20.0
1,3-Dinitrobenzene	Lin1		0.1831		9.05	10.0	-9.5	20.0
2,6-Dinitrotoluene	Ave	0.2614	0.2670		10.2	10.0	2.1	20.0
Acenaphthylene	Ave	1.660	1.649	0.9000	9.93	10.0	-0.7	20.0
3-Nitroaniline	Ave	0.3101	0.3130	0.0100	10.1	10.0	1.0	20.0
Acenaphthene	Ave	1.057	1.029	0.9000	9.73	10.0	-2.7	20.0
2,4-Dinitrophenol	Lin1		0.1586	0.0100	21.7	20.0	8.5	20.0
4-Nitrophenol	Ave	0.1683	0.1673		19.9	20.0	-0.6	20.0
2,4-Dinitrotoluene	Ave	0.3412	0.3459	0.2000	10.1	10.0	1.4	20.0
Dibenzofuran	Ave	1.510	1.446	0.8000	9.58	10.0	-4.2	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2547	0.2663	0.0100	10.5	10.0	4.5	20.0
Diethyl phthalate	Ave	1.192	1.156	0.0100	9.69	10.0	-3.1	20.0
4-Chlorophenyl phenyl ether	Ave	0.5496	0.5437	0.4000	9.89	10.0	-1.1	20.0
4-Nitroaniline	Ave	0.3071	0.3210	0.0100	10.5	10.0	4.5	20.0
Fluorene	Ave	1.237	1.194	0.9000	9.65	10.0	-3.5	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1237	0.0100	19.2	20.0	-3.8	20.0
N-Nitrosodiphenylamine	Ave	0.5378	0.5296	0.0100	19.7	20.0	-1.5	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8231	0.9139		11.1	10.0	11.0	20.0
4-Bromophenyl phenyl ether	Ave	0.1882	0.1898	0.1000	10.1	10.0	0.9	20.0
Hexachlorobenzene	Ave	0.2012	0.1996	0.1000	9.92	10.0	-0.8	20.0
Atrazine	Ave	0.1798	0.1967	0.0100	21.9	20.0	9.4	20.0
Pentachlorophenol	Lin1		0.1478	0.0500	21.5	20.0	7.5	20.0
Phenanthrene	Ave	1.056	1.011	0.7000	9.57	10.0	-4.3	20.0
Anthracene	Ave	1.048	1.052	0.7000	10.0	10.0	0.3	20.0
Carbazole	Ave	1.002	0.9882	0.0100	9.86	10.0	-1.4	20.0
Di-n-butyl phthalate	Ave	1.251	1.263	0.0100	10.1	10.0	0.9	20.0
Fluoranthene	Ave	1.123	1.122	0.6000	9.99	10.0	-0.1	20.0
~~Benzidine~~	Ave	0.2433	0.4475		36.8	20.0	~~83.9*~~	20.0
Pyrene	Ave	1.093	1.090	0.6000	9.98	10.0	-0.2	20.0
Butyl benzyl phthalate	Ave	0.5082	0.5499	0.0100	10.8	10.0	8.2	20.0
3,3'-Dichlorobenzidine	Ave	0.3513	0.3773	0.0100	21.5	20.0	7.4	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7245	0.7608	0.0100	10.5	10.0	5.0	20.0
Benzo[a]anthracene	Ave	1.017	1.028	0.8000	10.1	10.0	1.1	20.0
Chrysene	Ave	0.9659	0.9380	0.7000	9.71	10.0	-2.9	20.0
Di-n-octyl phthalate	Lin1		1.473	0.0100	9.84	10.0	-1.6	20.0
Benzo[b]fluoranthene	Ave	1.038	1.130	0.7000	10.9	10.0	8.9	20.0
Benzo[k]fluoranthene	Ave	1.175	1.156	0.7000	9.84	10.0	-1.6	20.0
Benzo[a]pyrene	Ave	1.003	1.086	0.7000	10.8	10.0	8.2	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.073	1.241	0.5000	11.6	10.0	15.7	20.0
Dibenzo(a,h)anthracene	Ave	0.8393	0.9736	0.4000	11.6	10.0	16.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: STD6 240-102195/2 Calibration Date: 09/20/2013 07:58

Instrument ID: A4AG2 Calib Start Date: 09/13/2013 08:02

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/13/2013 10:55

Lab File ID: 0920002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[g,h,i]perylene	Ave	0.9300	1.051	0.5000	11.3	10.0	13.0	20.0
2-Fluorophenol (Surr)	Ave	1.228	1.249		10.2	10.0	1.7	20.0
Phenol-d5 (Surr)	Ave	1.612	1.695		10.5	10.0	5.1	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3690	0.3858		10.5	10.0	4.5	20.0
2-Fluorobiphenyl (Surr)	Ave	1.204	1.126		9.35	10.0	-6.5	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1445	0.1397		9.67	10.0	-3.3	20.0
Terphenyl-d14 (Surr)	Ave	0.6442	0.6129		9.51	10.0	-4.9	20.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab File ID: 0920003.D Lab Sample ID: MB 240-101887/21-A

Matrix: Solid Date Extracted: 09/18/2013 09:10

Instrument ID: A4AG2 Date Analyzed: 09/20/2013 08:20

Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-101887/22-A	0920004.D	09/20/2013 08:41
DR-SB-48D-19-21	240-28680-1	0920020.D	09/20/2013 14:31
DR-SB-48D-24-26	240-28680-2	0920021.D	09/20/2013 14:53
DR-SB-48D-28-31	240-28680-3	0920022.D	09/20/2013 15:15
DR-SB-48D-34-36	240-28680-4	0920023.D	09/20/2013 15:37
DR-SB-48D-40-42	240-28680-5	0920024.D	09/20/2013 15:59
	240-28747-O-3-H MS	0920028.D	09/20/2013 17:27
	240-28747-O-3-I MSD	0920029.D	09/20/2013 17:49

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-101887/21-A

Matrix: Solid | Lab File ID: 0920003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.0(g) | Date Analyzed: 09/20/2013 08:20

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	50	U	50	3.5
123-91-1	1,4-Dioxane	100	U	100	22
88-06-2	2,4,6-Trichlorophenol	150	U	150	8.9
95-95-4	2,4,5-Trichlorophenol	150	U	150	25
120-83-2	2,4-Dichlorophenol	150	U	150	20
105-67-9	2,4-Dimethylphenol	150	U	150	20
51-28-5	2,4-Dinitrophenol	330	U	330	21
121-14-2	2,4-Dinitrotoluene	200	U	200	17
91-58-7	2-Chloronaphthalene	50	U	50	0.45
95-57-8	2-Chlorophenol	50	U	50	8.2
91-57-6	2-Methylnaphthalene	6.7	U	6.7	0.50
95-48-7	2-Methylphenol	200	U	200	11
88-74-4	2-Nitroaniline	200	U	200	9.1
88-75-5	2-Nitrophenol	50	U	50	8.3
15831-10-4	3 & 4 Methylphenol	400	U	400	20
91-94-1	3,3'-Dichlorobenzidine	100	U	100	18
99-09-2	3-Nitroaniline	200	U	200	16
534-52-1	4,6-Dinitro-2-methylphenol	150	U	150	9.2
101-55-3	4-Bromophenyl phenyl ether	50	U	50	13
59-50-7	4-Chloro-3-methylphenol	150	U	150	21
106-47-8	4-Chloroaniline	150	U	150	17
7005-72-3	4-Chlorophenyl phenyl ether	50	U	50	13
100-01-6	4-Nitroaniline	200	U	200	26
83-32-9	Acenaphthene	6.7	U	6.7	0.76
208-96-8	Acenaphthylene	6.7	U	6.7	0.35
98-86-2	Acetophenone	100	U	100	9.2
120-12-7	Anthracene	6.7	U	6.7	0.78
1912-24-9	Atrazine	200	U	200	9.1
100-52-7	Benzaldehyde	100	U	100	12
56-55-3	Benzo[a]anthracene	6.7	U	6.7	0.63
50-32-8	Benzo[a]pyrene	6.7	U	6.7	0.64
205-99-2	Benzo[b]fluoranthene	6.7	U	6.7	0.59
191-24-2	Benzo[g,h,i]perylene	6.7	U	6.7	0.35
207-08-9	Benzo[k]fluoranthene	6.7	U	6.7	0.68

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-101887/21-A

Matrix: Solid | Lab File ID: 0920003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.0(g) | Date Analyzed: 09/20/2013 08:20

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	100	U	100	22
111-44-4	Bis(2-chloroethyl)ether	100	U	100	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	23.2	J	70	19
85-68-7	Butyl benzyl phthalate	70	U	70	10
105-60-2	Caprolactam	330	U	330	37
86-74-8	Carbazole	50	U	50	27
218-01-9	Chrysene	6.7	U	6.7	1.1
84-74-2	Di-n-butyl phthalate	70	U	70	15
117-84-0	Di-n-octyl phthalate	70	U	70	7.9
53-70-3	Dibenzo(a,h)anthracene	6.7	U	6.7	0.66
132-64-9	Dibenzofuran	50	U	50	0.66
84-66-2	Diethyl phthalate	70	U	70	16
131-11-3	Dimethyl phthalate	70	U	70	17
206-44-0	Fluoranthene	6.7	U	6.7	0.55
86-73-7	Fluorene	6.7	U	6.7	0.53
118-74-1	Hexachlorobenzene	6.7	U	6.7	2.1
87-68-3	Hexachlorobutadiene	50	U	50	5.6
77-47-4	Hexachlorocyclopentadiene	330	U	330	8.1
67-72-1	Hexachloroethane	50	U	50	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	6.7	U	6.7	0.35
78-59-1	Isophorone	50	U	50	13
621-64-7	N-Nitrosodi-n-propylamine	50	U	50	6.3
62-75-9	N-Nitrosodimethylamine	100	U	100	16
86-30-6	N-Nitrosodiphenylamine	50	U	50	21
91-20-3	Naphthalene	6.7	U	6.7	0.82
98-95-3	Nitrobenzene	100	U	100	2.2
87-86-5	Pentachlorophenol	150	U	150	9.1
85-01-8	Phenanthrene	6.7	U	6.7	0.73
108-95-2	Phenol	50	U	50	7.3
129-00-0	Pyrene	6.7	U	6.7	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	100	U	100	9.5
606-20-2	2,6-Dinitrotoluene	200	U	200	21
100-02-7	4-Nitrophenol	330	U	330	17

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-101887/21-A

Matrix: Solid Lab File ID: 0920003.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3540C Date Extracted: 09/18/2013 09:10

Sample wt/vol: 30.0(g) Date Analyzed: 09/20/2013 08:20

Con. Extract Vol.: 2.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 102195 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	74		36-110
4165-62-2	Phenol-d5 (Surr)	55		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	55		20-110
367-12-4	2-Fluorophenol (Surr)	53		24-110
321-60-8	2-Fluorobiphenyl (Surr)	50		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	18		10-110

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 0920004.D

Lab ID: LCS 240-101887/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	667	433	65	35-110	
1,4-Dioxane	667	199	30	10-110	
2,4,6-Trichlorophenol	667	417	63	12-110	
2,4,5-Trichlorophenol	667	456	68	25-110	
2,4-Dichlorophenol	667	452	68	39-110	
2,4-Dimethylphenol	667	454	68	29-110	
2,4-Dinitrophenol	1330	668	50	10-110	
2,4-Dinitrotoluene	667	489	73	48-110	
2-Chloronaphthalene	667	438	66	32-110	
2-Chlorophenol	667	436	65	37-110	
2-Methylnaphthalene	667	433	65	36-110	
2-Methylphenol	667	449	67	41-110	
2-Nitroaniline	667	541	81	45-110	
2-Nitrophenol	667	460	69	34-110	
3 & 4 Methylphenol	667	479	72	40-110	
3,3'-Dichlorobenzidine	1330	890	67	28-110	
3-Nitroaniline	667	468	70	44-110	
4,6-Dinitro-2-methylphenol	1330	828	62	10-110	
4-Bromophenyl phenyl ether	667	481	72	39-110	
4-Chloro-3-methylphenol	667	488	73	48-110	
4-Chloroaniline	667	406	61	30-110	
4-Chlorophenyl phenyl ether	667	463	69	40-110	
4-Nitroaniline	667	502	75	48-110	
Acenaphthene	667	445	67	38-110	
Acenaphthylene	667	428	64	40-110	
Acetophenone	667	426	64	40-110	
Anthracene	667	483	72	48-110	
Atrazine	1330	1040	78	66-127	
Benzaldehyde	1330	327	25	32-110	*
Benzo[a]anthracene	667	499	75	50-110	
Benzo[a]pyrene	667	506	76	44-110	
Benzo[b]fluoranthene	667	516	77	43-110	
Benzo[g,h,i]perylene	667	543	81	51-110	
Benzo[k]fluoranthene	667	507	76	38-105	
Bis(2-chloroethoxy)methane	667	466	70	32-110	
Bis(2-chloroethyl)ether	667	446	67	34-110	
Bis(2-ethylhexyl) phthalate	667	548	82	50-110	
Butyl benzyl phthalate	667	524	79	51-110	
Caprolactam	1330	1090	82	44-114	
Carbazole	667	493	74	50-110	
Chrysene	667	487	73	50-110	
Di-n-butyl phthalate	667	509	76	51-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 0920004.D

Lab ID: LCS 240-101887/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	667	474	71	48-110	
Dibenzo(a,h)anthracene	667	555	83	51-110	
Dibenzofuran	667	443	66	43-110	
Diethyl phthalate	667	475	71	52-110	
Dimethyl phthalate	667	464	70	50-110	
Fluoranthene	667	496	74	51-110	
Fluorene	667	447	67	46-110	
Hexachlorobenzene	667	466	70	43-110	
Hexachlorobutadiene	667	413	62	29-110	
Hexachlorocyclopentadiene	667	346	52	12-110	
Hexachloroethane	667	416	62	30-110	
Indeno[1,2,3-cd]pyrene	667	554	83	50-110	
Isophorone	667	454	68	36-110	
N-Nitrosodi-n-propylamine	667	492	74	38-110	
N-Nitrosodimethylamine	667	481	72	31-110	
N-Nitrosodiphenylamine	1330	938	70	46-110	
Naphthalene	667	421	63	36-110	
Nitrobenzene	667	471	71	32-110	
Pentachlorophenol	1330	653	49	10-110	
Phenanthrene	667	466	70	49-110	
Phenol	667	484	73	38-110	
Pyrene	667	499	75	49-110	
2,2'-oxybis[1-chloropropane]	667	517	78	29-110	
2,6-Dinitrotoluene	667	486	73	45-110	
4-Nitrophenol	1330	944	71	28-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 0920028.D

Lab ID: 240-28747-O-3-H MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	787	59 U	441	56	32-110	
1,4-Dioxane	787	120 U	239	30	10-110	
2,4,6-Trichlorophenol	787	180 U	429	55	10-110	
2,4,5-Trichlorophenol	787	180 U	445	57	10-117	
2,4-Dichlorophenol	787	180 U	449	57	10-110	
2,4-Dimethylphenol	787	180 U	438	56	10-110	
2,4-Dinitrophenol	1570	390 U	331 J	21	10-110	
2,4-Dinitrotoluene	787	240 U	501	64	32-110	
2-Chloronaphthalene	787	59 U	436	55	28-110	
2-Chlorophenol	787	59 U	436	55	10-110	
2-Methylnaphthalene	787	7.9 U	423	54	10-133	
2-Methylphenol	787	240 U	468	59	24-110	
2-Nitroaniline	787	240 U	546	69	39-110	
2-Nitrophenol	787	59 U	438	56	10-110	
3 & 4 Methylphenol	787	470 U	461 J	59	25-110	
3,3'-Dichlorobenzidine	1570	120 U	874	56	10-110	
3-Nitroaniline	787	240 U	462	59	10-110	
4,6-Dinitro-2-methylphenol	1570	180 U	415	26	10-110	
4-Bromophenyl phenyl ether	787	59 U	493	63	33-110	
4-Chloro-3-methylphenol	787	180 U	448	57	25-110	
4-Chloroaniline	787	180 U	367	47	10-110	
4-Chlorophenyl phenyl ether	787	59 U	471	60	32-110	
4-Nitroaniline	787	240 U	517	66	10-110	
Acenaphthene	787	7.9 U	454	58	22-110	
Acenaphthylene	787	7.9 U	428	54	24-110	
Acetophenone	787	120 U	424	54	31-110	
Anthracene	787	7.9 U	498	63	20-110	
Atrazine	1570	240 U	1070	68	45-118	
Benzaldehyde	1570	120 U	837	53	23-110	
Benzo[a]anthracene	787	7.9 U	527	67	10-122	
Benzo[a]pyrene	787	7.9 U	545	69	10-110	
Benzo[b]fluoranthene	787	7.9 U	568	72	12-118	
Benzo[g,h,i]perylene	787	7.9 U	438	56	10-117	
Benzo[k]fluoranthene	787	7.9 U	553	70	10-121	
Bis(2-chloroethoxy)methane	787	120 U	460	58	26-110	
Bis(2-chloroethyl)ether	787	120 U	439	56	21-110	
Bis(2-ethylhexyl) phthalate	787	83 U	595	76	40-110	
Butyl benzyl phthalate	787	83 U	559	71	44-110	
Caprolactam	1570	390 U	1130	72	10-134	
Carbazole	787	59 U	516	66	34-110	
Chrysene	787	7.9 U	523	66	10-125	
Di-n-butyl phthalate	787	83 U	545	69	43-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 0920028.D

Lab ID: 240-28747-O-3-H MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	787	83 U	524	67	24-119	
Dibenzo(a,h)anthracene	787	7.9 U	482	61	14-113	
Dibenzofuran	787	59 U	439	56	29-110	
Diethyl phthalate	787	83 U	506	64	42-110	
Dimethyl phthalate	787	83 U	474	60	41-110	
Fluoranthene	787	7.9 U	521	66	10-110	
Fluorene	787	7.9 U	460	58	23-110	
Hexachlorobenzene	787	7.9 U	490	62	34-110	
Hexachlorobutadiene	787	59 U	404	51	25-110	
Hexachlorocyclopentadiene	787	390 U	390 U	0	10-110	F
Hexachloroethane	787	59 U	368	47	12-110	
Indeno[1,2,3-cd]pyrene	787	7.9 U	484	62	10-114	
Isophorone	787	59 U	453	58	29-110	
N-Nitrosodi-n-propylamine	787	59 U	482	61	26-110	
N-Nitrosodimethylamine	787	120 U	474	60	20-110	
N-Nitrosodiphenylamine	1570	59 U	989	63	22-110	
Naphthalene	787	7.9 U	419	53	10-111	
Nitrobenzene	787	120 U	463	59	23-110	
Pentachlorophenol	1570	180 U	724	46	10-110	
Phenanthrene	787	7.9 U	485	62	10-166	
Phenol	787	59 U	510	65	17-110	
Pyrene	787	7.9 U	521	66	10-147	
2,2'-oxybis[1-chloropropane]	787	120 U	490	62	11-110	
2,6-Dinitrotoluene	787	240 U	489	62	35-110	
4-Nitrophenol	1570	390 U	996	63	10-113	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 0920029.D

Lab ID: 240-28747-O-3-I MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	780	448	57	2	32	32-110	
1,4-Dioxane	780	197	25	19	50	10-110	
2,4,6-Trichlorophenol	780	439	56	2	38	10-110	
2,4,5-Trichlorophenol	780	419	54	6	99	10-117	
2,4-Dichlorophenol	780	476	61	6	34	10-110	
2,4-Dimethylphenol	780	462	59	5	31	10-110	
2,4-Dinitrophenol	1560	371 J	24	11	99	10-110	
2,4-Dinitrotoluene	780	499	64	0	30	32-110	
2-Chloronaphthalene	780	446	57	2	30	28-110	
2-Chlorophenol	780	457	59	5	47	10-110	
2-Methylnaphthalene	780	449	58	6	42	10-133	
2-Methylphenol	780	468	60	0	51	24-110	
2-Nitroaniline	780	553	71	1	31	39-110	
2-Nitrophenol	780	460	59	5	49	10-110	
3 & 4 Methylphenol	780	467 J	60	1	50	25-110	
3,3'-Dichlorobenzidine	1560	540	35	47	56	10-110	
3-Nitroaniline	780	400	51	14	30	10-110	
4,6-Dinitro-2-methylphenol	1560	461	30	10	55	10-110	
4-Bromophenyl phenyl ether	780	501	64	1	30	33-110	
4-Chloro-3-methylphenol	780	450	58	0	54	25-110	
4-Chloroaniline	780	324	41	13	36	10-110	
4-Chlorophenyl phenyl ether	780	483	62	2	30	32-110	
4-Nitroaniline	780	452	58	14	48	10-110	
Acenaphthene	780	466	60	3	99	22-110	
Acenaphthylene	780	439	56	3	99	24-110	
Acetophenone	780	471	60	11	43	31-110	
Anthracene	780	507	65	2	99	20-110	
Atrazine	1560	1040	67	2	30	45-118	
Benzaldehyde	1560	731	47	14	42	23-110	
Benzo[a]anthracene	780	510	65	3	99	10-122	
Benzo[a]pyrene	780	537	69	1	99	10-110	
Benzo[b]fluoranthene	780	581	74	2	99	12-118	
Benzo[g,h,i]perylene	780	424	54	3	99	10-117	
Benzo[k]fluoranthene	780	537	69	3	99	10-121	
Bis(2-chloroethoxy)methane	780	476	61	3	37	26-110	
Bis(2-chloroethyl)ether	780	450	58	3	55	21-110	
Bis(2-ethylhexyl) phthalate	780	574	74	4	30	40-110	
Butyl benzyl phthalate	780	542	70	3	30	44-110	
Caprolactam	1560	1160	74	3	32	10-134	
Carbazole	780	505	65	2	30	34-110	
Chrysene	780	501	64	4	99	10-125	
Di-n-butyl phthalate	780	541	69	1	30	43-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 0920029.D

Lab ID: 240-28747-O-3-I MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Di-n-octyl phthalate	780	538	69	3	30	24-119	
Dibenzo(a,h)anthracene	780	477	61	1	99	14-113	
Dibenzofuran	780	457	59	4	30	29-110	
Diethyl phthalate	780	493	63	3	30	42-110	
Dimethyl phthalate	780	477	61	1	30	41-110	
Fluoranthene	780	509	65	2	99	10-110	
Fluorene	780	470	60	2	99	23-110	
Hexachlorobenzene	780	491	63	0	30	34-110	
Hexachlorobutadiene	780	418	54	4	34	25-110	
Hexachlorocyclopentadiene	780	390 U	0	NC	79	10-110	F
Hexachloroethane	780	382	49	4	50	12-110	
Indeno[1,2,3-cd]pyrene	780	471	60	3	99	10-114	
Isophorone	780	463	59	2	38	29-110	
N-Nitrosodi-n-propylamine	780	501	64	4	42	26-110	
N-Nitrosodimethylamine	780	468	60	1	46	20-110	
N-Nitrosodiphenylamine	1560	999	64	1	30	22-110	
Naphthalene	780	432	55	3	99	10-111	
Nitrobenzene	780	481	62	4	41	23-110	
Pentachlorophenol	1560	732	47	1	50	10-110	
Phenanthrene	780	485	62	0	99	10-166	
Phenol	780	521	67	2	53	17-110	
Pyrene	780	507	65	3	99	10-147	
2,2'-oxybis[1-chloropropane]	780	506	65	3	42	11-110	
2,6-Dinitrotoluene	780	492	63	1	30	35-110	
4-Nitrophenol	1560	961	62	4	49	10-113	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
DR-SB-48D-19-21	240-28680-1	68	70	67	62	50	87
DR-SB-48D-24-26	240-28680-2	45	52	52	48	28	68
DR-SB-48D-28-31	240-28680-3	43	44	42	39	31	57
DR-SB-48D-34-36	240-28680-4	51	53	50	47	41	71
DR-SB-48D-40-42	240-28680-5	61	65	58	54	50	93
	MB 240-101887/21-A	53	55	55	50	18	74
	LCS 240-101887/22-A	71	74	73	68	58	89
	240-28747-O-3-H MS	55	62	60	58	55	79
	240-28747-O-3-I MSD	59	64	62	60	50	78

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	24-110
PHL = Phenol-d5 (Surr)	26-110
NBZ = Nitrobenzene-d5 (Surr)	20-110
FBP = 2-Fluorobiphenyl (Surr)	24-110
TBP = 2,4,6-Tribromophenol (Surr)	10-110
TPH = Terphenyl-d14 (Surr)	36-110

Column to be used to flag recovery values

FORM II 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: STD6 240-101294/5 Date Analyzed: 09/13/2013 09:07

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0913005.D Heated Purge: (Y/N) N

Calibration ID: 17426

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		212011	5.89	859611	7.00	513945	8.50
UPPER LIMIT		424022	6.39	1719222	7.50	1027890	9.00
LOWER LIMIT		106006	5.39	429806	6.50	256973	8.00
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-101294/11		223099	5.89	897575	7.00	530517	8.50
STD6 240-102195/2 CCVIS		166459	5.83	690357	6.95	409264	8.44

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: STD6 240-101294/5 Date Analyzed: 09/13/2013 09:07

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0913005.D Heated Purge: (Y/N) N

Calibration ID: 17426

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		826632	9.76	870971	12.29	770901	14.34
UPPER LIMIT		1653264	10.26	1741942	12.79	1541802	14.84
LOWER LIMIT		413316	9.26	435486	11.79	385451	13.84
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-101294/11		864894	9.76	908749	12.29	787622	14.34
STD6 240-102195/2 CCVIS		666093	9.71	694355	12.20	617009	14.21

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: STD6 240-102195/2 Date Analyzed: 09/20/2013 07:58

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0920002.D Heated Purge: (Y/N) N

Calibration ID: 17430

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		166459	5.83	690357	6.95	409264	8.44
UPPER LIMIT		332918	6.33	1380714	7.45	818528	8.94
LOWER LIMIT		83230	5.33	345179	6.45	204632	7.94
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-101887/21-A		170301	5.83	687258	6.95	406310	8.44
LCS 240-101887/22-A		177386	5.83	720620	6.95	423778	8.44
240-28680-1	DR-SB-48D-19-21	186302	5.83	749872	6.95	446220	8.44
240-28680-2	DR-SB-48D-24-26	205180	5.83	838608	6.95	494369	8.44
240-28680-3	DR-SB-48D-28-31	198100	5.83	794806	6.95	473402	8.44
240-28680-4	DR-SB-48D-34-36	203512	5.83	821443	6.95	474297	8.44
240-28680-5	DR-SB-48D-40-42	185732	5.83	766178	6.95	442999	8.44
240-28747-O-3-H MS		205487	5.83	844279	6.95	493974	8.44
240-28747-O-3-I MSD		200501	5.83	814608	6.95	482721	8.44

DCB = 1,4-Dichlorobenzene-d4
DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
NPT = Naphthalene-d8
Area Limit = 50%-200% of internal standard area
ANT = Acenaphthene-d10
RT Limit = ± 0.5 minutes of internal standard RT
ANT = Acenaphthene-d10

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: STD6 240-102195/2 Date Analyzed: 09/20/2013 07:58

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0920002.D Heated Purge: (Y/N) N

Calibration ID: 17430

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		666093	9.71	694355	12.20	617009	14.21
UPPER LIMIT		1332186	10.21	1388710	12.70	1234018	14.71
LOWER LIMIT		333047	9.21	347178	11.70	308505	13.71
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-101887/21-A		647187	9.70	661708	12.20	597850	14.21
LCS 240-101887/22-A		684753	9.70	719439	12.20	650738	14.21
240-28680-1	DR-SB-48D-19-21	729076	9.70	760834	12.20	638302	14.21
240-28680-2	DR-SB-48D-24-26	799514	9.70	826411	12.20	668749	14.21
240-28680-3	DR-SB-48D-28-31	768192	9.70	791537	12.20	670332	14.21
240-28680-4	DR-SB-48D-34-36	768969	9.70	798570	12.20	661799	14.21
240-28680-5	DR-SB-48D-40-42	722784	9.70	729386	12.20	603748	14.21
240-28747-O-3-H MS		802024	9.70	847523	12.20	707378	14.21
240-28747-O-3-I MSD		776397	9.70	815988	12.20	650628	14.21

PHN = Phenanthrene-d10

PHN = Phenanthrene-d10

CRY = Chrysene-d12

CRY = Chrysene-d12

Area Limit = 50%-200% of internal standard area

PRY = Perylene-d12

RT Limit = ± 0.5 minutes of internal standard RT

PRY = Perylene-d12

Column used to flag values outside QC limits

FORM VIII 8270D

Method 8015C - GRO

Nonhalogenated Organics using GC/FID - Modified (Gasoline Range Organics) by Method 8015C

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: YPID Start Date: 08/21/2013 11:53

Analysis Batch Number: 98316 End Date: 08/21/2013 16:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-98316/5 IC		08/21/2013 11:53	1	YF082105.D	RTX-VRX 0.45(mm)
STD2 240-98316/6 IC		08/21/2013 12:34	1	YF082106.D	RTX-VRX 0.45(mm)
STD3 240-98316/7 IC		08/21/2013 13:16	1	YF082107.D	RTX-VRX 0.45(mm)
STD4 240-98316/8 ICRT		08/21/2013 13:57	1	YF082108.D	RTX-VRX 0.45(mm)
STD5 240-98316/9 IC		08/21/2013 14:38	1	YF082109.D	RTX-VRX 0.45(mm)
STD6 240-98316/10 IC		08/21/2013 15:19	1	YF082110.D	RTX-VRX 0.45(mm)
ICV 240-98316/11		08/21/2013 16:00	1	YF082111.D	RTX-VRX 0.45(mm)

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 98316

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/21/2013 11:53 Calibration End Date: 08/21/2013 15:19 Calibration ID: 17011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98316/5	YF082105.D
Level 2	STD2 240-98316/6	YF082106.D
Level 3	STD3 240-98316/7	YF082107.D
Level 4	STD4 240-98316/8	YF082108.D
Level 5	STD5 240-98316/9	YF082109.D
Level 6	STD6 240-98316/10	YF082110.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	218793 178073	200683 168402	185221	179733	Ave		188484.161				9.7		20.0			
C6-C12	253410 192449	217081 182497	201115	194347	Ave		206816.484				12.0		20.0			
Trifluorotoluene (Surr)	208336 165275	165005 153793	163672	170026	Ave		171017.973				11.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 98316

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/21/2013 11:53 Calibration End Date: 08/21/2013 15:19 Calibration ID: 17011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98316/5	YF082105.D
Level 2	STD2 240-98316/6	YF082106.D
Level 3	STD3 240-98316/7	YF082107.D
Level 4	STD4 240-98316/8	YF082108.D
Level 5	STD5 240-98316/9	YF082109.D
Level 6	STD6 240-98316/10	YF082110.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.970	11.970	11.970	11.970	11.970	11.970					5.055 - 18.885	11.970
C6-C12	13.527	13.527	13.527	13.527	13.527	13.527					5.055 - 22.000	13.527
Trifluorotoluene (Surr)	9.802	9.805	9.800	9.803	9.802	9.802					9.553 - 10.053	9.802

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 98316

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/21/2013 11:53 Calibration End Date: 08/21/2013 15:19 Calibration ID: 17011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98316/5	YF082105.D
Level 2	STD2 240-98316/6	YF082106.D
Level 3	STD3 240-98316/7	YF082107.D
Level 4	STD4 240-98316/8	YF082108.D
Level 5	STD5 240-98316/9	YF082109.D
Level 6	STD6 240-98316/10	YF082110.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Total Petroleum Hydrocarbons (C6-C10)	Ave	21879324 269443328	40136556	74088424	143786198	213687668	100 1600	200	400	800	1200
C6-C12	Ave	25341049 291995584	43416109	80445864	155477876	230938349	100 1600	200	400	800	1200
Trifluorotoluene (Surr)	Ave	208336 7689657	330010	818361	1700262	3305506	1.00 50.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-98316/11 Calibration Date: 08/21/2013 16:00

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082111.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	170634		724	800	-9.5	20.0
C6-C12	Ave	206816	191323		740	800	-7.5	20.0
Trifluorotoluene (Surr)	Ave	171018	169240		9.90	10.0	-1.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-98316/11 Calibration Date: 08/21/2013 16:00

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082111.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.97	5.06	18.89
C6-C12	13.53	5.06	22.00
Trifluorotoluene (Surr)	9.80	9.55	10.05

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: YPID Start Date: 09/06/2013 16:00

Analysis Batch Number: 100469 End Date: 09/07/2013 06:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-100469/4 CCVRT		09/06/2013 16:00	1	YF090604.D	RTX-VRX 0.45(mm)
CCV 240-100469/11		09/06/2013 20:31	1	YF090611.D	RTX-VRX 0.45(mm)
MB 240-100462/1-A		09/06/2013 21:09	1	YF090612.D	RTX-VRX 0.45(mm)
LCS 240-100462/2-A		09/06/2013 21:48	1	YF090613.D	RTX-VRX 0.45(mm)
ZZZZZ		09/06/2013 22:27	1		RTX-VRX 0.45(mm)
ZZZZZ		09/06/2013 23:06	1		RTX-VRX 0.45(mm)
240-28679-G-2-B MS		09/06/2013 23:45	1	YF090616.D	RTX-VRX 0.45(mm)
240-28679-G-2-C MSD		09/07/2013 00:24	1	YF090617.D	RTX-VRX 0.45(mm)
ZZZZZ		09/07/2013 01:03	1		RTX-VRX 0.45(mm)
ZZZZZ		09/07/2013 01:43	1		RTX-VRX 0.45(mm)
CCV 240-100469/20		09/07/2013 02:22	1	YF090620.D	RTX-VRX 0.45(mm)
240-28680-1	DR-SB-48D-19-21	09/07/2013 03:01	1	YF090621.D	RTX-VRX 0.45(mm)
240-28680-2	DR-SB-48D-24-26	09/07/2013 03:41	1	YF090622.D	RTX-VRX 0.45(mm)
240-28680-3	DR-SB-48D-28-31	09/07/2013 04:20	1	YF090623.D	RTX-VRX 0.45(mm)
240-28680-4	DR-SB-48D-34-36	09/07/2013 04:58	1	YF090624.D	RTX-VRX 0.45(mm)
240-28680-5	DR-SB-48D-40-42	09/07/2013 05:37	1	YF090625.D	RTX-VRX 0.45(mm)
CCV 240-100469/26		09/07/2013 06:15	1	YF090626.D	RTX-VRX 0.45(mm)

8015C

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-100469/4 Calibration Date: 09/06/2013 16:00

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090604.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	192145		816	800	1.9	20.0
C6-C12	Ave	206816	212844		823	800	2.9	20.0
Trifluorotoluene (Surr)	Ave	171018	180442		10.6	10.0	5.5	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-100469/4 Calibration Date: 09/06/2013 16:00

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090604.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.96	5.13	18.79
C6-C12	13.64	5.13	22.15
Trifluorotoluene (Surr)	9.83	9.58	10.08

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-100469/11 Calibration Date: 09/06/2013 20:31

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090611.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	185741		788	800	-1.5	20.0
C6-C12	Ave	206816	203115		786	800	-1.8	20.0
Trifluorotoluene (Surr)	Ave	171018	189393		11.1	10.0	10.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-100469/11 Calibration Date: 09/06/2013 20:31

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090611.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.96	5.13	18.79
C6-C12	13.64	5.13	22.15
Trifluorotoluene (Surr)	9.83	9.58	10.08

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-100469/20 Calibration Date: 09/07/2013 02:22

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090620.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	201123		854	800	6.7	20.0
C6-C12	Ave	206816	217989		843	800	5.4	20.0
Trifluorotoluene (Surr)	Ave	171018	192150		11.2	10.0	12.4	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-100469/20 Calibration Date: 09/07/2013 02:22

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090620.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.96	5.13	18.79
C6-C12	13.64	5.13	22.15
Trifluorotoluene (Surr)	9.83	9.58	10.08

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-100469/26 Calibration Date: 09/07/2013 06:15

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090626.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	192364		816	800	2.1	20.0
C6-C12	Ave	206816	207483		803	800	0.3	20.0
Trifluorotoluene (Surr)	Ave	171018	187177		10.9	10.0	9.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-100469/26 Calibration Date: 09/07/2013 06:15

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090626.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.96	5.13	18.79
C6-C12	13.64	5.13	22.15
Trifluorotoluene (Surr)	9.83	9.58	10.08

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: MB 240-100462/1-A

Matrix: Solid Date Extracted: 09/06/2013 13:19

Lab File ID:(1) YF090612.D Lab File ID:(2)

Date Analyzed:(1) 09/06/2013 21:09 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-100462/2-A	09/06/2013 21:48	
	240-28679-G-2-B MS	09/06/2013 23:45	
	240-28679-G-2-C MSD	09/07/2013 00:24	
DR-SB-48D-19-21	240-28680-1	09/07/2013 03:01	
DR-SB-48D-24-26	240-28680-2	09/07/2013 03:41	
DR-SB-48D-28-31	240-28680-3	09/07/2013 04:20	
DR-SB-48D-34-36	240-28680-4	09/07/2013 04:58	
DR-SB-48D-40-42	240-28680-5	09/07/2013 05:37	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100462/1-A

Matrix: Solid Lab File ID: YF090612.D

Analysis Method: 8015C Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 09/06/2013 21:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 100469 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	100	U	100	46

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	104		10-150

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF090613.D

Lab ID: LCS 240-100462/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	809	101	60-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF090616.D

Lab ID: 240-28679-G-2-B MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	935	450	1430	105	10-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF090617.D

Lab ID: 240-28679-G-2-C MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	930	1280	89	11	94	10-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
DR-SB-48D-19-21	240-28680-1	99
DR-SB-48D-24-26	240-28680-2	102
DR-SB-48D-28-31	240-28680-3	103
DR-SB-48D-34-36	240-28680-4	97
DR-SB-48D-40-42	240-28680-5	104
	MB 240-100462/1-A	104
	LCS 240-100462/2-A	120
	240-28679-G-2-B MS	124
	240-28679-G-2-C MSD	125

	QC LIMITS
TFT = Trifluorotoluene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8015C

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: CCV 240-100469/4 Date Analyzed: 09/06/2013 16:00

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF090604.D Heated Purge: (Y/N) N

Calibration ID: 17011

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.83		
UPPER LIMIT				9.93		
LOWER LIMIT				9.73		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-100469/4 CCVRT		09/06/2013 16:00	YF090604.D	9.83		
CCV 240-100469/11		09/06/2013 20:31	YF090611.D	9.83		
MB 240-100462/1-A		09/06/2013 21:09	YF090612.D	9.82		
LCS 240-100462/2-A		09/06/2013 21:48	YF090613.D	9.83		
240-28679-G-2-B MS		09/06/2013 23:45	YF090616.D	9.83		
240-28679-G-2-C MSD		09/07/2013 00:24	YF090617.D	9.83		
CCV 240-100469/20		09/07/2013 02:22	YF090620.D	9.83		
240-28680-1	DR-SB-48D-19-21	09/07/2013 03:01	YF090621.D	9.82		
240-28680-2	DR-SB-48D-24-26	09/07/2013 03:41	YF090622.D	9.82		
240-28680-3	DR-SB-48D-28-31	09/07/2013 04:20	YF090623.D	9.82		
240-28680-4	DR-SB-48D-34-36	09/07/2013 04:58	YF090624.D	9.82		
240-28680-5	DR-SB-48D-40-42	09/07/2013 05:37	YF090625.D	9.82		
CCV 240-100469/26		09/07/2013 06:15	YF090626.D	9.83		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

Method 8015C - DRO

Nonhalogenated Organics using GC/FID - Modified (Diesel Range Organics) by Method 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: A2HP6F Start Date: 09/05/2013 15:19

Analysis Batch Number: 100244 End Date: 09/06/2013 07:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-100244/6 IC		09/05/2013 15:19	1	P6F90506.D	RTX-5 0.53(mm)
STD2 240-100244/7 IC		09/05/2013 15:49	1	P6F90507.D	RTX-5 0.53(mm)
STD3 240-100244/8 ICRT	CAL	09/05/2013 16:20	1	P6F90508.D	RTX-5 0.53(mm)
STD4 240-100244/9 IC		09/05/2013 16:50	1	P6F90509.D	RTX-5 0.53(mm)
STD5 240-100244/10 IC		09/05/2013 17:21	1	P6F90510.D	RTX-5 0.53(mm)
ICV 240-100244/11		09/05/2013 17:52	1	P6F90511.D	RTX-5 0.53(mm)
ZZZZZ		09/05/2013 18:22	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 18:53	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 19:24	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 19:54	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 20:25	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 20:55	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 21:26	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 21:57	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 22:28	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 22:59	1		RTX-5 0.53(mm)
CCV 240-100244/22		09/05/2013 23:29	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 00:00	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 00:30	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 01:01	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 01:31	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 02:02	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 02:32	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 03:03	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 03:33	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 04:04	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 04:34	1		RTX-5 0.53(mm)
CCV 240-100244/33		09/06/2013 05:05	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 05:35	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 06:06	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 06:36	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 07:07	1		RTX-5 0.53(mm)
CCV 240-100244/38		09/06/2013 07:37	1		RTX-5 0.53(mm)

8015C

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100244

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:19 Calibration End Date: 09/05/2013 17:21 Calibration ID: 17266

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-100244/6	P6F90506.D
Level 2	STD2 240-100244/7	P6F90507.D
Level 3	STD3 240-100244/8	P6F90508.D
Level 4	STD4 240-100244/9	P6F90509.D
Level 5	STD5 240-100244/10	P6F90510.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	219968 206023	197355	213222	207792	Ave		208871.966				4.0		20.0			
n-Nonane	204224 217176	193811	217498	215112	Ave		209564.227				4.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI

DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100244

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:19 Calibration End Date: 09/05/2013 17:21 Calibration ID: 17266

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-100244/6	P6F90506.D
Level 2	STD2 240-100244/7	P6F90507.D
Level 3	STD3 240-100244/8	P6F90508.D
Level 4	STD4 240-100244/9	P6F90509.D
Level 5	STD5 240-100244/10	P6F90510.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel Range Organics [C10 - C28]	9.324	9.324	9.324	9.324	9.324						5.126 - 13.522	9.324
n-Nonane	4.109	4.107	4.108	4.109	4.109						4.059 - 4.159	4.108

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100244

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:19 Calibration End Date: 09/05/2013 17:21 Calibration ID: 17266

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-100244/6	P6F90506.D
Level 2	STD2 240-100244/7	P6F90507.D
Level 3	STD3 240-100244/8	P6F90508.D
Level 4	STD4 240-100244/9	P6F90509.D
Level 5	STD5 240-100244/10	P6F90510.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel Range Organics [C10 - C28]	Ave	21999062	39475055	106622039	207813725	412089491	100	200	500	1000	2000
n-Nonane	Ave	2042237	3876226	10874906	21511179	43435245	10.0	20.0	50.0	100	200

Curve Type Legend:
Ave = Average

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-100244/11 Calibration Date: 09/05/2013 17:52

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F90511.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	208872	172520		414	501	-17.4	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-100244/11 Calibration Date: 09/05/2013 17:52

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F90511.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.32	5.13	13.52

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: A2HP6F Start Date: 09/12/2013 17:54

Analysis Batch Number: 101206 End Date: 09/13/2013 07:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-101206/5	*	09/12/2013 17:54	1	P6F91205.D	RTX-5 0.53(mm)
MB 240-100949/23-A		09/12/2013 18:26	1	P6F91206.D	RTX-5 0.53(mm)
LCS 240-100949/24-A		09/12/2013 18:57	1	P6F91207.D	RTX-5 0.53(mm)
ZZZZZ		09/12/2013 19:28	1		RTX-5 0.53(mm)
ZZZZZ		09/12/2013 20:00	1		RTX-5 0.53(mm)
ZZZZZ		09/12/2013 20:31	1		RTX-5 0.53(mm)
ZZZZZ		09/12/2013 21:02	1		RTX-5 0.53(mm)
ZZZZZ		09/12/2013 21:32	1		RTX-5 0.53(mm)
ZZZZZ		09/12/2013 22:03	1		RTX-5 0.53(mm)
ZZZZZ		09/12/2013 22:34	1		RTX-5 0.53(mm)
ZZZZZ		09/12/2013 23:05	1		RTX-5 0.53(mm)
CCV 240-101206/16	*	09/12/2013 23:36	1	P6F91216.D	RTX-5 0.53(mm)
ZZZZZ		09/13/2013 00:07	1		RTX-5 0.53(mm)
ZZZZZ		09/13/2013 00:38	1		RTX-5 0.53(mm)
240-28680-1	DR-SB-48D-19-21	09/13/2013 01:09	1	P6F91219.D	RTX-5 0.53(mm)
240-28680-2	DR-SB-48D-24-26	09/13/2013 01:40	1	P6F91220.D	RTX-5 0.53(mm)
240-28680-2 MS	DR-SB-48D-24-26 MS	09/13/2013 02:11	1	P6F91221.D	RTX-5 0.53(mm)
240-28680-2 MSD	DR-SB-48D-24-26 MSD	09/13/2013 02:42	1	P6F91222.D	RTX-5 0.53(mm)
240-28680-3	DR-SB-48D-28-31	09/13/2013 03:14	1	P6F91223.D	RTX-5 0.53(mm)
240-28680-4	DR-SB-48D-34-36	09/13/2013 03:45	1	P6F91224.D	RTX-5 0.53(mm)
240-28680-5	DR-SB-48D-40-42	09/13/2013 04:16	1	P6F91225.D	RTX-5 0.53(mm)
ZZZZZ		09/13/2013 04:47	1		RTX-5 0.53(mm)
CCV 240-101206/27	*	09/13/2013 05:18	1	P6F91227.D	RTX-5 0.53(mm)
ZZZZZ		09/13/2013 05:48	1		RTX-5 0.53(mm)
ZZZZZ		09/13/2013 06:19	1		RTX-5 0.53(mm)
ZZZZZ		09/13/2013 06:50	1		RTX-5 0.53(mm)
ZZZZZ		09/13/2013 07:21	1		RTX-5 0.53(mm)
CCV 240-101206/32		09/13/2013 07:52	1		RTX-5 0.53(mm)

*%D non-compliant

8015C

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVRT 240-101206/5 Calibration Date: 09/12/2013 17:54

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F91205.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	208872	255684		612	500	22.4*	20.0
n-Nonane	Ave	209564	251060		59.9	50.0	19.8	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCVRT 240-101206/5 Calibration Date: 09/12/2013 17:54

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F91205.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.33	5.13	13.53
n-Nonane	4.12	4.07	4.17

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101206/16 Calibration Date: 09/12/2013 23:36

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F91216.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	208872	279241		669	500	33.7*	20.0
n-Nonane	Ave	209564	271794		64.8	50.0	29.7*	20.0

FORM VII 8015C

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101206/16 Calibration Date: 09/12/2013 23:36

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F91216.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.33	5.13	13.53
n-Nonane	4.12	4.07	4.17

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101206/27 Calibration Date: 09/13/2013 05:18

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F91227.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	208872	258453		619	500	23.7*	20.0
n-Nonane	Ave	209564	254258		60.7	50.0	21.3*	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101206/27 Calibration Date: 09/13/2013 05:18

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F91227.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.33	5.13	13.53
n-Nonane	4.11	4.07	4.17

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: MB 240-100949/23-A

Matrix: Solid Date Extracted: 09/11/2013 07:38

Lab File ID:(1) P6F91206.D Lab File ID:(2)

Date Analyzed:(1) 09/12/2013 18:26 Date Analyzed:(2)

Instrument ID:(1) A2HP6F Instrument ID:(2)

GC Column:(1) RTX-5 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-100949/24-A	09/12/2013 18:57	
DR-SB-48D-19-21	240-28680-1	09/13/2013 01:09	
DR-SB-48D-24-26	240-28680-2	09/13/2013 01:40	
DR-SB-48D-24-26 MS	240-28680-2 MS	09/13/2013 02:11	
DR-SB-48D-24-26 MSD	240-28680-2 MSD	09/13/2013 02:42	
DR-SB-48D-28-31	240-28680-3	09/13/2013 03:14	
DR-SB-48D-34-36	240-28680-4	09/13/2013 03:45	
DR-SB-48D-40-42	240-28680-5	09/13/2013 04:16	

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100949/23-A

Matrix: Solid Lab File ID: P6F91206.D

Analysis Method: 8015C Date Collected:

Extraction Method: 3550C Date Extracted: 09/11/2013 07:38

Sample wt/vol: 30.00(g) Date Analyzed: 09/12/2013 18:26

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 101206 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	17	U	17	9.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	56		10-110

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P6F91207.D

Lab ID: LCS 240-100949/24-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Diesel	83.3	73.9	89	47-138	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P6F91221.D

Lab ID: 240-28680-2 MS Client ID: DR-SB-48D-24-26 MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Diesel	99.2	20 U	82.0	83	10-199	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III

DIESEL RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P6F91222.D

Lab ID: 240-28680-2 MSD Client ID: DR-SB-48D-24-26 MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Diesel	99.3	82.3	83	0	30	10-199	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II

DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-5 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	C91 #
DR-SB-48D-19-21	240-28680-1	29
DR-SB-48D-24-26	240-28680-2	25
DR-SB-48D-28-31	240-28680-3	24
DR-SB-48D-34-36	240-28680-4	27
DR-SB-48D-40-42	240-28680-5	30
	MB 240-100949/23-A	56
	LCS 240-100949/24-A	53
DR-SB-48D-24-26 MS	240-28680-2 MS	44
DR-SB-48D-24-26 MSD	240-28680-2 MSD	46

	QC LIMITS
C9 = n-Nonane	10-110

Column to be used to flag recovery values

FORM II 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: CCVRT 240-101206/5 Date Analyzed: 09/12/2013 17:54

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm)

Lab File ID (Standard): P6F91205.D Heated Purge: (Y/N) N

Calibration ID: 17266

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				4.12		
UPPER LIMIT				4.22		
LOWER LIMIT				4.02		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-101206/5		09/12/2013 17:54	P6F91205.D	4.12		
LCS 240-100949/24-A		09/12/2013 18:57	P6F91207.D	4.11		
CCV 240-101206/16		09/12/2013 23:36	P6F91216.D	4.12		
240-28680-1	DR-SB-48D-19-21	09/13/2013 01:09	P6F91219.D	4.11		
240-28680-2	DR-SB-48D-24-26	09/13/2013 01:40	P6F91220.D	4.11		
240-28680-2 MS	DR-SB-48D-24-26 MS	09/13/2013 02:11	P6F91221.D	4.11		
240-28680-2 MSD	DR-SB-48D-24-26 MSD	09/13/2013 02:42	P6F91222.D	4.11		
240-28680-3	DR-SB-48D-28-31	09/13/2013 03:14	P6F91223.D	4.11		
240-28680-4	DR-SB-48D-34-36	09/13/2013 03:45	P6F91224.D	4.11		
240-28680-5	DR-SB-48D-40-42	09/13/2013 04:16	P6F91225.D	4.11		
CCV 240-101206/27		09/13/2013 05:18	P6F91227.D	4.11		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

Method 8082A

Polychlorinated Biphenyls (PCBs) (GC) by Method 8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: A2HP10 Start Date: 09/07/2013 08:15

Analysis Batch Number: 100488 End Date: 09/07/2013 20:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 240-100488/3 IC	Ar 1232	09/07/2013 08:15	1	P1000003.D	CLP-1 0.53(mm)
STD005 240-100488/3 IC		09/07/2013 08:15	1	P1000003.D	CLP-2 0.53(mm)
STD01 240-100488/4 IC		09/07/2013 08:30	1	P1000004.D	CLP-1 0.53(mm)
STD01 240-100488/4 IC		09/07/2013 08:30	1	P1000004.D	CLP-2 0.53(mm)
STD02 240-100488/5 IC		09/07/2013 08:45	1	P1000005.D	CLP-1 0.53(mm)
STD02 240-100488/5 IC		09/07/2013 08:45	1	P1000005.D	CLP-2 0.53(mm)
STD05 240-100488/6 IC		09/07/2013 09:00	1	P1000006.D	CLP-1 0.53(mm)
STD05 240-100488/6 IC		09/07/2013 09:00	1	P1000006.D	CLP-2 0.53(mm)
STD1 240-100488/7 IC		09/07/2013 09:15	1	P1000007.D	CLP-1 0.53(mm)
STD1 240-100488/7 IC		09/07/2013 09:15	1	P1000007.D	CLP-2 0.53(mm)
STD2 240-100488/8 IC		09/07/2013 09:30	1	P1000008.D	CLP-1 0.53(mm)
STD2 240-100488/8 IC		09/07/2013 09:30	1	P1000008.D	CLP-2 0.53(mm)
STD005 240-100488/9 IC	Ar 1242	09/07/2013 09:46	1	P1000009.D	CLP-1 0.53(mm)
STD005 240-100488/9 IC		09/07/2013 09:46	1	P1000009.D	CLP-2 0.53(mm)
STD01 240-100488/10 IC		09/07/2013 10:01	1	P1000010.D	CLP-1 0.53(mm)
STD01 240-100488/10 IC		09/07/2013 10:01	1	P1000010.D	CLP-2 0.53(mm)
STD02 240-100488/11 IC		09/07/2013 10:16	1	P1000011.D	CLP-1 0.53(mm)
STD02 240-100488/11 IC		09/07/2013 10:16	1	P1000011.D	CLP-2 0.53(mm)
STD05 240-100488/12 IC		09/07/2013 10:31	1	P1000012.D	CLP-1 0.53(mm)
STD05 240-100488/12 IC		09/07/2013 10:31	1	P1000012.D	CLP-2 0.53(mm)
STD1 240-100488/13 IC		09/07/2013 10:46	1	P1000013.D	CLP-1 0.53(mm)
STD1 240-100488/13 IC		09/07/2013 10:46	1	P1000013.D	CLP-2 0.53(mm)
STD2 240-100488/14 IC		09/07/2013 11:01	1	P1000014.D	CLP-1 0.53(mm)
STD2 240-100488/14 IC		09/07/2013 11:01	1	P1000014.D	CLP-2 0.53(mm)
STD005 240-100488/15 IC	Ar 1248	09/07/2013 11:16	1	P1000015.D	CLP-1 0.53(mm)
STD005 240-100488/15 IC		09/07/2013 11:16	1	P1000015.D	CLP-2 0.53(mm)
STD01 240-100488/16 IC		09/07/2013 11:31	1	P1000016.D	CLP-1 0.53(mm)
STD01 240-100488/16 IC		09/07/2013 11:31	1	P1000016.D	CLP-2 0.53(mm)
STD02 240-100488/17 IC		09/07/2013 11:46	1	P1000017.D	CLP-1 0.53(mm)
STD02 240-100488/17 IC		09/07/2013 11:46	1	P1000017.D	CLP-2 0.53(mm)
STD05 240-100488/18 IC		09/07/2013 12:02	1	P1000018.D	CLP-1 0.53(mm)
STD05 240-100488/18 IC		09/07/2013 12:02	1	P1000018.D	CLP-2 0.53(mm)
STD1 240-100488/19 IC		09/07/2013 12:17	1	P1000019.D	CLP-1 0.53(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: A2HP10 Start Date: 09/07/2013 08:15

Analysis Batch Number: 100488 End Date: 09/07/2013 20:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-100488/19 IC	A=1248	09/07/2013 12:17	1	P1000019.D	CLP-2 0.53(mm)
STD2 240-100488/20 IC		09/07/2013 12:32	1	P1000020.D	CLP-1 0.53(mm)
STD2 240-100488/20 IC		09/07/2013 12:32	1	P1000020.D	CLP-2 0.53(mm)
STD005 240-100488/21 IC	A=1221/1254	09/07/2013 12:47	1	P1000021.D	CLP-1 0.53(mm)
STD005 240-100488/21 IC		09/07/2013 12:47	1	P1000021.D	CLP-2 0.53(mm)
STD01 240-100488/22 IC		09/07/2013 13:02	1	P1000022.D	CLP-1 0.53(mm)
STD01 240-100488/22 IC		09/07/2013 13:02	1	P1000022.D	CLP-2 0.53(mm)
STD02 240-100488/23 IC		09/07/2013 13:17	1	P1000023.D	CLP-1 0.53(mm)
STD02 240-100488/23 IC		09/07/2013 13:17	1	P1000023.D	CLP-2 0.53(mm)
STD05 240-100488/24 IC		09/07/2013 13:33	1	P1000024.D	CLP-1 0.53(mm)
STD05 240-100488/24 IC		09/07/2013 13:33	1	P1000024.D	CLP-2 0.53(mm)
STD1 240-100488/25 IC		09/07/2013 13:48	1	P1000025.D	CLP-1 0.53(mm)
STD1 240-100488/25 IC		09/07/2013 13:48	1	P1000025.D	CLP-2 0.53(mm)
STD2 240-100488/26 IC		09/07/2013 14:03	1	P1000026.D	CLP-1 0.53(mm)
STD2 240-100488/26 IC		09/07/2013 14:03	1	P1000026.D	CLP-2 0.53(mm)
STD005 240-100488/27 IC	A=1016/1260	09/07/2013 14:18	1	P1000027.D	CLP-1 0.53(mm)
STD005 240-100488/27 IC		09/07/2013 14:18	1	P1000027.D	CLP-2 0.53(mm)
STD01 240-100488/28 IC		09/07/2013 14:34	1	P1000028.D	CLP-1 0.53(mm)
STD01 240-100488/28 IC		09/07/2013 14:34	1	P1000028.D	CLP-2 0.53(mm)
STD02 240-100488/29 IC		09/07/2013 14:49	1	P1000029.D	CLP-1 0.53(mm)
STD02 240-100488/29 IC		09/07/2013 14:49	1	P1000029.D	CLP-2 0.53(mm)
STD05 240-100488/30 ICRT		09/07/2013 15:04	1	P1000030.D	CLP-1 0.53(mm)
STD05 240-100488/30 ICRT		09/07/2013 15:04	1	P1000030.D	CLP-2 0.53(mm)
STD1 240-100488/31 IC		09/07/2013 15:19	1	P1000031.D	CLP-1 0.53(mm)
STD1 240-100488/31 IC		09/07/2013 15:19	1	P1000031.D	CLP-2 0.53(mm)
STD2 240-100488/32 IC		09/07/2013 15:34	1	P1000032.D	CLP-1 0.53(mm)
STD2 240-100488/32 IC		09/07/2013 15:34	1	P1000032.D	CLP-2 0.53(mm)
STD005 240-100488/33 IC		09/07/2013 15:50	1		CLP-1 0.53(mm)
STD005 240-100488/33 IC		09/07/2013 15:50	1		CLP-2 0.53(mm)
STD01 240-100488/34 IC		09/07/2013 16:05	1		CLP-1 0.53(mm)
STD01 240-100488/34 IC		09/07/2013 16:05	1		CLP-2 0.53(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: A2HP10 Start Date: 09/07/2013 08:15

Analysis Batch Number: 100488 End Date: 09/07/2013 20:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD02 240-100488/35 IC		09/07/2013 16:20	1		CLP-1 0.53(mm)
STD02 240-100488/35 IC		09/07/2013 16:20	1		CLP-2 0.53(mm)
STD05 240-100488/36 IC		09/07/2013 16:35	1		CLP-1 0.53(mm)
STD05 240-100488/36 IC		09/07/2013 16:35	1		CLP-2 0.53(mm)
STD1 240-100488/37 IC		09/07/2013 16:50	1		CLP-1 0.53(mm)
STD1 240-100488/37 IC		09/07/2013 16:50	1		CLP-2 0.53(mm)
STD2 240-100488/38 IC		09/07/2013 17:06	1		CLP-1 0.53(mm)
STD2 240-100488/38 IC		09/07/2013 17:06	1		CLP-2 0.53(mm)
STD005 240-100488/39 IC		09/07/2013 17:21	1		CLP-1 0.53(mm)
STD005 240-100488/39 IC		09/07/2013 17:21	1		CLP-2 0.53(mm)
STD01 240-100488/40 IC		09/07/2013 17:36	1		CLP-1 0.53(mm)
STD01 240-100488/40 IC		09/07/2013 17:36	1		CLP-2 0.53(mm)
STD02 240-100488/41 IC		09/07/2013 17:51	1		CLP-1 0.53(mm)
STD02 240-100488/41 IC		09/07/2013 17:51	1		CLP-2 0.53(mm)
STD05 240-100488/42 IC		09/07/2013 18:06	1		CLP-1 0.53(mm)
STD05 240-100488/42 IC		09/07/2013 18:06	1		CLP-2 0.53(mm)
STD1 240-100488/43 IC		09/07/2013 18:22	1		CLP-1 0.53(mm)
STD1 240-100488/43 IC		09/07/2013 18:22	1		CLP-2 0.53(mm)
STD2 240-100488/44 IC		09/07/2013 18:37	1		CLP-1 0.53(mm)
STD2 240-100488/44 IC		09/07/2013 18:37	1		CLP-2 0.53(mm)
ICV 240-100488/45		09/07/2013 18:52	1		CLP-1 0.53(mm)
ICV 240-100488/45		09/07/2013 18:52	1		CLP-2 0.53(mm)
ICV 240-100488/46		09/07/2013 19:07	1		CLP-1 0.53(mm)
ICV 240-100488/46		09/07/2013 19:07	1		CLP-2 0.53(mm)
ICV 240-100488/47		09/07/2013 19:22	1		CLP-1 0.53(mm)
ICV 240-100488/47		09/07/2013 19:22	1		CLP-2 0.53(mm)
ICV 240-100488/48		09/07/2013 19:38	1		CLP-1 0.53(mm)
ICV 240-100488/48		09/07/2013 19:38	1		CLP-2 0.53(mm)
ICV 240-100488/49		09/07/2013 19:53	1		CLP-1 0.53(mm)
ICV 240-100488/49		09/07/2013 19:53	1		CLP-2 0.53(mm)
ICV 240-100488/50		09/07/2013 20:08	1	P1000050.D	CLP-1 0.53(mm)
ICV 240-100488/50		09/07/2013 20:08	1	P1000050.D	CLP-2 0.53(mm)
ICV 240-100488/51		09/07/2013 20:23	1		CLP-1 0.53(mm)
ICV 240-100488/51		09/07/2013 20:23	1		CLP-2 0.53(mm)
ICV 240-100488/52		09/07/2013 20:38	1		CLP-1 0.53(mm)
ICV 240-100488/52		09/07/2013 20:38	1		CLP-2 0.53(mm)

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 08:15 Calibration End Date: 09/07/2013 09:30 Calibration ID: 17342

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/3	P1000003.D
Level 2	STD01 240-100488/4	P1000004.D
Level 3	STD02 240-100488/5	P1000005.D
Level 4	STD05 240-100488/6	P1000006.D
Level 5	STD1 240-100488/7	P1000007.D
Level 6	STD2 240-100488/8	P1000008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1232 Peak 1	26039040 19805329	24513440 18303192	23911500	22696118	Ave		22544769.8				13.0		20.0			
PCB-1232 Peak 2	21713760 14231156	19332920 12718818	17944795	16825702	Ave		17127858.5				19.0		20.0			
PCB-1232 Peak 3	36688940 28968940	33231660 24239586	36012905	31584014	Ave		31787674.2				15.0		20.0			
PCB-1232 Peak 4	13824240 12669839	13367900 10137771	14703050	12350978	Ave		12842296.3				12.0		20.0			
PCB-1232 Peak 5	15721820 11585569	14741290 11353831	13719705	13086620	Ave		13368139.2				13.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 08:15 Calibration End Date: 09/07/2013 09:30 Calibration ID: 17342

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/3	P1000003.D
Level 2	STD01 240-100488/4	P1000004.D
Level 3	STD02 240-100488/5	P1000005.D
Level 4	STD05 240-100488/6	P1000006.D
Level 5	STD1 240-100488/7	P1000007.D
Level 6	STD2 240-100488/8	P1000008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1232 Peak 1	1.787	1.786	1.786	1.785	1.785	1.785					1.737 - 1.837	1.786
PCB-1232 Peak 2	2.126	2.123	2.125	2.125	2.124	2.122					2.076 - 2.176	2.124
PCB-1232 Peak 3	2.578	2.575	2.575	2.576	2.576	2.575					2.528 - 2.628	2.576
PCB-1232 Peak 4	2.717	2.715	2.711	2.713	2.709	2.711					2.667 - 2.767	2.713
PCB-1232 Peak 5	3.135	3.135	3.137	3.139	3.136	3.135					3.085 - 3.185	3.136

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 09:46 Calibration End Date: 09/07/2013 11:01 Calibration ID: 17348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/9	P1000009.D
Level 2	STD01 240-100488/10	P1000010.D
Level 3	STD02 240-100488/11	P1000011.D
Level 4	STD05 240-100488/12	P1000012.D
Level 5	STD1 240-100488/13	P1000013.D
Level 6	STD2 240-100488/14	P1000014.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	19764220 13018145	17654930 13279561	16328870	15723804	Ave		15961588.3				16.0		20.0			
PCB-1242 Peak 2	37514120 24160209	32720680 24040104	30562320	29049232	Ave		29674444.1				17.0		20.0			
PCB-1242 Peak 3	66098760 49335575	63246340 49947172	57538810	56787730	Ave		57159064.4				12.0		20.0			
PCB-1242 Peak 4	29585800 22243780	24376180 22611152	21834875	24886028	Ave		24256302.4				12.0		20.0			
PCB-1242 Peak 5	32409720 23049880	29691270 23089465	27154855	25410682	Ave		26800978.7				14.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 09:46 Calibration End Date: 09/07/2013 11:01 Calibration ID: 17348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/9	P1000009.D
Level 2	STD01 240-100488/10	P1000010.D
Level 3	STD02 240-100488/11	P1000011.D
Level 4	STD05 240-100488/12	P1000012.D
Level 5	STD1 240-100488/13	P1000013.D
Level 6	STD2 240-100488/14	P1000014.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1242 Peak 1	1.787	1.785	1.784	1.785	1.786	1.785					1.737 - 1.837	1.785
PCB-1242 Peak 2	2.123	2.121	2.124	2.121	2.122	2.122					2.073 - 2.173	2.122
PCB-1242 Peak 3	2.575	2.575	2.576	2.575	2.576	2.574					2.525 - 2.625	2.575
PCB-1242 Peak 4	2.711	2.712	2.712	2.711	2.712	2.711					2.661 - 2.761	2.712
PCB-1242 Peak 5	3.136	3.133	3.134	3.136	3.134	3.135					3.086 - 3.186	3.135

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-28680-1 | Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 | GC Column: CLP-1 | ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 11:16 | Calibration End Date: 09/07/2013 12:32 | Calibration ID: 17354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/15	P1000015.D
Level 2	STD01 240-100488/16	P1000016.D
Level 3	STD02 240-100488/17	P1000017.D
Level 4	STD05 240-100488/18	P1000018.D
Level 5	STD1 240-100488/19	P1000019.D
Level 6	STD2 240-100488/20	P1000020.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	17212860 12632622	16688670 11815422	14953170	13672518	Ave		14495877.0				15.0		20.0			
PCB-1248 Peak 2	36275600 32990090	37470490 31255274	34573780	38428502	Ave		35165622.8				7.8		20.0			
PCB-1248 Peak 3	47991160 35500843	42687340 34483348	41279270	42391020	Ave		40722163.4				12.0		20.0			
PCB-1248 Peak 4	23617700 20421220	19594230 19685939	22110110	21971986	Ave		21233530.8				7.5		20.0			
PCB-1248 Peak 5	21968040 17891470	21570070 18681028	21266555	20603548	Ave		20330118.5				8.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 11:16 Calibration End Date: 09/07/2013 12:32 Calibration ID: 17354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/15	P1000015.D
Level 2	STD01 240-100488/16	P1000016.D
Level 3	STD02 240-100488/17	P1000017.D
Level 4	STD05 240-100488/18	P1000018.D
Level 5	STD1 240-100488/19	P1000019.D
Level 6	STD2 240-100488/20	P1000020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1248 Peak 1	2.122	2.120	2.123	2.121	2.121	2.122					2.072 - 2.172	2.122
PCB-1248 Peak 2	2.574	2.570	2.574	2.572	2.573	2.573					2.524 - 2.624	2.573
PCB-1248 Peak 3	3.134	3.134	3.134	3.136	3.135	3.135					3.084 - 3.184	3.135
PCB-1248 Peak 4	3.761	3.760	3.761	3.762	3.762	3.760					3.711 - 3.811	3.761
PCB-1248 Peak 5	4.223	4.222	4.219	4.222	4.221	4.221					4.173 - 4.273	4.221

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 12:47 Calibration End Date: 09/07/2013 14:03 Calibration ID: 17318

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/21	P1000021.D
Level 2	STD01 240-100488/22	P1000022.D
Level 3	STD02 240-100488/23	P1000023.D
Level 4	STD05 240-100488/24	P1000024.D
Level 5	STD1 240-100488/25	P1000025.D
Level 6	STD2 240-100488/26	P1000026.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	14284240 9111735	12690910 9012891	11217185	9978126	Ave		11049181.1				19.0		20.0			
PCB-1221 Peak 2	7473660 4711185	6680670 4837707	5945855	5363752	Ave		5835471.50				19.0		20.0			
PCB-1221 Peak 3	31788360 22171762	30832980 21217772	27804305	25217490	Ave		26505444.8				17.0		20.0			
PCB-1254 Peak 1	37328820 26828647	37301130 26982968	33850925	31158280	Ave		32241795.0				15.0		20.0			
PCB-1254 Peak 2	72836560 56805745	70367700 58961940	68017240	64092740	Ave		65180320.8				9.8		20.0			
PCB-1254 Peak 3	46790780 40160039	44278890 42497651	44533230	42563270	Ave		43470643.3				5.2		20.0			
PCB-1254 Peak 4	43992680 35344225	41958250 36717663	41348140	39403828	Ave		39794130.9				8.3		20.0			
PCB-1254 Peak 5	66687860 53459817	65129060 54732214	61867920	59164776	Ave		60173607.8				9.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 12:47 Calibration End Date: 09/07/2013 14:03 Calibration ID: 17318

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/21	P1000021.D
Level 2	STD01 240-100488/22	P1000022.D
Level 3	STD02 240-100488/23	P1000023.D
Level 4	STD05 240-100488/24	P1000024.D
Level 5	STD1 240-100488/25	P1000025.D
Level 6	STD2 240-100488/26	P1000026.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1221 Peak 1	1.618	1.619	1.619	1.618	1.619	1.618					1.568 - 1.668	1.619
PCB-1221 Peak 2	1.748	1.752	1.751	1.749	1.749	1.749					1.698 - 1.798	1.750
PCB-1221 Peak 3	1.784	1.785	1.785	1.783	1.786	1.786					1.734 - 1.834	1.785
PCB-1254 Peak 1	3.531	3.532	3.532	3.531	3.532	3.532					3.481 - 3.581	3.532
PCB-1254 Peak 2	4.222	4.221	4.220	4.220	4.221	4.221					4.172 - 4.272	4.221
PCB-1254 Peak 3	4.519	4.516	4.519	4.517	4.517	4.516					4.469 - 4.569	4.517
PCB-1254 Peak 4	4.717	4.718	4.715	4.717	4.717	4.716					4.667 - 4.767	4.717
PCB-1254 Peak 5	5.009	5.011	5.010	5.010	5.009	5.009					4.959 - 5.059	5.010

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-28680-1 | Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 | GC Column: CLP-1 | ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 14:18 | Calibration End Date: 09/07/2013 15:34 | Calibration ID: 17324

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/27	P1000027.D
Level 2	STD01 240-100488/28	P1000028.D
Level 3	STD02 240-100488/29	P1000029.D
Level 4	STD05 240-100488/30	P1000030.D
Level 5	STD1 240-100488/31	P1000031.D
Level 6	STD2 240-100488/32	P1000032.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	21385700 16802899	20794510 15484820	20111530	18943782	Ave		18920540.2				12.0		20.0			
PCB-1016 Peak 2	40588180 30363180	38253280 28258776	37014580	33277594	Ave		34625931.6				14.0		20.0			
PCB-1016 Peak 3	80978940 67142334	79579040 59592946	72559910	67169096	Ave		71170377.6				12.0		20.0			
PCB-1016 Peak 4	33667800 28374173	33798330 26449685	27413790	29874800	Ave		29929763.0				11.0		20.0			
PCB-1016 Peak 5	35193000 29189671	33994900 26735489	32452655	29195408	Ave		31126853.8				10.0		20.0			
PCB-1260 Peak 1	49397600 40252946	50016270 39196106	47425555	44821268	Ave		45184957.4				10.0		20.0			
PCB-1260 Peak 2	88425780 72185606	88244860 70500621	86241475	79277360	Ave		80812616.9				10.0		20.0			
PCB-1260 Peak 3	79476160 68860670	80324630 67832320	80958680	75149460	Ave		75433653.3				7.8		20.0			
PCB-1260 Peak 4	117670120 99853853	116372850 99215872	115951535	108599068	Ave		109610550				7.7		20.0			
PCB-1260 Peak 5	53040640 44905531	50568490 44253891	50963920	48307562	Ave		48673339.0				7.2		20.0			
Tetrachloro-m-xylene	1167322400 974696040	1133825200 941441540	1173416100	1072528480	Ave		1077204960				9.2		20.0			
Decachlorobiphenyl	1196368000 911526720	1112686400 877443510	1086590000	1014587160	Ave		1033200298				12.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 14:18 Calibration End Date: 09/07/2013 15:34 Calibration ID: 17324

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/27	P1000027.D
Level 2	STD01 240-100488/28	P1000028.D
Level 3	STD02 240-100488/29	P1000029.D
Level 4	STD05 240-100488/30	P1000030.D
Level 5	STD1 240-100488/31	P1000031.D
Level 6	STD2 240-100488/32	P1000032.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1016 Peak 1	1.784	1.786	1.786	1.787	1.784	1.785					1.737 - 1.837	1.785
PCB-1016 Peak 2	2.123	2.122	2.125	2.122	2.121	2.121					2.072 - 2.172	2.122
PCB-1016 Peak 3	2.574	2.575	2.574	2.576	2.574	2.574					2.526 - 2.626	2.575
PCB-1016 Peak 4	2.710	2.714	2.712	2.712	2.711	2.711					2.662 - 2.762	2.712
PCB-1016 Peak 5	3.134	3.136	3.133	3.135	3.134	3.135					3.085 - 3.185	3.135
PCB-1260 Peak 1	4.419	4.422	4.418	4.419	4.419	4.419					4.369 - 4.469	4.419
PCB-1260 Peak 2	4.719	4.719	4.717	4.719	4.717	4.717					4.669 - 4.769	4.718
PCB-1260 Peak 3	5.010	5.008	5.008	5.007	5.007	5.007					4.957 - 5.057	5.008
PCB-1260 Peak 4	5.726	5.724	5.726	5.727	5.725	5.725					5.677 - 5.777	5.726
PCB-1260 Peak 5	6.015	6.014	6.017	6.014	6.015	6.014					5.964 - 6.064	6.015
Tetrachloro-m-xylene	1.453	1.454	1.453	1.454	1.453	1.452					1.404 - 1.504	1.453
Decachlorobiphenyl	7.186	7.184	7.186	7.185	7.184	7.184					7.135 - 7.235	7.185

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-100488/50 Calibration Date: 09/07/2013 20:08

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000050.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	18920540	17296453		0.914	1.00	-8.6	20.0
PCB-1016 Peak 2	Ave	34625932	32390913		0.935	1.00	-6.5	20.0
PCB-1016 Peak 3	Ave	71170378	64677016		0.909	1.00	-9.1	20.0
PCB-1016 Peak 4	Ave	29929763	29030728		0.970	1.00	-3.0	20.0
PCB-1016 Peak 5	Ave	31126854	29197087		0.938	1.00	-6.2	20.0
PCB-1260 Peak 1	Ave	45184957	41325814		0.915	1.00	-8.5	20.0
PCB-1260 Peak 2	Ave	80812617	74850357		0.926	1.00	-7.4	20.0
PCB-1260 Peak 3	Ave	75433653	70352636		0.933	1.00	-6.7	20.0
PCB-1260 Peak 4	Ave	109610550	108075176		0.986	1.00	-1.4	20.0
PCB-1260 Peak 5	Ave	48673339	48746629		1.00	1.00	0.2	20.0

FORM VII

PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-100488/50 Calibration Date: 09/07/2013 20:08

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000050.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	1.79	1.74	1.84
PCB-1016 Peak 2	2.12	2.07	2.17
PCB-1016 Peak 3	2.58	2.53	2.63
PCB-1016 Peak 4	2.71	2.66	2.76
PCB-1016 Peak 5	3.13	3.09	3.19
PCB-1260 Peak 1	4.42	4.37	4.47
PCB-1260 Peak 2	4.72	4.67	4.77
PCB-1260 Peak 3	5.01	4.96	5.06
PCB-1260 Peak 4	5.73	5.68	5.78
PCB-1260 Peak 5	6.01	5.96	6.06

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 08:15 Calibration End Date: 09/07/2013 09:30 Calibration ID: 17343

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/3	P1000003.D
Level 2	STD01 240-100488/4	P1000004.D
Level 3	STD02 240-100488/5	P1000005.D
Level 4	STD05 240-100488/6	P1000006.D
Level 5	STD1 240-100488/7	P1000007.D
Level 6	STD2 240-100488/8	P1000008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1232 Peak 1	24212000 15942710	19814490 14651601	19046580	18197620	Ave		18644166.8				18.0		20.0			
PCB-1232 Peak 2	18400100 12842632	14033890 11915329	14924970	14396492	Ave		14418902.2				16.0		20.0			
PCB-1232 Peak 3	32908740 25450821	29530230 24343345	29249625	28106440	Ave		28264866.9				11.0		20.0			
PCB-1232 Peak 4	16629600 11185508	13951460 10590975	13614965	12501928	Ave		13079072.7				17.0		20.0			
PCB-1232 Peak 5	14053740 8757062	11353370 8627806	10243670	9789776	Ave		10470904.0				19.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 08:15 Calibration End Date: 09/07/2013 09:30 Calibration ID: 17343

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/3	P1000003.D
Level 2	STD01 240-100488/4	P1000004.D
Level 3	STD02 240-100488/5	P1000005.D
Level 4	STD05 240-100488/6	P1000006.D
Level 5	STD1 240-100488/7	P1000007.D
Level 6	STD2 240-100488/8	P1000008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1232 Peak 1	2.511	2.512	2.516	2.515	2.513	2.513					2.461 - 2.561	2.513
PCB-1232 Peak 2	2.959	2.962	2.965	2.967	2.962	2.964					2.909 - 3.009	2.963
PCB-1232 Peak 3	3.457	3.456	3.459	3.459	3.459	3.459					3.407 - 3.507	3.458
PCB-1232 Peak 4	3.606	3.604	3.610	3.610	3.612	3.610					3.556 - 3.656	3.609
PCB-1232 Peak 5	4.262	4.259	4.262	4.260	4.262	4.261					4.212 - 4.312	4.261

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 09:46 Calibration End Date: 09/07/2013 11:01 Calibration ID: 17349

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/9	P1000009.D
Level 2	STD01 240-100488/10	P1000010.D
Level 3	STD02 240-100488/11	P1000011.D
Level 4	STD05 240-100488/12	P1000012.D
Level 5	STD1 240-100488/13	P1000013.D
Level 6	STD2 240-100488/14	P1000014.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	16282580 10775634	15245180 10592236	13906900	12635368	Ave		13239649.6				18.0		20.0			
PCB-1242 Peak 2	31827480 21630104	28758820 21163663	26913150	25588052	Ave		25980211.5				16.0		20.0			
PCB-1242 Peak 3	60819940 44127213	54893680 44607859	52957870	50448320	Ave		51309146.9				12.0		20.0			
PCB-1242 Peak 4	28181040 19028094	23450410 18679418	23382260	21634046	Ave		22392544.6				16.0		20.0			
PCB-1242 Peak 5	26774040 15047778	22541700 14711320	19475545	17127740	Lin1	732699.127	14578201.1							0.9980		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 09:46 Calibration End Date: 09/07/2013 11:01 Calibration ID: 17349

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/9	P1000009.D
Level 2	STD01 240-100488/10	P1000010.D
Level 3	STD02 240-100488/11	P1000011.D
Level 4	STD05 240-100488/12	P1000012.D
Level 5	STD1 240-100488/13	P1000013.D
Level 6	STD2 240-100488/14	P1000014.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1242 Peak 1	2.511	2.512	2.514	2.512	2.512	2.514					2.461 - 2.561	2.513
PCB-1242 Peak 2	2.965	2.965	2.963	2.963	2.964	2.964					2.915 - 3.015	2.964
PCB-1242 Peak 3	3.456	3.459	3.459	3.459	3.459	3.459					3.406 - 3.506	3.459
PCB-1242 Peak 4	3.613	3.609	3.610	3.610	3.609	3.610					3.563 - 3.663	3.610
PCB-1242 Peak 5	4.131	4.130	4.129	4.127	4.130	4.129					4.081 - 4.181	4.129

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 11:16 Calibration End Date: 09/07/2013 12:32 Calibration ID: 17355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/15	P1000015.D
Level 2	STD01 240-100488/16	P1000016.D
Level 3	STD02 240-100488/17	P1000017.D
Level 4	STD05 240-100488/18	P1000018.D
Level 5	STD1 240-100488/19	P1000019.D
Level 6	STD2 240-100488/20	P1000020.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	16842780 10717062	15525330 10131593	13670985	11701002	Lin1	452742.181	10193029.6							0.9970		0.9900
PCB-1248 Peak 2	38517240 28573357	37334780 28615981	34096015	30923740	Ave		33010185.4				13.0		20.0			
PCB-1248 Peak 3	36410460 27532598	35128620 27245851	33643555	28761510	Ave		31453765.6				13.0		20.0			
PCB-1248 Peak 4	33885580 26816984	33812860 26206031	31891335	28733908	Ave		30224449.7				11.0		20.0			
PCB-1248 Peak 5	22875840 16973915	22261860 16935186	21128875	18106662	Ave		19713723.0				14.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 11:16 Calibration End Date: 09/07/2013 12:32 Calibration ID: 17355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/15	P1000015.D
Level 2	STD01 240-100488/16	P1000016.D
Level 3	STD02 240-100488/17	P1000017.D
Level 4	STD05 240-100488/18	P1000018.D
Level 5	STD1 240-100488/19	P1000019.D
Level 6	STD2 240-100488/20	P1000020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1248 Peak 1	2.960	2.960	2.961	2.963	2.963	2.962					2.910 - 3.010	2.962
PCB-1248 Peak 2	3.460	3.457	3.456	3.458	3.458	3.458					3.410 - 3.510	3.458
PCB-1248 Peak 3	4.259	4.262	4.260	4.260	4.261	4.262					4.209 - 4.309	4.261
PCB-1248 Peak 4	4.547	4.548	4.547	4.547	4.546	4.547					4.497 - 4.597	4.547
PCB-1248 Peak 5	5.301	5.300	5.297	5.296	5.296	5.298					5.251 - 5.351	5.298

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 12:47 Calibration End Date: 09/07/2013 14:03 Calibration ID: 17319

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/21	P1000021.D
Level 2	STD01 240-100488/22	P1000022.D
Level 3	STD02 240-100488/23	P1000023.D
Level 4	STD05 240-100488/24	P1000024.D
Level 5	STD1 240-100488/25	P1000025.D
Level 6	STD2 240-100488/26	P1000026.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	12599340 7695317	10862030 7641215	10008950	8546034	Lin1	311840.242	7557839.36							0.9980		0.9900
PCB-1221 Peak 2	7958240 5161120	7685610 4928971	6764455	5648454	Ave		6357808.25				20.0		20.0			
PCB-1221 Peak 3	28911560 18158460	25463410 17515414	22829960	20188164	Ave		22177828.0				20.0		20.0			
PCB-1254 Peak 1	38615500 27663745	37034690 27636501	33721265	30470792	Ave		32523748.8				14.0		20.0			
PCB-1254 Peak 2	43355260 31707771	42193240 31752485	38199830	34323046	Ave		36921938.7				14.0		20.0			
PCB-1254 Peak 3	69676200 51007612	65349200 52174985	60984480	54926218	Ave		59019782.5				13.0		20.0			
PCB-1254 Peak 4	52640560 39998476	50469890 40856767	46772620	42461190	Ave		45533250.5				12.0		20.0			
PCB-1254 Peak 5	62506980 48286861	61516870 48909706	57117975	51202896	Ave		54923548.0				12.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 12:47 Calibration End Date: 09/07/2013 14:03 Calibration ID: 17319

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/21	P1000021.D
Level 2	STD01 240-100488/22	P1000022.D
Level 3	STD02 240-100488/23	P1000023.D
Level 4	STD05 240-100488/24	P1000024.D
Level 5	STD1 240-100488/25	P1000025.D
Level 6	STD2 240-100488/26	P1000026.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1221 Peak 1	2.290	2.294	2.292	2.294	2.294	2.294					2.240 - 2.340	2.293
PCB-1221 Peak 2	2.445	2.446	2.445	2.448	2.447	2.446					2.395 - 2.495	2.446
PCB-1221 Peak 3	2.511	2.511	2.512	2.511	2.511	2.511					2.461 - 2.561	2.511
PCB-1254 Peak 1	4.586	4.586	4.588	4.586	4.587	4.587					4.536 - 4.636	4.587
PCB-1254 Peak 2	4.801	4.801	4.800	4.801	4.801	4.801					4.751 - 4.851	4.801
PCB-1254 Peak 3	5.294	5.295	5.295	5.294	5.294	5.296					5.244 - 5.344	5.295
PCB-1254 Peak 4	5.914	5.913	5.915	5.913	5.913	5.914					5.864 - 5.964	5.914
PCB-1254 Peak 5	6.121	6.124	6.120	6.121	6.122	6.121					6.071 - 6.171	6.122

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-28680-1 | Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 | GC Column: CLP-2 | ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 14:18 | Calibration End Date: 09/07/2013 15:34 | Calibration ID: 17325

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/27	P1000027.D
Level 2	STD01 240-100488/28	P1000028.D
Level 3	STD02 240-100488/29	P1000029.D
Level 4	STD05 240-100488/30	P1000030.D
Level 5	STD1 240-100488/31	P1000031.D
Level 6	STD2 240-100488/32	P1000032.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	19150720 13049793	17159250 12273569	16516075	14621006	Ave		15461735.5				17.0		20.0			
PCB-1016 Peak 2	32919640 26618415	35873860 25038161	32645060	29228824	Ave		30387326.8				14.0		20.0			
PCB-1016 Peak 3	67188260 55225060	66943700 54158652	61715220	59010000	Ave		60706815.3				9.3		20.0			
PCB-1016 Peak 4	29960880 23689823	30567460 22986528	27203320	25448790	Ave		26642800.2				12.0		20.0			
PCB-1016 Peak 5	26990340 18616344	23863540 18001213	21824795	19642840	Ave		21489845.3				16.0		20.0			
PCB-1260 Peak 1	48733040 36059036	44991680 35779884	42074590	38243740	Ave		40980328.3				13.0		20.0			
PCB-1260 Peak 2	50751560 41393071	51048860 41114689	48116810	44052932	Ave		46079653.7				9.8		20.0			
PCB-1260 Peak 3	70622700 60356707	72031750 60116810	69293915	63582564	Ave		66000741.0				8.0		20.0			
PCB-1260 Peak 4	90883820 78087330	89144170 80212670	89799280	84542502	Ave		85444961.9				6.3		20.0			
PCB-1260 Peak 5	69476040 56892974	67778370 56818760	66315090	61708556	Ave		63164965.0				8.8		20.0			
Tetrachloro-m-xylene	962488400 791834160	899508600 788329410	885171200	834437160	Ave		860294822				7.9		20.0			
Decachlorobiphenyl	871776800 644919080	786014000 631895650	776839800	720715040	Ave		738693395				12.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 14:18 Calibration End Date: 09/07/2013 15:34 Calibration ID: 17325

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/27	P1000027.D
Level 2	STD01 240-100488/28	P1000028.D
Level 3	STD02 240-100488/29	P1000029.D
Level 4	STD05 240-100488/30	P1000030.D
Level 5	STD1 240-100488/31	P1000031.D
Level 6	STD2 240-100488/32	P1000032.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1016 Peak 1	2.512	2.510	2.512	2.512	2.511	2.509					2.462 - 2.562	2.511
PCB-1016 Peak 2	2.963	2.965	2.962	2.961	2.962	2.960					2.911 - 3.011	2.962
PCB-1016 Peak 3	3.458	3.455	3.457	3.456	3.456	3.457					3.406 - 3.506	3.457
PCB-1016 Peak 4	3.607	3.606	3.607	3.608	3.608	3.606					3.558 - 3.658	3.607
PCB-1016 Peak 5	4.124	4.126	4.127	4.126	4.126	4.125					4.076 - 4.176	4.126
PCB-1260 Peak 1	5.510	5.507	5.506	5.507	5.508	5.507					5.457 - 5.557	5.508
PCB-1260 Peak 2	5.740	5.739	5.738	5.740	5.740	5.740					5.690 - 5.790	5.740
PCB-1260 Peak 3	6.119	6.117	6.118	6.118	6.116	6.117					6.068 - 6.168	6.118
PCB-1260 Peak 4	6.813	6.813	6.812	6.812	6.812	6.811					6.762 - 6.862	6.812
PCB-1260 Peak 5	7.199	7.199	7.200	7.199	7.200	7.199					7.149 - 7.249	7.199
Tetrachloro-m-xylene	1.959	1.959	1.959	1.959	1.958	1.958					1.909 - 2.009	1.959
Decachlorobiphenyl	8.449	8.449	8.447	8.449	8.448	8.447					8.399 - 8.499	8.448

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-100488/50 Calibration Date: 09/07/2013 20:08

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000050.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15461736	14418208		0.933	1.00	-6.7	20.0
PCB-1016 Peak 2	Ave	30387327	28512986		0.938	1.00	-6.2	20.0
PCB-1016 Peak 3	Ave	60706815	58764885		0.968	1.00	-3.2	20.0
PCB-1016 Peak 4	Ave	26642800	25065050		0.941	1.00	-5.9	20.0
PCB-1016 Peak 5	Ave	21489845	19608649		0.912	1.00	-8.8	20.0
PCB-1260 Peak 1	Ave	40980328	37996822		0.927	1.00	-7.3	20.0
PCB-1260 Peak 2	Ave	46079654	43354987		0.941	1.00	-5.9	20.0
PCB-1260 Peak 3	Ave	66000741	63101852		0.956	1.00	-4.4	20.0
PCB-1260 Peak 4	Ave	85444962	87418317		1.02	1.00	2.3	20.0
PCB-1260 Peak 5	Ave	63164965	62598857		0.991	1.00	-0.9	20.0

FORM VII

PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICV 240-100488/50 Calibration Date: 09/07/2013 20:08

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000050.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.51	2.46	2.56
PCB-1016 Peak 2	2.96	2.91	3.01
PCB-1016 Peak 3	3.46	3.41	3.51
PCB-1016 Peak 4	3.61	3.56	3.66
PCB-1016 Peak 5	4.13	4.08	4.18
PCB-1260 Peak 1	5.51	5.46	5.56
PCB-1260 Peak 2	5.74	5.69	5.79
PCB-1260 Peak 3	6.12	6.07	6.17
PCB-1260 Peak 4	6.81	6.76	6.86
PCB-1260 Peak 5	7.20	7.15	7.25

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: A2HP10 Start Date: 09/17/2013 07:51

Analysis Batch Number: 101679 End Date: 09/17/2013 14:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-101679/3 CCVRT		09/17/2013 07:51	1	P1000003.D	CLP-1 0.53(mm)
CCV 240-101679/3 CCVRT		09/17/2013 07:51	1	P1000003.D	CLP-2 0.53(mm)
ZZZZZ		09/17/2013 10:38	1		CLP-1 0.53(mm)
ZZZZZ		09/17/2013 10:38	1		CLP-2 0.53(mm)
240-28680-1	DR-SB-48D-19-21	09/17/2013 10:53	1	P1000015.D	CLP-1 0.53(mm)
240-28680-1	DR-SB-48D-19-21	09/17/2013 10:53	1	P1000015.D	CLP-2 0.53(mm)
240-28680-2	DR-SB-48D-24-26	09/17/2013 11:08	1	P1000016.D	CLP-1 0.53(mm)
240-28680-2	DR-SB-48D-24-26	09/17/2013 11:08	1	P1000016.D	CLP-2 0.53(mm)
240-28680-3	DR-SB-48D-28-31	09/17/2013 11:23	1	P1000017.D	CLP-1 0.53(mm)
240-28680-3	DR-SB-48D-28-31	09/17/2013 11:23	1	P1000017.D	CLP-2 0.53(mm)
240-28680-4	DR-SB-48D-34-36	09/17/2013 11:38	1	P1000018.D	CLP-1 0.53(mm)
240-28680-4	DR-SB-48D-34-36	09/17/2013 11:38	1	P1000018.D	CLP-2 0.53(mm)
240-28680-5	DR-SB-48D-40-42	09/17/2013 11:54	1	P1000019.D	CLP-1 0.53(mm)
240-28680-5	DR-SB-48D-40-42	09/17/2013 11:54	1	P1000019.D	CLP-2 0.53(mm)
MB 240-101331/23-A		09/17/2013 12:09	1	P1000020.D	CLP-1 0.53(mm)
MB 240-101331/23-A		09/17/2013 12:09	1	P1000020.D	CLP-2 0.53(mm)
CCV 240-101679/21		09/17/2013 12:24	1	P1000021.D	CLP-1 0.53(mm)
CCV 240-101679/21		09/17/2013 12:24	1	P1000021.D	CLP-2 0.53(mm)
ZZZZZ		09/17/2013 12:48	1		CLP-1 0.53(mm)
ZZZZZ		09/17/2013 12:48	1		CLP-2 0.53(mm)
ZZZZZ		09/17/2013 13:03	10		CLP-1 0.53(mm)
ZZZZZ		09/17/2013 13:03	10		CLP-2 0.53(mm)
ZZZZZ		09/17/2013 13:18	1		CLP-1 0.53(mm)
ZZZZZ		09/17/2013 13:18	1		CLP-2 0.53(mm)
ZZZZZ		09/17/2013 13:33	1		CLP-1 0.53(mm)
ZZZZZ		09/17/2013 13:33	1		CLP-2 0.53(mm)
240-28743-I-4-D MS		09/17/2013 13:48	1	P1000026.D	CLP-1 0.53(mm)
240-28743-I-4-D MS		09/17/2013 13:48	1	P1000026.D	CLP-2 0.53(mm)
240-28743-I-4-E MSD		09/17/2013 14:04	1	P1000027.D	CLP-1 0.53(mm)
240-28743-I-4-E MSD		09/17/2013 14:04	1	P1000027.D	CLP-2 0.53(mm)
LCS 240-101331/24-A		09/17/2013 14:19	1	P1000028.D	CLP-1 0.53(mm)
LCS 240-101331/24-A		09/17/2013 14:19	1	P1000028.D	CLP-2 0.53(mm)
CCV 240-101679/29		09/17/2013 14:34	1	P1000029.D	CLP-1 0.53(mm)
CCV 240-101679/29		09/17/2013 14:34	1	P1000029.D	CLP-2 0.53(mm)

8082A

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/3 Calibration Date: 09/17/2013 07:51

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	18920540	15720592		0.415	0.500	-16.9	20.0
PCB-1016 Peak 2	Ave	34625932	31986014		0.462	0.500	-7.6	20.0
PCB-1016 Peak 3	Ave	71170378	54591282		0.384	0.500	-23.3*	20.0
PCB-1016 Peak 4	Ave	29929763	23033514		0.385	0.500	-23.0*	20.0
PCB-1016 Peak 5	Ave	31126854	28972310		0.465	0.500	-6.9	20.0
PCB-1260 Peak 1	Ave	45184957	41907032		0.464	0.500	-7.3	20.0
PCB-1260 Peak 2	Ave	80812617	75045676		0.464	0.500	-7.1	20.0
PCB-1260 Peak 3	Ave	75433653	70180082		0.465	0.500	-7.0	20.0
PCB-1260 Peak 4	Ave	109610550	102735278		0.469	0.500	-6.3	20.0
PCB-1260 Peak 5	Ave	48673339	45800530		0.470	0.500	-5.9	20.0
Tetrachloro-m-xylene	Ave	1077204960	1002919640		0.0233	0.0250	-6.9	20.0
Decachlorobiphenyl	Ave	1033200298	962831520		0.0233	0.0250	-6.8	20.0

FORM VII

PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/3 Calibration Date: 09/17/2013 07:51

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000003.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	1.78	1.73	1.83
PCB-1016 Peak 2	2.12	2.07	2.17
PCB-1016 Peak 3	2.57	2.52	2.62
PCB-1016 Peak 4	2.71	2.66	2.76
PCB-1016 Peak 5	3.13	3.08	3.18
PCB-1260 Peak 1	4.42	4.37	4.47
PCB-1260 Peak 2	4.71	4.66	4.76
PCB-1260 Peak 3	5.01	4.96	5.06
PCB-1260 Peak 4	5.72	5.67	5.77
PCB-1260 Peak 5	6.01	5.96	6.06
Tetrachloro-m-xylene	1.45	1.40	1.50
Decachlorobiphenyl	7.18	7.13	7.23

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/3 Calibration Date: 09/17/2013 07:51

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15461736	13667404		0.442	0.500	-11.6	20.0
PCB-1016 Peak 2	Ave	30387327	27455328		0.452	0.500	-9.6	20.0
PCB-1016 Peak 3	Ave	60706815	55066208		0.454	0.500	-9.3	20.0
PCB-1016 Peak 4	Ave	26642800	24279944		0.456	0.500	-8.9	20.0
PCB-1016 Peak 5	Ave	21489845	19533226		0.454	0.500	-9.1	20.0
PCB-1260 Peak 1	Ave	40980328	36434464		0.445	0.500	-11.1	20.0
PCB-1260 Peak 2	Ave	46079654	41393836		0.449	0.500	-10.2	20.0
PCB-1260 Peak 3	Ave	66000741	59181116		0.448	0.500	-10.3	20.0
PCB-1260 Peak 4	Ave	85444962	77218780		0.452	0.500	-9.6	20.0
PCB-1260 Peak 5	Ave	63164965	55387470		0.438	0.500	-12.3	20.0
Tetrachloro-m-xylene	Ave	860294822	779229280		0.0226	0.0250	-9.4	20.0
Decachlorobiphenyl	Ave	738693395	666167440		0.0225	0.0250	-9.8	20.0

FORM VII

PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/3 Calibration Date: 09/17/2013 07:51

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000003.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.51	2.46	2.56
PCB-1016 Peak 2	2.96	2.91	3.01
PCB-1016 Peak 3	3.46	3.41	3.51
PCB-1016 Peak 4	3.61	3.56	3.66
PCB-1016 Peak 5	4.13	4.08	4.18
PCB-1260 Peak 1	5.51	5.46	5.56
PCB-1260 Peak 2	5.74	5.69	5.79
PCB-1260 Peak 3	6.12	6.07	6.17
PCB-1260 Peak 4	6.81	6.76	6.86
PCB-1260 Peak 5	7.20	7.15	7.25
Tetrachloro-m-xylene	1.96	1.91	2.01
Decachlorobiphenyl	8.45	8.40	8.50

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/21 Calibration Date: 09/17/2013 12:24

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000021.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	18920540	17639888		0.466	0.500	-6.8	20.0
PCB-1016 Peak 2	Ave	34625932	32389360		0.468	0.500	-6.5	20.0
PCB-1016 Peak 3	Ave	71170378	63201826		0.444	0.500	-11.2	20.0
PCB-1016 Peak 4	Ave	29929763	28420722		0.475	0.500	-5.0	20.0
PCB-1016 Peak 5	Ave	31126854	28747664		0.462	0.500	-7.6	20.0
PCB-1260 Peak 1	Ave	45184957	41435938		0.459	0.500	-8.3	20.0
PCB-1260 Peak 2	Ave	80812617	74830886		0.463	0.500	-7.4	20.0
PCB-1260 Peak 3	Ave	75433653	70834800		0.470	0.500	-6.1	20.0
PCB-1260 Peak 4	Ave	109610550	103229436		0.471	0.500	-5.8	20.0
PCB-1260 Peak 5	Ave	48673339	44068580		0.453	0.500	-9.5	20.0
Tetrachloro-m-xylene	Ave	1077204960	1012673320		0.0235	0.0250	-6.0	20.0
Decachlorobiphenyl	Ave	1033200298	979876160		0.0237	0.0250	-5.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/21 Calibration Date: 09/17/2013 12:24

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000021.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	1.78	1.73	1.83
PCB-1016 Peak 2	2.12	2.07	2.17
PCB-1016 Peak 3	2.57	2.52	2.62
PCB-1016 Peak 4	2.71	2.66	2.76
PCB-1016 Peak 5	3.13	3.08	3.18
PCB-1260 Peak 1	4.42	4.37	4.47
PCB-1260 Peak 2	4.71	4.66	4.76
PCB-1260 Peak 3	5.00	4.95	5.05
PCB-1260 Peak 4	5.72	5.67	5.77
PCB-1260 Peak 5	6.01	5.96	6.06
Tetrachloro-m-xylene	1.45	1.40	1.50
Decachlorobiphenyl	7.18	7.13	7.23

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/21 Calibration Date: 09/17/2013 12:24

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000021.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15461736	14117856		0.457	0.500	-8.7	20.0
PCB-1016 Peak 2	Ave	30387327	28262892		0.465	0.500	-7.0	20.0
PCB-1016 Peak 3	Ave	60706815	56457476		0.465	0.500	-7.0	20.0
PCB-1016 Peak 4	Ave	26642800	25140072		0.472	0.500	-5.6	20.0
PCB-1016 Peak 5	Ave	21489845	19557944		0.455	0.500	-9.0	20.0
PCB-1260 Peak 1	Ave	40980328	37467970		0.457	0.500	-8.6	20.0
PCB-1260 Peak 2	Ave	46079654	42583440		0.462	0.500	-7.6	20.0
PCB-1260 Peak 3	Ave	66000741	61209314		0.464	0.500	-7.3	20.0
PCB-1260 Peak 4	Ave	85444962	80132232		0.469	0.500	-6.2	20.0
PCB-1260 Peak 5	Ave	63164965	58338448		0.462	0.500	-7.6	20.0
Tetrachloro-m-xylene	Ave	860294822	798974480		0.0232	0.0250	-7.1	20.0
Decachlorobiphenyl	Ave	738693395	698422440		0.0236	0.0250	-5.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/21 Calibration Date: 09/17/2013 12:24

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000021.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.51	2.46	2.56
PCB-1016 Peak 2	2.96	2.91	3.01
PCB-1016 Peak 3	3.46	3.41	3.51
PCB-1016 Peak 4	3.61	3.56	3.66
PCB-1016 Peak 5	4.12	4.07	4.17
PCB-1260 Peak 1	5.50	5.45	5.55
PCB-1260 Peak 2	5.74	5.69	5.79
PCB-1260 Peak 3	6.12	6.07	6.17
PCB-1260 Peak 4	6.81	6.76	6.86
PCB-1260 Peak 5	7.20	7.15	7.25
Tetrachloro-m-xylene	1.96	1.91	2.01
Decachlorobiphenyl	8.45	8.40	8.50

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/29 Calibration Date: 09/17/2013 14:34

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000029.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	18920540	19667164		0.520	0.500	3.9	20.0
PCB-1016 Peak 2	Ave	34625932	35547972		0.513	0.500	2.7	20.0
PCB-1016 Peak 3	Ave	71170378	65826298		0.462	0.500	-7.5	20.0
PCB-1016 Peak 4	Ave	29929763	26644964		0.445	0.500	-11.0	20.0
PCB-1016 Peak 5	Ave	31126854	31755560		0.510	0.500	2.0	20.0
PCB-1260 Peak 1	Ave	45184957	46354954		0.513	0.500	2.6	20.0
PCB-1260 Peak 2	Ave	80812617	82200314		0.509	0.500	1.7	20.0
PCB-1260 Peak 3	Ave	75433653	77357036		0.513	0.500	2.5	20.0
PCB-1260 Peak 4	Ave	109610550	112037742		0.511	0.500	2.2	20.0
PCB-1260 Peak 5	Ave	48673339	47821750		0.491	0.500	-1.7	20.0
Tetrachloro-m-xylene	Ave	1077204960	1117270240		0.0259	0.0250	3.7	20.0
Decachlorobiphenyl	Ave	1033200298	1056184840		0.0256	0.0250	2.2	20.0

FORM VII

PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/29 Calibration Date: 09/17/2013 14:34

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000029.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	1.78	1.73	1.83
PCB-1016 Peak 2	2.12	2.07	2.17
PCB-1016 Peak 3	2.57	2.52	2.62
PCB-1016 Peak 4	2.71	2.66	2.76
PCB-1016 Peak 5	3.13	3.08	3.18
PCB-1260 Peak 1	4.41	4.36	4.46
PCB-1260 Peak 2	4.71	4.66	4.76
PCB-1260 Peak 3	5.00	4.95	5.05
PCB-1260 Peak 4	5.72	5.67	5.77
PCB-1260 Peak 5	6.01	5.96	6.06
Tetrachloro-m-xylene	1.45	1.40	1.50
Decachlorobiphenyl	7.18	7.13	7.23

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/29 Calibration Date: 09/17/2013 14:34

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000029.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15461736	15445042		0.499	0.500	-0.1	20.0
PCB-1016 Peak 2	Ave	30387327	30828188		0.507	0.500	1.5	20.0
PCB-1016 Peak 3	Ave	60706815	62341706		0.513	0.500	2.7	20.0
PCB-1016 Peak 4	Ave	26642800	27060666		0.508	0.500	1.6	20.0
PCB-1016 Peak 5	Ave	21489845	21117998		0.491	0.500	-1.7	20.0
PCB-1260 Peak 1	Ave	40980328	41253908		0.503	0.500	0.7	20.0
PCB-1260 Peak 2	Ave	46079654	47019830		0.510	0.500	2.0	20.0
PCB-1260 Peak 3	Ave	66000741	67177828		0.509	0.500	1.8	20.0
PCB-1260 Peak 4	Ave	85444962	88000982		0.515	0.500	3.0	20.0
PCB-1260 Peak 5	Ave	63164965	63331592		0.501	0.500	0.3	20.0
Tetrachloro-m-xylene	Ave	860294822	896364880		0.0260	0.0250	4.2	20.0
Decachlorobiphenyl	Ave	738693395	762047880		0.0258	0.0250	3.2	20.0

FORM VII

PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: CCV 240-101679/29 Calibration Date: 09/17/2013 14:34

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000029.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.51	2.46	2.56
PCB-1016 Peak 2	2.96	2.91	3.01
PCB-1016 Peak 3	3.45	3.40	3.50
PCB-1016 Peak 4	3.61	3.56	3.66
PCB-1016 Peak 5	4.12	4.07	4.17
PCB-1260 Peak 1	5.51	5.46	5.56
PCB-1260 Peak 2	5.74	5.69	5.79
PCB-1260 Peak 3	6.11	6.06	6.16
PCB-1260 Peak 4	6.81	6.76	6.86
PCB-1260 Peak 5	7.20	7.15	7.25
Tetrachloro-m-xylene	1.96	1.91	2.01
Decachlorobiphenyl	8.45	8.40	8.50

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: MB 240-101331/23-A

Matrix: Solid Date Extracted: 09/13/2013 09:27

Lab File ID:(1) P1000020.D Lab File ID:(2) P1000020.D

Date Analyzed:(1) 09/17/2013 12:09 Date Analyzed:(2) 09/17/2013 12:09

Instrument ID:(1) A2HP10 Instrument ID:(2) A2HP10

GC Column:(1) CLP-2 ID: 0.53(mm) GC Column:(2) CLP-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
DR-SB-48D-19-21	240-28680-1	09/17/2013 10:53	09/17/2013 10:53
DR-SB-48D-24-26	240-28680-2	09/17/2013 11:08	09/17/2013 11:08
DR-SB-48D-28-31	240-28680-3	09/17/2013 11:23	09/17/2013 11:23
DR-SB-48D-34-36	240-28680-4	09/17/2013 11:38	09/17/2013 11:38
DR-SB-48D-40-42	240-28680-5	09/17/2013 11:54	09/17/2013 11:54
	240-28743-I-4-D MS	09/17/2013 13:48	09/17/2013 13:48
	240-28743-I-4-E MSD	09/17/2013 14:04	09/17/2013 14:04
	LCS 240-101331/24-A	09/17/2013 14:19	09/17/2013 14:19

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-101331/23-A

Matrix: Solid Lab File ID: P1000020.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 30(g) Date Analyzed: 09/17/2013 12:09

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	33	U	33	21
11104-28-2	Aroclor-1221	33	U	33	16
11141-16-5	Aroclor-1232	33	U	33	14
53469-21-9	Aroclor-1242	33	U	33	13
12672-29-6	Aroclor-1248	33	U	33	17
11097-69-1	Aroclor-1254	33	U	33	17
11096-82-5	Aroclor-1260	33	U	33	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	74		29-151
2051-24-3	Decachlorobiphenyl	76		14-163

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-101331/23-A

Matrix: Solid Lab File ID: P1000020.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3540C Date Extracted: 09/13/2013 09:27

Sample wt/vol: 30(g) Date Analyzed: 09/17/2013 12:09

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 101679 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	72		29-151
2051-24-3	Decachlorobiphenyl	76		14-163

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P1000028.D

Lab ID: LCS 240-101331/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Aroclor-1016	333	242	73	62-120	
Aroclor-1260	333	266	80	56-122	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P1000026.D

Lab ID: 240-28743-I-4-D MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Aroclor-1016	393	38 U	319	81	22-157	
Aroclor-1260	393	38 U	357	91	13-161	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P1000027.D

Lab ID: 240-28743-I-4-E MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Aroclor-1016	387	263	68	19	30	22-157	
Aroclor-1260	387	287	74	22	30	13-161	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm) GC Column (2): CLP-1 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCB1 #	DCB2 #
DR-SB-48D-19-21	240-28680-1	79	102	78	79
DR-SB-48D-24-26	240-28680-2	74	76	81	84
DR-SB-48D-28-31	240-28680-3	74	74	83	85
DR-SB-48D-34-36	240-28680-4	74	75	81	84
DR-SB-48D-40-42	240-28680-5	72	75	79	79
	MB 240-101331/23-A	74	72	76	76
	LCS 240-101331/24-A	84	78	85	83
	240-28743-I-4-D MS	81	84	96	98
	240-28743-I-4-E MSD	70	75	82	86

	QC LIMITS
TCX = Tetrachloro-m-xylene	29-151
DCB = Decachlorobiphenyl	14-163

Column to be used to flag recovery values

FORM II 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: CCV 240-101679/3 Date Analyzed: 09/17/2013 07:51

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P1000003.D Heated Purge: (Y/N) N

Calibration ID: 17324

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.45	7.18	
UPPER LIMIT				1.55	7.28	
LOWER LIMIT				1.35	7.08	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-101679/3 CCVRT		09/17/2013 07:51	P1000003.D	1.45	7.18	
240-28680-1	DR-SB-48D-19-21	09/17/2013 10:53	P1000015.D	1.45	7.18	
240-28680-2	DR-SB-48D-24-26	09/17/2013 11:08	P1000016.D	1.45	7.18	
240-28680-3	DR-SB-48D-28-31	09/17/2013 11:23	P1000017.D	1.45	7.18	
240-28680-4	DR-SB-48D-34-36	09/17/2013 11:38	P1000018.D	1.45	7.18	
240-28680-5	DR-SB-48D-40-42	09/17/2013 11:54	P1000019.D	1.45	7.18	
MB 240-101331/23-A		09/17/2013 12:09	P1000020.D	1.45	7.18	
CCV 240-101679/21		09/17/2013 12:24	P1000021.D	1.45	7.18	
240-28743-I-4-D MS		09/17/2013 13:48	P1000026.D	1.45	7.18	
240-28743-I-4-E MSD		09/17/2013 14:04	P1000027.D	1.45	7.18	
LCS 240-101331/24-A		09/17/2013 14:19	P1000028.D	1.45	7.18	
CCV 240-101679/29		09/17/2013 14:34	P1000029.D	1.45	7.18	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Sample No.: CCV 240-101679/3 Date Analyzed: 09/17/2013 07:51

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1000003.D Heated Purge: (Y/N) N

Calibration ID: 17325

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.96	8.45	
UPPER LIMIT				2.06	8.55	
LOWER LIMIT				1.86	8.35	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-101679/3 CCVRT		09/17/2013 07:51	P1000003.D	1.96	8.45	
240-28680-1	DR-SB-48D-19-21	09/17/2013 10:53	P1000015.D	1.96	8.45	
240-28680-2	DR-SB-48D-24-26	09/17/2013 11:08	P1000016.D	1.96	8.45	
240-28680-3	DR-SB-48D-28-31	09/17/2013 11:23	P1000017.D	1.96	8.45	
240-28680-4	DR-SB-48D-34-36	09/17/2013 11:38	P1000018.D	1.96	8.44	
240-28680-5	DR-SB-48D-40-42	09/17/2013 11:54	P1000019.D	1.96	8.45	
MB 240-101331/23-A		09/17/2013 12:09	P1000020.D	1.96	8.45	
CCV 240-101679/21		09/17/2013 12:24	P1000021.D	1.96	8.45	
240-28743-I-4-D MS		09/17/2013 13:48	P1000026.D	1.96	8.45	
240-28743-I-4-E MSD		09/17/2013 14:04	P1000027.D	1.96	8.45	
LCS 240-101331/24-A		09/17/2013 14:19	P1000028.D	1.96	8.45	
CCV 240-101679/29		09/17/2013 14:34	P1000029.D	1.96	8.45	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG No.:

Project: Dump Road Area, Martin State Airport, MD

Client Sample ID	Lab Sample ID
DR-SB-48D-19-21	240-28680-1
DR-SB-48D-24-26	240-28680-2
DR-SB-48D-28-31	240-28680-3
DR-SB-48D-34-36	240-28680-4
DR-SB-48D-40-42	240-28680-5

Comments:

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/10/2013 15:19 End Date: 09/10/2013 17:42

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
IC 240-100911/1-A			15:19	X
IC 240-100911/1-A			15:21	X
IC 240-100911/2-A			15:22	X
IC 240-100911/2-A			15:23	X
IC 240-100911/3-A			15:25	X
IC 240-100911/3-A			15:26	X
IC 240-100911/4-A			15:28	X
IC 240-100911/4-A			15:29	X
IC 240-100911/5-A			15:31	X
IC 240-100911/5-A			15:32	X
IC 240-100911/6-A			15:34	X
IC 240-100911/6-A			15:35	X
IC 240-100911/7-A			15:37	X
IC 240-100911/7-A			15:39	X
ICV 240-100911/8-A	1		15:41	X
ICB 240-100911/9-A	1		15:42	X
CRA 240-100911/10-A	1		15:43	X
CCV 240-100911/11-A			15:45	
CCB 240-100911/12-A			15:47	
ZZZZZZ			15:48	
ZZZZZZ			15:50	
ZZZZZZ			15:51	
ZZZZZZ			15:53	
ZZZZZZ			15:55	
ZZZZZZ			15:56	
ZZZZZZ			15:57	
ZZZZZZ			15:59	
ZZZZZZ			16:01	
ZZZZZZ			16:04	
CCV 240-100911/11-A			16:06	
CCB 240-100911/12-A			16:07	
ZZZZZZ			16:10	
ZZZZZZ			16:13	
ZZZZZZ			16:14	
ZZZZZZ			16:16	
ZZZZZZ			16:17	
ZZZZZZ			16:18	
ZZZZZZ			16:20	
ZZZZZZ			16:22	
ZZZZZZ			16:23	
ZZZZZZ			16:25	
CCV 240-100911/11-A	1		16:27	X

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/10/2013 15:19 End Date: 09/10/2013 17:42

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
CCB 240-100911/12-A	1		16:28	X																				
ZZZZZZ			16:29																					
ZZZZZZ			16:31																					
ZZZZZZ			16:33																					
ZZZZZZ			16:34																					
ZZZZZZ			16:36																					
ZZZZZZ			16:38																					
MB 240-100675/1-A	1	T	16:39	X																				
LCS 240-100675/2-A	1	T	16:41	X																				
ZZZZZZ			16:42																					
240-28627-G-4-E DU	1	T	16:44	X																				
CCV 240-100911/11-A	1		16:45	X																				
CCB 240-100911/12-A	1		16:46	X																				
240-28627-G-4-F MS	1	T	16:48	X																				
ZZZZZZ			16:49																					
ZZZZZZ			16:50																					
ZZZZZZ			16:52																					
ZZZZZZ			16:53																					
ZZZZZZ			16:55																					
ZZZZZZ			16:57																					
ZZZZZZ			16:58																					
240-28680-1	1	T	17:00	X																				
240-28680-2	1	T	17:01	X																				
CCV 240-100911/11-A	1		17:04	X																				
CCB 240-100911/12-A	1		17:05	X																				
240-28680-3	1	T	17:07	X																				
240-28680-4	1	T	17:08	X																				
240-28680-5	1	T	17:09	X																				
ZZZZZZ			17:11																					
ZZZZZZ			17:12																					
ZZZZZZ			17:14																					
ZZZZZZ			17:15																					
CCV 240-100911/11-A	1		17:16	X																				
CCB 240-100911/12-A	1		17:18	X																				
ZZZZZZ			17:24																					
ZZZZZZ			17:26																					
CCV 240-100911/11-A			17:28																					
CCB 240-100911/12-A			17:29																					
ZZZZZZ			17:31																					
ZZZZZZ			17:33																					
ZZZZZZ			17:34																					
ZZZZZZ			17:35																					

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00459

Analyte	ICV 240-100911/8-A 09/10/2013 15:41				CCV 240-100911/11-A 09/10/2013 16:27				CCV 240-100911/11-A 09/10/2013 16:45			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.23		5.00	105	10.3		10.0	103	10.3		10.0	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00459

Analyte	CCV 240-100911/11-A 09/10/2013 17:04				CCV 240-100911/11-A 09/10/2013 17:16							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	10.2		10.0	102	10.2		10.0	102				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Method: 7471B Instrument ID: H1

Lab Sample ID: CRA 240-100911/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00459

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.197	J	98	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-100911/9-A 09/10/2013 15:42		CCB 240-100911/12-A 09/10/2013 16:28		CCB 240-100911/12-A 09/10/2013 16:46		CCB 240-100911/12-A 09/10/2013 17:05	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.60	0.60	U	0.60	U	0.60	U	0.60	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-100911/12-A 09/10/2013 17:18							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.60	0.60	U						

Italicized analytes were not requested for this sequence.

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Prep Method: 7471B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-100675/1-A	09/09/2013 14:30	100675	0.60		100
LCS 240-100675/2-A	09/09/2013 14:30	100675	0.60		100
240-28627-G-4-E DU	09/09/2013 14:30	100675	0.55		100
240-28627-G-4-F MS	09/09/2013 14:30	100675	0.55		100
240-28680-1	09/09/2013 14:30	100675	0.53		100
240-28680-2	09/09/2013 14:30	100675	0.67		100
240-28680-3	09/09/2013 14:30	100675	0.64		100
240-28680-4	09/09/2013 14:30	100675	0.67		100
240-28680-5	09/09/2013 14:30	100675	0.60		100

FORM XII-IN

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-100675/1-A

Instrument Code: H1 Batch No.: 100981

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.10	U		7471B

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-100675/2-A

Lab Name: TestAmerica Canton Job No.: 240-28680-1

Sample Matrix: Solid LCS Source: MTHGCALW_00458

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.873		105	80	120		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-28627-G-4-F MS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.: _____

Matrix: Solid Concentration Units: mg/Kg

% Solids: 84.5

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.249		0.023	J	0.215	105	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

6-IN
DUPLICATES
METALS

Client ID: | Lab ID: 240-28627-G-4-E DU

Lab Name: TestAmerica Canton | Job No.: 240-28680-1

SDG No.:

% Solids for Sample: 84.5 | % Solids for Duplicate: 84.5

Matrix: Solid | Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.13	0.023	J	0.0229	J	2		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: H1

Method: 7471B MDL Date: 02/16/2010 09:48

Prep Method: 7471B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury	253.7	0.1	0.015

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: H1

Method: 7471B XMDL Date: 02/16/2010 09:48

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.6	0.12

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: I6 Method: 6010C

Start Date: 09/16/2013 08:02 End Date: 09/17/2013 05:30

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
STD 240-101673/1 IC			08:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-101673/2 IC			08:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-101673/3 IC			08:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-101673/4 IC			08:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-101673/5	1		08:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICBIS 240-101673/6	1		08:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-101673/7			08:35																				
CRI 240-101673/8	1		08:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			08:47																				
ICSA 240-101673/10	1		08:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-101673/11	1		09:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-101673/12			09:16																				
CCB 240-101673/13			09:22																				
ZZZZZZ			09:28																				
ZZZZZZ			09:34																				
ZZZZZZ			09:40																				
ZZZZZZ			09:46																				
ZZZZZZ			09:52																				
ZZZZZZ			09:58																				
ZZZZZZ			10:04																				
ZZZZZZ			10:10																				
ZZZZZZ			10:16																				
ZZZZZZ			10:22																				
CCV 240-101673/24			10:27																				
CCB 240-101673/25			10:33																				
ZZZZZZ			10:39																				
ZZZZZZ			10:45																				
ZZZZZZ			10:51																				
ZZZZZZ			10:57																				
ZZZZZZ			11:03																				
ZZZZZZ			11:09																				
ZZZZZZ			11:15																				
ZZZZZZ			11:21																				
ZZZZZZ			11:27																				
ZZZZZZ			11:33																				
CCV 240-101673/36			11:38																				
CCB 240-101673/37			11:44																				
CCV 240-101673/38	1		11:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-101673/39	1		12:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			12:07																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: I6 Method: 6010C

Start Date: 09/16/2013 08:02 End Date: 09/17/2013 05:30

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			12:13																				
ZZZZZZ			12:19																				
ZZZZZZ			12:25																				
ZZZZZZ			12:31																				
ZZZZZZ			12:37																				
ZZZZZZ			12:43																				
ZZZZZZ			12:49																				
MB 240-100670/1-A	1	T	12:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-100670/2-A	1	T	13:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-101673/50	1		13:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-101673/51	1		13:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			13:18																				
240-28627-G-4-A SD ^5	5	T	13:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-G-4-A PDS	1	T	13:30												X								
240-28627-G-4-B DU	1	T	13:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28627-G-4-C MS	1	T	13:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			13:48																				
ZZZZZZ			13:54																				
ZZZZZZ			14:00																				
ZZZZZZ			14:06																				
ZZZZZZ			14:12																				
CCV 240-101673/62	1		14:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-101673/63	1		14:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			14:30																				
ZZZZZZ			14:36																				
240-28680-1	1	T	14:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28680-2	1	T	14:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28680-3	1	T	14:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28680-4	1	T	15:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28680-5	1	T	15:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			15:12																				
ZZZZZZ			15:18																				
ZZZZZZ			15:24																				
CCV 240-101673/74	1		15:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-101673/75	1		15:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			15:42																				
ZZZZZZ			15:48																				
ZZZZZZ			15:54																				
ZZZZZZ			15:59																				
ZZZZZZ			16:05																				
ZZZZZZ			16:11																				
ZZZZZZ			16:17																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: I6 Method: 6010C

Start Date: 09/16/2013 08:02 End Date: 09/17/2013 05:30

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			16:23																				
ZZZZZZ			16:29																				
ZZZZZZ			16:35																				
CCV 240-101673/86			16:41																				
CCB 240-101673/87			16:47																				
ZZZZZZ			16:53																				
ZZZZZZ			16:59																				
ZZZZZZ			17:05																				
ZZZZZZ			17:11																				
ZZZZZZ			17:17																				
ZZZZZZ			17:23																				
ZZZZZZ			17:29																				
CRI 240-101673/95	1		17:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			17:41																				
ZZZZZZ			17:47																				
CCV 240-101673/98			17:53																				
CCB 240-101673/99			17:59																				
ZZZZZZ			18:05																				
ZZZZZZ			18:11																				
ZZZZZZ			18:17																				
ZZZZZZ			18:23																				
ZZZZZZ			18:29																				
ZZZZZZ			18:35																				
ZZZZZZ			18:41																				
ZZZZZZ			18:47																				
ZZZZZZ			18:53																				
ZZZZZZ			18:59																				
CCV 240-101673/110			19:05																				
CCB 240-101673/111			19:11																				
ZZZZZZ			19:17																				
ZZZZZZ			19:23																				
ZZZZZZ			19:29																				
ZZZZZZ			19:35																				
ZZZZZZ			19:41																				
ZZZZZZ			19:47																				
ZZZZZZ			19:53																				
ZZZZZZ			19:59																				
ZZZZZZ			20:04																				
ZZZZZZ			20:10																				
CCV 240-101673/122			20:16																				
CCB 240-101673/123			20:23																				
ZZZZZZ			20:29																				

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

ICV Source: MT6500ICV_00012 Concentration Units: ug/L

CCV Source: MTICPCCV_00007

Analyte	ICV 240-101673/5 09/16/2013 08:23				CCV 240-101673/38 09/16/2013 11:55				CCV 240-101673/50 09/16/2013 13:07			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	380		375	101	527		500	105	534		500	107
Arsenic	385		375	103	519		500	104	542		500	108
Barium	1550		1500	104	2050		2000	103	2100		2000	105
Beryllium	1580		1500	105	2130		2000	106	2180		2000	109
Cadmium	373		375	99	496		500	99	506		500	101
Chromium	1520		1500	101	2040		2000	102	2050		2000	102
Cobalt	1490		1500	99	2020		2000	101	2020		2000	101
Copper	1530		1500	102	2060		2000	103	2050		2000	103
Lead	376		375	100	488		500	98	513		500	103
Molybdenum	1530		1500	102	1950		2000	97	1910		2000	95
Nickel	1510		1500	100	1970		2000	98	2070		2000	104
Selenium	381		375	102	500		500	100	519		500	104
Silver	775		750	103	1020		1000	102	1040		1000	104
Thallium	749		750	100	1010		1000	101	961		1000	96
Vanadium	1540		1500	103	2070		2000	103	2050		2000	103
Zinc	1540		1500	102	2030		2000	101	2070		2000	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

ICV Source: MT6500ICV_00012 Concentration Units: ug/L

CCV Source: MTICPCCV_00007

Analyte	CCV 240-101673/62 09/16/2013 14:18				CCV 240-101673/74 09/16/2013 15:30							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	526		500	105	517		500	103				
Arsenic	539		500	108	528		500	106				
Barium	2110		2000	106	2090		2000	104				
Beryllium	2180		2000	109	2160		2000	108				
Cadmium	507		500	101	509		500	102				
Chromium	2050		2000	102	2050		2000	102				
Cobalt	2020		2000	101	2020		2000	101				
Copper	2060		2000	103	2060		2000	103				
Lead	521		500	104	518		500	104				
Molybdenum	1950		2000	98	2020		2000	101				
Nickel	2090		2000	105	2070		2000	104				
Selenium	522		500	104	521		500	104				
Silver	1050		1000	105	1040		1000	104				
Thallium	950		1000	95	971		1000	97				
Vanadium	2060		2000	103	2080		2000	104				
Zinc	2080		2000	104	2090		2000	104				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-101673/75 09/16/2013 15:36							
		Found	C	Found	C	Found	C	Found	C
Antimony	20	3.10	J						
Arsenic	15	15	U						
Barium	200	200	U						
Beryllium	5.0	5.0	U						
Cadmium	5.0	5.0	U						
Chromium	10	10	U						
Cobalt	10	10	U						
Copper	25	25	U						
Lead	10	10	U						
Molybdenum	40	8.34	J						
Nickel	40	40	U						
Selenium	20	20	U						
Silver	10	10	U						
Thallium	20	20	U						
Vanadium	10	10	U						
Zinc	50	50	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICBIS 240-101673/6 09/16/2013 08:29		CCB 240-101673/39 09/16/2013 12:01		CCB 240-101673/51 09/16/2013 13:12		CCB 240-101673/63 09/16/2013 14:24	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	20	U	1.91	J	20	U
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	200	U	200	U
Beryllium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Lead	10	10	U	10	U	10	U	10	U
Molybdenum	40	6.08	J	7.78	J	8.02	J	7.87	J
Nickel	40	40	U	40	U	40	U	40	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	10	U	10	U	10	U	10	U
Zinc	50	50	U	50	U	50	U	50	U

Italicized analytes were not requested for this sequence.

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-100670/1-A	09/09/2013 11:53	100670	1.00		100
LCS 240-100670/2-A	09/09/2013 11:53	100670	1.00		100
240-28627-G-4-B DU	09/09/2013 11:53	100670	1.07		100
240-28627-G-4-C MS	09/09/2013 11:53	100670	1.07		100
240-28680-1	09/09/2013 11:53	100670	1.16		100
240-28680-2	09/09/2013 11:53	100670	1.08		100
240-28680-3	09/09/2013 11:53	100670	1.06		100
240-28680-4	09/09/2013 11:53	100670	1.09		100
240-28680-5	09/09/2013 11:53	100670	1.30		100

FORM XII-IN

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-100670/1-A

Instrument Code: I6 Batch No.: 101673

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6010C
7440-38-2	Arsenic	1.5	U		6010C
7440-39-3	Barium	0.116	J		6010C
7440-41-7	Beryllium	0.50	U		6010C
7440-43-9	Cadmium	0.50	U		6010C
7440-47-3	Chromium	1.0	U		6010C
7440-48-4	Cobalt	1.0	U		6010C
7440-50-8	Copper	2.5	U		6010C
7439-92-1	Lead	1.0	U		6010C
7439-98-7	Molybdenum	4.0	U		6010C
7440-02-0	Nickel	4.0	U		6010C
7782-49-2	Selenium	2.0	U		6010C
7440-22-4	Silver	1.0	U		6010C
7440-28-0	Thallium	2.0	U		6010C
7440-62-2	Vanadium	1.0	U		6010C
7440-66-6	Zinc	2.14	J		6010C

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-100670/2-A

Lab Name: TestAmerica Canton Job No.: 240-28680-1

Sample Matrix: Solid LCS Source: MTICP1_00023

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	50.0		100	80	120		6010C
Arsenic	200	204		102	80	120		6010C
Barium	200	200		100	80	120		6010C
Beryllium	5.00	5.10		102	80	120		6010C
Cadmium	5.00	4.88		98	80	120		6010C
Chromium	20.0	19.9		99	80	120		6010C
Cobalt	50.0	47.6		95	80	120		6010C
Copper	25.0	24.2		97	80	120		6010C
Lead	50.0	48.7		97	80	120		6010C
Molybdenum	100	92.0		92	80	120		6010C
Nickel	50.0	49.5		99	80	120		6010C
Selenium	200	192		96	80	120		6010C
Silver	5.00	5.02		100	80	120		6010C
Thallium	200	182		91	80	120		6010C
Vanadium	50.0	49.0		98	80	120		6010C
Zinc	50.0	51.5		103	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICSA 240-101673/10 Instrument ID: I6

Lab File ID: I60916A ICS Source: MTTRICSAW_00019

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**2.99**	
Arsenic		**0.966**	
Barium		**1.58**	
Beryllium		**0.0586**	
Cadmium		**0.754**	
Chromium		**-1.52**	
Cobalt		**-0.335**	
Copper		**2.77**	
Lead		**-3.35**	
Molybdenum		**-0.334**	
Nickel		**-1.15**	
Selenium		**-3.78**	
Silver		**-0.472**	
Thallium		**-1.18**	
Vanadium		**-0.203**	
Zinc		**3.39**	
Aluminum	*500000*	*486762*	*97*
Boron		*2.48*	
Calcium	*500000*	*502449*	*100*
Iron	*200000*	*196369*	*98*
Magnesium	*500000*	*496637*	*99*
Manganese		*3.74*	
Potassium		*11.7*	
Sodium		*-1104*	
Tin		*1.78*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Lab Sample ID: ICSAB 240-101673/11 Instrument ID: I6

Lab File ID: I60916A ICS Source: MTICPICSABW_00001

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**1000**	**1030**	**103**
Arsenic	**1000**	**1060**	**106**
Barium	**500**	**548**	**110**
Beryllium	**500**	**536**	**107**
Cadmium	**1000**	**989**	**99**
Chromium	**500**	**509**	**102**
Cobalt	**500**	**498**	**100**
Copper	**500**	**545**	**109**
Lead	**1000**	**981**	**98**
Molybdenum	**1000**	**1029**	**103**
Nickel	**1000**	**965**	**96**
Selenium	**1000**	**1034**	**103**
Silver	**1000**	**1094**	**109**
Thallium	**1000**	**1025**	**103**
Vanadium	**500**	**522**	**104**
Zinc	**1000**	**1053**	**105**
Aluminum	*500000*	*509044*	*102*
Boron	*500*	*540*	*108*
Calcium	*500000*	*515524*	*103*
Iron	*200000*	*204644*	*102*
Magnesium	*500000*	*515131*	*103*
Manganese	*500*	*526*	*105*
Potassium	*10000*	*11171*	*112*
Sodium	*10000*	*11019*	*110*
Tin	*500*	*511*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: Lab ID: 240-28627-G-4-C MS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids: 84.5

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	18.4		0.46	J	55.3	32	75-125	F	6010C
Arsenic	203		4.0		221	90	75-125		6010C
Barium	218		19	J	221	90	75-125		6010C
Beryllium	5.86		0.97		5.53	88	75-125		6010C
Cadmium	6.99		2.3		5.53	84	75-125		6010C
Chromium	43.7		23		22.1	95	75-125		6010C
Cobalt	57.7		12		55.3	83	75-125		6010C
Copper	34.0		10		27.7	86	75-125		6010C
Lead	59.9		12		55.3	87	75-125		6010C
Molybdenum	87.1		0.89	J	111	78	75-125		6010C
Nickel	63.9		16		55.3	88	75-125		6010C
Selenium	187		2.2	U	221	85	75-125		6010C
Silver	4.97		1.1	U	5.53	90	75-125		6010C
Thallium	174		2.2	U	221	79	75-125		6010C
Vanadium	68.3		20		55.3	87	75-125		6010C
Zinc	108		61		55.3	86	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: Lab ID: 240-28627-G-4-A PDS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR C		Sample Result (SR) C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	16.5		0.46	J	16.6	97	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: Lab ID: 240-28627-G-4-B DU

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

% Solids for Sample: 84.5 % Solids for Duplicate: 84.5

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	2.2	0.46	J	0.651	J	34		6010C
Arsenic	1.7	4.0		4.29		6		6010C
Barium	22	19	J	21.5	J	12		6010C
Beryllium	0.55	0.97		0.882		10		6010C
Cadmium *	0.55	2.3		1.56		41	F	6010C
Chromium	1.1	23		21.7		4		6010C
Cobalt	1.1	12		10.9		7		6010C
Copper	2.8	10		8.80		14		6010C
Lead	1.1	12		11.1		7		6010C
Molybdenum	4.4	0.89	J	0.751	J	17		6010C
Nickel	4.4	16		14.1		10		6010C
Selenium	2.2	2.2	U	2.2	U	NC		6010C
Silver	1.1	1.1	U	1.1	U	NC		6010C
Thallium	2.2	2.2	U	2.2	U	NC		6010C
Vanadium	1.1	20		20.4		1		6010C
Zinc	5.5	61		68.5		12		6010C

* Cd < 5x RDL
±1.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-28627-G-4-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-28680-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.46	J	11	U	NC		6010C
Arsenic	4.0		4.91	J	NC		6010C
Barium	19	J	21.0	J	10		6010C
Beryllium	0.97		0.977	J	NC		6010C
Cadmium	2.3		2.51	J	7.2		6010C
Chromium	23		25.1		11	V	6010C
Cobalt	12		12.7		9.1		6010C
Copper	10		8.98	J	NC		6010C
Lead	12		13.8		16	V	6010C
Molybdenum	0.89	J	22	U	NC		6010C
Nickel	16		17.4	J	12	V	6010C
Selenium	2.2	U	11	U	NC		6010C
Silver	1.1	U	5.5	U	NC		6010C
Thallium	2.2	U	11	U	NC		6010C
Vanadium	20		22.3		10		6010C
Zinc	61		70.3		16	V	6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Method: 6010C Instrument ID: I6

Lab Sample ID: CRI 240-101673/8 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	20.4		102	70-130
Arsenic	15.0	16.0		106	70-130
Barium	200	206		103	70-130
Beryllium	5.00	4.34	J	87	70-130
Cadmium	5.00	5.06		101	70-130
Chromium	10.0	9.46	J	95	70-130
Cobalt	10.0	11.0		110	70-130
Copper	20.0	19.1	J	95	70-130
Lead	10.0	9.60	J	96	70-130
Molybdenum	40.0	43.2		108	70-130
Nickel	40.0	40.4		101	70-130
Selenium	20.0	21.6		108	70-130
Silver	10.0	10.5		105	70-130
Thallium	20.0	19.7	J	99	70-130
Vanadium	10.0	10.5		105	70-130
Zinc	50.0	53.6		107	70-130

Lab Sample ID: CRI 240-101673/95 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	20.7		104	70-130
Arsenic	15.0	15.7		105	70-130
Barium	200	208		104	70-130
Beryllium	5.00	4.57	J	91	70-130
Cadmium	5.00	5.21		104	70-130
Chromium	10.0	10.3		103	70-130
Cobalt	10.0	10.8		108	70-130
Copper	20.0	20.9	J	104	70-130
Lead	10.0	9.65	J	97	70-130
Molybdenum	40.0	44.8		112	70-130
Nickel	40.0	41.1		103	70-130
Selenium	20.0	21.9		110	70-130
Silver	10.0	10.1		101	70-130
Thallium	20.0	22.1		110	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Method: 6010C Instrument ID: I6

Lab Sample ID: CRI 240-101673/95 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	10.0	10.8		108	70-130
Zinc	50.0	55.1		110	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: I6

Method: 6010C MDL Date: 03/01/2011 14:59

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Antimony	206.838	2	0.39
Arsenic	189.042	1.5	0.3
Barium	493.409	20	0.071
Beryllium	313.042	0.5	0.043
Cadmium	226.502	0.5	0.036
Chromium	267.716	1	0.2
Cobalt	228.616	1	0.16
Copper	324.753	2.5	0.74
Lead	220.353	1	0.19
Molybdenum	202.030	4	0.27
Nickel	231.604	4	0.27
Selenium	196.026	2	0.45
Silver	328.068	1	0.1
Thallium	190.864	2	0.55
Vanadium	292.402	1	0.12
Zinc	213.856	5	1

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: I6

Method: 6010C XMDL Date: 03/01/2011 15:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28680-1

SDG No.:

Instrument ID: I6 Date: 10/16/2012 10:27

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Antimony		10000	6010C
Arsenic		10000	6010C
Barium		25000	6010C
Beryllium		4000	6010C
Cadmium		2500	6010C
Chromium		50000	6010C
Cobalt		10000	6010C
Copper		30000	6010C
Lead		15000	6010C
Molybdenum		10000	6010C
Nickel		50000	6010C
Selenium		10000	6010C
Silver		2000	6010C
Thallium		20000	6010C
Vanadium		50000	6010C
Zinc		10000	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28680-1

SDG No.:

Instrument ID: H1 Date: 04/01/2011 10:45

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		50	7471B

FORM XI - IN

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28680-1

SDG No.:

Project: Dump Road Area, Martin State Airport, MD

Client Sample ID	Lab Sample ID
DR-SB-48D-24-26	240-28680-2
DR-SB-48D-40-42	240-28680-5

Comments:

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: NOEQUIP Method: 9045C

Start Date: 09/05/2013 15:24 End Date: 09/05/2013 16:53

Lab Sample ID	D / F	Type	Time	Analytes
				pH
CCV 240-100333/1	1		15:24	X
LCS 240-100333/2	1	T	15:24	X
ZZZZZZ			15:24	
ZZZZZZ			15:24	
240-28670-A-4 DU	1	T	15:24	X
ZZZZZZ			15:24	
ZZZZZZ			15:24	
ZZZZZZ			15:24	
ZZZZZZ			15:24	
240-28680-2	1	T	15:24	X
240-28680-5	1	T	15:24	X
CCV 240-100333/12	1		15:24	X
ZZZZZZ			16:33	
ZZZZZZ			16:33	
ZZZZZZ			16:33	
CCV 240-100333/16			16:53	

Prep Types

T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Analyst: BLW Batch Start Date: 09/05/2013

Reporting Units: SU Analytical Batch No.: 100333

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	15:24	pH	7.030	7.00	100	99-101		WCPH7_00042
12	CCV	15:24	pH	7.020	7.00	100	99-101		WCPH7_00042

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: BARNEY Method: 365.1

Start Date: 09/11/2013 13:45 End Date: 09/11/2013 14:04

Lab Sample ID	D/F	Type	Time	Analytes: P-PO4
IC 240-100954/1-A			13:45	X
IC 240-100954/2-A			13:45	X
IC 240-100954/3-A			13:45	X
IC 240-100954/4-A			13:45	X
IC 240-100954/5-A			13:45	X
IC 240-100954/6-A			13:45	X
IC 240-100954/7-A			13:45	X
CCV 240-100954/8-A			13:45	
CCB 240-100954/9-A			13:45	
CCV 240-100954/8-A	1		13:57	X
CCB 240-100954/9-A	1		13:57	X
MB 240-100954/10-A	1	T	13:57	X
LCS 240-100954/11-A	1	T	13:57	X
ZZZZZZ			13:57	
240-28747-P-3-B MS	1	T	13:57	X
240-28747-P-3-C MSD	1	T	13:57	X
ZZZZZZ			13:57	
ZZZZZZ			13:57	
ZZZZZZ			13:57	
ZZZZZZ			13:57	
240-28680-2	1	T	13:57	X
CCV 240-100954/8-A	1		14:00	X
CCB 240-100954/9-A	1		14:00	X
240-28680-5	1	T	14:00	X
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
CCV 240-100954/8-A	1		14:03	X
CCB 240-100954/9-A	1		14:03	X
ZZZZZZ			14:03	
ZZZZZZ			14:03	
ZZZZZZ			14:03	
ZZZZZZ			14:03	
CCV 240-100954/8-A			14:04	
CCB 240-100954/9-A			14:04	

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Analyst: TPH Batch Start Date: 09/11/2013

Reporting Units: mg/L Analytical Batch No.: 101047

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
10	CCV	13:57	Phosphate as PO4	1.54	1.54	100	90-110		WCPHOS50PPM_00037
11	CCB	13:57	Phosphate as PO4	0.31				U	
22	CCV	14:00	Phosphate as PO4	1.53	1.54	100	90-110		WCPHOS50PPM_00037
23	CCB	14:00	Phosphate as PO4	0.31				U	
34	CCV	14:03	Phosphate as PO4	1.57	1.54	102	90-110		WCPHOS50PPM_00037
35	CCB	14:03	Phosphate as PO4	0.31				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: GARFUNKEL Method: 300.0

Start Date: 09/18/2013 15:26 End Date: 09/18/2013 18:20

Lab Sample ID	D / F	Type	Time	Nitrate Analytes
STD1 240-101954/1 IC			15:26	
STD2 240-101954/2 IC			15:43	
STD3 240-101954/3 IC			16:00	
STD4 240-101954/4 IC			16:18	
STD5 240-101954/5 ICRT			16:35	
STD6 240-101954/6 IC			16:53	
STD7 240-101954/7 IC			17:10	
STD8 240-101954/8 IC			17:27	
STD9 240-101954/9 IC			17:45	
ICV 240-101954/10	1		18:02	
ICB 240-101954/11			18:20	

Prep Types

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Analyst: LKG Batch Start Date: 09/18/2013

Reporting Units: mg/L Analytical Batch No.: 101954

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
10	ICV	18:02	Nitrate as N	2.64	2.50	106	90-110		WCICLCS_00223

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Instrument ID: GARFUNKEL Method: 300.0

Start Date: 09/18/2013 18:37 End Date: 09/19/2013 03:54

Lab Sample ID	D / F	Type	Time	Analytes: NO3
CCV 240-102034/1	1		18:37	X
CCB 240-102034/2	1		18:54	X
MB 240-101798/1-A	1	Y	19:12	X
LCS 240-101798/2-A	1	Y	19:29	X
ZZZZZZ			19:47	
ZZZZZZ			20:04	
ZZZZZZ			20:21	
ZZZZZZ			20:39	
ZZZZZZ			20:56	
ZZZZZZ			21:14	
CCV 240-102034/11	1		21:31	X
CCB 240-102034/12	1		21:48	X
ZZZZZZ			22:06	
ZZZZZZ			22:23	
ZZZZZZ			22:41	
240-28680-2	1	Y	22:58	X
240-28680-2 MS	1	Y	23:15	X
240-28680-2 MSD	1	Y	23:33	X
240-28680-5	1	Y	23:50	X
ZZZZZZ			00:08	
ZZZZZZ			00:25	
ZZZZZZ			00:42	
CCV 240-102034/23	1		01:00	X
CCB 240-102034/24	1		01:17	X
ZZZZZZ			01:34	
ZZZZZZ			01:52	
ZZZZZZ			02:09	
ZZZZZZ			02:27	
ZZZZZZ			02:44	
ZZZZZZ			03:01	
ZZZZZZ			03:19	
CCV 240-102034/32			03:36	
CCB 240-102034/33			03:54	

Prep Types

Y = ASTM Leach

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Analyst: LKG Batch Start Date: 09/18/2013

Reporting Units: mg/L Analytical Batch No.: 102034

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	18:37	Nitrate as N	2.52	2.50	101	90-110		WCICCCV_00323
2	CCB	18:54	Nitrate as N	0.50				U	
11	CCV	21:31	Nitrate as N	2.59	2.50	104	90-110		WCICCCV_00323
12	CCB	21:48	Nitrate as N	0.50				U	
23	CCV	01:00	Nitrate as N	2.63	2.50	105	90-110		WCICCCV_00323
24	CCB	01:17	Nitrate as N	0.50				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28680-1

SDG No.:

Instrument ID: NOEQUIP Method: 9060A

Start Date: 09/13/2013 14:00 End Date: 09/26/2013 11:59

Lab Sample ID	D / F	Type	Time	Analytes: TOCD
CCV 490-110032/1	1		14:00	X
LCS 490-110032/2	1	T	14:00	X
MB 490-110032/3	1	T	14:00	X
ZZZZZZ			14:00	
240-28528-I-19 DU	1	T	14:00	X
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
240-28680-2	1	T	14:00	X
ZZZZZZ			14:00	
ZZZZZZ			14:00	
ZZZZZZ			14:00	
CCV 490-110032/13	1		14:00	X
CCB 490-110032/14	1		14:00	X
CCV 490-110032/15	1		14:00	X
CCB 490-110032/16	1		14:00	X
ZZZZZZ			14:00	
240-28680-5	1	T	14:00	X
ZZZZZZ			14:00	
ZZZZZZ			14:00	
CCV 490-110032/21	1		11:59	X
CCB 490-110032/22	1		11:59	X
CCV 490-110032/23			11:59	
CCB 490-110032/24			11:59	
ZZZZZZ			11:59	
ZZZZZZ			11:59	
ZZZZZZ			11:59	
CCV 490-110032/28			11:59	
CCB 490-110032/29			11:59	

Prep Types
T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28680-1

SDG No.:

Analyst: JKF Batch Start Date: 09/13/2013

Reporting Units: mg/L Analytical Batch No.: 110032

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	14:00	Total Organic Carbon - Duplicates	171000	169000	101	90-110		Ammonium_Oxal_00003
13	CCV	14:00	Total Organic Carbon - Duplicates	173000	169000	102	90-110		Ammonium_Oxal_00003
14	CCB	14:00	Total Organic Carbon - Duplicates	1.0				U	
15	CCV	14:00	Total Organic Carbon - Duplicates	166000	169000	98	90-110		Ammonium_Oxal_00003
16	CCB	14:00	Total Organic Carbon - Duplicates	1.0				U	
21	CCV	11:59	Total Organic Carbon - Duplicates	161000	169000	95	90-110		Ammonium_Oxal_00003
22	CCB	11:59	Total Organic Carbon - Duplicates	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 102034	Date: 09/18/2013 19:12						
300.0	MB 240-101798/1-A	Nitrate as N	5.0	U	mg/Kg	5.0	1
Batch ID: 101047	Date: 09/11/2013 13:57	Prep Batch: 100954	Date: 09/11/2013 07:00				
365.1	MB 240-100954/10-A	Phosphate as PO4	31	U	mg/Kg	31	1
Batch ID: 100854	Date: 09/10/2013 12:45	Prep Batch: 100715	Date: 09/09/2013 14:00				
SM4500_NH3_E	MB 240-100715/1-A	Nitrogen, Kjeldahl	150	U	mg/Kg	150	1

FORM III-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28680-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 110032 Date: 09/13/2013 14:00							
9060A	MB 490-110032/3	Total Organic Carbon - Duplicates	1000	U	mg/Kg	1000	1
Batch ID: 107742 Date: 09/11/2013 08:36 Prep Batch: 106125 Date: 09/11/2013 08:36							
9081	MB 490-106125/1-A	Cation Exchange Capacity	0.040	U	meq/100gm	0.040	1

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 102034	Date: 09/18/2013 19:29										
						LCS Source: WCICLCS_00222					
300.0	LCS 240-101798/2-A	Nitrate as N	26.9		mg/Kg	25.5	106	90-110			
Batch ID: 101047	Date: 09/11/2013 13:57	Prep Batch: 100954	Date: 09/11/2013 07:01								
						LCS Source: P194-525_00004					
365.1	LCS 240-100954/11-A	Phosphate as PO4	143		mg/Kg	138	104	90-110			
Batch ID: 100333	Date: 09/05/2013 15:24										
						LCS Source: WCPHLCS_00007					
9045C	LCS 240-100333/2	pH	6.470		SU	6.34	102	97-103			
Batch ID: 100854	Date: 09/10/2013 12:46	Prep Batch: 100715	Date: 09/09/2013 14:00								
						LCS Source: P194-525_00004					
SM4500_NH3_E	LCS 240-100715/2-A	Nitrogen, Kjeldahl	362		mg/Kg	403	90	70-133			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28680-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 110032		Date: 09/13/2013 14:00									
						LCS Source: MarineSedimen_00002					
9060A	LCS 490-110032/2	Total Organic Carbon - Duplicates	29700		mg/Kg	29900	99	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 100333	Date: 09/05/2013 15:24							
9045C		240-28670-A-4	pH	4.47	SU			
9045C		240-28670-A-4 DU	pH	4.600	SU	3	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28680-1

SDG No.:

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 109460	Date: 09/13/2013 13:00							
9060A		240-28528-I-19	Total Inorganic Carbon - Duplicates	1000	mg/Kg			U
9060A		240-28528-I-19 DU	Total Inorganic Carbon - Duplicates	1000	mg/Kg	NC	20	U
Batch ID: 110032	Date: 09/13/2013 14:00							
9060A		240-28528-I-19	Total Organic Carbon - Duplicates	1000	mg/Kg			U
9060A		240-28528-I-19 DU	Total Organic Carbon - Duplicates	1000	mg/Kg	NC	20	U
Batch ID: 107742	Date: 09/11/2013 08:36	Prep Batch: 106125	Date: 09/11/2013 08:36					
9081		240-28528-I-19-B	Cation Exchange Capacity	18	meq/100gm			
9081		240-28528-I-19-B DU	Cation Exchange Capacity	20.8	meq/100gm	13	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 102034	Date: 09/18/2013 23:15										
300.0	240-28680-2	Nitrate as N	5.9	U	mg/Kg						
300.0	240-28680-2 MS	Nitrate as N	31.8		mg/Kg	29.3	109	80-120			
Batch ID: 101047	Date: 09/11/2013 13:57	Prep Batch: 100954	Date: 09/11/2013 07:03								
365.1	240-28747-P-3 -B	Phosphate as PO4	38	U	mg/Kg						
365.1	240-28747-P-3 -B MS	Phosphate as PO4	35.9	J	mg/Kg	188	19	90-110			F
Batch ID: 100854	Date: 09/10/2013 12:58	Prep Batch: 100715	Date: 09/09/2013 14:00								
SM4500_ NH3_E	240-28747-O-3 -B	Nitrogen, Kjeldahl	63	J	mg/Kg						
SM4500_ NH3_E	240-28747-O-3 -B MS	Nitrogen, Kjeldahl	1200		mg/Kg	1160	99	50-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28680-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 102034		Date: 09/18/2013 23:33									
300.0	240-28680-2 MSD	Nitrate as N	33.5		mg/Kg	29.3	114	80-120	5	20	
Batch ID: 101047		Date: 09/11/2013 13:57	Prep Batch: 100954			Date: 09/11/2013 07:04					
365.1	240-28747-P-3 -C MSD	Phosphate as PO4	8.25	J	mg/Kg	188	4	90-110	125	20	F
Batch ID: 100854		Date: 09/10/2013 12:59	Prep Batch: 100715			Date: 09/09/2013 14:00					
SM4500_ NH3_E	240-28747-O-3 -C MSD	Nitrogen, Kjeldahl	1240		mg/Kg	1160	102	50-120	3	50	

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM V-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9045C RL Date: 01/28/2010 09:54

Analyte	Wavelength/ Mass	RL (SU)	
pH		0.1	

9-IN

CALIBRATION BLANK DETECTION LIMITS

GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9045C XRL Date: 01/28/2010 09:54

Analyte	Wavelength/ Mass	XRL (SU)	
pH		0.1	

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - ASTM LEACH

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: GARFUNKEL

Method: 300.0 MDL Date: 01/27/2010 17:37

Leach Method: D3987-85

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Nitrate as N		5	0.23

9-IN

CALIBRATION BLANK DETECTION LIMITS

GENERAL CHEMISTRY - ASTM LEACH

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: GARFUNKEL

Method: 300.0 XMDL Date: 01/27/2010 17:38

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate as N		0.5	0.023

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: BARNEY

Method: 365.1 MDL Date: 01/27/2010 16:28

Prep Method: 365.2/365.3/365

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Phosphate as PO4		30.7	0.3

9-IN

CALIBRATION BLANK DETECTION LIMITS

GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: BARNEY

Method: 365.1 XMDL Date: 01/27/2010 16:28

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Phosphate as PO4		0.307	0.1

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: SM4500_NH3_E MDL Date: 01/27/2010 16:51

Prep Method: SM4500Norg_C

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Nitrogen, Kjeldahl		150	51

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: SM4500_NH3_E XMDL Date: 07/30/2013 09:49

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Kjeldahl		5	1.7

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9060A MDL Date: 07/02/2013 16:54

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Total Inorganic Carbon - Duplicates		1000	1000
Total Organic Carbon - Duplicates		1000	600

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9060A XMDL Date: 01/16/2012 09:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Inorganic Carbon - Duplicates		1	0.14
Total Organic Carbon - Duplicates		1	0.5

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9081 RL Date: 01/16/2012 19:19

Prep Method: 9081

Analyte	Wavelength/ Mass	RL (meq/100gm)	
Cation Exchange Capacity		1	

9-IN

CALIBRATION BLANK DETECTION LIMITS

GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28680-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9081 XRL Date: 01/16/2012 19:20

Analyte	Wavelength/ Mass	XRL (meq/100gm)	
Cation Exchange Capacity		1	

FORM IX - IN

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **October 29, 2013**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- SELECT METALS, CEC, NITRATE-N, pH, PHOSPHATE, TIC, TOTAL KJELDAHL NITROGEN, AND TOC**
LOCKHEED-MATRIN STATE AIRPORT
DUMP ROAD SOURCE AREAS
SDG 240-28947-1

SAMPLES: 5/Soil/

DR-SB-50D-18-20	DR-SB-50D-29-31
DR-SB-50D-34-36	DR-SB-50D-42-44
DR-SB-50D-52-54	

Overview

The sample set for Lockheed MSA, SDG 240-28947-1, consists of five (5) soil environmental samples.

All samples were analyzed for select metals. Sample DR-SB-50D-18-20 and DR-SB-50D-52-54 was also analyzed for cation exchange capacity (CEC), nitrate-N, pH, phosphate, total inorganic carbon (TIC), total kjeldahl nitrogen, and total organic carbon (TOC). The samples were collected by Tetra Tech September 9th, 2013 and analyzed by TestAmerica. Metals analyses were conducted using method 6010C. Mercury analyses were conducted using method 7471B. CEC analyses were conducted using method 9081. Nitrate-N analyses were conducted using EPA method 300.0. pH analyses were conducted using method 9045C. Phosphate analyses were conducted using EPA method 365.1. TIC analyses were conducted using method 9060A. Total nitrogen analyses were conducted using standard method 4500. TOC analyses were conducted using method 9060A.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, initial and continuing calibration verification results, laboratory method / preparation blank results, laboratory control sample recoveries, matrix spike recoveries, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems-

- None.

Minor Problems-

- The following contaminants were detected in preparation and calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Barium [1]	0.14 mg/kg	0.7 mg/kg
Mercury [2]	0.13 ug/L	0.11 mg/kg
Molybdenum [3]	3.7 ug/L	1.8 mg/kg

Vanadium [3]	2.5 ug/L	1.25 mg/kg
Zinc [3]	28.1 ug/L	14.1 mg/kg
Total kjeldahl nitrogen [4]	55.6 mg/kg	278 mg/kg

[1] Maximum concentration found in preparation blank affecting samples in preparation batch 102878.
[2] Maximum concentration found in a calibration blank affecting all samples.
[3] Maximum concentration found in a calibration blank affecting all samples.
[4] Maximum concentration found in preparation blank affecting samples DR-SB-50D-18-20 and DR-SB-50D-52-54.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Detected molybdenum, zinc, and total kjeldahl nitrogen results less than the blank action level were qualified (B) for blank contamination.

- The CRDL standard analyzed on 9/26/13 had a percent recovery < 90% for selenium and percent recoveries > 110% for arsenic and copper. All samples were affected. Non-detected selenium results were qualified as biased low (UL). Detected arsenic and copper results were qualified as either biased high (K) or estimated (J).

- The matrix spike for sample DR-SB-50D-18-20 had a percent recovery <75% for antimony. The post digestion spike and LCS were with QC limits. Non-detected results were qualified as biased low (UL).

Notes

Non-detected results were reported at the MDL.

Positive results less than the reporting limit (RL) and greater than the method detection limit (MDL) were qualified as estimated (J).

Executive Summary

Laboratory Performance: Preparation and calibration blank contamination results in the qualification of molybdenum, zinc, and total kjeldahl nitrogen results as non-detected (B). CRDL standard non-compliances for selenium, arsenic, and copper resulted in the qualification of sample results.

Other Factors Affecting Data Quality: Matrix spike non-compliances for antimony resulted in the qualification of sample results.

The data for these analyses were reviewed with reference to the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993).

Megan Carson

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	DR-SB-50D-18-20			DR-SB-50D-29-31			DR-SB-50D-34-36			DR-SB-50D-42-44		
SDG: 240-28947-1	LAB_ID	240-28947-1			240-28947-2			240-28947-3			240-28947-4		
FRACTION: M	SAMP_DATE	9/9/2013			9/9/2013			9/9/2013			9/9/2013		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	84.9			76.6			79.2			78.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.45	UL	D	0.48	UL	D	0.46	UL	D	0.44	UL	D
ARSENIC		1.6	J	CP	0.41	J	CP	0.37	J	CP	0.81	J	CP
BARIUM		9.7	J	P	1.5	J	P	2	J	P	0.87	J	P
BERYLLIUM		0.1	J	P	0.053	U		0.05	U		0.048	U	
CADMIUM		0.041	U		0.045	U		0.042	U		0.04	U	
CHROMIUM		21			2.1			2.6			2.1		
COBALT		1.1			0.2	U		0.19	U		0.18	U	
COPPER		18			0.92	U		0.88	J	CP	1.6	J	CP
LEAD		3.3			0.55	J	P	0.8	J	P	0.21	U	
MERCURY		0.016	U		0.02	U		0.017	U		0.017	U	
MOLYBDENUM		2.7	J	P	0.34	U		0.32	U		0.3	U	
NICKEL		2.1	J	P	0.34	U		0.32	U		0.3	U	
SELENIUM		0.51	UL	C	0.56	UL	C	0.53	UL	C	0.5	UL	C
SILVER		0.11	U		0.12	U		0.12	U		0.11	U	
THALLIUM		0.63	U		0.68	U		0.64	U		0.62	U	
VANADIUM		9.1			2.7			5.5			1.7		
ZINC		6.7	B	A	1.2	U		1.2	U		1.1	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-50D-52-54		
SDG: 240-28947-1	LAB_ID	240-28947-5		
FRACTION: M	SAMP_DATE	9/9/2013		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	MG/KG		
	PCT_SOLIDS	85.2		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
ANTIMONY		0.38	UL	D
ARSENIC		3.1	K	C
BARIUM		1.9	J	P
BERYLLIUM		0.042	U	
CADMIUM		0.035	U	
CHROMIUM		8.3		
COBALT		0.53	J	P
COPPER		3.9	K	C
LEAD		0.78	J	P
MERCURY		0.018	U	
MOLYBDENUM		0.33	B	A
NICKEL		0.27	U	
SELENIUM		0.44	UL	C
SILVER		0.099	U	
THALLIUM		0.54	U	
VANADIUM		8.1		
ZINC		0.99	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-50D-18-20											
SDG: 240-28947-1	LAB_ID	240-28947-1											
FRACTION: MISC	SAMP_DATE	9/9/2013											
MEDIA: SOIL	QC_TYPE	NM											
	UNITS	MEQ/100			MG/KG						S.U.		
	PCT_SOLIDS	84.9			0.0			84.9			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CATION EXCHANGE CAPACITY		27											
NITRATE-N								1.3	J	P			
PH											4.88		
PHOSPHATE								0.76	J	P			
TOTAL INORGANIC CARBON					1000	U							
TOTAL KJELDAHL NITROGEN								430					
TOTAL ORGANIC CARBON					600	U							

DR-SB-50D-52-54											
240-28947-5											
9/9/2013											
NM											
MEQ/100			MG/KG						S.U.		
85.2			0.0			85.2			0.0		
RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
8.2											
						0.27	U				
									4.8		
						0.33	U				
			1000	U							
						67	B	A			
			600	U							

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Client: Tetra Tech, Inc

Job Number: 240-28947-1

Client Sample ID: **DR-SB-50D-18-20**

Lab Sample ID: 240-28947-1
Client Matrix: Solid
% Moisture: 15.1
Date Sampled: 09/09/2013 0925
Date Received: 09/12/2013 0920

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	240-103165	Instrument ID:	I9
Prep Method:	3050B	Prep Batch:	240-102878	Lab File ID:	I9092613B.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	09/26/2013 1515			Final Weight/Volume:	100 mL
Prep Date:	09/25/2013 1108				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		2.3	U	0.45	2.3
Arsenic		1.6	J	0.34	1.7
Barium		9.7	J B	0.081	23
Beryllium		0.10	J	0.049	0.57
Cadmium		0.57	U	0.041	0.57
Chromium		21		0.23	1.1
Cobalt		1.1		0.18	1.1
Copper		18		0.85	2.9
Lead		3.3		0.22	1.1
Molybdenum		2.7	J	0.31	4.6
Nickel		2.1	J	0.31	4.6
Selenium		2.3	U	0.51	2.3
Silver		1.1	U	0.11	1.1
Thallium		2.3	U	0.63	2.3
Vanadium		9.1		0.14	1.1
Zinc		6.7		1.1	5.7

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	240-103342	Instrument ID:	H1
Prep Method:	7471B	Prep Batch:	240-102879	Lab File ID:	092713A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	0.65 g
Analysis Date:	09/27/2013 1053			Final Weight/Volume:	100 mL
Prep Date:	09/25/2013 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.11	U	0.016	0.11

Client: Tetra Tech, Inc

Job Number: 240-28947-1

Client Sample ID: **DR-SB-50D-29-31**

Lab Sample ID: 240-28947-2
Client Matrix: Solid
% Moisture: 23.4

Date Sampled: 09/09/2013 1030
Date Received: 09/12/2013 0920

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	240-103165	Instrument ID:	I9
Prep Method:	3050B	Prep Batch:	240-102878	Lab File ID:	I9092613B.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	09/26/2013 1535			Final Weight/Volume:	100 mL
Prep Date:	09/25/2013 1108				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		2.5	U	0.48	2.5
Arsenic		0.41	J	0.37	1.9
Barium		1.5	J B	0.088	25
Beryllium		0.62	U	0.053	0.62
Cadmium		0.62	U	0.045	0.62
Chromium		2.1		0.25	1.2
Cobalt		1.2	U	0.20	1.2
Copper		3.1	U	0.92	3.1
Lead		0.55	J	0.24	1.2
Molybdenum		5.0	U	0.34	5.0
Nickel		5.0	U	0.34	5.0
Selenium		2.5	U	0.56	2.5
Silver		1.2	U	0.12	1.2
Thallium		2.5	U	0.68	2.5
Vanadium		2.7		0.15	1.2
Zinc		6.2	U	1.2	6.2

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	240-103342	Instrument ID:	H1
Prep Method:	7471B	Prep Batch:	240-102879	Lab File ID:	092713A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	0.58 g
Analysis Date:	09/27/2013 1058			Final Weight/Volume:	100 mL
Prep Date:	09/25/2013 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.14	U	0.020	0.14

Client: Tetra Tech, Inc

Job Number: 240-28947-1

Client Sample ID: **DR-SB-50D-34-36**

Lab Sample ID: 240-28947-3
Client Matrix: Solid
% Moisture: 20.8

Date Sampled: 09/09/2013 1110
Date Received: 09/12/2013 0920

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	240-103165	Instrument ID:	I9
Prep Method:	3050B	Prep Batch:	240-102878	Lab File ID:	I9092613B.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	09/26/2013 1547			Final Weight/Volume:	100 mL
Prep Date:	09/25/2013 1108				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		2.3	U	0.46	2.3
Arsenic		0.37	J	0.35	1.8
Barium		2.0	J B	0.083	23
Beryllium		0.58	U	0.050	0.58
Cadmium		0.58	U	0.042	0.58
Chromium		2.6		0.23	1.2
Cobalt		1.2	U	0.19	1.2
Copper		0.88	J	0.87	2.9
Lead		0.80	J	0.22	1.2
Molybdenum		4.7	U	0.32	4.7
Nickel		4.7	U	0.32	4.7
Selenium		2.3	U	0.53	2.3
Silver		1.2	U	0.12	1.2
Thallium		2.3	U	0.64	2.3
Vanadium		5.5		0.14	1.2
Zinc		5.8	U	1.2	5.8

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	240-103342	Instrument ID:	H1
Prep Method:	7471B	Prep Batch:	240-102879	Lab File ID:	092713A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	0.65 g
Analysis Date:	09/27/2013 1103			Final Weight/Volume:	100 mL
Prep Date:	09/25/2013 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.12	U	0.017	0.12

Client: Tetra Tech, Inc

Job Number: 240-28947-1

Client Sample ID: **DR-SB-50D-42-44**

Lab Sample ID: 240-28947-4
Client Matrix: Solid
% Moisture: 21.1

Date Sampled: 09/09/2013 1150
Date Received: 09/12/2013 0920

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	240-103165	Instrument ID:	I9
Prep Method:	3050B	Prep Batch:	240-102878	Lab File ID:	I9092613B.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	09/26/2013 1551			Final Weight/Volume:	100 mL
Prep Date:	09/25/2013 1108				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		2.2	U	0.44	2.2
Arsenic		0.81	J	0.34	1.7
Barium		0.87	J B	0.080	22
Beryllium		0.56	U	0.048	0.56
Cadmium		0.56	U	0.040	0.56
Chromium		2.1		0.22	1.1
Cobalt		1.1	U	0.18	1.1
Copper		1.6	J	0.83	2.8
Lead		1.1	U	0.21	1.1
Molybdenum		4.5	U	0.30	4.5
Nickel		4.5	U	0.30	4.5
Selenium		2.2	U	0.50	2.2
Silver		1.1	U	0.11	1.1
Thallium		2.2	U	0.62	2.2
Vanadium		1.7		0.13	1.1
Zinc		5.6	U	1.1	5.6

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	240-103342	Instrument ID:	H1
Prep Method:	7471B	Prep Batch:	240-102879	Lab File ID:	092713A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	0.69 g
Analysis Date:	09/27/2013 1104			Final Weight/Volume:	100 mL
Prep Date:	09/25/2013 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.11	U	0.017	0.11

Client: Tetra Tech, Inc

Job Number: 240-28947-1

Client Sample ID: **DR-SB-50D-52-54**

Lab Sample ID: 240-28947-5
Client Matrix: Solid
% Moisture: 14.8

Date Sampled: 09/09/2013 1245
Date Received: 09/12/2013 0920

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	240-103165	Instrument ID:	I9
Prep Method:	3050B	Prep Batch:	240-102878	Lab File ID:	I9092613B.asc
Dilution:	1.0			Initial Weight/Volume:	1.19 g
Analysis Date:	09/26/2013 1555			Final Weight/Volume:	100 mL
Prep Date:	09/25/2013 1108				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		2.0	U	0.38	2.0
Arsenic		3.1		0.30	1.5
Barium		1.9	J B	0.070	20
Beryllium		0.49	U	0.042	0.49
Cadmium		0.49	U	0.035	0.49
Chromium		8.3		0.20	0.99
Cobalt		0.53	J	0.16	0.99
Copper		3.9		0.73	2.5
Lead		0.78	J	0.19	0.99
Molybdenum		0.33	J	0.27	3.9
Nickel		3.9	U	0.27	3.9
Selenium		2.0	U	0.44	2.0
Silver		0.99	U	0.099	0.99
Thallium		2.0	U	0.54	2.0
Vanadium		8.1		0.12	0.99
Zinc		4.9	U	0.99	4.9

7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analysis Method:	7471B	Analysis Batch:	240-103342	Instrument ID:	H1
Prep Method:	7471B	Prep Batch:	240-102879	Lab File ID:	092713A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	09/27/2013 1106			Final Weight/Volume:	100 mL
Prep Date:	09/25/2013 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.12	U	0.018	0.12

General Chemistry

Client Sample ID: **DR-SB-50D-18-20**

Lab Sample ID: 240-28947-1
Client Matrix: Solid
% Moisture: 15.1
Date Sampled: 09/09/2013 0925
Date Received: 09/12/2013 0920

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N-ASTM Leach	1.3	J	mg/Kg	0.27	5.8	1.0	300.0
Analysis Batch: 240-102953	Analysis Date: 09/25/2013 2015						DryWt Corrected: Y
Phosphate as PO4	0.76	J	mg/Kg	0.34	35	1.0	365.1
Analysis Batch: 240-102742	Analysis Date: 09/24/2013 1429						DryWt Corrected: Y
Prep Batch: 240-102629	Prep Date: 09/24/2013 0723						
Total Inorganic Carbon - Duplicates	1000	U	mg/Kg	1000	1000	1.0	9060A
Analysis Batch: 490-109460	Analysis Date: 09/13/2013 1300						DryWt Corrected: N
Total Organic Carbon - Duplicates	1000	U	mg/Kg	600	1000	1.0	9060A
Analysis Batch: 490-110032	Analysis Date: 09/26/2013 1159						DryWt Corrected: N
Nitrogen, Kjeldahl	430	B	mg/Kg	58	170	1.0	SM4500_NH3_E
Analysis Batch: 240-101775	Analysis Date: 09/17/2013 1337						DryWt Corrected: Y
Prep Batch: 240-101616	Prep Date: 09/16/2013 1349						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH	4.88		SU	0.100	0.100	1.0	9045C
Analysis Batch: 240-101462	Analysis Date: 09/14/2013 1422						DryWt Corrected: N
Cation Exchange Capacity	27		meq/100gm	0.047	0.047	1.0	9081
Analysis Batch: 490-110404	Analysis Date: 09/25/2013 1126						DryWt Corrected: Y
Prep Batch: 490-109697	Prep Date: 09/25/2013 1126						
Percent Solids	85		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-101391	Analysis Date: 09/13/2013 1351						DryWt Corrected: N

General Chemistry

Client Sample ID: **DR-SB-50D-52-54**

Lab Sample ID: 240-28947-5
Client Matrix: Solid
% Moisture: 14.8
Date Sampled: 09/09/2013 1245
Date Received: 09/12/2013 0920

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N-ASTM Leach	5.8	U	mg/Kg	0.27	5.8	1.0	300.0
Analysis Batch: 240-102953	Analysis Date: 09/25/2013 2031						DryWt Corrected: Y
Phosphate as PO4	33	U	mg/Kg	0.33	33	1.0	365.1
Analysis Batch: 240-102742	Analysis Date: 09/24/2013 1429						DryWt Corrected: Y
Prep Batch: 240-102629	Prep Date: 09/24/2013 0726						
Total Inorganic Carbon - Duplicates	1000	U	mg/Kg	1000	1000	1.0	9060A
Analysis Batch: 490-109460	Analysis Date: 09/13/2013 1300						DryWt Corrected: N
Total Organic Carbon - Duplicates	1000	U	mg/Kg	600	1000	1.0	9060A
Analysis Batch: 490-110032	Analysis Date: 09/26/2013 1159						DryWt Corrected: N
Nitrogen, Kjeldahl	67	J B	mg/Kg	59	170	1.0	SM4500_NH3_E
Analysis Batch: 240-101775	Analysis Date: 09/17/2013 1339						DryWt Corrected: Y
Prep Batch: 240-101616	Prep Date: 09/16/2013 1349						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH	4.80		SU	0.100	0.100	1.0	9045C
Analysis Batch: 240-101462	Analysis Date: 09/14/2013 1415						DryWt Corrected: N
Cation Exchange Capacity	8.2		meq/100gm	0.047	0.047	1.0	9081
Analysis Batch: 490-110404	Analysis Date: 09/25/2013 1126						DryWt Corrected: Y
Prep Batch: 490-109697	Prep Date: 09/25/2013 1126						
Percent Solids	85		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-101391	Analysis Date: 09/13/2013 1351						DryWt Corrected: N

General Chemistry

Client Sample ID: **DR-SB-50D-29-31**

Lab Sample ID: 240-28947-2

Client Matrix: Solid

Date Sampled: 09/09/2013 1030

Date Received: 09/12/2013 0920

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Solids	77		%	0.10	0.10	1.0	Moisture

Analysis Batch: 240-101391 Analysis Date: 09/13/2013 1351 DryWt Corrected: N

General Chemistry

Client Sample ID: **DR-SB-50D-34-36**

Lab Sample ID: 240-28947-3

Client Matrix: Solid

Date Sampled: 09/09/2013 1110

Date Received: 09/12/2013 0920

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Solids	79		%	0.10	0.10	1.0	Moisture

Analysis Batch: 240-101391 Analysis Date: 09/13/2013 1351 DryWt Corrected: N

General Chemistry

Client Sample ID: **DR-SB-50D-42-44**

Lab Sample ID: 240-28947-4

Client Matrix: Solid

Date Sampled: 09/09/2013 1150

Date Received: 09/12/2013 0920

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Solids	79		%	0.10	0.10	1.0	Moisture

Analysis Batch: 240-101391 Analysis Date: 09/13/2013 1351 DryWt Corrected: N

APPENDIX C

SUPPORT DOCUMENTATION

Chain of Custody Record

1.4

THE LE

240-28947 Chain of Custody

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
TETRA TECH INC	TONY APANNAVAGE	9/9/13	015009
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** _____ **of** _____
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State)	**Carrier/Waybill Number**		
LOCKHEED MARTIN Dump ROAD, MARTIN STATE AIRPORT			
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	METHANOL	Analysis: VOC	GRO	SVOC/PAHs DRO	METALS	TOC	TINC	CEC	NITRATES	PHOSPHATES	TKN	pH
DR-SB-SOD-18-20	9/9/13	0925				X	1						1	X	X	X	X	X	X	X	X	X	X	X
DR-SB-SOD-29-31		1030					1						1	X	X	X	X							
DR-SB-SOD-34-36		1110					1						1	X	X	X	X							
DR-SB-SOD-42-44		1140					1						1	X	X	X	X							
DR-SB-SOD-52-54		1245					1						1	X	X	X	X	X	X	X	X	X	X	X
TB		1245		X			1			X				X										

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Special Instructions/ Conditions of Receipt

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time
1. Relinquished By		
2. Relinquished By	9/9/13	1400
3. Relinquished By	9/9/13	1540

	Date	Time
1. Received By	9/9/13	1405
2. Received By (TAL)	9-10-13	0900
3. Received By	9/10/13	920

Comments

4:1 #2

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: LM Dump Road, Martin State Airport

Report Number: 240-28947-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 9060A TOC, 9060 TIC, and 9081 CEC analysis were performed at the TestAmerica Nashville Laboratory.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 09/12/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.4 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-SB-50D-18-20 (240-28947-1), DR-SB-50D-29-31 (240-28947-2), DR-SB-50D-34-36 (240-28947-3), DR-SB-50D-42-44 (240-28947-4) and DR-SB-50D-52-54 (240-28947-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 09/12/2013 and analyzed on 09/21/2013.

The laboratory control sample (LCS) for batch 102378 recovered outside control limits for the following analytes: Tetrachloroethene and 1,1-Dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Insufficient sample volume was available to meet method-mandated requirements for matrix spike/matrix spike duplicate (MS/MSD) analyses for batch 102378.

The following samples were received outside of holding time: DR-SB-50D-18-20 (240-28947-1), DR-SB-50D-29-31 (240-28947-2), DR-SB-50D-34-36 (240-28947-3), DR-SB-50D-42-44 (240-28947-4), DR-SB-50D-52-54 (240-28947-5). The samples were collected on 9/9/13 and received at the lab on 9/12/13.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample TB (240-28947-6) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/17/2013.

The laboratory control sample (LCS) for batch 101757 recovered outside control limits for the following analyte(s): 2-Chloroethyl vinyl ether and 2-Methyl-2-propanol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Samples DR-SB-50D-18-20 (240-28947-1), DR-SB-50D-29-31 (240-28947-2), DR-SB-50D-34-36 (240-28947-3), DR-SB-50D-42-44 (240-28947-4) and DR-SB-50D-52-54 (240-28947-5) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/19/2013 and analyzed on 10/01/2013.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)
Samples DR-SB-50D-18-20 (240-28947-1), DR-SB-50D-29-31 (240-28947-2), DR-SB-50D-34-36 (240-28947-3), DR-SB-50D-42-44 (240-28947-4) and DR-SB-50D-52-54 (240-28947-5) were analyzed for gasoline range organics (GRO) in accordance with EPA-SW-846 Method 8015C - GRO. The samples were analyzed on 09/17/2013.

No difficulties were encountered during the GRO analysis. All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)
Samples DR-SB-50D-18-20 (240-28947-1), DR-SB-50D-29-31 (240-28947-2), DR-SB-50D-34-36 (240-28947-3), DR-SB-50D-42-44 (240-28947-4) and DR-SB-50D-52-54 (240-28947-5) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 09/13/2013 and analyzed on 09/14/2013.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

No other difficulties were encountered during the DRO analysis. All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)
Samples DR-SB-50D-18-20 (240-28947-1), DR-SB-50D-29-31 (240-28947-2), DR-SB-50D-34-36 (240-28947-3), DR-SB-50D-42-44 (240-28947-4) and DR-SB-50D-52-54 (240-28947-5) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/19/2013 and analyzed on 09/23/2013.

No other difficulties were encountered during the PCBs analysis. All quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)
Samples DR-SB-50D-18-20 (240-28947-1), DR-SB-50D-29-31 (240-28947-2), DR-SB-50D-34-36 (240-28947-3), DR-SB-50D-42-44 (240-28947-4) and DR-SB-50D-52-54 (240-28947-5) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 09/25/2013 and analyzed on 09/26/2013.

Barium was detected in method blank MB 240-102878/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Copper and Molybdenum exceeded the RPD limit for the duplicate of sample DR-SB-50D-18-20DU (240-28947-1).

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

MERCURY
Samples DR-SB-50D-18-20 (240-28947-1), DR-SB-50D-29-31 (240-28947-2), DR-SB-50D-34-36 (240-28947-3), DR-SB-50D-42-44 (240-28947-4) and DR-SB-50D-52-54 (240-28947-5) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared on 09/25/2013 and analyzed on 09/27/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

LEACHABLE ANIONS
Samples DR-SB-50D-18-20 (240-28947-1) and DR-SB-50D-52-54 (240-28947-5) were analyzed for Leachable anions in accordance with ASTM Method D3987-85/EPA Method 300.0. The samples were leached on 09/25/2013 and analyzed on 09/25/2013.

No difficulties were encountered during the anions analysis. All quality control parameters were within the acceptance limits.

TOTAL PHOSPHORUS
Samples DR-SB-50D-18-20 (240-28947-1) and DR-SB-50D-52-54 (240-28947-5) were analyzed for total phosphorus in accordance with EPA Method 365.1. The samples were prepared and analyzed on 09/24/2013.

No other difficulties were encountered during the total phosphorus analysis. All other quality control parameters were within the acceptance limits.

PH
Samples DR-SB-50D-18-20 (240-28947-1) and DR-SB-50D-52-54 (240-28947-5) were analyzed for pH in accordance with EPA SW-846 Method 9045C. The samples were analyzed on 09/14/2013.

No difficulties were encountered during the pH analysis. All quality control parameters were within the acceptance limits.

TOTAL ORGANIC CARBON

Samples DR-SB-50D-18-20 (240-28947-1) and DR-SB-50D-52-54 (240-28947-5) were analyzed for total organic carbon in accordance with SW-846 Method 9060A. The samples were analyzed on 09/13/2013 and 09/26/2013.

Quality Control (QC) results are not provided for Total Inorganic Carbon (TIC) as this result is taken from a calculation incorporating the Total Carbon (TC) and Total Organic Carbon (TOC) results. The QC results associated with these component parameters are found in their respective section of the final report.

As required by the reference method, soil samples for Total Organic Carbon (TOC) are dried prior to analysis. Since determination of TOC is performed using a pre-dried sample, the final TOC result obtained is not converted to a dry weight basis using results of a % Solids (or % Moisture) determination, as is typically performed for other types of soil analyses. For this reason, this report indicates the TOC results are not dry weight corrected.

Batch 110032 was analyzed without the required sample duplicate (DU) per every 10 samples. The associated laboratory control sample (LCS) precision met acceptance criteria.

No other difficulties were encountered during the TOC analysis. All quality control parameters were within the acceptance limits.

CATION EXCHANGE CAPACITY

Samples DR-SB-50D-18-20 (240-28947-1) and DR-SB-50D-52-54 (240-28947-5) were analyzed for Cation Exchange Capacity in accordance with EPA SW-846 Method 9081. The samples were prepared and analyzed on 09/25/2013.

No difficulties were encountered during the CEC analysis. All quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples DR-SB-50D-18-20 (240-28947-1), DR-SB-50D-29-31 (240-28947-2), DR-SB-50D-34-36 (240-28947-3), DR-SB-50D-42-44 (240-28947-4) and DR-SB-50D-52-54 (240-28947-5) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 09/13/2013.

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

TOTAL KJELDAHL NITROGEN

Samples DR-SB-50D-18-20 (240-28947-1) and DR-SB-50D-52-54 (240-28947-5) were analyzed for total kjeldahl nitrogen in accordance with SM 4500 NH3 E. The samples were prepared on 09/16/2013 and analyzed on 09/17/2013.

Nitrogen, Kjeldahl was detected in method blank MB 240-101616/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No other difficulties were encountered during the TKN analysis. All other quality control parameters were within the acceptance limits.

DR-SB-50D-18-20

Sample Name: 240-28947-e-1-c Acquired: 9/26/2013 15:15:44 Type: Unk
Method: Standard Method + IEC Checks(v252) Mode: CONC Corr. Factor: 1.000000
User: Roger Method: 6010B/6010C Method: 200.7 :
Comment: $159.05\ \frac{\mu g}{L} \times \frac{0.1\ L}{1.093\ g} \times \frac{1000\ g}{1\ Kg} \times \frac{1\ mg}{1000\ \mu g} \times \frac{1}{0.8498} = 18.1\ \frac{mg}{Kg}$ reported as $\frac{18\ mg}{Kg}$

Elem	Ag3280	Al3082	As1890	B_1826	Ba4554	Be3130	Ca3179	Cd2288
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.11822	21376.	14.284	9.7056	85.001	.87004	2295.6	.1994
Stddev	.29525	44.	2.416	.2922	.070	.04029	2.4	.1346
%RSD	249.74	.20773	16.915	3.0101	.08292	4.6304	.10322	67.49
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(In2306)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.8150	186.33	159.05	38117.	2730.8	14.892	2288.5	157.44
Stddev	.0537	.33	.59	103.	44.9	.241	15.9	.74
%RSD	.54704	.17680	.36791	.26995	1.6453	1.6172	.69628	.46894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2175	Se1960	Sn1899	Ti3372
IS Ref	(Y_2243)	(Y_3710)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(In2306)	(Y_3600)
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	23.464	536.00	18.652	28.536	-.1700	.71169	20.009	337.43
Stddev	.156	6.71	.376	.775	2.089	1.7555	.400	.66
%RSD	.66484	1.2520	2.0156	2.7152	1229.	246.67	2.0001	.19513
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 28947

Client Tetra Tech Site Name

Cooler unpacked by: David O. Lee

Cooler Received on 9-12-13 Opened on 9-12-13

FedEx: 1st Grd ~~Exp~~ UPS FAS Stetson Client Drop Off TestAmerica Courier Other

TestAmerica Cooler # Foam Box ~~Client Cooler~~ Box Other

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other

COOLANT: ~~Wet Ice~~ Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. 1.4 °C	Corrected Cooler Temp. 1.4 °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 ~~Yes~~ No
   -Were custody seals on the outside of the cooler(s) signed & dated? ~~Yes~~ No NA
   -Were custody seals on the bottle(s)? Yes ~~No~~
3. Shippers' packing slip attached to the cooler(s)? ~~Yes~~ No
4. Did custody papers accompany the sample(s)? ~~Yes~~ No
5. Were the custody papers relinquished & signed in the appropriate place? ~~Yes~~ No
6. Did all bottles arrive in good condition (Unbroken)? ~~Yes~~ No
7. Could all bottle labels be reconciled with the COC? ~~Yes~~ No
8. Were correct bottle(s) used for the test(s) indicated? ~~Yes~~ No
9. Sufficient quantity received to perform indicated analyses? ~~Yes~~ No
10. Were sample(s) at the correct pH upon receipt? Yes No ~~NA~~ pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes ~~No~~
12. Were air bubbles >6 mm in any VOA vials? Yes No ~~NA~~
13. Was a trip blank present in the cooler(s)? ~~Yes~~ No

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other
Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: David O. Lee

Received 2X40 ml trip blanks, COC State just 1X40ml trip blank Therefor received 1 extra trip blank

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

Login Sample Receipt Checklist

Client: Tetra Tech, Inc

Job Number: 240-28947-1

Login Number: 28947
List Number: 1
Creator: Buckingham, Paul

List Source: TestAmerica Nashville
List Creation: 09/17/13 05:25 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

HOLDTIME

SDG 240-28947-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/25/2013	09/27/2013	16	2	18
HG	MG/KG	DR-SB-50D-29-31	240-28947-2	NM	09/09/2013	09/25/2013	09/27/2013	16	2	18
HG	MG/KG	DR-SB-50D-34-36	240-28947-3	NM	09/09/2013	09/25/2013	09/27/2013	16	2	18
HG	MG/KG	DR-SB-50D-42-44	240-28947-4	NM	09/09/2013	09/25/2013	09/27/2013	16	2	18
HG	MG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/25/2013	09/27/2013	16	2	18
M	MG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/25/2013	09/26/2013	16	1	17
M	MG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/25/2013	09/26/2013	16	1	17
M	MG/KG	DR-SB-50D-29-31	240-28947-2	NM	09/09/2013	09/25/2013	09/26/2013	16	1	17
M	MG/KG	DR-SB-50D-34-36	240-28947-3	NM	09/09/2013	09/25/2013	09/26/2013	16	1	17
M	MG/KG	DR-SB-50D-42-44	240-28947-4	NM	09/09/2013	09/25/2013	09/26/2013	16	1	17
	MEQ/100G	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/25/2013	09/25/2013	16	0	16
	MEQ/100G	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/25/2013	09/25/2013	16	0	16
	MG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/25/2013	09/25/2013	16	0	16
	MG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/25/2013	09/25/2013	16	0	16
NH3	MG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/16/2013	09/17/2013	7	1	8

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
NH3	MG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/16/2013	09/17/2013	7	1	8
PH	SU	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/14/2013	09/14/2013	5	0	5
PH	SU	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/14/2013	09/14/2013	5	0	5
PHO	MG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/24/2013	09/24/2013	15	0	15
PHO	MG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/24/2013	09/24/2013	15	0	15
TOC	MG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/26/2013	09/26/2013	17	0	17
TOC	MG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/13/2013	09/13/2013	4	0	4
TOC	MG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/26/2013	09/26/2013	17	0	17
TOC	MG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/13/2013	09/13/2013	4	0	4
OS	UG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/19/2013	10/01/2013	10	12	22
OS	UG/KG	DR-SB-50D-34-36	240-28947-3	NM	09/09/2013	09/19/2013	10/01/2013	10	12	22
OS	UG/KG	DR-SB-50D-29-31	240-28947-2	NM	09/09/2013	09/19/2013	10/01/2013	10	12	22
OS	UG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/19/2013	10/01/2013	10	12	22
OS	UG/KG	DR-SB-50D-42-44	240-28947-4	NM	09/09/2013	09/19/2013	10/01/2013	10	12	22
OV	UG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/12/2013	09/21/2013	3	9	12
OV	UG/KG	DR-SB-50D-34-36	240-28947-3	NM	09/09/2013	09/12/2013	09/21/2013	3	9	12
OV	UG/KG	DR-SB-50D-42-44	240-28947-4	NM	09/09/2013	09/12/2013	09/21/2013	3	9	12
OV	UG/KG	DR-SB-50D-29-31	240-28947-2	NM	09/09/2013	09/12/2013	09/21/2013	3	9	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/12/2013	09/21/2013	3	9	12
OV	UG/L	TB	240-28947-6	NM	09/09/2013	09/17/2013	09/17/2013	8	0	8
PCB	UG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/19/2013	09/23/2013	10	4	14
PCB	UG/KG	DR-SB-50D-42-44	240-28947-4	NM	09/09/2013	09/19/2013	09/23/2013	10	4	14
PCB	UG/KG	DR-SB-50D-34-36	240-28947-3	NM	09/09/2013	09/19/2013	09/23/2013	10	4	14
PCB	UG/KG	DR-SB-50D-29-31	240-28947-2	NM	09/09/2013	09/19/2013	09/23/2013	10	4	14
PCB	UG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/19/2013	09/23/2013	10	4	14
	MG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/13/2013	09/14/2013	4	1	5
	MG/KG	DR-SB-50D-42-44	240-28947-4	NM	09/09/2013	09/13/2013	09/14/2013	4	1	5
	MG/KG	DR-SB-50D-34-36	240-28947-3	NM	09/09/2013	09/13/2013	09/14/2013	4	1	5
	MG/KG	DR-SB-50D-29-31	240-28947-2	NM	09/09/2013	09/13/2013	09/14/2013	4	1	5
	MG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/13/2013	09/14/2013	4	1	5
	UG/KG	DR-SB-50D-42-44	240-28947-4	NM	09/09/2013	09/17/2013	09/17/2013	8	0	8
	UG/KG	DR-SB-50D-34-36	240-28947-3	NM	09/09/2013	09/17/2013	09/17/2013	8	0	8
	UG/KG	DR-SB-50D-29-31	240-28947-2	NM	09/09/2013	09/17/2013	09/17/2013	8	0	8
	UG/KG	DR-SB-50D-18-20	240-28947-1	NM	09/09/2013	09/17/2013	09/17/2013	8	0	8
	UG/KG	DR-SB-50D-52-54	240-28947-5	NM	09/09/2013	09/17/2013	09/17/2013	8	0	8

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010C MDL Date: 03/01/2011 14:59

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Antimony	206.838	2	0.39
Arsenic	189.042	1.5	0.3
Barium	493.409	20	0.071
Beryllium	313.042	0.5	0.043
Cadmium	226.502	0.5	0.036
Chromium	267.716	1	0.2
Cobalt	228.616	1	0.16
Copper	324.753	2.5	0.74
Lead	220.353	1	0.19
Molybdenum	202.030	4	0.27
Nickel	231.604	4	0.27
Selenium	196.026	2	0.45
Silver	328.068	1	0.1
Thallium	190.864	2	0.55
Vanadium	292.402	1	0.12
Zinc	213.856	5	1

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010C XMDL Date: 03/01/2011 15:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: H1

Method: 7471B MDL Date: 02/16/2010 09:48

Prep Method: 7471B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury	253.7	0.1	0.015

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: H1

Method: 7471B XMDL Date: 02/16/2010 09:48

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.6	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28947-1

SDG No.:

Instrument ID: I9 Date: 04/04/2013 11:44

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		10000	6010C
Arsenic		5000	6010C
Barium		25000	6010C
Beryllium		4000	6010C
Cadmium		2000	6010C
Chromium		20000	6010C
Cobalt		10000	6010C
Copper		30000	6010C
Lead		15000	6010C
Molybdenum		10000	6010C
Nickel		30000	6010C
Selenium		10000	6010C
Silver		2000	6010C
Thallium		10000	6010C
Vanadium		5000	6010C
Zinc		10000	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28947-1

SDG No.:

Instrument ID: H1 Date: 04/01/2011 10:45

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		50	7471B

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Prep Method: 7471B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-102879/1-A	09/25/2013 14:40	102879	0.60		100
LCS 240-102879/2-A	09/25/2013 14:40	102879	0.60		100
240-28947-1	09/25/2013 14:40	102879	0.65		100
240-28947-1 DU	09/25/2013 14:40	102879	0.65		100
240-28947-1 MS	09/25/2013 14:40	102879	0.65		100
240-28947-2	09/25/2013 14:40	102879	0.58		100
240-28947-3	09/25/2013 14:40	102879	0.65		100
240-28947-4	09/25/2013 14:40	102879	0.69		100
240-28947-5	09/25/2013 14:40	102879	0.60		100

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-102879/1-A

Instrument Code: H1 Batch No.: 103342

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.10	U		7471B

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-102879/2-A

Lab Name: TestAmerica Canton Job No.: 240-28947-1

Sample Matrix: Solid LCS Source: MTHGCALW_00470

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.851		102	80	120		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-102878/1-A	09/25/2013 11:08	102878	1.00		100
LCS 240-102878/2-A	09/25/2013 11:08	102878	1.00		100
240-28947-1	09/25/2013 11:08	102878	1.03		100
240-28947-1 DU	09/25/2013 11:08	102878	1.03		100
240-28947-1 MS	09/25/2013 11:08	102878	1.03		100
240-28947-2	09/25/2013 11:08	102878	1.05		100
240-28947-3	09/25/2013 11:08	102878	1.08		100
240-28947-4	09/25/2013 11:08	102878	1.13		100
240-28947-5	09/25/2013 11:08	102878	1.19		100

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-102878/1-A

Instrument Code: I9 Batch No.: 103165

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6010C
7440-38-2	Arsenic	1.5	U		6010C
7440-39-3	Barium	0.137	J		6010C
7440-41-7	Beryllium	0.50	U		6010C
7440-43-9	Cadmium	0.50	U		6010C
7440-47-3	Chromium	1.0	U		6010C
7440-48-4	Cobalt	1.0	U		6010C
7440-50-8	Copper	2.5	U		6010C
7439-92-1	Lead	1.0	U		6010C
7439-98-7	Molybdenum	4.0	U		6010C
7440-02-0	Nickel	4.0	U		6010C
7782-49-2	Selenium	2.0	U		6010C
7440-22-4	Silver	1.0	U		6010C
7440-28-0	Thallium	2.0	U		6010C
7440-62-2	Vanadium	1.0	U		6010C
7440-66-6	Zinc	5.0	U		6010C

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-SB-50D-18-20 MS
Lab ID: 240-28947-1 MS
Lab Name: TestAmerica Canton
Job No.: 240-28947-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 84.9

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	28.2		2.3	U	57.2	49	75-125	F	6010C
Arsenic	197		1.6	J	229	86	75-125		6010C
Barium	205		9.7	J	229	85	75-125		6010C
Beryllium	4.79		0.10	J	5.72	82	75-125		6010C
Cadmium	4.75		0.57	U	5.72	83	75-125		6010C
Chromium	44.2		21		22.9	100	75-125		6010C
Cobalt	54.1		1.1		57.2	93	75-125		6010C
Copper	52.2		18		28.6	119	75-125		6010C
Lead	51.7		3.3		57.2	85	75-125		6010C
Molybdenum	97.5		2.7	J	114	83	75-125		6010C
Nickel	56.4		2.1	J	57.2	95	75-125		6010C
Selenium	195		2.3	U	229	85	75-125		6010C
Silver	4.76		1.1	U	5.72	83	75-125		6010C
Thallium	206		2.3	U	229	90	75-125		6010C
Vanadium	59.7		9.1		57.2	89	75-125		6010C
Zinc	62.9		6.7		57.2	98	75-125		6010C
Mercury	0.195		0.11	U	0.181	108	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-SB-50D-18-20 PDS Lab ID: 240-28947-1 PDS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	15.8		2.3	U	17.2	92	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: DR-SB-50D-18-20 DU | Lab ID: 240-28947-1 DU

Lab Name: TestAmerica Canton | Job No.: 240-28947-1

SDG No.:

% Solids for Sample: 84.9 | % Solids for Duplicate: 84.9

Matrix: Solid | Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	2.3	2.3	U	2.3	U	NC		6010C
Arsenic	1.7	1.6	J	1.53	J	7		6010C
Barium	23	9.7	J	9.06	J	7		6010C
Beryllium	0.57	0.10	J	0.0897	J	10		6010C
Cadmium	0.57	0.57	U	0.57	U	NC		6010C
Chromium	1.1	21		19.5		9		6010C
Cobalt	1.1	1.1		1.04	J	8		6010C
Copper	2.9	18		22.8		23	F	6010C
Lead	1.1	3.3		3.37		3		6010C
Molybdenum	4.6	2.7	J	2.14	J	23		6010C
Nickel	4.6	2.1	J	2.02	J	6		6010C
Selenium	2.3	2.3	U	2.3	U	NC		6010C
Silver	1.1	1.1	U	1.1	U	NC		6010C
Thallium	2.3	2.3	U	2.3	U	NC		6010C
Vanadium	1.1	9.1		8.70		4		6010C
Zinc	5.7	6.7		5.88		14		6010C
Mercury	0.11	0.11	U	0.0224	J	NC		7471B

QC limit
35

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-102878/2-A

Lab Name: TestAmerica Canton Job No.: 240-28947-1

Sample Matrix: Solid LCS Source: MTICP1_00023

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	46.7		93	80	120		6010C
Arsenic	200	194		97	80	120		6010C
Barium	200	186		93	80	120		6010C
Beryllium	5.00	4.54		91	80	120		6010C
Cadmium	5.00	4.67		93	80	120		6010C
Chromium	20.0	19.5		98	80	120		6010C
Cobalt	50.0	47.7		95	80	120		6010C
Copper	25.0	23.6		95	80	120		6010C
Lead	50.0	47.0		94	80	120		6010C
Molybdenum	100	96.1		96	80	120		6010C
Nickel	50.0	49.2		98	80	120		6010C
Selenium	200	193		97	80	120		6010C
Silver	5.00	4.61		92	80	120		6010C
Thallium	200	188		94	80	120		6010C
Vanadium	50.0	47.7		95	80	120		6010C
Zinc	50.0	49.2		98	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-28947-1

SDG No:

Lab Name: TestAmerica Canton Job No: 240-28947-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	2.3	U	11	U	NC		6010C
Arsenic	1.6	J	2.20	J	NC		6010C
Barium	9.7	J	10.1	J	4.3		6010C
Beryllium	0.10	J	2.9	U	NC		6010C
Cadmium	0.57	U	2.9	U	NC		6010C
Chromium	21		21.6		1.4		6010C
Cobalt	1.1		1.16	J	NC		6010C
Copper	18		19.0		NC		6010C
Lead	3.3		3.61	J	NC		6010C
Molybdenum	2.7	J	2.39	J	NC		6010C
Nickel	2.1	J	2.42	J	NC		6010C
Selenium	2.3	U	11	U	NC		6010C
Silver	1.1	U	5.7	U	NC		6010C
Thallium	2.3	U	11	U	NC		6010C
Vanadium	9.1		8.96		1.5		6010C
Zinc	6.7		9.77	J	NC		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/27/2013 07:13 End Date: 09/27/2013 15:08

Lab Sample ID	D/F	Type	Time	Analytes
				Hg
IC 240-103300/1-A			07:13	X
IC 240-103300/1-A			07:15	X
IC 240-103300/2-A			07:16	X
IC 240-103300/2-A			07:18	X
IC 240-103300/3-A			07:19	X
IC 240-103300/3-A			07:21	X
IC 240-103300/4-A			07:22	X
IC 240-103300/4-A			07:24	X
IC 240-103300/5-A			07:25	X
IC 240-103300/5-A			07:26	X
IC 240-103300/6-A			07:28	X
IC 240-103300/6-A			07:29	X
IC 240-103300/7-A			07:31	X
IC 240-103300/7-A			07:33	X
ICV 240-103300/8-A	1		08:24	X
ICB 240-103300/9-A	1		08:26	X
CRA 240-103300/10-A	1		08:28	X
CCV 240-103300/11-A			08:29	
CCB 240-103300/12-A			08:30	
ZZZZZZ			08:32	
ZZZZZZ			08:33	
ZZZZZZ			08:34	
ZZZZZZ			08:36	
ZZZZZZ			08:37	
ZZZZZZ			08:38	
ZZZZZZ			08:41	
ZZZZZZ			08:42	
ZZZZZZ			08:44	
ZZZZZZ			08:45	
CCV 240-103300/11-A			08:46	
CCB 240-103300/12-A			08:49	
ZZZZZZ			08:51	
ZZZZZZ			08:52	
ZZZZZZ			08:54	
ZZZZZZ			08:55	
ZZZZZZ			08:56	
ZZZZZZ			08:58	
ZZZZZZ			08:59	
ZZZZZZ			09:01	
ZZZZZZ			09:02	
ZZZZZZ			09:04	
CCV 240-103300/11-A			09:05	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/27/2013 07:13 End Date: 09/27/2013 15:08

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
CCB 240-103300/12-A			09:07																					
ZZZZZZ			09:09																					
ZZZZZZ			09:10																					
ZZZZZZ			09:12																					
ZZZZZZ			09:13																					
ZZZZZZ			09:15																					
ZZZZZZ			09:16																					
ZZZZZZ			09:18																					
ZZZZZZ			09:19																					
ZZZZZZ			09:21																					
ZZZZZZ			09:22																					
CCV 240-103300/11-A			09:23																					
CCB 240-103300/12-A			09:25																					
ZZZZZZ			09:26																					
ZZZZZZ			09:28																					
ZZZZZZ			09:29																					
ZZZZZZ			09:31																					
ZZZZZZ			09:33																					
ZZZZZZ			09:35																					
ZZZZZZ			09:36																					
ZZZZZZ			09:38																					
ZZZZZZ			09:39																					
ZZZZZZ			09:41																					
CCV 240-103300/11-A			09:43																					
CCB 240-103300/12-A			09:44																					
ZZZZZZ			09:46																					
ZZZZZZ			09:47																					
ZZZZZZ			09:48																					
ZZZZZZ			09:51																					
ZZZZZZ			09:53																					
ZZZZZZ			09:55																					
ZZZZZZ			09:57																					
ZZZZZZ			09:58																					
ZZZZZZ			10:00																					
ZZZZZZ			10:01																					
CCV 240-103300/11-A			10:02																					
CCB 240-103300/12-A			10:03																					
ZZZZZZ			10:05																					
ZZZZZZ			10:06																					
ZZZZZZ			10:08																					
ZZZZZZ			10:09																					
ZZZZZZ			10:11																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/27/2013 07:13 End Date: 09/27/2013 15:08

Lab Sample ID	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			10:12	
ZZZZZZ			10:14	
ZZZZZZ			10:15	
ZZZZZZ			10:17	
ZZZZZZ			10:19	
CCV 240-103300/11-A			10:20	
CCB 240-103300/12-A			10:21	
ZZZZZZ			10:23	
ZZZZZZ			10:24	
ZZZZZZ			10:26	
ZZZZZZ			10:27	
ZZZZZZ			10:29	
ZZZZZZ			10:31	
ZZZZZZ			10:33	
ZZZZZZ			10:34	
ZZZZZZ			10:36	
ZZZZZZ			10:39	
CCV 240-103300/11-A	1		10:40	X
CCB 240-103300/12-A	1		10:41	X
ZZZZZZ			10:43	
ZZZZZZ			10:45	
ZZZZZZ			10:47	
ZZZZZZ			10:49	
MB 240-102879/1-A	1	T	10:50	X
LCS 240-102879/2-A	1	T	10:52	X
240-28947-1	1	T	10:53	X
240-28947-1 DU	1	T	10:55	X
240-28947-1 MS	1	T	10:56	X
240-28947-2	1	T	10:58	X
CCV 240-103300/11-A	1		11:00	X
CCB 240-103300/12-A	1		11:02	X
240-28947-3	1	T	11:03	X
240-28947-4	1	T	11:04	X
240-28947-5	1	T	11:06	X
ZZZZZZ			11:08	
ZZZZZZ			11:11	
ZZZZZZ			11:14	
ZZZZZZ			11:17	
CCV 240-103300/11-A	1		11:18	X
CCB 240-103300/12-A	1		11:19	X
CCV 240-103300/11-A			11:41	
CCB 240-103300/12-A			11:43	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/27/2013 07:13 End Date: 09/27/2013 15:08

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			11:45																					
ZZZZZZ			11:46																					
ZZZZZZ			11:48																					
ZZZZZZ			11:50																					
ZZZZZZ			11:51																					
ZZZZZZ			11:53																					
ZZZZZZ			11:54																					
ZZZZZZ			11:56																					
ZZZZZZ			11:57																					
ZZZZZZ			11:59																					
CCV 240-103300/11-A			12:00																					
CCB 240-103300/12-A			12:02																					
ZZZZZZ			12:03																					
ZZZZZZ			12:05																					
ZZZZZZ			12:06																					
ZZZZZZ			12:08																					
ZZZZZZ			12:10																					
ZZZZZZ			12:11																					
ZZZZZZ			12:14																					
ZZZZZZ			12:16																					
ZZZZZZ			12:17																					
ZZZZZZ			12:19																					
CCV 240-103300/11-A			12:20																					
CCB 240-103300/12-A			12:22																					
ZZZZZZ			12:23																					
ZZZZZZ			12:25																					
ZZZZZZ			12:27																					
ZZZZZZ			12:28																					
ZZZZZZ			12:29																					
ZZZZZZ			12:31																					
ZZZZZZ			12:33																					
ZZZZZZ			12:34																					
ZZZZZZ			12:35																					
ZZZZZZ			12:36																					
CCV 240-103300/11-A			12:38																					
CCB 240-103300/12-A			12:41																					
ZZZZZZ			12:42																					
ZZZZZZ			12:43																					
ZZZZZZ			12:45																					
ZZZZZZ			12:46																					
ZZZZZZ			12:47																					
ZZZZZZ			12:49																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/27/2013 07:13 End Date: 09/27/2013 15:08

Lab Sample ID	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			12:51	
ZZZZZZ			12:52	
ZZZZZZ			12:53	
ZZZZZZ			12:55	
CCV 240-103300/11-A			12:56	
CCB 240-103300/12-A			12:58	
ZZZZZZ			12:59	
ZZZZZZ			13:00	
ZZZZZZ			13:02	
ZZZZZZ			13:03	
ZZZZZZ			13:05	
ZZZZZZ			13:06	
ZZZZZZ			13:07	
ZZZZZZ			13:09	
ZZZZZZ			13:11	
ZZZZZZ			13:12	
CCV 240-103300/11-A			13:14	
CCB 240-103300/12-A			13:16	
ZZZZZZ			13:17	
ZZZZZZ			13:19	
ZZZZZZ			13:20	
ZZZZZZ			13:22	
ZZZZZZ			13:23	
ZZZZZZ			13:24	
ZZZZZZ			13:26	
ZZZZZZ			13:27	
ZZZZZZ			13:28	
ZZZZZZ			13:30	
CCV 240-103300/11-A			13:31	
CCB 240-103300/12-A			13:32	
ZZZZZZ			13:36	
ZZZZZZ			13:37	
ZZZZZZ			13:38	
ZZZZZZ			13:40	
ZZZZZZ			13:41	
ZZZZZZ			13:42	
ZZZZZZ			13:44	
ZZZZZZ			13:46	
ZZZZZZ			13:47	
ZZZZZZ			13:50	
CCV 240-103300/11-A			13:51	
CCB 240-103300/12-A			13:53	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: H1 Method: 7471B

Start Date: 09/27/2013 07:13 End Date: 09/27/2013 15:08

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
ZZZZZZ			13:54	
ZZZZZZ			13:56	
ZZZZZZ			13:57	
ZZZZZZ			13:59	
ZZZZZZ			14:00	
ZZZZZZ			14:02	
ZZZZZZ			14:03	
ZZZZZZ			14:05	
ZZZZZZ			14:06	
ZZZZZZ			14:08	
CCV 240-103300/11-A			14:09	
CCB 240-103300/12-A			14:10	
ZZZZZZ			14:12	
ZZZZZZ			14:13	
ZZZZZZ			14:14	
ZZZZZZ			14:16	
ZZZZZZ			14:19	
ZZZZZZ			14:20	
ZZZZZZ			14:22	
ZZZZZZ			14:23	
CCV 240-103300/11-A			14:25	
CCB 240-103300/12-A			14:27	
CCV 240-103300/11-A			14:39	
CCB 240-103300/12-A			14:40	
ZZZZZZ			14:42	
ZZZZZZ			14:45	
ZZZZZZ			14:47	
ZZZZZZ			14:48	
ZZZZZZ			14:51	
ZZZZZZ			14:53	
CCV 240-103300/11-A			14:58	
CCB 240-103300/12-A			14:59	
ZZZZZZ			15:00	
ZZZZZZ			15:01	
ZZZZZZ			15:03	
ZZZZZZ			15:04	
CCV 240-103300/11-A			15:07	
CCB 240-103300/12-A			15:08	

Prep Types

T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00471

Analyte	ICV 240-103300/8-A 09/27/2013 08:24				CCV 240-103300/11-A 09/27/2013 10:40				CCV 240-103300/11-A 09/27/2013 11:00			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.16		5.00	103	10.2		10.0	102	10.2		10.0	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00471

Analyte	CCV 240-103300/11-A 09/27/2013 11:18											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	10.2		10.0	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Method: 7471B Instrument ID: H1

Lab Sample ID: CRA 240-103300/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00471

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.188	J	94	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-103300/9-A 09/27/2013 08:26		CCB 240-103300/12-A 09/27/2013 10:41		CCB 240-103300/12-A 09/27/2013 11:02		CCB 240-103300/12-A 09/27/2013 11:19	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.60	0.60	U	0.60	U	0.133	J	0.60	U

Italicized analytes were not requested for this sequence.

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 09/26/2013 11:14 End Date: 09/26/2013 20:44

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ICIS 240-103165/1	1		11:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-103165/2 IC			11:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-103165/3 IC			11:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-103165/4	1		11:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICB 240-103165/5	1		11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-103165/6			11:34																				
ZZZZZZ			11:38																				
ICSA 240-103165/8	1		11:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-103165/9	1		11:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-103165/10			11:50																				
CCB 240-103165/11			11:54																				
ZZZZZZ			11:58																				
ZZZZZZ			12:02																				
ZZZZZZ			12:06																				
ZZZZZZ			12:10																				
ZZZZZZ			12:14																				
ZZZZZZ			12:18																				
CCV 240-103165/18			12:22																				
CCB 240-103165/19			12:26																				
ZZZZZZ			12:30																				
ZZZZZZ			12:35																				
ZZZZZZ			12:39																				
ZZZZZZ			12:43																				
ZZZZZZ			12:47																				
ZZZZZZ			12:52																				
ZZZZZZ			12:56																				
CRI 240-103165/27	1		13:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			13:04																				
ZZZZZZ			13:08																				
CCV 240-103165/30			13:12																				
CCB 240-103165/31			13:16																				
ZZZZZZ			13:20																				
ZZZZZZ			13:24																				
ZZZZZZ			13:28																				
ZZZZZZ			13:32																				
ZZZZZZ			13:36																				
ZZZZZZ			13:41																				
ZZZZZZ			13:45																				
ZZZZZZ			13:49																				
ZZZZZZ			13:54																				
ZZZZZZ			13:58																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 09/26/2013 11:14 End Date: 09/26/2013 20:44

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCV 240-103165/42			14:02																				
CCB 240-103165/43			14:06																				
ZZZZZZ			14:10																				
ZZZZZZ			14:14																				
ZZZZZZ			14:18																				
ZZZZZZ			14:23																				
ZZZZZZ			14:27																				
ZZZZZZ			14:31																				
ZZZZZZ			14:35																				
CCV 240-103165/51			14:40																				
CCB 240-103165/52			14:43																				
ZZZZZZ			14:48																				
CCV 240-103165/54			14:52																				
CCB 240-103165/55			14:55																				
CCV 240-103165/56	1		15:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-103165/57	1		15:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MB 240-102878/1-A	1	T	15:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-102878/2-A	1	T	15:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28947-1	1	T	15:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28947-1 SD	5	T	15:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28947-1 PDS	1	T	15:23												X								
240-28947-1 DU	1	T	15:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28947-1 MS	1	T	15:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28947-2	1	T	15:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-103165/66	1		15:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-103165/67	1		15:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28947-3	1	T	15:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28947-4	1	T	15:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28947-5	1	T	15:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-103165/71	1		15:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			16:03																				
ZZZZZZ			16:07																				
ZZZZZZ			16:11																				
ZZZZZZ			16:15																				
ZZZZZZ			16:19																				
ZZZZZZ			16:23																				
CCV 240-103165/78	1		16:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-103165/79	1		16:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			16:35																				
ZZZZZZ			16:39																				
ZZZZZZ			16:43																				
ZZZZZZ			16:47																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 09/26/2013 11:14 End Date: 09/26/2013 20:44

Lab Sample ID	D/F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			16:52																				
ZZZZZZ			16:56																				
ZZZZZZ			17:00																				
ZZZZZZ			17:04																				
ZZZZZZ			17:08																				
ZZZZZZ			17:12																				
CCV 240-103165/90			17:16																				
CCB 240-103165/91			17:20																				
ZZZZZZ			17:24																				
ZZZZZZ			17:28																				
ZZZZZZ			17:32																				
ZZZZZZ			17:36																				
ZZZZZZ			17:41																				
ZZZZZZ			17:45																				
ZZZZZZ			17:49																				
ZZZZZZ			17:53																				
ZZZZZZ			17:57																				
ZZZZZZ			18:01																				
CCV 240-103165/102			18:05																				
CCB 240-103165/103			18:09																				
ZZZZZZ			18:13																				
ZZZZZZ			18:18																				
ZZZZZZ			18:22																				
ZZZZZZ			18:26																				
ZZZZZZ			18:30																				
ZZZZZZ			18:34																				
ZZZZZZ			18:37																				
ZZZZZZ			18:42																				
ZZZZZZ			18:45																				
ZZZZZZ			18:50																				
CCV 240-103165/114			18:53																				
CCB 240-103165/115			18:57																				
ZZZZZZ			19:01																				
ZZZZZZ			19:05																				
ZZZZZZ			19:09																				
ZZZZZZ			19:13																				
ZZZZZZ			19:17																				
ZZZZZZ			19:22																				
ZZZZZZ			19:26																				
ZZZZZZ			19:30																				
ZZZZZZ			19:34																				
ZZZZZZ			19:38																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 09/26/2013 11:14 End Date: 09/26/2013 20:44

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCV 240-103165/126			19:43																					
CCB 240-103165/127			19:47																					
ZZZZZZ			19:51																					
ZZZZZZ			19:55																					
ZZZZZZ			19:59																					
ZZZZZZ			20:03																					
ZZZZZZ			20:07																					
ZZZZZZ			20:11																					
ZZZZZZ			20:15																					
ZZZZZZ			20:19																					
ZZZZZZ			20:23																					
ZZZZZZ			20:28																					
CCV 240-103165/138			20:32																					
CCB 240-103165/139			20:36																					
ZZZZZZ			20:40																					
ZZZZZZ			20:44																					

Prep Types
T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

ICV Source: MT6500ICV_00013 Concentration Units: ug/L

CCV Source: MTICPCCV_00008

Analyte	ICV 240-103165/4 09/26/2013 11:26				CCV 240-103165/56 09/26/2013 15:00				CCV 240-103165/66 09/26/2013 15:39			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	367		375	98	479		500	96	493		500	99
Arsenic	374		375	100	495		500	99	514		500	103
Barium	1480		1500	99	1880		2000	94	1940		2000	97
Beryllium	1480		1500	99	1910		2000	96	1970		2000	98
Cadmium	368		375	98	486		500	97	501		500	100
Chromium	1490		1500	100	1960		2000	98	2060		2000	103
Cobalt	1450		1500	97	1980		2000	99	2070		2000	103
Copper	1480		1500	99	1920		2000	96	1990		2000	99
Lead	359		375	96	482		500	96	500		500	100
Molybdenum	1450		1500	97	1960		2000	98	2040		2000	102
Nickel	1470		1500	98	1980		2000	99	2060		2000	103
Selenium	368		375	98	496		500	99	520		500	104
Silver	756		750	101	964		1000	96	998		1000	100
Thallium	727		750	97	970		1000	97	1020		1000	102
Vanadium	1500		1500	100	1960		2000	98	2030		2000	102
Zinc	1500		1500	100	2030		2000	101	2120		2000	106

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

ICV Source: MT6500ICV_00013 Concentration Units: ug/L

CCV Source: MTICPCCV_00008

Analyte	CCV 240-103165/78 09/26/2013 16:27											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	492		500	98								
Arsenic	517		500	103								
Barium	1950		2000	98								
Beryllium	1990		2000	99								
Cadmium	500		500	100								
Chromium	2070		2000	103								
Cobalt	2070		2000	104								
Copper	1990		2000	100								
Lead	499		500	100								
Molybdenum	2060		2000	103								
Nickel	2070		2000	104								
Selenium	522		500	104								
Silver	997		1000	100								
Thallium	1020		1000	102								
Vanadium	2060		2000	103								
Zinc	2130		2000	106								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-103165/27 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	18.5	J	92	70-130
Arsenic	15.0	15.5		103	70-130
Barium	200	198	J	99	70-130
Beryllium	5.00	4.88	J	98	70-130
Cadmium	5.00	5.15		103	70-130
Chromium	10.0	9.96	J	100	70-130
Cobalt	10.0	10.1		101	70-130
Copper	20.0	20.8	J	104	70-130
Lead	10.0	10.7		107	70-130
Molybdenum	40.0	39.3	J	98	70-130
Nickel	40.0	39.5	J	99	70-130
Selenium	20.0	17.9	J	89	70-130
Silver	10.0	9.91	J	99	70-130
Thallium	20.0	18.3	J	92	70-130
Vanadium	10.0	10.6		106	70-130
Zinc	50.0	49.2	J	98	70-130

Lab Sample ID: CRI 240-103165/71 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	19.9	J	99	70-130
Arsenic	15.0	16.6		111	70-130
Barium	200	196	J	98	70-130
Beryllium	5.00	4.75	J	95	70-130
Cadmium	5.00	4.81	J	96	70-130
Chromium	10.0	10.3		103	70-130
Cobalt	10.0	9.94	J	99	70-130
Copper	20.0	22.7	J	114	70-130
Lead	10.0	10.5		105	70-130
Molybdenum	40.0	40.3		101	70-130
Nickel	40.0	40.8		102	70-130
Selenium	20.0	21.1		106	70-130
Silver	10.0	10.3		103	70-130
Thallium	20.0	18.4	J	92	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-103165/71 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	10.0	9.25	J	92	70-130
Zinc	50.0	50.1		100	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-103165/5 09/26/2013 11:30		CCB 240-103165/57 09/26/2013 15:03		CCB 240-103165/67 09/26/2013 15:43		CCB 240-103165/79 09/26/2013 16:31	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	20	U	20	U	20	U
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	200	U	200	U
Beryllium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Lead	10	10	U	10	U	10	U	10	U
Molybdenum	40	3.30	J	3.70	J	3.46	J	3.38	J
Nickel	40	40	U	40	U	40	U	40	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	10	U	10	U	2.50	J	10	U
Zinc	50	50	U	28.1	J	50	U	50	U

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Lab Sample ID: ICSA 240-103165/8 Instrument ID: I9

Lab File ID: I9092613B.asc ICS Source: MTTRICSAW_00019

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-1.23**	
Arsenic		**-6.35**	
Barium		**0.336**	
Beryllium		**-0.315**	
Cadmium		**0.559**	
Chromium		**3.30**	
Cobalt		**-1.05**	
Copper		**1.44**	
Lead		**3.95**	
Molybdenum		**-1.86**	
Nickel		**3.83**	
Selenium		**-5.44**	
Silver		**-0.111**	
Thallium		**-9.39**	
Vanadium		**-0.987**	
Zinc		**9.65**	
Aluminum	*500000*	*504000*	*101*
Boron		*1.26*	
Calcium	*500000*	*486090*	*97*
Iron	*200000*	*192860*	*96*
Lithium		*-29.3*	
Magnesium	*500000*	*506150*	*101*
Manganese		*2.32*	
Potassium		*93.7*	
Silicon		*-5.78*	
Sodium		*285*	
Strontium		*-0.236*	
Tin		*1.56*	
Titanium		*-0.512*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Lab Sample ID: ICSAB 240-103165/9 Instrument ID: I9

Lab File ID: I9092613B.asc ICS Source: MTICPICSABW_00001

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**1000**	**993**	**99**
Arsenic	**1000**	**1007**	**101**
Barium	**500**	**499**	**100**
Beryllium	**500**	**486**	**97**
Cadmium	**1000**	**1022**	**102**
Chromium	**500**	**497**	**99**
Cobalt	**500**	**507**	**101**
Copper	**500**	**527**	**105**
Lead	**1000**	**900**	**90**
Molybdenum	**1000**	**950**	**95**
Nickel	**1000**	**1010**	**101**
Selenium	**1000**	**991**	**99**
Silver	**1000**	**1076**	**108**
Thallium	**1000**	**950**	**95**
Vanadium	**500**	**490**	**98**
Zinc	**1000**	**1038**	**104**
Aluminum	*500000*	*527430*	*105*
Boron	*500*	*496*	*99*
Calcium	*500000*	*502280*	*100*
Iron	*200000*	*200880*	*100*
Lithium	*500*	*495*	*99*
Magnesium	*500000*	*521990*	*104*
Manganese	*500*	*502*	*100*
Potassium	*10000*	*10902*	*109*
Silicon	*10000*	*10216*	*102*
Sodium	*10000*	*11244*	*112*
Strontium	*1500*	*1462*	*97*
Tin	*500*	*517*	*103*
Titanium	*500*	*509*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: BARNEY

Method: 365.1 MDL Date: 01/27/2010 16:28

Prep Method: 365.2/365.3/365

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Phosphate as PO4		30.7	0.3

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: BARNEY

Method: 365.1 XMDL Date: 01/27/2010 16:28

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Phosphate as PO4		0.307	0.1

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - ASTM LEACH

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: SIMON

Method: 300.0 MDL Date: 01/27/2010 17:37

Leach Method: D3987-85

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Nitrate as N		5	0.23

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - ASTM LEACH

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: SIMON

Method: 300.0 XMDL Date: 01/27/2010 17:38

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate as N		0.5	0.023

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: Randolph

Method: 9045C RL Date: 01/28/2010 09:54

Analyte	Wavelength/ Mass	RL (SU)	
pH		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: Randolph

Method: 9045C XRL Date: 01/28/2010 09:54

Analyte	Wavelength/ Mass	XRL (SU)	
pH		0.1	

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	RL (%)	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Solids		10	

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: SM4500_NH3_E MDL Date: 01/27/2010 16:51

Prep Method: SM4500Norg_C

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Nitrogen, Kjeldahl		150	51

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: SM4500_NH3_E XMDL Date: 07/30/2013 09:49

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Kjeldahl		5	1.7

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9060A MDL Date: 07/02/2013 16:54

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Total Inorganic Carbon - Duplicates		1000	1000
Total Organic Carbon - Duplicates		1000	600

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9060A XMDL Date: 01/16/2012 09:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Inorganic Carbon - Duplicates		1	0.14
Total Organic Carbon - Duplicates		1	0.5

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9081 RL Date: 01/16/2012 19:19

Prep Method: 9081

Analyte	Wavelength/ Mass	RL (meq/100gm)	
Cation Exchange Capacity		1	

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job Number: 240-28947-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 9081 XRL Date: 01/16/2012 19:20

Analyte	Wavelength/ Mass	XRL (meq/100gm)	
Cation Exchange Capacity		1	

FORM IX - IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Batch Number: 102629 Batch Start Date: 09/24/13 07:00 Batch Analyst: Harshman, Tom

Batch Method: 365.2/365.3/365 Batch End Date: 09/24/13 07:29

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	P194-525 00004	WCPHOS50PPM 00037		
CCV 240-102629/1		365.2/365.3/ 365, 365.1		50 mL	50 mL		0.5 mL		
CCB 240-102629/2		365.2/365.3/ 365, 365.1		50 mL	50 mL				
MB 240-102629/3		365.2/365.3/ 365, 365.1		0.52 g	50 mL				
LCS 240-102629/4		365.2/365.3/ 365, 365.1		0.50 g	50 mL	5 mL			
180-25284-F-1 MS		365.2/365.3/ 365, 365.1	T	0.50 g	50 mL		0.5 mL		
180-25284-F-1 MSD		365.2/365.3/ 365, 365.1	T	0.50 g	50 mL		0.5 mL		
240-28947-I-1	DR-SB-50D-18-20	365.2/365.3/ 365, 365.1	T	0.52 g	50 mL				
240-28947-I-5	DR-SB-50D-52-54	365.2/365.3/ 365, 365.1	T	0.54 g	50 mL				

Batch Notes	
Block Digestor Name	Mike
First End time	12:30
Sodium Hydroxide Reagent ID Number	1155695
Ammonium Persulfate Lot #	562270
Oven, Bath or Block Temperature 1	136.1 Centigrade
Phenolphthalein Lot #	1035686
Pipette ID	377823/28
First Start time	7:30
Sulfuric Acid Reagent ID Number	1155697
ID number of the thermometer	CL3512A
Digestion Tube/Cup Lot #	1109863
Uncorrected Temperature	130 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Batch Number: 102742 Batch Start Date: 09/24/13 14:29 Batch Analyst: Harshman, Tom

Batch Method: 365.1 Batch End Date: 09/24/13 14:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	CalcMsg			
CCV 240-102629/1-A		365.1		4 mL	4 mL	OK			
CCB 240-102629/2-A		365.1		4 mL	4 mL	OK			
MB 240-102629/3-A		365.1		4 mL	4 mL	OK			
LCS 240-102629/4-A		365.1		4 mL	4 mL	OK			
180-25284-F-1-E MS		365.1	T	4 mL	4 mL	OK			
180-25284-F-1-F MSD		365.1	T	4 mL	4 mL	OK			
240-28947-I-1-C	DR-SB-50D-18-20	365.1	T	4 mL	4 mL	OK			
240-28947-I-5-E	DR-SB-50D-52-54	365.1	T	4 mL	4 mL	OK			
CCV 240-102629/1-A		365.1		4 mL	4 mL	OK			
CCB 240-102629/2-A		365.1		4 mL	4 mL	OK			

Batch Notes	
Ammonium Molybdate Reagent ID Number	1130356
Ascorbic Acid Reagent ID Number	1181820
Batch Comment	combined 1183727 13:00 - 17:00
Potassium Antimonyl Tartrate Reagent ID	1161381
Pipette ID	380192
Perform Calculation (0=No, 1=Yes)	1
Sulfuric Acid Reagent ID Number	1127086

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Batch Number: 101958 Batch Start Date: 09/18/13 14:32 Batch Analyst: Grossman, Lucas

Batch Method: 300.0 Batch End Date: 09/18/13 17:16

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WCICCALSOLN 00128	WCICLCS 00223			
STD1 240-101958/1		300.0		5 mL	0.025 mL				
STD2 240-101958/2		300.0		5 mL	0.125 mL				
STD3 240-101958/3		300.0		5 mL	0.25 mL				
STD4 240-101958/4		300.0		5 mL	0.5 mL				
STD5 240-101958/5		300.0		5 mL	1.25 mL				
STD6 240-101958/6		300.0		5 mL	2 mL				
STD7 240-101958/7		300.0		5 mL	2.5 mL				
STD8 240-101958/8		300.0		5 mL	3.75 mL				
STD9 240-101958/9		300.0		5 mL	5 mL				
ICV 240-101958/11		300.0		5 mL		5 mL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Batch Number: 102900 Batch Start Date: 09/25/13 11:35 Batch Analyst: Burns, Jill

Batch Method: D3987-85 Batch End Date: 09/25/13 12:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WCICLCS 00226			
MB 240-102900/1		D3987-85, 300.0		4.98 g	50 mL				
LCS 240-102900/2		D3987-85, 300.0		5.04 g	50 mL	50 mL			
240-28947-I-1	DR-SB-50D-18-20	D3987-85, 300.0	Y	5.05 g	50 mL				
240-28947-I-5	DR-SB-50D-52-54	D3987-85, 300.0	Y	5.04 g	50 mL				

Batch Notes	
Balance ID	B043
Blank Soil Lot Number	1016113

Basis	Basis Description
Y	ASTM Leach

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Batch Number: 102953 Batch Start Date: 09/25/13 10:10 Batch Analyst: Grossman, Lucas

Batch Method: 300.0 Batch End Date: 09/25/13 21:37

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WCICCCV 00326	WCICELUENT 00096	WCICSOLNA1 00008	WCICSOLNB1 00008	
CCV 240-102953/1		300.0		5 mL	5 mL				
CCB 240-102953/2		300.0		5 mL		5 mL			
MB 240-102900/1-A		300.0		5 mL					
LCS 240-102900/2-A		300.0		5 mL					
CCV 240-102953/13		300.0		5 mL	5 mL				
CCB 240-102953/14		300.0		5 mL		5 mL			
240-28947-I-1-D	DR-SB-50D-18-20	300.0	Y	5 mL					
240-28947-I-5-F	DR-SB-50D-52-54	300.0	Y	5 mL					
240-28947-I-5-F MS	DR-SB-50D-52-54	300.0	Y	5 mL			0.1 mL	0.1 mL	
240-28947-I-5-F MSD	DR-SB-50D-52-54	300.0	Y	5 mL			0.1 mL	0.1 mL	
CCV 240-102953/23		300.0		5 mL	5 mL				
CCB 240-102953/24		300.0		5 mL		5 mL			

Batch Notes	

Basis	Basis Description
Y	ASTM Leach

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Batch Number: 101462 Batch Start Date: 09/14/13 09:53 Batch Analyst: Eikelberry, Nicholas

Batch Method: 9045C Batch End Date: 09/14/13 15:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	pHread1	TempRead1	CalcMsg	WCPH7 00042	WCPHLCS 00007
CCV 240-101462/24		9045C		10 mL	6.98 SU	21.3 Celsius	pH = Read 1	10 mL	
LCS 240-101462/28		9045C		10 mL	6.18 SU	21.4 Celsius	pH = Read 1		10 mL
CCV 240-101462/29		9045C		10 mL	6.96 SU	21.4 Celsius	pH = Read 1	10 mL	
240-29001-G-6 DU		9045C	T	10 mL	4.82 SU	21.2 Celsius	pH = Read 1		
240-28947-I-5	DR-SB-50D-52-54	9045C	T	10 mL	4.80 SU	21.4 Celsius	pH = Read 1		
240-28947-I-1	DR-SB-50D-18-20	9045C	T	10 mL	4.88 SU	21.8 Celsius	pH = Read 1		
CCV 240-101462/38		9045C		10 mL	6.97 SU	21.1 Celsius	pH = Read 1	10 mL	

Batch Notes	
Batch Comment	5-pt
pH Buffer 1 ID	2-921151
pH Buffer 2 ID	4-945008
pH Buffer 3 ID	7-1126157
pH Buffer 4 ID	10-1015110
pH Buffer 5 ID	12-922364
Calibration Date and Time	9/14/13 13:26
Electronic Slope	99.2
Instrument ID	Randolph
Probe ID	WCP96
Sufficient volume for sample dup	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Batch Number: 101391 Batch Start Date: 09/13/13 13:14 Batch Analyst: Kuhle, Julie

Batch Method: Moisture Batch End Date: 09/14/13 07:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-28318-A-46 DU		Moisture	T	4.4062 g	9.1725 g	8.4450 g			
240-28947-D-1	DR-SB-50D-18-20	Moisture	T	4.4062 g	19.9342 g	17.5859 g			
240-28947-D-2	DR-SB-50D-29-31	Moisture	T	4.4062 g	29.5582 g	23.6711 g			
240-28947-D-3	DR-SB-50D-34-36	Moisture	T	4.4062 g	26.8688 g	22.1891 g			
240-28947-D-4	DR-SB-50D-42-44	Moisture	T	4.4062 g	31.1693 g	25.5283 g			
240-28947-D-5	DR-SB-50D-52-54	Moisture	T	4.4062 g	26.7202 g	23.4219 g			

Batch Notes	
Balance ID	B047 No Unit
Date samples were placed in the oven	9/13/13
Oven Temp when samples are put in oven	103.8 Degrees C
Time samples were place in the oven	14:00
Date samples were removed from oven	9/14/13
Oven Temp when samples removed from oven	104.3 Degrees C
Time Samples were removed from oven	7:50
Oven ID	002
ID number of the thermometer	TEMPGUARD BOXC #6

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Batch Number: 101616 Batch Start Date: 09/16/13 14:30 Batch Analyst: Kuhle, Julie

Batch Method: SM4500Norg_C Batch End Date: 09/16/13 19:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DigestBlockPos	P194-525 00004	WCNH31000 00024	
MB 240-101616/1		SM4500Norg_C, SM4500_NH3_E		.52 g	25 mL	C3			
LCS 240-101616/2		SM4500Norg_C, SM4500_NH3_E		.52 g	25 mL	C4	25 mL		
240-28947-I-1	DR-SB-50D-18-20	SM4500Norg_C, SM4500_NH3_E	T	.52 g	25 mL	C5			
240-28947-I-5	DR-SB-50D-52-54	SM4500Norg_C, SM4500_NH3_E	T	.51 g	25 mL	C6			
240-28947-I-5 MS	DR-SB-50D-52-54	SM4500Norg_C, SM4500_NH3_E	T	.54 g	25 mL	C7		0.5 mL	
240-28947-I-5 MSD	DR-SB-50D-52-54	SM4500Norg_C, SM4500_NH3_E	T	.53 g	25 mL	C8		0.5 mL	

Batch Notes	
Batch Comment	BALANCE B043 HENGAR 9/25/12
Block Digestor Name	CAROL
Digestion Solution Used	1047904
Oven, Bath or Block Temperature 1	186.3
Pipette ID	380194

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Batch Number: 101775 Batch Start Date: 09/17/13 13:35 Batch Analyst: Kuhle, Julie

Batch Method: SM4500_NH3_E Batch End Date: 09/17/13 13:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TitrantVolume1			
MB 240-101616/1-A		SM4500_NH3_E		25 mL	25 mL	.1 mL			
LCS 240-101616/2-A		SM4500_NH3_E		25 mL	25 mL	.8 mL			
240-28947-I-1-A	DR-SB-50D-18-20	SM4500_NH3_E	T	25 mL	25 mL	.65 mL			
240-28947-I-5-A	DR-SB-50D-52-54	SM4500_NH3_E	T	25 mL	25 mL	.1 mL			
240-28947-I-5-B MS	DR-SB-50D-52-54	SM4500_NH3_E	T	25 mL	25 mL	1.85 mL			
240-28947-I-5-C MSD	DR-SB-50D-52-54	SM4500_NH3_E	T	25 mL	25 mL	2.00 mL			

Batch Notes	
Batch Comment	beakers 1109874
Borate Reagent ID Number	boric acid 1100113
Buffer Reagent ID Number	nathiosulfate 1029249
Color Reagent ID Number	1132525
Potassium Persulfate Lot Number	H2SO4 titrant 1149732
Nominal Amount Used	25 mL
Normality	0.02066 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Batch Number: 110032 Batch Start Date: 09/13/13 14:00 Batch Analyst: Frankenfield, Julie

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Ammonium_Oxal 00003	MarineSedimen 00002				
CCV 490-110032/1		9060A		25 mg					
LCS 490-110032/2		9060A			25 mg				
CCV 490-110032/13		9060A		25 mg					
CCV 490-110032/23		9060A		25 mg					
CCV 490-110032/28		9060A		25 mg					

Batch Notes	
Lot # of hydrochloric acid	855241

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Batch Number: 109697 Batch Start Date: 09/25/13 11:26 Batch Analyst: Dunn, John B

Batch Method: 9081 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MET_2PROPANOL 00003	MET_NaOAc 00007	MET_NH4OAc 00004	
MB 490-109697/1		9081, 9081		4 g	100 mL			100 mL	
240-28853-H-1 DU		9081, 9081	T	4.028 g	100 mL	100 mL	132 mL	100 mL	
240-28947-G-5	DR-SB-50D-52-54	9081, 9081	T	4.058 g	100 mL	100 mL	132 mL	100 mL	
240-28947-G-1	DR-SB-50D-18-20	9081, 9081	T	4.017 g	100 mL	100 mL	132 mL	100 mL	

Batch Notes	
Ammonium Acetate Rgt ID	634031
Batch Comment	First isopropyl cyle done with Rgt ID- 719694
Isopropyl Alcohol Rgt ID	977799
Sodium Acetate Rgt ID	724504

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Batch Number: 110404 Batch Start Date: 09/27/13 14:13 Batch Analyst: Street, Rodney

Batch Method: 9081 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 490-109697/1-A		9081		4 g	100 mL				
240-28853-H-1-B DU		9081	T	4.028 g	100 mL				
240-28947-G-5-A	DR-SB-50D-52-54	9081	T	4.058 g	100 mL				
240-28947-G-1-A	DR-SB-50D-18-20	9081	T	4.017 g	100 mL				

Batch Notes	
Batch Comment	First isopropyl cyle done with Rgt ID- 719694

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Prep Method: 365.2/365.3/365

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-102629/3-A	09/24/2013 07:05	102629	0.52		50
LCS 240-102629/4-A	09/24/2013 07:08	102629	0.50		50
180-25284-F-1-E MS	09/24/2013 07:14	102629	0.50		50
180-25284-F-1-F MSD	09/24/2013 07:17	102629	0.50		50
240-28947-1	09/24/2013 07:23	102629	0.52		50
240-28947-5	09/24/2013 07:26	102629	0.54		50

FORM XII-IN

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Prep Method: SM4500Norg_C

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-101616/1-A	09/16/2013 13:49	101616	.52		25
LCS 240-101616/2-A	09/16/2013 13:49	101616	.52		25
240-28947-1	09/16/2013 13:49	101616	.52		25
240-28947-5	09/16/2013 13:49	101616	.51		25
240-28947-5 MS	09/16/2013 13:49	101616	.54		25
240-28947-5 MSD	09/16/2013 13:49	101616	.53		25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Prep Method: 9081

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 490-109697/1-A	09/25/2013 11:26	109697	4		100
240-28853-H-1-B DU	09/25/2013 11:26	109697	4.028		100
240-28947-5	09/25/2013 11:26	109697	4.058		100
240-28947-1	09/25/2013 11:26	109697	4.017		100

FORM XII-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID:	102953 Date: 09/25/2013 16:25						
300.0	MB 240-102900/1-A	Nitrate as N	5.0	U	mg/Kg	5.0	1
Batch ID:	102742 Date: 09/24/2013 14:29	Prep Batch: 102629		Date: 09/24/2013 07:05			
365.1	MB 240-102629/3-A	Phosphate as PO4	30	U	mg/Kg	30	1
Batch ID:	101775 Date: 09/17/2013 13:35	Prep Batch: 101616		Date: 09/16/2013 13:49			
SM4500_NH3_E	MB 240-101616/1-A	Nitrogen, Kjeldahl	55.6	J	mg/Kg	140	1

FORM III-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 110032	Date: 09/13/2013 14:00						
9060A	MB 490-110032/3	Total Organic Carbon - Duplicates	1000	U	mg/Kg	1000	1
Batch ID: 110404	Date: 09/25/2013 11:26	Prep Batch: 109697	Date: 09/25/2013 11:26				
9081	MB 490-109697/1-A	Cation Exchange Capacity	0.040	U	meq/100gm	0.040	1

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 102953	Date: 09/25/2013 20:47										
300.0	240-28947-5	Nitrate as N	5.8	U	mg/Kg						
300.0	240-28947-5 MS	Nitrate as N	31.5		mg/Kg	29.1	108	80-120			
Batch ID: 102742	Date: 09/24/2013 14:29	Prep Batch: 102629	Date: 09/24/2013 07:14								
365.1	180-25284-F-1 -E	Phosphate as PO4	32	U	mg/Kg						
365.1	180-25284-F-1 -E MS	Phosphate as PO4	3.57	J	mg/Kg	162	2	90-110			F
Batch ID: 101775	Date: 09/17/2013 13:40	Prep Batch: 101616	Date: 09/16/2013 13:49								
SM4500_NH3_E	240-28947-5	Nitrogen, Kjeldahl	67	J	mg/Kg						B
SM4500_NH3_E	240-28947-5 MS	Nitrogen, Kjeldahl	1160		mg/Kg	1090	101	50-120			

Not in this SDG

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 102953	Date: 09/25/2013 21:04										
300.0	240-28947-5 MSD	Nitrate as N	31.3		mg/Kg	29.1	108	80-120	0	20	
Batch ID: 102742	Date: 09/24/2013 14:29	Prep Batch: 102629			Date: 09/24/2013 07:17						
365.1	180-25284-F-1 -F MSD	Phosphate as PO4	193		mg/Kg	162	119	90-110	193	20	F
Batch ID: 101775	Date: 09/17/2013 13:42	Prep Batch: 101616			Date: 09/16/2013 13:49						
SM4500_ NH3 E	240-28947-5 MSD	Nitrogen, Kjeldahl	1280		mg/Kg	1110	110	50-120	10	50	

Not in SDG

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 101462	Date: 09/14/2013 14:00							
9045C		240-29001-G-6	pH	4.79	SU			
9045C		240-29001-G-6 DU	pH	4.820	SU	0.6	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 109460	Date: 09/13/2013 13:00							
9060A		240-28528-I-19	Total Inorganic Carbon - Duplicates	1000	mg/Kg			U
9060A		240-28528-I-19 DU	Total Inorganic Carbon - Duplicates	1000	mg/Kg	NC	20	U
Batch ID: 110032	Date: 09/13/2013 14:00							
9060A		240-28528-I-19	Total Organic Carbon - Duplicates	1000	mg/Kg			U
9060A		240-28528-I-19 DU	Total Organic Carbon - Duplicates	1000	mg/Kg	NC	20	U
Batch ID: 110404	Date: 09/25/2013 11:26	Prep Batch: 109697	Date: 09/25/2013 11:26					
9081		240-28853-H-1-B	Cation Exchange Capacity	23	meq/100gm			
9081		240-28853-H-1-B DU	Cation Exchange Capacity	25.9	meq/100gm	10	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 102953	Date: 09/25/2013 16:41										
						LCS Source: WCICLCS_00226					
300.0	LCS 240-102900/2-A	Nitrate as N	25.4		mg/Kg	24.8	103	90-110			
Batch ID: 102742	Date: 09/24/2013 14:29	Prep Batch: 102629			Date: 09/24/2013 07:08						
						LCS Source: P194-525_00004					
365.1	LCS 240-102629/4-A	Phosphate as PO4	129		mg/Kg	138	94	90-110			
Batch ID: 101462	Date: 09/14/2013 13:15										
						LCS Source: WCPHLCS_00007					
9045C	LCS 240-101462/28	pH	6.180		SU	6.34	97	97-103			
Batch ID: 101775	Date: 09/17/2013 13:36	Prep Batch: 101616			Date: 09/16/2013 13:49						
						LCS Source: P194-525_00004					
SM4500_NH3_E	LCS 240-101616/2-A	Nitrogen, Kjeldahl	445		mg/Kg	403	110	70-133			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 110032		Date: 09/13/2013 14:00									
						LCS Source:		MarineSedimen_00002			
9060A	LCS 490-110032/2	Total Organic Carbon - Duplicates	29700		mg/Kg	29900	99	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: BARNEY Method: 365.1

Start Date: 09/24/2013 14:29 End Date: 09/24/2013 14:31

Lab Sample ID	D / F	Type	Time	Analytes																				
				P-PO4																				
CCV 240-102629/1-A	1		14:29	X																				
CCB 240-102629/2-A	1		14:29	X																				
MB 240-102629/3-A	1	T	14:29	X																				
LCS 240-102629/4-A	1	T	14:29	X																				
ZZZZZZ			14:29																					
180-25284-F-1-E MS	1	T	14:29	X																				
180-25284-F-1-F MSD	1	T	14:29	X																				
ZZZZZZ			14:29																					
240-28947-1	1	T	14:29	X																				
240-28947-5	1	T	14:29	X																				
CCV 240-102629/1-A	1		14:31	X																				
CCB 240-102629/2-A	1		14:31	X																				

Prep Types
T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Analyst: TPH Batch Start Date: 09/24/2013

Reporting Units: mg/L Analytical Batch No.: 102742

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	14:29	Phosphate as PO4	1.56	1.54	102	90-110		WCPHOS50PPM_00037
2	CCB	14:29	Phosphate as PO4	0.31				U	
11	CCV	14:31	Phosphate as PO4	1.54	1.54	100	90-110		WCPHOS50PPM_00037
12	CCB	14:31	Phosphate as PO4	0.31				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: SIMON Method: 300.0

Start Date: 09/18/2013 14:32 End Date: 09/18/2013 17:16

Lab Sample ID	D / F	Type	Time	Analytes																				
STD1 240-101958/1 IC			14:32																					
STD2 240-101958/2 IC			14:49																					
STD3 240-101958/3 IC			15:05																					
STD4 240-101958/4 IC			15:21																					
STD5 240-101958/5 ICRT			15:38																					
STD6 240-101958/6 IC			15:54																					
STD7 240-101958/7 IC			16:11																					
STD8 240-101958/8 IC			16:27																					
STD9 240-101958/9 IC			16:43																					
ICV 240-101958/11	1		17:00																					
ICB 240-101958/12			17:16																					

Prep Types

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Analyst: LKG Batch Start Date: 09/18/2013

Reporting Units: mg/L Analytical Batch No.: 101958

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
11	ICV	17:00	Nitrate as N	2.63	2.50	105	90-110		WCICLCS_00223

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: SIMON Method: 300.0

Start Date: 09/25/2013 10:10 End Date: 09/25/2013 21:37

Lab Sample ID	D/F	Type	Time	Analytes																				
				NO3																				
CCV 240-102953/1	1		10:10	X																				
CCB 240-102953/2	1		10:26	X																				
ZZZZZZ			10:42																					
ZZZZZZ			10:59																					
MB 240-102900/1-A	1	Y	16:25	X																				
LCS 240-102900/2-A	1	Y	16:41	X																				
ZZZZZZ			16:58																					
ZZZZZZ			17:14																					
ZZZZZZ			17:30																					
ZZZZZZ			18:03																					
ZZZZZZ			18:20																					
CCV 240-102953/13	1		18:36	X																				
CCB 240-102953/14	1		18:52	X																				
ZZZZZZ			19:09																					
ZZZZZZ			19:25																					
ZZZZZZ			19:42																					
ZZZZZZ			19:58																					
240-28947-1	1	Y	20:15	X																				
240-28947-5	1	Y	20:31	X																				
240-28947-5 MS	1	Y	20:47	X																				
240-28947-5 MSD	1	Y	21:04	X																				
CCV 240-102953/23	1		21:20	X																				
CCB 240-102953/24	1		21:37	X																				

Prep Types
Y = ASTM Leach

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Analyst: LKG Batch Start Date: 09/25/2013

Reporting Units: mg/L Analytical Batch No.: 102953

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	10:10	Nitrate as N	2.57	2.50	103	90-110		WCICCCV_00326
2	CCB	10:26	Nitrate as N	0.50				U	
13	CCV	18:36	Nitrate as N	2.58	2.50	103	90-110		WCICCCV_00326
14	CCB	18:52	Nitrate as N	0.50				U	
23	CCV	21:20	Nitrate as N	2.62	2.50	105	90-110		WCICCCV_00326
24	CCB	21:37	Nitrate as N	0.50				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: Randolph Method: 9045C

Start Date: 09/14/2013 09:53 End Date: 09/14/2013 14:52

Lab Sample ID	D / F	Type	Time	Analytes
				pH
CCV 240-101462/1			09:53	
ZZZZZZ			10:00	
ZZZZZZ			10:08	
ZZZZZZ			10:15	
ZZZZZZ			10:23	
ZZZZZZ			10:30	
ZZZZZZ			10:37	
ZZZZZZ			10:45	
ZZZZZZ			10:52	
ZZZZZZ			11:00	
ZZZZZZ			11:07	
ZZZZZZ			11:15	
CCV 240-101462/13			11:22	
ZZZZZZ			11:30	
ZZZZZZ			11:37	
ZZZZZZ			11:45	
ZZZZZZ			11:52	
ZZZZZZ			12:00	
ZZZZZZ			12:07	
ZZZZZZ			12:15	
ZZZZZZ			12:22	
ZZZZZZ			12:30	
ZZZZZZ			12:37	
CCV 240-101462/24	1		12:45	X
ZZZZZZ			12:52	
ZZZZZZ			13:00	
ZZZZZZ			13:07	
LCS 240-101462/28	1	T	13:15	X
CCV 240-101462/29	1		13:22	X
ZZZZZZ			13:30	
ZZZZZZ			13:37	
ZZZZZZ			13:45	
ZZZZZZ			13:52	
240-29001-G-6 DU	1	T	14:00	X
ZZZZZZ			14:07	
240-28947-5	1	T	14:15	X
240-28947-1	1	T	14:22	X
CCV 240-101462/38	1		14:30	X
ZZZZZZ			14:37	
CCV 240-101462/40			14:45	
ZZZZZZ			14:52	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: Randolph Method: 9045C

Start Date: 09/14/2013 09:53 End Date: 09/14/2013 14:52

Prep Types
T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Analyst: NJE Batch Start Date: 09/14/2013

Reporting Units: SU Analytical Batch No.: 101462

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
24	CCV	12:45	pH	6.980	7.00	100	99-101		WCPH7_00042
29	CCV	13:22	pH	6.960	7.00	99	99-101		WCPH7_00042
38	CCV	14:30	pH	6.970	7.00	100	99-101		WCPH7_00042

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Instrument ID: NOEQUIP Method: 9060A

Start Date: 09/13/2013 14:00 End Date: 09/26/2013 11:59

Lab Sample ID	D / F	Type	Time	Analytes																				
				TOCD																				
CCV 490-110032/1	1		14:00	X																				
LCS 490-110032/2	1	T	14:00	X																				
MB 490-110032/3	1	T	14:00	X																				
ZZZZZZ			14:00																					
240-28528-I-19 DU	1	T	14:00	X																				
ZZZZZZ			14:00																					
ZZZZZZ			14:00																					
ZZZZZZ			14:00																					
ZZZZZZ			14:00																					
ZZZZZZ			14:00																					
ZZZZZZ			14:00																					
ZZZZZZ			14:00																					
CCV 490-110032/13	1		14:00	X																				
CCB 490-110032/14	1		14:00	X																				
CCV 490-110032/15			14:00																					
CCB 490-110032/16			14:00																					
ZZZZZZ			14:00																					
ZZZZZZ			14:00																					
ZZZZZZ			14:00																					
ZZZZZZ			14:00																					
CCV 490-110032/21			11:59																					
CCB 490-110032/22			11:59																					
CCV 490-110032/23	1		11:59	X																				
CCB 490-110032/24	1		11:59	X																				
ZZZZZZ			11:59																					
240-28947-1	1	T	11:59	X																				
240-28947-5	1	T	11:59	X																				
CCV 490-110032/28	1		11:59	X																				
CCB 490-110032/29	1		11:59	X																				

Prep Types
T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Analyst: JKF Batch Start Date: 09/13/2013

Reporting Units: mg/L Analytical Batch No.: 110032

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	14:00	Total Organic Carbon - Duplicates	171000	169000	101	90-110		Ammonium_Oxal_00003
13	CCV	14:00	Total Organic Carbon - Duplicates	173000	169000	102	90-110		Ammonium_Oxal_00003
14	CCB	14:00	Total Organic Carbon - Duplicates	1.0				U	
23	CCV	11:59	Total Organic Carbon - Duplicates	173000	169000	102	90-110		Ammonium_Oxal_00003
24	CCB	11:59	Total Organic Carbon - Duplicates	1.0				U	
28	CCV	11:59	Total Organic Carbon - Duplicates	168000	169000	99	90-110		Ammonium_Oxal_00003
29	CCB	11:59	Total Organic Carbon - Duplicates	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-28947-1

SDG No.:

Instrument ID: NOEQUIP Method: SM4500_NH3_E

Start Date: 09/17/2013 13:35 End Date: 09/17/2013 13:43

Lab Sample ID	D / F	Type	Time	Analytes																				
				TKN																				
MB 240-101616/1-A	1	T	13:35	X																				
LCS 240-101616/2-A	1	T	13:36	X																				
240-28947-1	1	T	13:37	X																				
240-28947-5	1	T	13:39	X																				
240-28947-5 MS	1	T	13:40	X																				
240-28947-5 MSD	1	T	13:42	X																				
ZZZZZZ			13:43																					

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Instrument ID: NOEQUIP Method: 9060A

Start Date: 09/13/2013 13:00 End Date: 09/13/2013 13:00

Lab Sample ID	D / F	Type	Time	Analytes																				
				TICD																				
ZZZZZZ			13:00																					
240-28528-I-19 DU	1	T	13:00	X																				
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
ZZZZZZ			13:00																					
240-28947-1	1	T	13:00	X																				
240-28947-5	1	T	13:00	X																				
ZZZZZZ			13:00																					

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Nashville Job No.: 240-28947-1

SDG No.:

Instrument ID: NOEQUIP Method: 9081

Start Date: 09/25/2013 11:26 End Date: 09/25/2013 11:26

Lab Sample ID	D / F	Type	Time	Analytes																		
				CEC																		
MB 490-109697/1-A	1	T	11:26	X																		
ZZZZZZ			11:26																			
240-28853-H-1-B DU	1	T	11:26	X																		
240-28947-5	1	T	11:26	X																		
240-28947-1	1	T	11:26	X																		

Prep Types
T = Total/NA

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **September 30, 2013**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION- VOCs, SVOC, TPH, PCB, AND SELECT METALS**
LOCKHEED-MATRIN STATE AIRPORT
DUMP ROAD SOURCE AREAS
SDG 240-28498-1

SAMPLES: 2/Soil/
DR-SB-46I-39-40 DR-SB-46S-19-20

1/Aqueous/
TRIP BLANK_20130828

Overview

The sample set for Lockheed MSA, SDG 240-28498-1, consists of two (2) soil environmental samples and one trip blank.

All samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOC), total petroleum hydrocarbons (TPH), polychlorinated biphenyl ether (PCB), and select metals. The samples were collected by Tetra Tech August 28th, 2013 and analyzed by TestAmerica. VOC analyses were conducted using method 8260B. SVOC analyses were conducted using method 8270D. TPH analyses were conducted using method 8015C. PCB analyses were conducted using method 8082A. Metals analyses were conducted using method 6020A. Mercury analyses were conducted using method 7471B.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, GC/MS tuning, MS tuning, initial and continuing calibration verification results, laboratory method / preparation blank results, ICP interference results, ICP internal standard recoveries, ICP serial dilution, surrogate standard recoveries, laboratory control sample recoveries, matrix spike recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems-

- The initial calibration analyzed on 9/5/13 on instrument A3UX11 had a relative response factor < 0.05 for tert-butyl alcohol and vinyl acetate. Sample TRIP BLANK_20130828 was affected. Non-detected results were qualified as rejected (UR).

- The continuing calibration analyzed on 9/6/13 on instrument A3UX11 had a relative response factor < 0.05 for tert-butyl alcohol and vinyl acetate. Sample TRIP BLANK_20130828 was affected. Non-detected results were qualified as rejected (UR).

- The initial calibration analyzed on 9/4/13 on instrument A3UX8 had a relative response factor < 0.05 for tert-butyl alcohol and vinyl acetate. Samples DR-SB-46I-39-40 and DR-SB-46S-19-20

were affected. Non-detected results were qualified as rejected (UR).

- The continuing calibration analyzed on 9/6/13 on instrument A3UX8 had a relative response factor < 0.05 for tert-butyl alcohol and vinyl acetate. Samples DR-SB-46I-39-40 and DR-SB-46S-19-20 were affected. Non-detected results were qualified as rejected (UR).

Minor Problems-

- The following contaminants were detected in preparation and calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Acetone [1]	12.2 ug/kg	122 ug/kg
Methylene chloride [1]	3.62 ug/kg	36.2 ug/kg
Toluene [1]	0.43 ug/kg	2.15 ug/kg
Bis(2-ethylhexyl)phthalate [2]	25.4 ug/kg	127 ug/kg
Di-n-butyl phthalate [2]	59 ug/kg	295 ug/kg
Diethyl phthalate [2]	43.8 ug/kg	219 ug/kg
Barium [3]	0.084 mg/kg	0.42 mg/kg
Zinc [3]	1.27 mg/kg	6.3 mg/kg
Antimony [4]	4.24 ug/L	2.12 mg/kg
Molybdenum [4]	1.36 ug/L	0.68 mg/kg

[1] Maximum concentration found in preparation blank affecting samples in preparation batch 240-99825.
[2] Maximum concentration found in preparation blank affecting samples in preparation batch 240-100631.
[3] Maximum concentration found in preparation blank affecting samples in preparation batch 240-99736.
[4] Maximum concentration found in a calibration blank affecting all soil samples.

An action level of 5X or 10X (acetone and methylene chloride) the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive antimony, molybdenum, zinc, bis(2-ethylhexyl)phthalate, di-n-butyl phthalate, diethyl phthalate, and acetone results less than the blank action level were qualified (B) for blank contamination.

- The laboratory control spike for preparation batch 240-100631 had a percent recovery less than the lower control limit for benzaldehyde. Both soil samples were affected. Non-detected benzaldehyde results were qualified as biased low (UL).

- The CRDL standard analyzed on 9/4/13 had a percent recovery < 80% for mercury. Sample MRC-MW-96D-050613 was affected. The positive result was qualified as estimated (J) due to conflicting directional bias. The non-detected result was qualified as bias low (UL).

Notes

Non-detected results were reported at the MDL.

The continuing calibration analyzed on 9/6/13 on instrument A3UX11 had a percent difference >25% but < 50% for carbon disulfide and methylene chloride. Sample TRIP BLANK_20130828 was affected. No

validation action was warranted as sample results were non-detect.

The continuing calibration analyzed on 9/6/13 on instrument A3UX8 had a percent difference >25% but < 50% for 1,1,2-trichlorotrifluoromethane, carbon tetrachloride, and sec-butylbenzene. Samples DR-SB-46I-39-40 and DR-SB-46S-19-20 were affected. No validation action was warranted as sample results were non-detect.

The CRDL standard analyzed on 9/4/13 had a percent recovery < 90% for antimony. Sample MRC-MW-96D-050613 was affected. Samples DR-SB-46I-39-40 and DR-SB-46S-19-20 were affected. No validation action was warranted as sample results were previously qualified for blank contamination.

The laboratory control spike for preparation batch 99825 had a percent recovery greater than the upper control limit for 1,1-dichloropropene and tetrachloroethene. Samples DR-SB-46I-39-40 and DR-SB-46S-19-20 were affected. No validation action was warranted as sample results were non-detect.

Executive Summary

Laboratory Performance: Preparation and calibration blank contamination for antimony, molybdenum, zinc, bis(2-ethylhexyl)phthalate, di-n-butyl phthalate, diethyl phthalate, and acetone resulted in the qualification of sample results. CRDL standard non-compliances for mercury resulted in the qualification of sample results. LCS non-compliances for benzaldehyde resulted in the qualification of sample results.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993) and U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994).

Megan Carson

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	DR-SB-46I-39-40			DR-SB-46S-19-20					
SDG: 240-28498-1	LAB_ID	240-28498-1			240-28498-2					
FRACTION: OV	SAMP_DATE	8/28/2013			8/28/2013					
MEDIA: SOIL	QC_TYPE	NM			NM			TIC		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.5			86.0			86.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.57	U		0.55	U				
1,1,1-TRICHLOROETHANE		0.51	U		0.5	U				
1,1,2,2-TETRACHLOROETHANE		0.31	U		0.3	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		1.2	U		1.2	U				
1,1-DICHLOROETHANE		0.33	U		0.32	U				
1,1-DICHLOROETHENE		0.48	U		0.46	U				
1,1-DICHLOROPROPENE		0.28	U		0.27	U				
1,2,3-TRICHLOROBENZENE		0.35	U		0.34	U				
1,2,3-TRICHLOROPROPANE		0.83	U		0.8	U				
1,2,3-TRIMETHYLBENZENE		0.16	U		0.15	U				
1,2,4-TRICHLOROBENZENE		0.25	U		0.24	U				
1,2,4-TRIMETHYLBENZENE		0.6	U		0.58	U				
1,2-DIBROMO-3-CHLOROPROPANE		1.2	U		1.2	U				
1,2-DIBROMOETHANE		0.46	U		0.44	U				
1,2-DICHLOROBENZENE		0.33	U		0.32	U				
1,2-DICHLOROETHANE		2.9	J	P	0.3	U				
1,2-DICHLOROPROPANE		0.63	U		0.61	U				
1,3-DICHLOROBENZENE		0.32	U		0.31	U				
1,3-DICHLOROPROPANE		0.31	U		0.3	U				
1,4-DICHLOROBENZENE		0.61	U		0.58	U				
2,2-DICHLOROPROPANE		0.86	U		0.83	U				
2-BUTANONE		1.3	U		1.9	J	P			
2-CHLOROETHYL VINYL ETHER		1.3	U		1.2	U				
2-CHLOROTOLUENE		0.37	U		0.35	U				
2-HEXANONE		0.58	U		0.56	U				
4-CHLOROTOLUENE		0.38	U		0.36	U				
4-ISOPROPYLTOLUENE		0.19	U		0.19	U				
4-METHYL-2-PENTANONE		0.5	U		0.48	U				
ACETONE		8.2	B	A	30	B	A			
BENZENE		0.21	U		0.2	U				
BROMOBENZENE		0.3	U		0.29	U				
BROMOCHLOROMETHANE		0.65	U		0.63	U				
BROMODICHLOROMETHANE		0.26	U		0.25	U				
BROMOFORM		0.3	U		0.29	U				
BROMOMETHANE		0.5	U		0.48	U				

PROJ_NO: 04882	NSAMPLE	DR-SB-46I-39-40			DR-SB-46S-19-20					
SDG: 240-28498-1	LAB_ID	240-28498-1			240-28498-2					
FRACTION: OV	SAMP_DATE	8/28/2013			8/28/2013					
MEDIA: SOIL	QC_TYPE	NM			NM			TIC		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.5			86.0			86.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.4	U		0.39	U				
CARBON TETRACHLORIDE		0.34	U		0.33	U				
CHLOROBENZENE		7.1			0.29	U				
CHLORODIBROMOMETHANE		0.51	U		0.49	U				
CHLOROETHANE		0.79	U		0.76	U				
CHLOROFORM		0.27	U		0.26	U				
CHLOROMETHANE		0.38	U		0.36	U				
CIS-1,2-DICHLOROETHENE		21			0.32	U				
CIS-1,3-DICHLOROPROPENE		0.31	U		0.3	U				
DIBROMOMETHANE		0.58	U		0.56	U				
DICHLORODIFLUOROMETHANE		0.46	U		0.44	U				
DIISOPROPYL ETHER		1.4	U		1.3	U				
ETHYL TERT-BUTYL ETHER		0.2	U		0.19	U				
ETHYLBENZENE		0.24	U		0.23	U				
HEXACHLOROBUTADIENE		1.1	U		1.1	U				
ISOPROPYLBENZENE		0.15	U		0.14	U				
M+P-XYLENES		1.1	U		1.1	U				
METHYL ACETATE								2.2	NJ	Z1
METHYL TERT-BUTYL ETHER		0.4	U		0.38	U				
METHYLENE CHLORIDE		0.62	U		0.59	U				
NAPHTHALENE		0.17	U		0.17	U				
N-BUTYLBENZENE		0.21	U		0.2	U				
N-PROPYLBENZENE		0.37	U		0.35	U				
O-XYLENE		0.32	U		0.31	U				
SEC-BUTYLBENZENE		0.17	U		0.16	U				
STYRENE		0.14	U		0.13	U				
TERT-AMYL METHYL ETHER		0.34	U		0.33	U				
TERT-BUTYLBENZENE		0.27	U		0.26	U				
TERTIARY-BUTYL ALCOHOL		7	UR	C	6.7	UR	C			
TETRACHLOROETHENE		0.48	U		0.46	U				
TOLUENE		0.25	U		0.24	U				
TOTAL XYLENES		0.32	U		0.31	U				
TRANS-1,2-DICHLOROETHENE		0.38	U		0.36	U				
TRANS-1,3-DICHLOROPROPENE		0.5	U		0.48	U				
TRICHLOROETHENE		31			0.37	U				

PROJ_NO: 04882	NSAMPLE	DR-SB-46I-39-40			DR-SB-46S-19-20					
SDG: 240-28498-1	LAB_ID	240-28498-1			240-28498-2					
FRACTION: OV	SAMP_DATE	8/28/2013			8/28/2013					
MEDIA: SOIL	QC_TYPE	NM			NM			TIC		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.5			86.0			86.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.31	U		0.3	U				
VINYL ACETATE		0.23	UR	C	0.22	UR	C			
VINYL CHLORIDE		9.9			0.35	U				

PROJ_NO: 04882	NSAMPLE	TRIP BLANK_20130828		
SDG: 240-28498-1	LAB_ID	240-28498-3		
FRACTION: OV	SAMP_DATE	8/28/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U	
1,1-DICHLOROETHANE		0.15	U	
1,1-DICHLOROETHENE		0.19	U	
1,1-DICHLOROPROPENE		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U	
1,2-DIBROMOETHANE		0.24	U	
1,2-DICHLOROBENZENE		0.13	U	
1,2-DICHLOROETHANE		0.22	U	
1,2-DICHLOROPROPANE		0.18	U	
1,3-DICHLOROBENZENE		0.14	U	
1,3-DICHLOROPROPANE		0.16	U	
1,4-DICHLOROBENZENE		0.13	U	
2,2-DICHLOROPROPANE		0.13	U	
2-BUTANONE		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U	
2-CHLOROTOLUENE		0.11	U	
2-HEXANONE		0.41	U	
4-CHLOROTOLUENE		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U	
4-METHYL-2-PENTANONE		0.32	U	
ACETONE		1.1	U	
BENZENE		0.13	U	
BROMOBENZENE		0.13	U	
BROMOCHLOROMETHANE		0.29	U	
BROMODICHLOROMETHANE		0.15	U	
BROMOFORM		0.64	U	
BROMOMETHANE		0.41	U	

PROJ_NO: 04882	NSAMPLE	TRIP BLANK_20130828		
SDG: 240-28498-1	LAB_ID	240-28498-3		
FRACTION: OV	SAMP_DATE	8/28/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U	
CARBON TETRACHLORIDE		0.13	U	
CHLOROBENZENE		0.15	U	
CHLORODIBROMOMETHANE		0.18	U	
CHLOROETHANE		0.29	U	
CHLOROFORM		0.16	U	
CHLOROMETHANE		0.3	U	
CIS-1,2-DICHLOROETHENE		0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U	
DIBROMOMETHANE		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U	
DIISOPROPYL ETHER		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U	
ETHYLBENZENE		0.17	U	
HEXACHLOROBUTADIENE		0.3	U	
ISOPROPYLBENZENE		0.13	U	
M+P-XYLENES		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U	
METHYLENE CHLORIDE		0.33	U	
NAPHTHALENE		0.24	U	
N-BUTYLBENZENE		0.12	U	
N-PROPYLBENZENE		0.14	U	
O-XYLENE		0.14	U	
SEC-BUTYLBENZENE		0.13	U	
STYRENE		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U	
TERT-BUTYLBENZENE		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	U	
TETRACHLOROETHENE		0.29	U	
TOLUENE		0.13	U	
TOTAL XYLENES		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U	
TRICHLOROETHENE		0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U	

PROJ_NO: 04882	NSAMPLE	TRIP BLANK_20130828		
SDG: 240-28498-1	LAB_ID	240-28498-3		
FRACTION: OV	SAMP_DATE	8/28/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
VINYL ACETATE		0.19	U	
VINYL CHLORIDE		0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-46I-39-40			DR-SB-46S-19-20		
SDG: 240-28498-1	LAB_ID	240-28498-1			240-28498-2		
FRACTION: OS	SAMP_DATE	8/28/2013			8/28/2013		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	85.5			86.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		4.1	U		4.1	U	
1,4-DIOXANE		26	U		26	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		11	U		11	U	
2,4,5-TRICHLOROPHENOL		29	U		29	U	
2,4,6-TRICHLOROPHENOL		10	U		10	U	
2,4-DICHLOROPHENOL		23	U		23	U	
2,4-DIMETHYLPHENOL		23	U		23	U	
2,4-DINITROPHENOL		25	U		25	U	
2,4-DINITROTOLUENE		20	U		20	U	
2,6-DINITROTOLUENE		25	U		25	U	
2-CHLORONAPHTHALENE		0.53	U		0.53	U	
2-CHLOROPHENOL		9.6	U		9.6	U	
2-METHYLNAPHTHALENE		0.58	U		0.58	U	
2-METHYLPHENOL		13	U		13	U	
2-NITROANILINE		11	U		11	U	
2-NITROPHENOL		9.7	U		9.7	U	
3&4-METHYLPHENOL		23	U		23	U	
3,3'-DICHLOROBENZIDINE		21	U		21	U	
3-NITROANILINE		19	U		19	U	
4,6-DINITRO-2-METHYLPHENOL		11	U		11	U	
4-BROMOPHENYL PHENYL ETHER		15	U		15	U	
4-CHLORO-3-METHYLPHENOL		25	U		25	U	
4-CHLOROANILINE		20	U		20	U	
4-CHLOROPHENYL PHENYL ETHER		15	U		15	U	
4-NITROANILINE		30	U		30	U	
4-NITROPHENOL		20	U		20	U	
ACENAPHTHENE		0.89	U		0.89	U	
ACENAPHTHYLENE		0.41	U		0.41	U	
ACETOPHENONE		11	U		11	U	
ANTHRACENE		0.91	U		0.91	U	
ATRAZINE		11	U		11	U	
BENZALDEHYDE		14	UL	E	14	UL	E
BENZO(A)ANTHRACENE		0.74	U		0.74	U	
BENZO(A)PYRENE		0.75	U		0.75	U	
BENZO(B)FLUORANTHENE		0.69	U		0.69	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-46I-39-40			DR-SB-46S-19-20		
SDG: 240-28498-1	LAB_ID	240-28498-1			240-28498-2		
FRACTION: OS	SAMP_DATE	8/28/2013			8/28/2013		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	85.5			86.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		0.41	U		0.41	U	
BENZO(K)FLUORANTHENE		0.79	U		0.79	U	
BIS(2-CHLOROETHOXY)METHANE		26	U		26	U	
BIS(2-CHLOROETHYL)ETHER		2.3	U		2.3	U	
BIS(2-ETHYLHEXYL)PHTHALATE		41	B	A	32	B	A
BUTYL BENZYL PHTHALATE		12	U		12	U	
CAPROLACTAM		43	U		43	U	
CARBAZOLE		32	U		32	U	
CHRYSENE		1.3	U		1.3	U	
DIBENZO(A,H)ANTHRACENE		0.77	U		0.77	U	
DIBENZOFURAN		0.77	U		0.77	U	
DIETHYL PHTHALATE		23	B	A	19	U	
DIMETHYL PHTHALATE		20	U		20	U	
DI-N-BUTYL PHTHALATE		20	B	A	18	U	
DI-N-OCTYL PHTHALATE		9.2	U		9.2	U	
FLUORANTHENE		0.64	U		0.64	U	
FLUORENE		0.62	U		0.62	U	
HEXACHLOROBENZENE		2.5	U		2.5	U	
HEXACHLOROBUTADIENE		6.5	U		6.5	U	
HEXACHLOROCYCLOPENTADIENE		9.5	U		9.5	U	
HEXACHLOROETHANE		11	U		11	U	
INDENO(1,2,3-CD)PYRENE		0.41	U		0.41	U	
ISOPHORONE		15	U		15	U	
NAPHTHALENE		0.96	U		0.96	U	
NITROBENZENE		2.6	U		2.6	U	
N-NITROSODIMETHYLAMINE		19	U		19	U	
N-NITROSO-DI-N-PROPYLAMINE		7.4	U		7.4	U	
N-NITROSODIPHENYLAMINE		25	U		25	U	
PENTACHLOROPHENOL		11	U		11	U	
PHENANTHRENE		0.85	U		0.85	U	
PHENOL		8.5	U		8.5	U	
PYRENE		0.51	U		0.51	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-46I-39-40			DR-SB-46S-19-20		
SDG: 240-28498-1	LAB_ID	240-28498-1			240-28498-2		
FRACTION: PCB	SAMP_DATE	8/28/2013			8/28/2013		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	85.5			86.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		25	U		25	U	
AROCLOR-1221		19	U		19	U	
AROCLOR-1232		16	U		16	U	
AROCLOR-1242		15	U		15	U	
AROCLOR-1248		20	U		20	U	
AROCLOR-1254		20	U		20	U	
AROCLOR-1260		20	U		20	U	

PROJ_NO: 04882	NSAMPLE	DR-SB-46I-39-40						DR-SB-46S-19-20					
SDG: 240-28498-1	LAB_ID	240-28498-1						240-28498-2					
FRACTION: PET	SAMP_DATE	8/28/2013						8/28/2013					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	85.5			85.5			86.0			86.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					54	U					51	U	
TPH (C10-C32)		11	U					11	U				

PROJ_NO: 04882	NSAMPLE	DR-SB-46I-39-40			DR-SB-46S-19-20		
SDG: 240-28498-1	LAB_ID	240-28498-1			240-28498-2		
FRACTION: M	SAMP_DATE	8/28/2013			8/28/2013		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	MG/KG			MG/KG		
	PCT_SOLIDS	85.5			86.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.55	B	A	0.58	B	A
ARSENIC		2.1			21		
BARIUM		0.45	J	P	6.4	J	P
BERYLLIUM		0.045	U		0.065	J	P
CADMIUM		0.038	U		0.041	U	
CHROMIUM		11			31		
COBALT		0.38	J	P	0.18	U	
COPPER		7.7			16		
LEAD		0.2	U		4.9		
MERCURY		0.019	UL	C	0.068	J	CP
MOLYBDENUM		0.34	B	A	0.88	J	P
NICKEL		0.33	J	P	0.3	U	
SELENIUM		0.47	U		0.53	J	P
SILVER		0.1	U		0.11	U	
THALLIUM		0.57	U		0.62	U	
VANADIUM		13			130		
ZINC		2.1	B	A	2.6	B	A

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 | Lab Sample ID: 240-28498-1

Matrix: Solid | Lab File ID: UX87236.D

Analysis Method: 8260B | Date Collected: 08/28/2013 09:40

Sample wt/vol: 6.36(g) | Date Analyzed: 09/06/2013 08:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.5 | Level: (low/med) Low

Analysis Batch No.: 100346 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.6	U	4.6	0.57
71-55-6	1,1,1-Trichloroethane	4.6	U	4.6	0.51
79-34-5	1,1,2,2-Tetrachloroethane	4.6	U	4.6	0.31
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.6	U	4.6	1.2
75-34-3	1,1-Dichloroethane	4.6	U	4.6	0.33
75-35-4	1,1-Dichloroethene	4.6	U	4.6	0.48
563-58-6	1,1-Dichloropropene	4.6	U *	4.6	0.28
87-61-6	1,2,3-Trichlorobenzene	4.6	U	4.6	0.35
96-18-4	1,2,3-Trichloropropane	4.6	U	4.6	0.83
526-73-8	1,2,3-Trimethylbenzene	4.6	U	4.6	0.16
120-82-1	1,2,4-Trichlorobenzene	4.6	U	4.6	0.25
95-63-6	1,2,4-Trimethylbenzene	4.6	U	4.6	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	9.2	U	9.2	1.2
106-93-4	1,2-Dibromoethane	4.6	U	4.6	0.46
95-50-1	1,2-Dichlorobenzene	4.6	U	4.6	0.33
107-06-2	1,2-Dichloroethane	2.9	J	4.6	0.31
78-87-5	1,2-Dichloropropane	4.6	U	4.6	0.63
541-73-1	1,3-Dichlorobenzene	4.6	U	4.6	0.32
142-28-9	1,3-Dichloropropane	4.6	U	4.6	0.31
106-46-7	1,4-Dichlorobenzene	4.6	U	4.6	0.61
594-20-7	2,2-Dichloropropane	4.6	U	4.6	0.86
78-93-3	2-Butanone	18	U	18	1.3
110-75-8	2-Chloroethyl vinyl ether	46	U	46	1.3
95-49-8	2-Chlorotoluene	4.6	U	4.6	0.37
591-78-6	2-Hexanone	18	U	18	0.58
106-43-4	4-Chlorotoluene	4.6	U	4.6	0.38
108-10-1	4-Methyl-2-pentanone	18	U	18	0.50
67-64-1	Acetone	8.2	J B	18	5.8
71-43-2	Benzene	4.6	U	4.6	0.21
108-86-1	Bromobenzene	4.6	U	4.6	0.30
74-97-5	Bromochloromethane	4.6	U	4.6	0.65
75-27-4	Bromodichloromethane	4.6	U	4.6	0.26
75-25-2	Bromoform	4.6	U	4.6	0.30
74-83-9	Bromomethane	4.6	U	4.6	0.50
75-15-0	Carbon disulfide	4.6	U	4.6	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 | Lab Sample ID: 240-28498-1

Matrix: Solid | Lab File ID: UX87236.D

Analysis Method: 8260B | Date Collected: 08/28/2013 09:40

Sample wt/vol: 6.36(g) | Date Analyzed: 09/06/2013 08:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.5 | Level: (low/med) Low

Analysis Batch No.: 100346 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.6	U	4.6	0.34
108-90-7	Chlorobenzene	7.1		4.6	0.30
75-00-3	Chloroethane	4.6	U	4.6	0.79
67-66-3	Chloroform	4.6	U	4.6	0.27
74-87-3	Chloromethane	4.6	U	4.6	0.38
156-59-2	cis-1,2-Dichloroethene	21		4.6	0.33
10061-01-5	cis-1,3-Dichloropropene	4.6	U	4.6	0.31
124-48-1	Dibromochloromethane	4.6	U	4.6	0.51
74-95-3	Dibromomethane	4.6	U	4.6	0.58
75-71-8	Dichlorodifluoromethane	4.6	U	4.6	0.46
108-20-3	Diisopropyl ether	9.2	U	9.2	1.4
100-41-4	Ethylbenzene	4.6	U	4.6	0.24
637-92-3	Ethyl-t-butyl ether (ETBE)	4.6	U	4.6	0.20
87-68-3	Hexachlorobutadiene	4.6	U	4.6	1.1
98-82-8	Isopropylbenzene	4.6	U	4.6	0.15
1634-04-4	Methyl tert-butyl ether	4.6	U	4.6	0.40
75-09-2	Methylene Chloride	4.6	U	4.6	0.62
179601-23-1	m-Xylene & p-Xylene	9.2	U	9.2	1.1
91-20-3	Naphthalene	4.6	U	4.6	0.17
104-51-8	n-Butylbenzene	4.6	U	4.6	0.21
103-65-1	n-Propylbenzene	4.6	U	4.6	0.37
95-47-6	o-Xylene	4.6	U	4.6	0.32
99-87-6	p-Isopropyltoluene	4.6	U	4.6	0.19
135-98-8	sec-Butylbenzene	4.6	U	4.6	0.17
100-42-5	Styrene	4.6	U	4.6	0.14
994-05-8	Tert-amyl-methyl ether (TAME)	4.6	U	4.6	0.34
75-65-0	tert-Butyl alcohol	180	U	180	7.0
98-06-6	tert-Butylbenzene	4.6	U	4.6	0.27
127-18-4	Tetrachloroethene	4.6	U *	4.6	0.48
108-88-3	Toluene	4.6	U	4.6	0.25
156-60-5	trans-1,2-Dichloroethene	4.6	U	4.6	0.38
10061-02-6	trans-1,3-Dichloropropene	4.6	U	4.6	0.50
79-01-6	Trichloroethene	31		4.6	0.39
75-69-4	Trichlorofluoromethane	4.6	U	4.6	0.31
108-05-4	Vinyl acetate	9.2	U	9.2	0.23
75-01-4	Vinyl chloride	9.9		4.6	0.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 | Lab Sample ID: 240-28498-1

Matrix: Solid | Lab File ID: UX87236.D

Analysis Method: 8260B | Date Collected: 08/28/2013 09:40

Sample wt/vol: 6.36(g) | Date Analyzed: 09/06/2013 08:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.5 | Level: (low/med) Low

Analysis Batch No.: 100346 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	9.2	U	9.2	0.32

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		58-123
460-00-4	4-Bromofluorobenzene (Surr)	85		52-136
1868-53-7	Dibromofluoromethane (Surr)	94		37-132
2037-26-5	Toluene-d8 (Surr)	90		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 Lab Sample ID: 240-28498-1

Matrix: Solid Lab File ID: UX87236.D

Analysis Method: 8260B Date Collected: 08/28/2013 09:40

Sample wt/vol: 6.36(g) Date Analyzed: 09/06/2013 08:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.5 Level: (low/med) Low

Analysis Batch No.: 100346 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 | Lab Sample ID: 240-28498-2

Matrix: Solid | Lab File ID: UX87237.D

Analysis Method: 8260B | Date Collected: 08/28/2013 08:35

Sample wt/vol: 6.56(g) | Date Analyzed: 09/06/2013 08:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.0 | Level: (low/med) Low

Analysis Batch No.: 100346 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.4	U	4.4	0.55
71-55-6	1,1,1-Trichloroethane	4.4	U	4.4	0.50
79-34-5	1,1,2,2-Tetrachloroethane	4.4	U	4.4	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.4	U	4.4	1.2
75-34-3	1,1-Dichloroethane	4.4	U	4.4	0.32
75-35-4	1,1-Dichloroethene	4.4	U	4.4	0.46
563-58-6	1,1-Dichloropropene	4.4	U *	4.4	0.27
87-61-6	1,2,3-Trichlorobenzene	4.4	U	4.4	0.34
96-18-4	1,2,3-Trichloropropane	4.4	U	4.4	0.80
526-73-8	1,2,3-Trimethylbenzene	4.4	U	4.4	0.15
120-82-1	1,2,4-Trichlorobenzene	4.4	U	4.4	0.24
95-63-6	1,2,4-Trimethylbenzene	4.4	U	4.4	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	8.9	U	8.9	1.2
106-93-4	1,2-Dibromoethane	4.4	U	4.4	0.44
95-50-1	1,2-Dichlorobenzene	4.4	U	4.4	0.32
107-06-2	1,2-Dichloroethane	4.4	U	4.4	0.30
78-87-5	1,2-Dichloropropane	4.4	U	4.4	0.61
541-73-1	1,3-Dichlorobenzene	4.4	U	4.4	0.31
142-28-9	1,3-Dichloropropane	4.4	U	4.4	0.30
106-46-7	1,4-Dichlorobenzene	4.4	U	4.4	0.58
594-20-7	2,2-Dichloropropane	4.4	U	4.4	0.83
78-93-3	2-Butanone	1.9	J	18	1.2
110-75-8	2-Chloroethyl vinyl ether	44	U	44	1.2
95-49-8	2-Chlorotoluene	4.4	U	4.4	0.35
591-78-6	2-Hexanone	18	U	18	0.56
106-43-4	4-Chlorotoluene	4.4	U	4.4	0.36
108-10-1	4-Methyl-2-pentanone	18	U	18	0.48
67-64-1	Acetone	30	B	18	5.6
71-43-2	Benzene	4.4	U	4.4	0.20
108-86-1	Bromobenzene	4.4	U	4.4	0.29
74-97-5	Bromochloromethane	4.4	U	4.4	0.63
75-27-4	Bromodichloromethane	4.4	U	4.4	0.25
75-25-2	Bromoform	4.4	U	4.4	0.29
74-83-9	Bromomethane	4.4	U	4.4	0.48
75-15-0	Carbon disulfide	4.4	U	4.4	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 | Lab Sample ID: 240-28498-2

Matrix: Solid | Lab File ID: UX87237.D

Analysis Method: 8260B | Date Collected: 08/28/2013 08:35

Sample wt/vol: 6.56(g) | Date Analyzed: 09/06/2013 08:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.0 | Level: (low/med) Low

Analysis Batch No.: 100346 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.4	U	4.4	0.33
108-90-7	Chlorobenzene	4.4	U	4.4	0.29
75-00-3	Chloroethane	4.4	U	4.4	0.76
67-66-3	Chloroform	4.4	U	4.4	0.26
74-87-3	Chloromethane	4.4	U	4.4	0.36
156-59-2	cis-1,2-Dichloroethene	4.4	U	4.4	0.32
10061-01-5	cis-1,3-Dichloropropene	4.4	U	4.4	0.30
124-48-1	Dibromochloromethane	4.4	U	4.4	0.49
74-95-3	Dibromomethane	4.4	U	4.4	0.56
75-71-8	Dichlorodifluoromethane	4.4	U	4.4	0.44
108-20-3	Diisopropyl ether	8.9	U	8.9	1.3
100-41-4	Ethylbenzene	4.4	U	4.4	0.23
637-92-3	Ethyl-t-butyl ether (ETBE)	4.4	U	4.4	0.19
87-68-3	Hexachlorobutadiene	4.4	U	4.4	1.1
98-82-8	Isopropylbenzene	4.4	U	4.4	0.14
1634-04-4	Methyl tert-butyl ether	4.4	U	4.4	0.38
75-09-2	Methylene Chloride	4.4	U	4.4	0.59
179601-23-1	m-Xylene & p-Xylene	8.9	U	8.9	1.1
91-20-3	Naphthalene	4.4	U	4.4	0.17
104-51-8	n-Butylbenzene	4.4	U	4.4	0.20
103-65-1	n-Propylbenzene	4.4	U	4.4	0.35
95-47-6	o-Xylene	4.4	U	4.4	0.31
99-87-6	p-Isopropyltoluene	4.4	U	4.4	0.19
135-98-8	sec-Butylbenzene	4.4	U	4.4	0.16
100-42-5	Styrene	4.4	U	4.4	0.13
994-05-8	Tert-amyl-methyl ether (TAME)	4.4	U	4.4	0.33
75-65-0	tert-Butyl alcohol	180	U	180	6.7
98-06-6	tert-Butylbenzene	4.4	U	4.4	0.26
127-18-4	Tetrachloroethene	4.4	U *	4.4	0.46
108-88-3	Toluene	4.4	U	4.4	0.24
156-60-5	trans-1,2-Dichloroethene	4.4	U	4.4	0.36
10061-02-6	trans-1,3-Dichloropropene	4.4	U	4.4	0.48
79-01-6	Trichloroethene	4.4	U	4.4	0.37
75-69-4	Trichlorofluoromethane	4.4	U	4.4	0.30
108-05-4	Vinyl acetate	8.9	U	8.9	0.22
75-01-4	Vinyl chloride	4.4	U	4.4	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 | Lab Sample ID: 240-28498-2

Matrix: Solid | Lab File ID: UX87237.D

Analysis Method: 8260B | Date Collected: 08/28/2013 08:35

Sample wt/vol: 6.56(g) | Date Analyzed: 09/06/2013 08:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.0 | Level: (low/med) Low

Analysis Batch No.: 100346 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	8.9	U	8.9	0.31

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		58-123
460-00-4	4-Bromofluorobenzene (Surr)	88		52-136
1868-53-7	Dibromofluoromethane (Surr)	100		37-132
2037-26-5	Toluene-d8 (Surr)	95		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 Lab Sample ID: 240-28498-2

Matrix: Solid Lab File ID: UX87237.D

Analysis Method: 8260B Date Collected: 08/28/2013 08:35

Sample wt/vol: 6.56(g) Date Analyzed: 09/06/2013 08:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.0 Level: (low/med) Low

Analysis Batch No.: 100346 Units: ug/Kg

Number TICs Found: 1 TIC Result Total: 2.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
79-20-9	Methyl acetate	3.23	2.2	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-28498-3

Matrix: Water | Lab File ID: UXJ3926.D

Analysis Method: 8260B | Date Collected: 08/28/2013 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 09/06/2013 18:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100410 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-28498-3

Matrix: Water | Lab File ID: UXJ3926.D

Analysis Method: 8260B | Date Collected: 08/28/2013 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 09/06/2013 18:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100410 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-28498-3

Matrix: Water | Lab File ID: UXJ3926.D

Analysis Method: 8260B | Date Collected: 08/28/2013 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 09/06/2013 18:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100410 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	96		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 240-28498-3

Matrix: Water | Lab File ID: UXJ3926.D

Analysis Method: 8260B | Date Collected: 08/28/2013 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 09/06/2013 18:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100410 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 | Lab Sample ID: 240-28498-1

Matrix: Solid | Lab File ID: 30912014.D

Analysis Method: 8270D | Date Collected: 08/28/2013 09:40

Extract. Method: 3540C | Date Extracted: 09/09/2013 09:43

Sample wt/vol: 30.02(g) | Date Analyzed: 09/12/2013 13:47

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 101122 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	58	U	58	4.1
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	10
95-95-4	2,4,5-Trichlorophenol	180	U	180	29
120-83-2	2,4-Dichlorophenol	180	U	180	23
105-67-9	2,4-Dimethylphenol	180	U	180	23
51-28-5	2,4-Dinitrophenol	390	U	390	25
121-14-2	2,4-Dinitrotoluene	230	U	230	20
91-58-7	2-Chloronaphthalene	58	U	58	0.53
95-57-8	2-Chlorophenol	58	U	58	9.6
91-57-6	2-Methylnaphthalene	7.8	U	7.8	0.58
95-48-7	2-Methylphenol	230	U	230	13
88-74-4	2-Nitroaniline	230	U	230	11
88-75-5	2-Nitrophenol	58	U	58	9.7
15831-10-4	3 & 4 Methylphenol	470	U	470	23
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	230	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	11
101-55-3	4-Bromophenyl phenyl ether	58	U	58	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	58	U	58	15
100-01-6	4-Nitroaniline	230	U	230	30
83-32-9	Acenaphthene	7.8	U	7.8	0.89
208-96-8	Acenaphthylene	7.8	U	7.8	0.41
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.8	U	7.8	0.91
1912-24-9	Atrazine	230	U	230	11
100-52-7	Benzaldehyde	120	U *	120	14
56-55-3	Benzo[a]anthracene	7.8	U	7.8	0.74
50-32-8	Benzo[a]pyrene	7.8	U	7.8	0.75
205-99-2	Benzo[b]fluoranthene	7.8	U	7.8	0.69
191-24-2	Benzo[g,h,i]perylene	7.8	U	7.8	0.41
207-08-9	Benzo[k]fluoranthene	7.8	U	7.8	0.79

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 | Lab Sample ID: 240-28498-1

Matrix: Solid | Lab File ID: 30912014.D

Analysis Method: 8270D | Date Collected: 08/28/2013 09:40

Extract. Method: 3540C | Date Extracted: 09/09/2013 09:43

Sample wt/vol: 30.02(g) | Date Analyzed: 09/12/2013 13:47

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 101122 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	41	J B	82	22
85-68-7	Butyl benzyl phthalate	82	U	82	12
105-60-2	Caprolactam	390	U	390	43
86-74-8	Carbazole	58	U	58	32
218-01-9	Chrysene	7.8	U	7.8	1.3
84-74-2	Di-n-butyl phthalate	20	J B	82	18
117-84-0	Di-n-octyl phthalate	82	U	82	9.2
53-70-3	Dibenzo(a,h)anthracene	7.8	U	7.8	0.77
132-64-9	Dibenzofuran	58	U	58	0.77
84-66-2	Diethyl phthalate	23	J B	82	19
131-11-3	Dimethyl phthalate	82	U	82	20
206-44-0	Fluoranthene	7.8	U	7.8	0.64
86-73-7	Fluorene	7.8	U	7.8	0.62
118-74-1	Hexachlorobenzene	7.8	U	7.8	2.5
87-68-3	Hexachlorobutadiene	58	U	58	6.5
77-47-4	Hexachlorocyclopentadiene	390	U	390	9.5
67-72-1	Hexachloroethane	58	U	58	11
193-39-5	Indeno[1,2,3-cd]pyrene	7.8	U	7.8	0.41
78-59-1	Isophorone	58	U	58	15
621-64-7	N-Nitrosodi-n-propylamine	58	U	58	7.4
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	58	U	58	25
91-20-3	Naphthalene	7.8	U	7.8	0.96
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	11
85-01-8	Phenanthrene	7.8	U	7.8	0.85
108-95-2	Phenol	58	U	58	8.5
129-00-0	Pyrene	7.8	U	7.8	0.51
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	230	U	230	25
100-02-7	4-Nitrophenol	390	U	390	20

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 | Lab Sample ID: 240-28498-1

Matrix: Solid | Lab File ID: 30912014.D

Analysis Method: 8270D | Date Collected: 08/28/2013 09:40

Extract. Method: 3540C | Date Extracted: 09/09/2013 09:43

Sample wt/vol: 30.02(g) | Date Analyzed: 09/12/2013 13:47

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 101122 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	101		36-110
4165-62-2	Phenol-d5 (Surr)	75		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	68		20-110
367-12-4	2-Fluorophenol (Surr)	75		24-110
321-60-8	2-Fluorobiphenyl (Surr)	73		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	65		10-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 | Lab Sample ID: 240-28498-2

Matrix: Solid | Lab File ID: 30912024.D

Analysis Method: 8270D | Date Collected: 08/28/2013 08:35

Extract. Method: 3540C | Date Extracted: 09/09/2013 09:43

Sample wt/vol: 29.86(g) | Date Analyzed: 09/12/2013 17:55

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 101122 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	58	U	58	4.1
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	10
95-95-4	2,4,5-Trichlorophenol	180	U	180	29
120-83-2	2,4-Dichlorophenol	180	U	180	23
105-67-9	2,4-Dimethylphenol	180	U	180	23
51-28-5	2,4-Dinitrophenol	390	U	390	25
121-14-2	2,4-Dinitrotoluene	230	U	230	20
91-58-7	2-Chloronaphthalene	58	U	58	0.53
95-57-8	2-Chlorophenol	58	U	58	9.6
91-57-6	2-Methylnaphthalene	7.8	U	7.8	0.58
95-48-7	2-Methylphenol	230	U	230	13
88-74-4	2-Nitroaniline	230	U	230	11
88-75-5	2-Nitrophenol	58	U	58	9.7
15831-10-4	3 & 4 Methylphenol	470	U	470	23
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	230	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	11
101-55-3	4-Bromophenyl phenyl ether	58	U	58	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	58	U	58	15
100-01-6	4-Nitroaniline	230	U	230	30
83-32-9	Acenaphthene	7.8	U	7.8	0.89
208-96-8	Acenaphthylene	7.8	U	7.8	0.41
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.8	U	7.8	0.91
1912-24-9	Atrazine	230	U	230	11
100-52-7	Benzaldehyde	120	U *	120	14
56-55-3	Benzo[a]anthracene	7.8	U	7.8	0.74
50-32-8	Benzo[a]pyrene	7.8	U	7.8	0.75
205-99-2	Benzo[b]fluoranthene	7.8	U	7.8	0.69
191-24-2	Benzo[g,h,i]perylene	7.8	U	7.8	0.41
207-08-9	Benzo[k]fluoranthene	7.8	U	7.8	0.79

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 | Lab Sample ID: 240-28498-2

Matrix: Solid | Lab File ID: 30912024.D

Analysis Method: 8270D | Date Collected: 08/28/2013 08:35

Extract. Method: 3540C | Date Extracted: 09/09/2013 09:43

Sample wt/vol: 29.86(g) | Date Analyzed: 09/12/2013 17:55

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 101122 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	32	J B	82	22
85-68-7	Butyl benzyl phthalate	82	U	82	12
105-60-2	Caprolactam	390	U	390	43
86-74-8	Carbazole	58	U	58	32
218-01-9	Chrysene	7.8	U	7.8	1.3
84-74-2	Di-n-butyl phthalate	82	U	82	18
117-84-0	Di-n-octyl phthalate	82	U	82	9.2
53-70-3	Dibenzo(a,h)anthracene	7.8	U	7.8	0.77
132-64-9	Dibenzofuran	58	U	58	0.77
84-66-2	Diethyl phthalate	82	U	82	19
131-11-3	Dimethyl phthalate	82	U	82	20
206-44-0	Fluoranthene	7.8	U	7.8	0.64
86-73-7	Fluorene	7.8	U	7.8	0.62
118-74-1	Hexachlorobenzene	7.8	U	7.8	2.5
87-68-3	Hexachlorobutadiene	58	U	58	6.5
77-47-4	Hexachlorocyclopentadiene	390	U	390	9.5
67-72-1	Hexachloroethane	58	U	58	11
193-39-5	Indeno[1,2,3-cd]pyrene	7.8	U	7.8	0.41
78-59-1	Isophorone	58	U	58	15
621-64-7	N-Nitrosodi-n-propylamine	58	U	58	7.4
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	58	U	58	25
91-20-3	Naphthalene	7.8	U	7.8	0.96
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	11
85-01-8	Phenanthrene	7.8	U	7.8	0.85
108-95-2	Phenol	58	U	58	8.5
129-00-0	Pyrene	7.8	U	7.8	0.51
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	230	U	230	25
100-02-7	4-Nitrophenol	390	U	390	20

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 | Lab Sample ID: 240-28498-2

Matrix: Solid | Lab File ID: 30912024.D

Analysis Method: 8270D | Date Collected: 08/28/2013 08:35

Extract. Method: 3540C | Date Extracted: 09/09/2013 09:43

Sample wt/vol: 29.86(g) | Date Analyzed: 09/12/2013 17:55

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 101122 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	102		36-110
4165-62-2	Phenol-d5 (Surr)	68		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	60		20-110
367-12-4	2-Fluorophenol (Surr)	68		24-110
321-60-8	2-Fluorobiphenyl (Surr)	66		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	63		10-110

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 Lab Sample ID: 240-28498-1

Matrix: Solid Lab File ID: YF090308.D

Analysis Method: 8015C Date Collected: 08/28/2013 09:40

Sample wt/vol: 4.97(g) Date Analyzed: 09/03/2013 15:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.5 Level: (low/med) Low

Analysis Batch No.: 99923 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	54

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	40		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 | Lab Sample ID: 240-28498-2

Matrix: Solid | Lab File ID: YF090311.D

Analysis Method: 8015C | Date Collected: 08/28/2013 08:35

Sample wt/vol: 5.22(g) | Date Analyzed: 09/03/2013 17:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.0 | Level: (low/med) Low

Analysis Batch No.: 99923 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	110	U	110	51

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	96		10-150

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 | Lab Sample ID: 240-28498-1

Matrix: Solid | Lab File ID: P6F90531.D

Analysis Method: 8015C | Date Collected: 08/28/2013 09:40

Extraction Method: 3550C | Date Extracted: 09/04/2013 07:26

Sample wt/vol: 29.78(g) | Date Analyzed: 09/06/2013 04:04

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 14.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100244 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	34		10-110

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 Lab Sample ID: 240-28498-2

Matrix: Solid Lab File ID: P6F90532.D

Analysis Method: 8015C Date Collected: 08/28/2013 08:35

Extraction Method: 3550C Date Extracted: 09/04/2013 07:26

Sample wt/vol: 29.78(g) Date Analyzed: 09/06/2013 04:34

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 14.0 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100244 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	38		10-110

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 | Lab Sample ID: 240-28498-1

Matrix: Solid | Lab File ID: P1000012.D

Analysis Method: 8082A | Date Collected: 08/28/2013 09:40

Extraction Method: 3540C | Date Extracted: 09/09/2013 09:32

Sample wt/vol: 29.88(g) | Date Analyzed: 09/11/2013 03:51

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 14.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100924 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	39	U	39	25
11104-28-2	Aroclor-1221	39	U	39	19
11141-16-5	Aroclor-1232	39	U	39	16
53469-21-9	Aroclor-1242	39	U	39	15
12672-29-6	Aroclor-1248	39	U	39	20
11097-69-1	Aroclor-1254	39	U	39	20
11096-82-5	Aroclor-1260	39	U	39	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	100		29-151
2051-24-3	Decachlorobiphenyl	85		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46I-39-40 Lab Sample ID: 240-28498-1

Matrix: Solid Lab File ID: P1000012.D

Analysis Method: 8082A Date Collected: 08/28/2013 09:40

Extraction Method: 3540C Date Extracted: 09/09/2013 09:32

Sample wt/vol: 29.88(g) Date Analyzed: 09/11/2013 03:51

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 14.5 GPC Cleanup:(Y/N) N

Analysis Batch No.: 100924 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	70		29-151
2051-24-3	Decachlorobiphenyl	83		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 | Lab Sample ID: 240-28498-2

Matrix: Solid | Lab File ID: P1000013.D

Analysis Method: 8082A | Date Collected: 08/28/2013 08:35

Extraction Method: 3540C | Date Extracted: 09/09/2013 09:32

Sample wt/vol: 29.73(g) | Date Analyzed: 09/11/2013 04:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 14.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100924 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	39	U	39	25
11104-28-2	Aroclor-1221	39	U	39	19
11141-16-5	Aroclor-1232	39	U	39	16
53469-21-9	Aroclor-1242	39	U	39	15
12672-29-6	Aroclor-1248	39	U	39	20
11097-69-1	Aroclor-1254	39	U	39	20
11096-82-5	Aroclor-1260	39	U	39	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	77		29-151
2051-24-3	Decachlorobiphenyl	90		14-163

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: DR-SB-46S-19-20 | Lab Sample ID: 240-28498-2

Matrix: Solid | Lab File ID: P1000013.D

Analysis Method: 8082A | Date Collected: 08/28/2013 08:35

Extraction Method: 3540C | Date Extracted: 09/09/2013 09:32

Sample wt/vol: 29.73(g) | Date Analyzed: 09/11/2013 04:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 14.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100924 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	72		29-151
2051-24-3	Decachlorobiphenyl	82		14-163

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-46I-39-40 Lab Sample ID: 240-28498-1

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG ID.:

Matrix: Solid Date Sampled: 08/28/2013 09:40

Reporting Basis: DRY Date Received: 08/29/2013 09:20

% Solids: 85.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.55	2.1	0.41	mg/Kg	J		1	6010C
7440-38-2	Arsenic	2.1	1.6	0.31	mg/Kg			1	6010C
7440-39-3	Barium	0.45	21	0.074	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.52	0.52	0.045	mg/Kg	U		1	6010C
7440-43-9	Cadmium	0.52	0.52	0.038	mg/Kg	U		1	6010C
7440-47-3	Chromium	11	1.0	0.21	mg/Kg			1	6010C
7440-48-4	Cobalt	0.38	1.0	0.17	mg/Kg	J		1	6010C
7440-50-8	Copper	7.7	2.6	0.77	mg/Kg			1	6010C
7439-92-1	Lead	1.0	1.0	0.20	mg/Kg	U		1	6010C
7439-98-7	Molybdenum	0.34	4.2	0.28	mg/Kg	J		1	6010C
7440-02-0	Nickel	0.33	4.2	0.28	mg/Kg	J		1	6010C
7782-49-2	Selenium	2.1	2.1	0.47	mg/Kg	U		1	6010C
7440-22-4	Silver	1.0	1.0	0.10	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.1	2.1	0.57	mg/Kg	U		1	6010C
7440-62-2	Vanadium	13	1.0	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	2.1	5.2	1.0	mg/Kg	J	B	1	6010C
7439-97-6	Mercury	0.13	0.13	0.019	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DR-SB-46S-19-20 Lab Sample ID: 240-28498-2

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG ID.:

Matrix: Solid Date Sampled: 08/28/2013 08:35

Reporting Basis: DRY Date Received: 08/29/2013 09:20

% Solids: 86.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.58	2.3	0.44	mg/Kg	J		1	6010C
7440-38-2	Arsenic	21	1.7	0.34	mg/Kg			1	6010C
7440-39-3	Barium	6.4	23	0.080	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.065	0.56	0.049	mg/Kg	J		1	6010C
7440-43-9	Cadmium	0.56	0.56	0.041	mg/Kg	U		1	6010C
7440-47-3	Chromium	31	1.1	0.23	mg/Kg			1	6010C
7440-48-4	Cobalt	1.1	1.1	0.18	mg/Kg	U		1	6010C
7440-50-8	Copper	16	2.8	0.83	mg/Kg			1	6010C
7439-92-1	Lead	4.9	1.1	0.21	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.88	4.5	0.30	mg/Kg	J		1	6010C
7440-02-0	Nickel	4.5	4.5	0.30	mg/Kg	U		1	6010C
7782-49-2	Selenium	0.53	2.3	0.51	mg/Kg	J		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.3	2.3	0.62	mg/Kg	U		1	6010C
7440-62-2	Vanadium	130	1.1	0.14	mg/Kg			1	6010C
7440-66-6	Zinc	2.6	5.6	1.1	mg/Kg	J	B	1	6010C
7439-97-6	Mercury	0.068	0.11	0.016	mg/Kg	J		1	7471B

APPENDIX C

SUPPORT DOCUMENTATION

240-28498 Chain of Custody

Chain of Custody Record

3.0, 4.4

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

tAmerica Laboratory location:

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Company: TETRA TECH, INC	Client Project Manager: Tony Apanavage	Site Contact: Stu Carew	Lab Contact:
Address: 20251 Century Blvd Ste 300	Telephone: (301)528-5551	Telephone: (703)342-8389	Telephone:
City/State/Zip: Germantown MD 20874	Email: Tony.Apanavage@tetratech.com	Analysis Turnaround Time (in BUS days)	Analyses
Phone: (301)528-5550		TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	
Project Name: Dump Road Sarcl	Method of Shipment/Carrier:		
Project Number: 112IC04882	Shipping/Tracking No:		
PO#			

COC No: 1 of 1 COCs

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOC	GRO	SVOC, PCB, DRO	METALS	Sample Specific Notes / Special Instructions:
DR-SB-46I-39-40	8/28/13	0940				X							5	2			X	X	X	X	
DR-SB-46S-19-20	"	0835				X							5	2			X	X	X	X	
TRIP BLANK	"	1200		X						1							X				

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

	Company	Date/Time		Company	Date/Time
Relinquished by:	Tetra Tech	8-28-13/1600	Received by:	TestAmerica	8/28/13/1600
Relinquished by:	TestAmerica	8/28/13/1630	Received by:		
Relinquished by:			Received in Laboratory by:	TM	8/29/13 926

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TAL-0018 (1008)

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source

Report Number: 240-28498-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 08/29/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.4 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples DR-SB-46I-39-40 (240-28498-1) and DR-SB-46S-19-20 (240-28498-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 08/29/2013 and analyzed on 09/06/2013.

Acetone, Methylene Chloride and Toluene were detected in method blank MB 240-99825/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) for batch 100346 recovered outside control limits for the following analytes: 1,1-Dichloropropene and Tetrachloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Insufficient sample volume was available to meet method-mandated requirements for matrix spike/matrix spike duplicate (MS/MSD) analyses for batch 100346.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Sample TRIP BLANK (240-28498-3) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/06/2013.

No difficulties were encountered during the VOCs analysis. All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Samples DR-SB-46I-39-40 (240-28498-1) and DR-SB-46S-19-20 (240-28498-2) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 09/09/2013 and analyzed on 09/12/2013.

Bis(2-ethylhexyl) phthalate, Diethyl phthalate and Di-n-butyl phthalate were detected in method blank MB 240-100631/23-B at levels that

were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) for batch 100631 associated with sample(s) DR-SB-46I-39-40 (240-28498-1), DR-SB-46S-19-20 (240-28498-2) recovered outside control limits for the following analyte: Benzaldehyde. However, since Benzaldehyde is a non-controlling compound no corrective action was required.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)
Samples DR-SB-46I-39-40 (240-28498-1) and DR-SB-46S-19-20 (240-28498-2) were analyzed for gasoline range organics (GRO) in accordance with EPA-SW-846 Method 8015C - GRO. The samples were analyzed on 09/03/2013.

No difficulties were encountered during the GRO analysis. All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)
Samples DR-SB-46I-39-40 (240-28498-1) and DR-SB-46S-19-20 (240-28498-2) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 09/04/2013 and analyzed on 09/06/2013.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

No difficulties were encountered during the DRO analysis. All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)
Samples DR-SB-46I-39-40 (240-28498-1) and DR-SB-46S-19-20 (240-28498-2) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 09/09/2013 and analyzed on 09/11/2013.

No difficulties were encountered during the PCBs analysis. All quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)
Samples DR-SB-46I-39-40 (240-28498-1) and DR-SB-46S-19-20 (240-28498-2) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 08/30/2013 and analyzed on 09/04/2013.

Barium and Zinc were detected in method blank MB 240-99736/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Antimony, Barium, Cobalt, Molybdenum, Nickel and Zinc exceeded the RPD limit for the duplicate of sample DR-SB-46I-39-40DU (240-28498-1).

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

MERCURY
Samples DR-SB-46I-39-40 (240-28498-1) and DR-SB-46S-19-20 (240-28498-2) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared on 08/30/2013 and analyzed on 09/04/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

PERCENT SOLIDS
Samples DR-SB-46I-39-40 (240-28498-1) and DR-SB-46S-19-20 (240-28498-2) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 08/30/2013.

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
57 1,1,1-Trichloroethane	97		4.663					
59 1,1-Dichloropropene	75		4.781					
60 Carbon tetrachloride	117		4.793					
63 1,2-Dichloroethane	62	4.943	4.947	-0.004	74	28407	3.13	
62 Benzene	78		4.947					9
64 Tert-amyl methyl ether	73		5.014					
67 Trichloroethene	130	5.440	5.444	-0.004	98	222461	33.6	
70 1,2-Dichloropropane	63		5.621					
73 Dibromomethane	93		5.704					
74 Dichlorobromomethane	83		5.822					
76 2-Chloroethyl vinyl ether	63		6.047					
77 cis-1,3-Dichloropropene	75		6.189					
78 4-Methyl-2-pentanone (MIBK)	43		6.296					
79 Toluene	91		6.485					9
80 trans-1,3-Dichloropropene	75		6.639					
84 Tetrachloroethene	164		6.958					
83 1,3-Dichloropropane	76		6.958					
85 2-Hexanone	43		7.006					
87 Chlorodibromomethane	129		7.159					
89 Ethylene Dibromide	107		7.278					
91 Chlorobenzene	112	7.712	7.704	0.008	93	132681	7.76	
92 1,1,1,2-Tetrachloroethane	131		7.775					
93 Ethylbenzene	106		7.798					
94 m-Xylene & p-Xylene	106		7.905					
95 o-Xylene	106		8.272					
96 Styrene	104		8.284					
97 Bromoform	173		8.461					
98 Isopropylbenzene	105		8.615					
101 1,1,2,2-Tetrachloroethane	83		8.875					
102 Bromobenzene	156		8.911					
104 1,2,3-Trichloropropane	110		8.923					
105 N-Propylbenzene	120		9.005					
106 2-Chlorotoluene	126		9.088					
108 4-Chlorotoluene	126		9.195					
109 tert-Butylbenzene	119		9.491					
110 1,2,4-Trimethylbenzene	105		9.526					
111 sec-Butylbenzene	105		9.704					
112 1,3-Dichlorobenzene	146		9.810					9
113 4-Isopropyltoluene	119		9.834					
114 1,4-Dichlorobenzene	146		9.893					9
115 1,2,3-Trimethylbenzene	105		9.948					
117 n-Butylbenzene	91		10.236					
118 1,2-Dichlorobenzene	146		10.260					
119 1,2-Dibromo-3-Chloropropane	157		11.029					
121 1,2,4-Trichlorobenzene	180		11.857					
122 Hexachlorobutadiene	225		12.035					
123 Naphthalene	128		12.106					
124 1,2,3-Trichlorobenzene	180		12.354					
S 129 Xylenes, Total	106		16.530					

$\frac{22246 \text{ Sam}}{1595866 \text{ Int}} \times \frac{50 \text{ Int}}{0.2075 \text{ Cal}} \times \frac{0.005 L}{6.36 g} \times \frac{1000 g}{Kg}$

$\frac{1}{0.855\%S} = \frac{30.8 \text{ mg}}{Kg}$

reported as 31 mg/Kg

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
73 Naphthalene	128		7.321					
74 4-Chloroaniline	127		7.347					
77 Hexachlorobutadiene	225		7.422					
83 Caprolactam	113		7.642					
84 4-Chloro-3-methylphenol	107		7.748					
85 2-Methylnaphthalene	142		7.920					
88 Hexachlorocyclopentadiene	237		8.053					
90 2,4,6-Trichlorophenol	196		8.150					
91 2,4,5-Trichlorophenol	196		8.182					
95 1,1'-Biphenyl	154		8.310					
98 2-Chloronaphthalene	162		8.342					
100 2-Nitroaniline	65		8.406					
103 Dimethyl phthalate	163		8.545					
105 2,6-Dinitrotoluene	165		8.604					
107 Acenaphthylene	152		8.701					
108 3-Nitroaniline	138		8.754					
109 2,4-Dinitrophenol	184		8.840					
110 Acenaphthene	153		8.845					
111 4-Nitrophenol	109		8.872					
112 2,4-Dinitrotoluene	165		8.952					
114 Dibenzofuran	168		8.989					
119 Diethyl phthalate	149	9.139	9.144	-0.005	94	34271	0.2894	
121 4-Chlorophenyl phenyl ether	204		9.267					
123 4-Nitroaniline	138		9.278					
124 Fluorene	166		9.284					
126 4,6-Dinitro-2-methylphenol	198		9.305					
130 N-Nitrosodiphenylamine	169		9.364					
137 4-Bromophenyl phenyl ether	248		9.685					
139 Hexachlorobenzene	284		9.760					
140 Atrazine	200		9.792					
141 Pentachlorophenol	266		9.920					
146 Phenanthrene	178		10.113					
147 Anthracene	178		10.155					
149 Carbazole	167		10.273					
151 Di-n-butyl phthalate	149	10.525	10.530	-0.006	96	49031	0.2600	
157 Fluoranthene	202		11.150					
160 Pyrene	202		11.380					
166 Butyl benzyl phthalate	149		12.006					
173 3,3'-Dichlorobenzidine	252		12.707					
171 Bis(2-ethylhexyl) phthalate	149	12.728	12.728	0.0	94	63301	0.5254	
175 Benzo[a]anthracene	228		12.776					
176 Chrysene	228		12.824					
178 Di-n-octyl phthalate	149		13.685					
180 Benzo[b]fluoranthene	252		14.365					
181 Benzo[k]fluoranthene	252		14.408					
182 Benzo[a]pyrene	252		14.884					
186 Indeno[1,2,3-cd]pyrene	276		16.756					
187 Dibenz(a,h)anthracene	278		16.777					
188 Benzo[g,h,i]perylene	276		17.264					

$\frac{63301}{787070} \times \frac{4}{0.6123} \times \frac{1}{0.8555} \times \frac{2mL}{30.02g} \times 1000 =$

$40.7 \frac{ug}{kg}$

Reported as 41

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\YPID\20130903-23100.b\YF090306.D		
Lims ID:	LCS 240-99962/2-A	Client ID:	
Inject. Date:	03-Sep-2013 14:15:24	Dil. Factor:	1.0000
Sample Type:	LCS		
Sample ID:	240-0023100-006		
Misc. Info.:			
Operator:	402582	Instrument ID:	YPID
Purge Vol:	5.000 mL	ALS Bottle#:	1
Lims Batch ID:	99923	Lims Sample ID:	6
Detector 1 :	GC ELC2B		
Detector 2 :	GC FID1A		
Method:	\\Ncchrom\ChromData\YPID\20130903-23100.b\Y80158021.m		
Last Update:	04-Sep-2013 08:42:03	Calib Date:	21-Aug-2013 15:19:55
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\YPID\20130821-22702.b\YF082110.D		
Limit Group:	GCV 8015C GRO ICAL		
Integrator:	Falcon		
Column Type:		Column Dia:	
Process Host:	XAWRK020		

First Level Reviewer: shockr Date: 03-Sep-2013 15:37:11

Compound	Det	RT	EXP RT	DLT RT	Response	On-Col Amt ug/l	Flags
$ 16 Trifluorotoluene (Surr)	2	9.810	9.810	0.0	1787520	10.5	
A 5 C6-C10	2	11.975	5.046 - 19.006		143370663	760.7	
A 1 C6-C12	2	13.534	5.046 - 22.021		160643031	776.7	

$\frac{143370663}{188484.161} = 760.6 \frac{ug}{Kg}$

reported as $761 \frac{ug}{Kg}$

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A2HP10\20130910-23356.b\P1000034.D		
Lims ID:	LCS 240-100629/24-A	Client ID:	
Inject. Date:	11-Sep-2013 09:38:59	Dil. Factor:	1.0000
Sample Type:	LCS		
Sample ID:	240-0023356-034		
Misc. Info.:			
Operator:		Instrument ID:	A2HP10
Injection Vol:	1.0 uL	ALS Bottle#:	34
Lims Batch ID:	100924	Lims Sample ID:	34
Detector 1 :	GC ECD1A		
Detector 2 :	GC ecd2b		
Method:	\\Ncchrom\ChromData\A2HP10\20130910-23356.b\PCB10.m		
Last Update:	11-Sep-2013 12:01:35	Calib Date:	07-Sep-2013 18:37:18
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A2HP10\20130906-23233.b\P1000044.D		
Limit Group:	GC 8082A ICAL		
Integrator:	Falcon		
Column Type:		Column Dia:	
Process Host:	XAWRK011		

Det	RT	EXP RT	DLT RT	Response	On-Col Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene						
1	1.458	1.453	0.005	17200009	0.0160	
2	1.959	1.958	0.001	22137019	0.0257	
					RPD = 46.83	
6 PCB-1016						
1	1.790	1.784	0.006	14881784	0.7865	
1	2.129	2.123	0.006	29847561	0.8620	
1	2.582	2.574	0.008	66732721	0.9376	
1	2.719	2.710	0.009	31280373	1.05	
1	3.142	3.135	0.007	28941694	0.9298	
		Average of Peak Amounts =			0.9122	
2	2.511	2.511	0.0	12629460	0.8168	
2	2.963	2.962	0.001	28300742	0.9313	
2	3.458	3.455	0.003	63593069	1.05	
2	3.609	3.606	0.003	25654121	0.9629	
2	4.129	4.124	0.005	21036000	0.9789	
		Average of Peak Amounts =			0.9475	
					RPD = 3.79	

LCS

$\frac{0.8168+0.9313+1.05+0.9629+0.9789}{5} = 0.9479 \times \frac{10\,mL}{30.0\,g} \times 1000 = 315.9\ \frac{ug}{Kg}$

reported as $316\ \frac{ug}{kg}$

Sample Name: 240-28498-g-2-a Acquired: 9/4/2013 19:30:38 Type: Unk
Method: Standard Method + IEC Checks(v235) Mode: CONC Corr. Factor: 1.000000
User: Roger Method: 6010B/6010C Method: 200.7 :
Comment: DR-SB-465-19-20

Elem	Tl1908	V_2908	Zn2062	Si2516	Sr3464
IS Ref	(In2306)	(Y_3710)	(In2306)	(Y_3710)	(Y_3710)
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.5280	1113.1	22.748	2462.0	17.360
Stddev	1.2351	2.3	.494	12.4	1.736
%RSD	80.831	.20267	2.1727	.50462	10.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4735.9	5921.3	79017.	10112.
Stddev	17.2	25.7	128.	45.
%RSD	.36411	.43439	.16168	.44074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.672%	109.62%	112.09%	110.09%
Range				

$$1113.1\ \frac{\mu g}{L} \times \frac{0.1\ L}{1.03\ g} \times \frac{1000\ g}{1\ Kg} \times \frac{1\ mg}{1000\ \mu g} \times \frac{1}{0.86\%S} = 125.6\ mg/Kg$$

reported as $130\ \frac{mg}{Kg}$

TestAmerica Canton Sample Receipt Form/Narrative Login # : 28498
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by:

Cooler Received on 8/28/13 Opened on 8/28/13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 4	(CF 0 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	☒ See Multiple
IR GUN# 5	(CF +1 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	Cooler Form
IR GUN# 8	(CF -0 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

TestAmerica Multiple Cooler Receipt Form/Narrative
Canton Facility

Login # : _____

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client	.8	3.0	3.0	ICE
Client	1	4.4	4.4	ICE
			only this Cooler	

HOLDTIME

SDG 240-28498-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	DR-SB-46I-39-40	240-28498-1	NM	08/28/2013	08/30/2013	09/04/2013	2	5	7
HG	MG/KG	DR-SB-46S-19-20	240-28498-2	NM	08/28/2013	08/30/2013	09/04/2013	2	5	7
M	MG/KG	DR-SB-46I-39-40	240-28498-1	NM	08/28/2013	08/30/2013	09/04/2013	2	5	7
M	MG/KG	DR-SB-46S-19-20	240-28498-2	NM	08/28/2013	08/30/2013	09/04/2013	2	5	7
OS	UG/KG	DR-SB-46S-19-20	240-28498-2	NM	08/28/2013	09/09/2013	09/12/2013	12	3	15
OS	UG/KG	DR-SB-46I-39-40	240-28498-1	NM	08/28/2013	09/09/2013	09/12/2013	12	3	15
OV	UG/KG	DR-SB-46S-19-20	240-28498-2	NM	08/28/2013	08/29/2013	09/06/2013	1	8	9
OV	UG/KG	DR-SB-46I-39-40	240-28498-1	NM	08/28/2013	08/29/2013	09/06/2013	1	8	9
OV	UG/L	DR-DPT-25-35	240-28779-2	NM	09/06/2013	09/16/2013	09/16/2013	10	0	10
OV	UG/L	DR-DPT-25-30	240-28779-1	NM	09/06/2013	09/16/2013	09/16/2013	10	0	10
OV	UG/L	DR-DPT-25-40	240-28779-3	NM	09/06/2013	09/16/2013	09/16/2013	10	0	10
OV	UG/L	DR-DPT-25-45	240-28779-4	NM	09/06/2013	09/16/2013	09/16/2013	10	0	10
OV	UG/L	DR-DPT-25-50	240-28779-5	NM	09/06/2013	09/11/2013	09/11/2013	5	0	5
OV	UG/L	TB-090613	240-28779-6	NM	09/06/2013	09/16/2013	09/16/2013	10	0	10
OV	UG/L	TRIP BLANK	240-28498-3	NM	08/28/2013	09/06/2013	09/06/2013	9	0	9

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	DR-SB-46S-19-20	240-28498-2	NM	08/28/2013	09/09/2013	09/11/2013	12	2	14
PCB	UG/KG	DR-SB-46I-39-40	240-28498-1	NM	08/28/2013	09/09/2013	09/11/2013	12	2	14
	MG/KG	DR-SB-46I-39-40	240-28498-1	NM	08/28/2013	09/04/2013	09/06/2013	7	2	9
	MG/KG	DR-SB-46S-19-20	240-28498-2	NM	08/28/2013	09/04/2013	09/06/2013	7	2	9
	UG/KG	DR-SB-46S-19-20	240-28498-2	NM	08/28/2013	09/03/2013	09/03/2013	6	0	6
	UG/KG	DR-SB-46I-39-40	240-28498-1	NM	08/28/2013	09/03/2013	09/03/2013	6	0	6

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab File ID: UXJ3911.D Lab Sample ID: MB 240-100410/5

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX11 Date Analyzed: 09/06/2013 12:23

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-100410/4	UXJ3908.D	09/06/2013 11:12
TRIP BLANK	240-28498-3	UXJ3926.D	09/06/2013 18:19
	240-28495-B-7 MS	UXJ3932.D	09/06/2013 20:41
	240-28495-B-7 MSD	UXJ3933.D	09/06/2013 21:05

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100410/5

Matrix: Water | Lab File ID: UXJ3911.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/06/2013 12:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100410 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100410/5

Matrix: Water Lab File ID: UXJ3911.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/06/2013 12:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 100410 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
75-65-0	tert-Butyl alcohol	50	U	50	3.9
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100410/5

Matrix: Water | Lab File ID: UXJ3911.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/06/2013 12:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100410 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100410/5

Matrix: Water Lab File ID: UXJ3911.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/06/2013 12:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 100410 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3908.D

Lab ID: LCS 240-100410/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.29	93	72-116	
1,1,1-Trichloroethane	10.0	9.13	91	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.79	88	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.1	111	74-151	
1,1-Dichloroethane	10.0	9.87	99	82-115	
1,1-Dichloroethene	10.0	8.51	85	78-131	
1,1-Dichloropropene	10.0	8.88	89	83-114	
1,2,3-Trichlorobenzene	10.0	9.43	94	54-126	
1,2,3-Trichloropropane	10.0	8.20	82	73-129	
1,2,3-Trimethylbenzene	10.0	9.68	97	70-130	
1,2,4-Trichlorobenzene	10.0	8.61	86	48-135	
1,2,4-Trimethylbenzene	10.0	10.4	104	76-120	
1,2-Dibromo-3-Chloropropane	10.0	9.96	100	42-136	
1,2-Dichlorobenzene	10.0	9.93	99	81-110	
1,2-Dichloroethane	10.0	9.39	94	71-127	
1,2-Dichloropropane	10.0	9.58	96	81-115	
1,3-Dichlorobenzene	10.0	9.81	98	80-110	
1,3-Dichloropropane	10.0	9.63	96	79-116	
1,4-Dichlorobenzene	10.0	9.74	97	82-110	
2,2-Dichloropropane	10.0	9.17	92	50-129	
2-Chloroethyl vinyl ether	10.0	8.35 J	83	52-131	
2-Chlorotoluene	10.0	9.73	97	76-116	
2-Hexanone	20.0	17.4	87	55-133	
4-Chlorotoluene	10.0	10.1	101	77-115	
Acetone	20.0	14.5	73	43-136	
Benzene	10.0	9.99	100	83-112	
Bromobenzene	10.0	9.51	95	76-115	
Bromochloromethane	10.0	9.16	92	77-120	
Bromoform	10.0	9.43	94	40-131	
Bromomethane	10.0	9.16	92	11-185	
Carbon disulfide	10.0	9.16	92	62-142	
Carbon tetrachloride	10.0	9.43	94	66-128	
Chlorobenzene	10.0	9.90	99	85-110	
Chloroethane	10.0	9.36	94	25-153	
Chloroform	10.0	9.45	94	79-117	
Chloromethane	10.0	9.11	91	44-126	
cis-1,2-Dichloroethene	10.0	9.78	98	80-113	
Bromodichloromethane	10.0	9.96	100	72-121	
cis-1,3-Dichloropropene	10.0	9.48	95	61-115	
1,2-Dibromoethane	10.0	9.80	98	79-113	
Dibromomethane	10.0	8.92	89	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3908.D

Lab ID: LCS 240-100410/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	8.96	90	19-129	
Diisopropyl ether	10.0	9.70 J	97	77-118	
Ethylbenzene	10.0	10.1	101	83-112	
Hexachlorobutadiene	10.0	9.08	91	36-134	
Isopropylbenzene	10.0	10.0	100	75-114	
2-Butanone	20.0	15.6	78	60-126	
4-Methyl-2-pentanone	20.0	16.4	82	63-128	
m-Xylene & p-Xylene	20.0	21.3	106	83-113	
Methyl tert-butyl ether	10.0	8.84	88	52-144	
Naphthalene	10.0	8.25	83	32-141	
n-Butylbenzene	10.0	10.5	105	66-125	
Methylene Chloride	10.0	8.59	86	66-131	
n-Propylbenzene	10.0	10.3	103	74-121	
o-Xylene	10.0	10.7	107	83-113	
p-Isopropyltoluene	10.0	10.5	105	74-120	
sec-Butylbenzene	10.0	9.98	100	70-117	
Styrene	10.0	10.9	109	79-114	
tert-Butylbenzene	10.0	9.82	98	71-115	
Tetrachloroethene	10.0	10.1	101	79-114	
Toluene	10.0	10.1	101	84-111	
trans-1,2-Dichloroethene	10.0	9.41	94	83-117	
trans-1,3-Dichloropropene	10.0	10.0	100	58-117	
Trichloroethene	10.0	9.71	97	76-117	
Trichlorofluoromethane	10.0	9.15	92	49-157	
tert-Butyl alcohol	200	167	84	70-130	
Vinyl acetate	10.0	11.8	118	46-161	
Vinyl chloride	10.0	8.83	88	53-127	
Dibromochloromethane	10.0	9.95	100	64-119	
Xylenes, Total	30.0	32.0	107	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3932.D

Lab ID: 240-28495-B-7 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	33.3	3.3 U	32.3	97	68-121	
1,1,2,2-Tetrachloroethane	33.3	3.3 U	32.6	98	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	33.3	3.3 U	33.5	101	70-152	
1,1-Dichloroethane	33.3	3.3 U	35.1	105	79-116	
1,1-Dichloroethene	33.3	3.3 U	31.2	94	74-135	
1,2,4-Trichlorobenzene	33.3	3.3 U	23.3	70	38-138	
1,2-Dibromo-3-Chloropropane	33.3	6.7 U	33.5	101	32-139	
1,2-Dichlorobenzene	33.3	3.3 U	31.2	94	75-111	
1,2-Dichloroethane	33.3	3.3 U	34.8	104	68-129	
1,2-Dichloropropane	33.3	3.3 U	33.5	101	78-115	
1,3-Dichlorobenzene	33.3	3.3 U	29.7	89	73-110	
1,4-Dichlorobenzene	33.3	3.3 U	29.9	90	75-110	
2-Hexanone	66.6	33 U	59.0	89	47-139	
Acetone	66.6	33 U	52.7	79	33-145	
Benzene	33.3	3.3 U	34.7	104	72-121	
Bromoform	33.3	3.3 U	31.9	96	32-128	
Bromomethane	33.3	3.3 U	29.6	89	10-186	
Carbon disulfide	33.3	3.3 U	35.4	106	57-147	
Carbon tetrachloride	33.3	3.3 U	32.8	98	59-129	
Chlorobenzene	33.3	3.3 U	31.9	96	80-110	
Chloroethane	33.3	3.3 U	32.8	99	21-165	
Chloroform	33.3	3.3 U	33.8	101	76-118	
Chloromethane	33.3	3.3 U	28.1	84	33-132	
cis-1,2-Dichloroethene	33.3	52	87.4	105	70-120	
Bromodichloromethane	33.3	3.3 U	35.7	107	67-120	
cis-1,3-Dichloropropene	33.3	3.3 U	29.1	87	51-110	
1,2-Dibromoethane	33.3	3.3 U	33.8	101	74-113	
Dichlorodifluoromethane	33.3	3.3 U	29.7	89	17-128	
Ethylbenzene	33.3	3.3 U	29.6	89	75-116	
Isopropylbenzene	33.3	3.3 U	29.1	87	68-116	
2-Butanone	66.6	33 U	57.8	87	54-129	
4-Methyl-2-pentanone	66.6	33 U	61.1	92	56-131	
m-Xylene & p-Xylene	66.6	6.7 U	66.4	100	75-117	
Methyl tert-butyl ether	33.3	3.3 U	32.6	98	46-144	
Methylene Chloride	33.3	3.3 U	33.7	101	63-128	
o-Xylene	33.3	3.3 U	32.6	98	76-116	
Styrene	33.3	3.3 U	34.9	105	71-117	
Tetrachloroethene	33.3	3.3 U	31.5	95	70-117	
Toluene	33.3	3.3 U	32.5	98	78-114	
trans-1,2-Dichloroethene	33.3	2.4 J	34.4	96	80-119	
trans-1,3-Dichloropropene	33.3	3.3 U	32.1	96	46-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3932.D

Lab ID: 240-28495-B-7 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Trichloroethene	33.3	1.5 J	32.9	94	66-120	
Trichlorofluoromethane	33.3	3.3 U	31.2	94	46-157	
Vinyl chloride	33.3	56	81.8	77	49-130	
Dibromochloromethane	33.3	3.3 U	33.5	100	56-118	
Xylenes, Total	99.9	6.7 U	99.0	99	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3933.D

Lab ID: 240-28495-B-7 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	33.3	31.4	94	3	30	68-121	
1,1,2,2-Tetrachloroethane	33.3	33.2	100	2	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	33.3	35.4	106	6	30	70-152	
1,1-Dichloroethane	33.3	34.2	103	3	30	79-116	
1,1-Dichloroethene	33.3	29.8	90	5	30	74-135	
1,2,4-Trichlorobenzene	33.3	25.1	75	7	30	38-138	
1,2-Dibromo-3-Chloropropane	33.3	27.6	83	20	30	32-139	
1,2-Dichlorobenzene	33.3	33.0	99	5	30	75-111	
1,2-Dichloroethane	33.3	33.3	100	4	30	68-129	
1,2-Dichloropropane	33.3	32.8	99	2	30	78-115	
1,3-Dichlorobenzene	33.3	29.7	89	0	30	73-110	
1,4-Dichlorobenzene	33.3	29.8	89	0	30	75-110	
2-Hexanone	66.6	61.5	92	4	30	47-139	
Acetone	66.6	57.1	86	8	30	33-145	
Benzene	33.3	33.3	100	4	30	72-121	
Bromoform	33.3	31.6	95	1	30	32-128	
Bromomethane	33.3	28.5	85	4	30	10-186	
Carbon disulfide	33.3	32.4	97	9	30	57-147	
Carbon tetrachloride	33.3	32.9	99	0	30	59-129	
Chlorobenzene	33.3	30.0	90	6	30	80-110	
Chloroethane	33.3	30.7	92	7	30	21-165	
Chloroform	33.3	31.8	95	6	30	76-118	
Chloromethane	33.3	28.3	85	1	30	33-132	
cis-1,2-Dichloroethene	33.3	85.6	100	2	30	70-120	
Bromodichloromethane	33.3	34.1	102	5	30	67-120	
cis-1,3-Dichloropropene	33.3	28.2	85	3	30	51-110	
1,2-Dibromoethane	33.3	32.5	98	4	30	74-113	
Dichlorodifluoromethane	33.3	26.4	79	12	30	17-128	
Ethylbenzene	33.3	29.4	88	0	30	75-116	
Isopropylbenzene	33.3	28.6	86	2	30	68-116	
2-Butanone	66.6	61.0	92	5	30	54-129	
4-Methyl-2-pentanone	66.6	59.1	89	3	30	56-131	
m-Xylene & p-Xylene	66.6	64.0	96	4	30	75-117	
Methyl tert-butyl ether	33.3	32.8	98	1	30	46-144	
Methylene Chloride	33.3	33.5	101	1	30	63-128	
o-Xylene	33.3	32.9	99	1	30	76-116	
Styrene	33.3	33.3	100	5	30	71-117	
Tetrachloroethene	33.3	30.8	93	2	30	70-117	
Toluene	33.3	31.9	96	2	30	78-114	
trans-1,2-Dichloroethene	33.3	32.8	91	5	30	80-119	
trans-1,3-Dichloropropene	33.3	31.3	94	3	30	46-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3933.D

Lab ID: 240-28495-B-7 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Trichloroethene	33.3	30.5	87	8	30	66-120	
Trichlorofluoromethane	33.3	29.4	88	6	30	46-157	
Vinyl chloride	33.3	76.5	61	7	30	49-130	
Dibromochloromethane	33.3	32.5	97	3	30	56-118	
Xylenes, Total	99.9	96.9	97	2	30	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Batch Number: 99825 Batch Start Date: 08/31/13 14:23 Batch Analyst: Mancine, Louis

Batch Method: 5035 Batch End Date: 08/31/13 16:02

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
MB 240-99825/1		5035, 8260B				5.00 g	5 mL		
240-28498-B-1	DR-SB-46I-39-40	5035, 8260B	T	34.99 g	41.35 g	6.36 g	5 mL		
240-28498-B-2	DR-SB-46S-19-20	5035, 8260B	T	35.39 g	41.95 g	6.56 g	5 mL		

Batch Notes	
Balance ID	B035

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab File ID: UX87235.D Lab Sample ID: MB 240-99825/1-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 09/06/2013 08:09

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
DR-SB-46I-39-40	240-28498-1	UX87236.D	09/06/2013 08:30
DR-SB-46S-19-20	240-28498-2	UX87237.D	09/06/2013 08:51

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99825/1-A

Matrix: Solid | Lab File ID: UX87235.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 09/06/2013 08:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100346 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	0.62
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.34
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	1.3
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.36
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.52
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.30
87-61-6	1,2,3-Trichlorobenzene	5.0	U	5.0	0.38
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	0.90
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.17
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	0.27
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	1.3
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.36
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.34
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.69
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.35
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.34
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.66
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.94
110-75-8	2-Chloroethyl vinyl ether	50	U	50	1.4
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.40
591-78-6	2-Hexanone	20	U	20	0.63
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.41
67-64-1	Acetone	12.2	J	20	6.3
71-43-2	Benzene	5.0	U	5.0	0.23
108-86-1	Bromobenzene	5.0	U	5.0	0.33
74-97-5	Bromochloromethane	5.0	U	5.0	0.71
75-25-2	Bromoform	5.0	U	5.0	0.33
74-83-9	Bromomethane	5.0	U	5.0	0.54
75-15-0	Carbon disulfide	5.0	U	5.0	0.44
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.37
108-90-7	Chlorobenzene	5.0	U	5.0	0.33
75-00-3	Chloroethane	5.0	U	5.0	0.86
67-66-3	Chloroform	5.0	U	5.0	0.29

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99825/1-A

Matrix: Solid | Lab File ID: UX87235.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 09/06/2013 08:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100346 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.0	U	5.0	0.41
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.36
75-27-4	Bromodichloromethane	5.0	U	5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.34
106-93-4	1,2-Dibromoethane	5.0	U	5.0	0.50
74-95-3	Dibromomethane	5.0	U	5.0	0.63
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	0.50
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	5.0	U	5.0	0.26
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.2
98-82-8	Isopropylbenzene	5.0	U	5.0	0.16
78-93-3	2-Butanone	20	U	20	1.4
108-10-1	4-Methyl-2-pentanone	20	U	20	0.54
179601-23-1	m-Xylene & p-Xylene	10	U	10	1.2
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.43
91-20-3	Naphthalene	5.0	U	5.0	0.19
104-51-8	n-Butylbenzene	5.0	U	5.0	0.23
75-09-2	Methylene Chloride	3.62	J	5.0	0.67
103-65-1	n-Propylbenzene	5.0	U	5.0	0.40
95-47-6	o-Xylene	5.0	U	5.0	0.35
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.21
135-98-8	sec-Butylbenzene	5.0	U	5.0	0.18
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.22
100-42-5	Styrene	5.0	U	5.0	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.37
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.29
127-18-4	Tetrachloroethene	5.0	U	5.0	0.52
108-88-3	Toluene	0.431	J	5.0	0.27
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.41
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.54
79-01-6	Trichloroethene	5.0	U	5.0	0.42
75-69-4	Trichlorofluoromethane	5.0	U	5.0	0.34
75-65-0	tert-Butyl alcohol	200	U	200	7.6
108-05-4	Vinyl acetate	10	U	10	0.25
75-01-4	Vinyl chloride	5.0	U	5.0	0.39
124-48-1	Dibromochloromethane	5.0	U	5.0	0.55

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99825/1-A

Matrix: Solid | Lab File ID: UX87235.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 09/06/2013 08:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100346 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	10	U	10	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		58-123
460-00-4	4-Bromofluorobenzene (Surr)	91		52-136
2037-26-5	Toluene-d8 (Surr)	101		67-125
1868-53-7	Dibromofluoromethane (Surr)	102		37-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99825/1-A

Matrix: Solid | Lab File ID: UX87235.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 09/06/2013 08:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 100346 | Units: ug/Kg

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87223.D

Lab ID: LCS 240-100346/6 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	57.8	116	81-119	
1,1,1-Trichloroethane	50.0	59.5	119	77-126	
1,1,2,2-Tetrachloroethane	50.0	56.6	113	77-123	
1,1,2-Trichloro-1,2,2-trichfluoroethane	50.0	56.9	114	82-138	
1,1-Dichloroethane	50.0	53.9	108	76-115	
1,1-Dichloroethene	50.0	54.6	109	75-135	
1,1-Dichloropropene	50.0	62.3	125	80-120	*
1,2,3-Trichlorobenzene	50.0	44.8	90	61-121	
1,2,3-Trichloropropane	50.0	57.0	114	84-126	
1,2,4-Trichlorobenzene	50.0	49.9	100	64-124	
1,2,4-Trimethylbenzene	50.0	55.2	110	80-129	
1,2-Dibromo-3-Chloropropane	50.0	58.7	117	61-132	
1,2-Dichlorobenzene	50.0	50.4	101	76-110	
1,2-Dichloroethane	50.0	52.2	104	72-120	
1,2-Dichloropropane	50.0	53.1	106	87-113	
1,3-Dichlorobenzene	50.0	51.4	103	78-111	
1,3-Dichloropropane	50.0	52.7	105	82-118	
1,4-Dichlorobenzene	50.0	51.1	102	75-110	
2,2-Dichloropropane	50.0	59.0	118	69-135	
2-Chloroethyl vinyl ether	100	113	113	28-173	
2-Chlorotoluene	50.0	54.1	108	78-119	
2-Hexanone	100	126	126	64-136	
4-Chlorotoluene	50.0	54.7	109	79-118	
Acetone	100	117	117	41-137	
Benzene	50.0	53.3	107	79-112	
Bromobenzene	50.0	54.0	108	81-115	
Bromochloromethane	50.0	51.9	104	79-111	
Bromoform	50.0	50.7	101	62-133	
Bromomethane	50.0	49.9	100	42-136	
Carbon disulfide	50.0	57.5	115	62-146	
Carbon tetrachloride	50.0	63.7	127	71-129	
Chlorobenzene	50.0	51.5	103	78-110	
Chloroethane	50.0	50.5	101	58-117	
Chloroform	50.0	54.1	108	77-114	
Chloromethane	50.0	43.4	87	50-110	
cis-1,2-Dichloroethene	50.0	53.6	107	76-113	
Bromodichloromethane	50.0	55.6	111	84-122	
cis-1,3-Dichloropropene	50.0	49.5	99	74-128	
1,2-Dibromoethane	50.0	55.0	110	83-117	
Dibromomethane	50.0	54.7	109	85-120	
Dichlorodifluoromethane	50.0	36.0	72	26-113	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87223.D

Lab ID: LCS 240-100346/6 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	50.0	54.9	110	79-117	
Hexachlorobutadiene	50.0	42.3	85	54-131	
Isopropylbenzene	50.0	59.0	118	76-122	
2-Butanone	100	107	107	52-131	
4-Methyl-2-pentanone	100	120	120	67-135	
m-Xylene & p-Xylene	50.0	53.9	108	80-117	
Methyl tert-butyl ether	50.0	53.1	106	49-165	
Naphthalene	50.0	55.5	111	65-123	
n-Butylbenzene	50.0	50.4	101	68-135	
Methylene Chloride	50.0	52.1	104	75-118	
n-Propylbenzene	50.0	58.6	117	81-129	
o-Xylene	50.0	56.8	114	80-120	
p-Isopropyltoluene	50.0	57.2	114	77-131	
sec-Butylbenzene	50.0	59.3	119	74-129	
Styrene	50.0	55.6	111	87-117	
tert-Butylbenzene	50.0	58.9	118	76-126	
Tetrachloroethene	50.0	58.2	116	79-114	*
Toluene	50.0	53.8	108	75-111	
trans-1,2-Dichloroethene	50.0	56.1	112	78-117	
trans-1,3-Dichloropropene	50.0	52.3	105	73-131	
Trichloroethene	50.0	54.6	109	79-113	
Trichlorofluoromethane	50.0	55.0	110	57-146	
tert-Butyl alcohol	500	486	97	60-125	
Vinyl acetate	80.0	98.9	124	70-130	
Vinyl chloride	50.0	47.2	94	57-114	
Dibromochloromethane	50.0	49.9	100	72-127	
Xylenes, Total	100	111	111	80-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-SB-46I-39-40	240-28498-1	94	95	90	85
DR-SB-46S-19-20	240-28498-2	100	100	95	88
	MB 240-99825/1-A	102	101	101	91
	LCS 240-100346/6	100	96	103	98

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	37-132
DCA = 1,2-Dichloroethane-d4 (Surr)	58-123
TOL = Toluene-d8 (Surr)	67-125
BFB = 4-Bromofluorobenzene (Surr)	52-136

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TRIP BLANK	240-28498-3	96	92	86	75
	MB 240-100410/5	94	89	90	81
	LCS 240-100410/4	87	82	95	96
	240-28495-B-7 MS	99	98	95	101
	240-28495-B-7 MSD	96	94	94	95

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab File ID: BFB199.D BFB Injection Date: 09/05/2013

Instrument ID: A3UX11 BFB Injection Time: 12:23

Analysis Batch No.: 100285

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.8	
75	30.0 - 60.0 % of mass 95	53.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.2	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	80.8	
175	5.0 - 9.0 % of mass 174	6.0	(7.4)1
176	95.0 - 101.0 % of mass 174	80.4	(99.5)1
177	5.0 - 9.0 % of mass 176	5.2	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-100285/2	UXJ3891.D	09/05/2013	12:48
	STD8260 240-100285/3	UXJ3892.D	09/05/2013	13:11
	STD8260 240-100285/4	UXJ3893.D	09/05/2013	13:35
	STD8260 240-100285/5	UXJ3894.D	09/05/2013	13:59
	STD8260 240-100285/6	UXJ3895.D	09/05/2013	14:22
	STD8260 240-100285/7	UXJ3896.D	09/05/2013	14:46
	STD6 240-100285/8	UXJ3897.D	09/05/2013	15:10
	STD5 240-100285/9	UXJ3898.D	09/05/2013	15:34
	STD4 240-100285/10	UXJ3899.D	09/05/2013	15:57
	STD3 240-100285/11	UXJ3900.D	09/05/2013	16:21
	STD2 240-100285/12	UXJ3901.D	09/05/2013	16:45
	STD1 240-100285/13	UXJ3902.D	09/05/2013	17:09
	ICV 240-100285/14	UXJ3903.D	09/05/2013	17:32

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 12:48 Calibration End Date: 09/05/2013 14:46 Calibration ID: 17246

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-100285/7	UXJ3896.D
Level 2	STD8260 240-100285/6	UXJ3895.D
Level 3	STD8260 240-100285/5	UXJ3894.D
Level 4	STD8260 240-100285/4	UXJ3893.D
Level 5	STD8260 240-100285/3	UXJ3892.D
Level 6	STD8260 240-100285/2	UXJ3891.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1521 0.1769	0.1543	0.1570	0.1627	0.1590	Ave		0.1603				5.6		15.0			
Chloromethane	0.3548 0.3586	0.3269	0.3524	0.3331	0.3555	Ave		0.3469			0.1000	3.9		15.0			
Vinyl chloride	0.2809 0.2831	0.2807	0.2836	0.2760	0.2798	Ave		0.2807				1.0		15.0			
Bromomethane	0.0684 0.0917	0.0787	0.0852	0.0816	0.0934	Ave		0.0832				11.0		15.0			
Chloroethane	0.0981 0.1274	0.1179	0.1281	0.1262	0.1279	Ave		0.1209				9.8		15.0			
Trichlorofluoromethane	0.2608 0.2613	0.2518	0.2710	0.2579	0.2715	Ave		0.2624				2.9		15.0			
Acrolein	0.0420 0.0375	0.0418	0.0389	0.0380	0.0393	Ave		0.0396				4.8		15.0			
1,1-Dichloroethene	0.2497 0.2258	0.2657	0.2457	0.2231	0.2352	Ave		0.2409				6.7		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1209 0.1364	0.1202	0.1244	0.1165	0.1275	Ave		0.1243				5.7		15.0			
Acetone	0.2265 0.1197	0.1538	0.1500	0.1186	0.1262	Lin1	0.2015	0.1176							0.9970		0.9900
Iodomethane	0.3189 0.3046	0.3252	0.3477	0.3049	0.3174	Ave		0.3198				5.0		15.0			
Carbon disulfide	0.6250 0.5428	0.5736	0.6174	0.5457	0.5645	Ave		0.5782				6.1		15.0			
Acetonitrile	0.0590 0.0378	0.0481	0.0419	0.0413	0.0410	Lin1	0.2119	0.0382							0.9990		0.9900
Methyl acetate	0.4734 0.3755	0.4114	0.3831	0.3695	0.3887	Ave		0.4003				9.6		15.0			
Methylene Chloride	0.6179 0.2554	0.4373	0.3278	0.2767	0.2729	Lin1	0.3739	0.2478							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 12:48 Calibration End Date: 09/05/2013 14:46 Calibration ID: 17246

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0266 0.0191	0.0209	0.0222	0.0213	0.0219	Ave		0.0220				11.0		15.0			
Acrylonitrile	0.1739 0.1500	0.1680	0.1587	0.1515	0.1509	Ave		0.1588				6.3		15.0			
Methyl tert-butyl ether	0.8600 0.7817	0.8067	0.7797	0.7175	0.8038	Ave		0.7916				5.9		15.0			
trans-1,2-Dichloroethene	0.3478 0.3316	0.3236	0.3428	0.2988	0.3308	Ave		0.3292				5.3		15.0			
Hexane	0.0532 0.0670	0.0761	0.0610	0.0529	0.0586	Ave		0.0614				14.0		15.0			
1,1-Dichloroethane	0.7275 0.7203	0.6945	0.7063	0.6542	0.6924	Ave		0.6992			0.1000	3.7		15.0			
Vinyl acetate	0.0207 0.0368	0.0326	0.0375	0.0346	0.0368	Lin1	-0.019	0.0372							0.9990		0.9900
cis-1,2-Dichloroethene	0.3894 0.3560	0.3566	0.3625	0.3244	0.3519	Ave		0.3568				5.8		15.0			
2-Butanone	0.2166 0.1609	0.1698	0.1662	0.1559	0.1760	Ave		0.1742				13.0		15.0			
2,2-Dichloropropane	0.3645 0.3008	0.3321	0.3223	0.3126	0.3203	Ave		0.3254				6.7		15.0			
Bromochloromethane	0.2236 0.1910	0.1822	0.1995	0.1786	0.1896	Ave		0.1941				8.3		15.0			
Tetrahydrofuran	0.1400 0.0976	0.1260	0.1120	0.1008	0.1026	Ave		0.1132				15.0		15.0			
Chloroform	0.6451 0.5973	0.5974	0.5993	0.5549	0.5890	Ave		0.5972				4.8		15.0			
1,1,1-Trichloroethane	0.4801 0.4392	0.4811	0.4858	0.4269	0.4493	Ave		0.4604				5.5		15.0			
Cyclohexane	0.5183 0.6167	0.5444	0.5660	0.5386	0.5817	Ave		0.5610				6.3		15.0			
1,1-Dichloropropene	0.4128 0.4585	0.4145	0.4213	0.4060	0.4351	Ave		0.4247				4.5		15.0			
Carbon tetrachloride	0.4630 0.4342	0.4191	0.4348	0.3968	0.4269	Ave		0.4291				5.1		15.0			
Benzene	1.2195 1.3256	1.2376	1.2377	1.1832	1.2996	Ave		1.2506				4.2		15.0			
1,2-Dichloroethane	0.5478 0.5587	0.5495	0.5877	0.5160	0.5604	Ave		0.5534				4.2		15.0			
Trichloroethene	0.4424 0.3903	0.3987	0.3906	0.3509	0.3862	Ave		0.3932				7.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 12:48 Calibration End Date: 09/05/2013 14:46 Calibration ID: 17246

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.3584 0.4230	0.3282	0.3438	0.3321	0.3853	Ave		0.3618				10.0		15.0			
1,2-Dichloropropane	0.3678 0.4030	0.4058	0.3886	0.3621	0.3944	Ave		0.3870				4.7		15.0			
Dibromomethane	0.2040 0.1870	0.2026	0.1790	0.1815	0.1830	Ave		0.1895				5.8		15.0			
1,4-Dioxane	0.0016 0.0015	0.0017	0.0018	0.0015	0.0018	Ave		0.0017				8.6		15.0			
Bromodichloromethane	0.4326 0.4274	0.4130	0.4029	0.3955	0.4180	Ave		0.4149				3.4		15.0			
2-Chloroethyl vinyl ether	0.1621 0.2000	0.1695	0.1745	0.1767	0.2016	Ave		0.1807				9.0		15.0			
cis-1,3-Dichloropropene	0.4410 0.4963	0.4412	0.4650	0.4406	0.4894	Ave		0.4623				5.5		15.0			
4-Methyl-2-pentanone	0.3162 0.3124	0.3015	0.3091	0.2990	0.3403	Ave		0.3131				4.7		15.0			
Toluene	2.1647 2.3826	2.0653	2.1950	2.0745	2.3314	Ave		2.2023				5.9		15.0			
trans-1,3-Dichloropropene	0.5664 0.6649	0.6058	0.6252	0.5862	0.6835	Ave		0.6220				7.3		15.0			
Ethyl methacrylate	0.4254 0.5310	0.4365	0.4985	0.4569	0.5589	Ave		0.4845				11.0		15.0			
1,1,2-Trichloroethane	0.4197 0.3833	0.3992	0.4013	0.3635	0.4016	Ave		0.3948				4.9		15.0			
1,3-Dichloropropane	0.6878 0.6742	0.6842	0.6782	0.6421	0.6910	Ave		0.6762				2.6		15.0			
Tetrachloroethene	0.3966 0.4037	0.3831	0.3895	0.3529	0.3971	Ave		0.3871				4.7		15.0			
2-Hexanone	0.2819 0.2991	0.2708	0.2708	0.2807	0.3291	Ave		0.2887				7.7		15.0			
Dibromochloromethane	0.4893 0.4865	0.4687	0.4612	0.4517	0.5027	Ave		0.4767				4.0		15.0			
1,2-Dibromoethane	0.3791 0.3519	0.3695	0.3652	0.3410	0.3738	Ave		0.3634				3.9		15.0			
Chlorobenzene	1.3408 1.2458	1.2278	1.2504	1.1653	1.2741	Ave		1.2507			0.3000	4.6		15.0			
1,1,1,2-Tetrachloroethane	0.5370 0.4655	0.4692	0.4765	0.4375	0.4926	Ave		0.4797				6.9		15.0			
Ethylbenzene	0.6040 0.6621	0.5639	0.6204	0.5676	0.6636	Ave		0.6136				7.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 12:48 Calibration End Date: 09/05/2013 14:46 Calibration ID: 17246

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6333 0.8039	0.6457	0.7162	0.7003	0.7958	Ave		0.7159				10.0		15.0			
o-Xylene	0.5237 0.6814	0.5679	0.6027	0.5944	0.6893	Ave		0.6099				11.0		15.0			
Styrene	0.8119 1.0799	0.8297	0.9469	0.9353	1.0861	Ave		0.9483				12.0		15.0			
Bromoform	0.1904 0.1800	0.1817	0.1803	0.1656	0.1834	Ave		0.1802			0.1000	4.5		15.0			
Isopropylbenzene	1.2798 1.5103	1.2006	1.3408	1.3149	1.5219	Ave		1.3614				9.5		15.0			
1,1,2,2-Tetrachloroethane	0.8613 0.6827	0.7999	0.8193	0.6830	0.7734	Ave		0.7699			0.3000	9.5		15.0			
Bromobenzene	1.0109 0.9305	0.9283	0.9975	0.9278	0.9803	Ave		0.9626				4.0		15.0			
1,2,3-Trichloropropane	0.4852 0.2505	0.2627	0.2807	0.2407	0.2770	Lin1	0.1620	0.2488							0.9920		0.9900
trans-1,4-Dichloro-2-butene	0.2478 0.2847	0.3221	0.2843	0.2724	0.3198	Ave		0.2885				9.9		15.0			
n-Propylbenzene	0.8326 0.9272	0.7349	0.8299	0.9134	1.0028	Ave		0.8735				11.0		15.0			
2-Chlorotoluene	0.9093 0.8590	0.8785	0.9294	0.8036	0.9118	Ave		0.8819				5.2		15.0			
1,3,5-Trimethylbenzene	2.1088 2.6517	2.2279	2.4244	2.3939	2.7235	Ave		2.4217				9.8		15.0			
4-Chlorotoluene	0.8536 0.9213	0.8498	0.9339	0.8759	0.9693	Ave		0.9006				5.4		15.0			
tert-Butylbenzene	1.6920 2.2636	2.1520	2.0132	1.8699	2.1456	Ave		2.0227				10.0		15.0			
1,2,4-Trimethylbenzene	2.0665 2.6657	2.2793	2.3833	2.3035	2.7054	Ave		2.4006				10.0		15.0			
sec-Butylbenzene	2.4681 2.8746	2.3578	2.5424	2.4637	2.8168	Ave		2.5872				8.1		15.0			
1,3-Dichlorobenzene	1.7811 1.6313	1.6183	1.6687	1.5132	1.6676	Ave		1.6467				5.3		15.0			
p-Isopropyltoluene	1.8639 2.5967	1.8536	2.2834	2.1645	2.5267	Ave		2.2148				14.0		15.0			
1,4-Dichlorobenzene	1.7577 1.7477	1.7436	1.6987	1.5939	1.7366	Ave		1.7130				3.6		15.0			
n-Butylbenzene	1.6766 2.0626	1.6630	1.6996	1.6902	1.9858	Ave		1.7963				9.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 12:48 Calibration End Date: 09/05/2013 14:46 Calibration ID: 17246

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.7378 1.6178	1.5549	1.6705	1.4823	1.6948	Ave		1.6264				5.8		15.0			
1,2-Dibromo-3-Chloropropane	0.1329 0.1382	0.1733	0.1445	0.1432	0.1628	Ave		0.1491				10.0		15.0			
1,3,5-Trichlorobenzene	1.0119 0.9263	0.9909	0.9667	0.8814	0.9888	Ave		0.9610				5.1		15.0			
1,2,4-Trichlorobenzene	1.0661 0.7863	0.9494	0.8317	0.8040	0.8172	Ave		0.8758				13.0		15.0			
Hexachlorobutadiene	0.3588 0.2869	0.3851	0.3725	0.3142	0.3332	Ave		0.3418				11.0		15.0			
Naphthalene	2.1458 2.0165	2.1313	1.9844	1.9287	2.2975	Ave		2.0840				6.4		15.0			
1,2,3-Trichlorobenzene	0.7641 0.6698	0.6912	0.7765	0.7118	0.8108	Ave		0.7374				7.4		15.0			
Dibromofluoromethane (Surr)	0.3471 0.3311	0.3046	0.3337	0.2982	0.3311	Ave		0.3243				5.8		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4011 0.4172	0.4393	0.3895	0.3866	0.4039	Ave		0.4063				4.8		15.0			
Toluene-d8 (Surr)	1.6945 1.9323	1.5982	1.6997	1.7247	1.9039	Ave		1.7589				7.4		15.0			
4-Bromofluorobenzene (Surr)	0.3197 0.3841	0.3573	0.3554	0.3463	0.3848	Ave		0.3579				6.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:10 Calibration End Date: 09/05/2013 17:09 Calibration ID: 17248

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-100285/13	UXJ3902.D
Level 2	STD2 240-100285/12	UXJ3901.D
Level 3	STD3 240-100285/11	UXJ3900.D
Level 4	STD4 240-100285/10	UXJ3899.D
Level 5	STD5 240-100285/9	UXJ3898.D
Level 6	STD6 240-100285/8	UXJ3897.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.2813 0.2412	0.2611	0.2469	0.2399	0.2474	Ave		0.2530				6.2		15.0			
Ethyl ether	0.3774 0.3369	0.3363	0.3574	0.3387	0.3487	Ave		0.3492				4.6		15.0			
3-Chloro-1-propene	0.1786 0.1551	0.1590	0.1639	0.1595	0.1681	Ave		0.1640				5.1		15.0			
Diisopropyl ether	0.2668 0.2901	0.2751	0.2906	0.2671	0.2979	Ave		0.2813				4.8		15.0			
2-Chloro-1,3-butadiene	0.8091 0.7856	0.7850	0.7930	0.7820	0.7965	Ave		0.7919				1.3		15.0			
Ethyl-t-butyl ether (ETBE)	1.1227 1.1769	1.2028	1.1450	1.1041	1.1915	Ave		1.1572				3.4		15.0			
Ethyl acetate	0.4102 0.3681	0.4197	0.3637	0.3637	0.3791	Ave		0.3841				6.4		15.0			
Propionitrile	0.0503 0.0461	0.0459	0.0471	0.0457	0.0481	Ave		0.0472	✓			3.8		15.0			
Methacrylonitrile	0.2814 0.2403	0.2636	0.2442	0.2372	0.2463	Ave		0.2522				6.8		15.0			
Isobutyl alcohol	0.0147 0.0153	0.0181	0.0152	0.0145	0.0162	Ave		0.0157	✓			8.5		15.0			
Tert-amyl-methyl ether (TAME)	0.6393 0.7448	0.6864	0.7047	0.7036	0.7627	Ave		0.7069				6.2		15.0			
n-Heptane	0.0484 0.0586	0.0537	0.0554	0.0553	0.0597	Ave		0.0552				7.3		15.0			
n-Butanol	0.0103 0.0093	0.0103	0.0105	0.0096	0.0104	Ave		0.0101	X			4.8		15.0			
Methyl methacrylate	0.3134 0.3435	0.3388	0.3166	0.3112	0.3380	Ave		0.3269				4.5		15.0			
2-Nitropropane	0.1011 0.0990	0.1040	0.1049	0.0943	0.0999	Ave		0.1005				3.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100285

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:10 Calibration End Date: 09/05/2013 17:09 Calibration ID: 17248

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1536 0.1808	0.1486	0.1687	0.1498	0.1662	Ave		0.1613				7.9		15.0			
1,2,3-Trimethylbenzene	2.0052 2.9861	2.0404	2.3540	2.4898	2.7492	Lin1	-1.473	2.8977							0.9960		0.9900
2-Methylnaphthalene	0.7984 1.0949	0.8414	0.8390	0.9107	1.0026	Ave		0.9145				12.0		15.0			
n-Butyl acetate	0.3718 0.5050	0.3758	0.3988	0.4204	0.4667	Ave		0.4231				13.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab File ID: BFB200.D BFB Injection Date: 09/06/2013

Instrument ID: A3UX11 BFB Injection Time: 10:12

Analysis Batch No.: 100410

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.4	
75	30.0 - 60.0 % of mass 95	47.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.7	(0.8)1
174	50.0 - 120.00 % of mass 95	83.1	
175	5.0 - 9.0 % of mass 174	6.5	(7.8)1
176	95.0 - 101.0 % of mass 174	82.0	(98.7)1
177	5.0 - 9.0 % of mass 176	4.7	(5.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-100410/2	UXJ3907.D	09/06/2013	10:48
	LCS 240-100410/4	UXJ3908.D	09/06/2013	11:12
	CCV 240-100410/3	UXJ3909.D	09/06/2013	11:36
	MB 240-100410/5	UXJ3911.D	09/06/2013	12:23
TRIP BLANK	240-28498-3	UXJ3926.D	09/06/2013	18:19
	240-28495-B-7 MS	UXJ3932.D	09/06/2013	20:41
	240-28495-B-7 MSD	UXJ3933.D	09/06/2013	21:05

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCVIS 240-100410/2 Calibration Date: 09/06/2013 10:48

Instrument ID: A3UX11 Calib Start Date: 09/05/2013 12:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/05/2013 14:46

Lab File ID: UXJ3907.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1603	0.1751		1.00	0.0100	9.2	50.0
Chloromethane	Ave	0.3469	0.3305	0.1000	1.00	0.0100	-4.7	50.0
Vinyl chloride	Ave	0.2807	0.2651		1.00	0.0100	-5.5	20.0
Bromomethane	Ave	0.0832	0.0813		1.00	0.0100	-2.3	50.0
Chloroethane	Ave	0.1209	0.1122		1.00	0.0100	-7.2	50.0
Trichlorofluoromethane	Ave	0.2624	0.2447		1.00	0.0100	-6.7	50.0
Acrolein	Ave	0.0396	0.0309		20.0	0.100	-21.8	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1243	0.1471		1.00	0.0100	18.3	50.0
1,1-Dichloroethene	Ave	0.2409	0.2034		1.00	0.0100	-15.6	20.0
Acetone	Lin1		0.1128		10.0	0.0200	-12.7	50.0
Iodomethane	Ave	0.3198	0.2587		1.00	0.0100	-19.1	50.0
Carbon disulfide	Ave	0.5782	0.4533		1.00	0.0100	-21.6	50.0
Acetonitrile	Lin1		0.0379		20.0	0.100	-6.4	50.0
Methyl acetate	Ave	0.4003	0.3469		10.0	0.0200	-13.3	50.0
Methylene Chloride	Lin1		0.2326		1.00	0.0100	-21.2	50.0
tert-Butyl alcohol	Ave	0.0220	0.0179		50.0	0.200	-18.8	50.0
Acrylonitrile	Ave	0.1588	0.1367		20.0	0.0200	-14.0	50.0
Methyl tert-butyl ether	Ave	0.7916	0.7011		1.00	0.0100	-11.4	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3015		1.00	0.0100	-8.4	50.0
Hexane	Ave	0.0614	0.0763		1.00	0.0100	24.2*	20.0
1,1-Dichloroethane	Ave	0.6992	0.6492	0.1000	1.00	0.0100	-7.1	50.0
Vinyl acetate	Lin1		0.0304		2.00	0.0100	-14.8	50.0
2,2-Dichloropropane	Ave	0.3254	0.2618		1.00	0.0100	-19.6	50.0
2-Butanone	Ave	0.1742	0.1532		10.0	0.0200	-12.1	50.0
cis-1,2-Dichloroethene	Ave	0.3568	0.3206		1.00	0.0100	-10.1	50.0
Bromochloromethane	Ave	0.1941	0.1785		1.00	0.0100	-8.1	50.0
Tetrahydrofuran	Ave	0.1132	0.0907		5.00	0.0100	-19.9	50.0
Chloroform	Ave	0.5972	0.5522		1.00	0.0100	-7.5	20.0
1,1,1-Trichloroethane	Ave	0.4604	0.3770		1.00	0.0100	-18.1	50.0
Cyclohexane	Ave	0.5610	0.5671		1.00	0.0100	1.1	50.0
1,1-Dichloropropene	Ave	0.4247	0.4247		1.00	0.0100	0.0	50.0
Carbon tetrachloride	Ave	0.4291	0.3928		1.00	0.0100	-8.5	50.0
1,2-Dichloroethane	Ave	0.5534	0.5017		1.00	0.0100	-9.3	50.0
Benzene	Ave	1.251	1.172		1.00	0.0100	-6.3	50.0
Trichloroethene	Ave	0.3932	0.3631		1.00	0.0100	-7.7	50.0
Methylcyclohexane	Ave	0.3618	0.3981		1.00	0.0100	10.0	50.0
1,2-Dichloropropane	Ave	0.3870	0.3703		1.00	0.0100	-4.3	20.0
1,4-Dioxane	Ave	0.0017	0.0013		50.0	0.500	-22.0	50.0
Dibromomethane	Ave	0.1895	0.1710		1.00	0.0100	-9.8	50.0
Bromodichloromethane	Ave	0.4149	0.4134		1.00	0.0100	-0.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCVIS 240-100410/2 Calibration Date: 09/06/2013 10:48

Instrument ID: A3UX11 Calib Start Date: 09/05/2013 12:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/05/2013 14:46

Lab File ID: UXJ3907.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1807	0.1616		10.0	0.0200	-10.6	50.0
cis-1,3-Dichloropropene	Ave	0.4623	0.4379		1.00	0.0100	-5.3	50.0
4-Methyl-2-pentanone	Ave	0.3131	0.2753		10.0	0.0200	-12.1	50.0
Toluene	Ave	2.202	2.069		1.00	0.0100	-6.1	20.0
trans-1,3-Dichloropropene	Ave	0.6220	0.5708		1.00	0.0100	-8.2	50.0
Ethyl methacrylate	Ave	0.4845	0.4189		1.00	0.0100	-13.6	50.0
1,1,2-Trichloroethane	Ave	0.3948	0.3475		1.00	0.0100	-12.0	50.0
1,3-Dichloropropane	Ave	0.6762	0.6167		1.00	0.0100	-8.8	50.0
Tetrachloroethene	Ave	0.3871	0.3663		1.00	0.0100	-5.4	50.0
2-Hexanone	Ave	0.2887	0.2485		10.0	0.0200	-13.9	50.0
Dibromochloromethane	Ave	0.4767	0.4410		1.00	0.0100	-7.5	50.0
1,2-Dibromoethane	Ave	0.3634	0.3327		1.00	0.0100	-8.5	50.0
Chlorobenzene	Ave	1.251	1.121	0.3000	1.00	0.0100	-10.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4797	0.4349		1.00	0.0100	-9.3	50.0
Ethylbenzene	Ave	0.6136	0.5845		1.00	0.0100	-4.7	20.0
m-Xylene & p-Xylene	Ave	0.7159	0.6945		2.00	0.0200	-3.0	50.0
o-Xylene	Ave	0.6099	0.5987		1.00	0.0100	-1.8	50.0
Styrene	Ave	0.9483	0.9113		1.00	0.0100	-3.9	50.0
Bromoform	Ave	0.1802	0.1536	0.1000	1.00	0.0100	-14.8	50.0
Isopropylbenzene	Ave	1.361	1.254		1.00	0.0100	-7.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7699	0.6748	0.3000	1.00	0.0100	-12.4	50.0
Bromobenzene	Ave	0.9626	0.9447		1.00	0.0100	-1.9	50.0
1,2,3-Trichloropropane	Lin1		0.2360		1.00	0.0100	-11.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2885	0.2713		1.00	0.0100	-6.0	50.0
n-Propylbenzene	Ave	0.8735	0.9032		1.00	0.0100	3.4	50.0
2-Chlorotoluene	Ave	0.8819	0.8537		1.00	0.0100	-3.2	50.0
1,3,5-Trimethylbenzene	Ave	2.422	2.409		1.00	0.0100	-0.5	50.0
4-Chlorotoluene	Ave	0.9006	0.9075		1.00	0.0100	0.8	50.0
tert-Butylbenzene	Ave	2.023	1.925		1.00	0.0100	-4.8	50.0
1,2,4-Trimethylbenzene	Ave	2.401	2.415		1.00	0.0100	0.6	50.0
sec-Butylbenzene	Ave	2.587	2.491		1.00	0.0100	-3.7	50.0
1,3-Dichlorobenzene	Ave	1.647	1.584		1.00	0.0100	-3.8	50.0
p-Isopropyltoluene	Ave	2.215	2.232		1.00	0.0100	0.8	50.0
1,4-Dichlorobenzene	Ave	1.713	1.674		1.00	0.0100	-2.3	50.0
n-Butylbenzene	Ave	1.796	1.747		1.00	0.0100	-2.7	50.0
1,2-Dichlorobenzene	Ave	1.626	1.561		1.00	0.0100	-4.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1491	0.1499		2.00	0.0100	0.5	50.0
1,3,5-Trichlorobenzene	Ave	0.9610	0.9156		1.00	0.0100	-4.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8758	0.7639		1.00	0.0100	-12.8	50.0
Hexachlorobutadiene	Ave	0.3418	0.3129		1.00	0.0100	-8.5	50.0
Naphthalene	Ave	2.084	1.760		1.00	0.0100	-15.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCVIS 240-100410/2 Calibration Date: 09/06/2013 10:48

Instrument ID: A3UX11 Calib Start Date: 09/05/2013 12:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/05/2013 14:46

Lab File ID: UXJ3907.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7374	0.6846		1.00	0.0100	-7.2	50.0
Dibromofluoromethane (Surr)	Ave	0.3243	0.2902		0.00746	0.00834	-10.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4063	0.3402		0.00698	0.00834	-16.3	50.0
Toluene-d8 (Surr)	Ave	1.759	1.638		0.00777	0.00834	-6.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3579	0.3334		0.00777	0.00834	-6.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100410/3 Calibration Date: 09/06/2013 11:36

Instrument ID: A3UX11 Calib Start Date: 09/05/2013 15:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/05/2013 17:09

Lab File ID: UXJ3909.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2530	0.2469		2.00	0.0100	-2.4	50.0
Ethyl ether	Ave	0.3492	0.3437		2.00	0.0100	-1.6	50.0
3-Chloro-1-propene	Ave	0.1640	0.1615		2.00	0.0100	-1.5	50.0
Diisopropyl ether	Ave	0.2813	0.2771		10.0	0.0500	-1.5	50.0
2-Chloro-1,3-butadiene	Ave	0.7919	0.7993		2.00	0.0100	0.9	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.157	1.125		5.00	0.0100	-2.8	50.0
Ethyl acetate	Ave	0.3841	0.3550		4.00	0.0200	-7.6	50.0
Propionitrile	Ave	0.0472	0.0444		4.00	0.0200	-6.0	50.0
Methacrylonitrile	Ave	0.2522	0.2177		2.00	0.0100	-13.7	50.0
Isobutyl alcohol	Ave	0.0157	0.0149		50.0	0.200	-4.9	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7069	0.6970		5.00	0.0100	-1.4	50.0
n-Heptane	Ave	0.0552	0.0609		1.00	0.0100	10.4	50.0
n-Butanol	Ave	0.0101	0.0078		50.0	0.200	-22.4	50.0
Methyl methacrylate	Ave	0.3269	0.2956		2.00	0.0100	-9.6	50.0
2-Nitropropane	Ave	0.1005	0.0923		2.00	0.0200	-8.2	50.0
Cyclohexanone	Ave	0.1613	0.1361		20.0	0.100	-15.6	50.0
1,2,3-Trimethylbenzene	Lin1		2.486		0.00909	0.0100	-9.1	50.0
2-Methylnaphthalene	Ave	0.9145	0.6832		5.00	0.0200	-25.3	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab File ID: BFB8353.D BFB Injection Date: 09/04/2013

Instrument ID: A3UX8 BFB Injection Time: 00:28

Analysis Batch No.: 100002

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.2	
75	30.0 - 60.0 % of mass 95	46.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	71.5	
175	5.0 - 9.0 % of mass 174	5.3	(7.4)1
176	95.0 - 101.0 % of mass 174	68.7	(96.1)1
177	5.0 - 9.0 % of mass 176	4.7	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-100002/3	UX87157.D	09/04/2013	01:29
	STD8260 240-100002/4	UX87158.D	09/04/2013	01:50
	STD8260 240-100002/5	UX87159.D	09/04/2013	02:12
	ICIS 240-100002/6	UX87160.D	09/04/2013	02:33
	STD8260 240-100002/7	UX87161.D	09/04/2013	02:54
	STD8260 240-100002/8	UX87162.D	09/04/2013	03:15
	STD8260 240-100002/9	UX87163.D	09/04/2013	03:36
	STD8260 240-100002/10	UX87164.D	09/04/2013	03:58
	STDA9 240-100002/11	UX87165.D	09/04/2013	04:19
	STDA9 240-100002/12	UX87166.D	09/04/2013	04:40
	STDA9 240-100002/13	UX87167.D	09/04/2013	05:01
	STDA9 240-100002/14	UX87168.D	09/04/2013	05:23
	STDA9 240-100002/15	UX87169.D	09/04/2013	05:44
	STDA9 240-100002/16	UX87170.D	09/04/2013	06:05
	ICV 240-100002/17	UX87171.D	09/04/2013	06:26

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 01:29 Calibration End Date: 09/04/2013 03:58 Calibration ID: 17222

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-100002/10	UX87164.D
Level 2	STD8260 240-100002/9	UX87163.D
Level 3	STD8260 240-100002/8	UX87162.D
Level 4	STD8260 240-100002/7	UX87161.D
Level 5	ICIS 240-100002/6	UX87160.D
Level 6	STD8260 240-100002/5	UX87159.D
Level 7	STD8260 240-100002/4	UX87158.D
Level 8	STD8260 240-100002/3	UX87157.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1947 0.1935	0.2057 0.1971	0.1819 0.1973	0.1887	0.1898	Ave		0.1936				3.6		15.0			
Chloromethane	0.1767 0.1969	0.2189 0.1933	0.1861 0.1927	0.2007	0.1992	Ave		0.1956			0.1000	6.3		15.0			
Vinyl chloride	0.1601 0.1684	0.1809 0.1627	0.1627 0.1649	0.1668	0.1676	Ave		0.1668				3.8		15.0			
Bromomethane	0.1199 0.1021	0.1109 0.0711	0.1111	0.1105	0.1099	Ave		0.1051				15.0		15.0			
Chloroethane	0.1067 0.0993	0.1136 0.0933	0.1072 0.0761	0.1027	0.1033	Ave		0.1003				11.0		15.0			
Dichlorofluoromethane	+++++ 0.2608	0.2935 0.2530	0.2517 0.2417	0.2670	0.2645	Ave		0.2617				6.3		15.0			
Trichlorofluoromethane	0.2407 0.2331	0.2433 0.2395	0.2146 0.2385	0.2281	0.2336	Ave		0.2339				3.9		15.0			
Ethyl ether	0.2470 0.2106	0.2186 0.1865	0.1817 0.1981	0.1850	0.1802	Ave		0.2010				12.0		15.0			
Acrolein	+++++ 0.0201	0.0207 0.0184	0.0202 0.0206	0.0185	0.0201	Ave		0.0198				4.8		15.0			
1,1-Dichloroethene	0.1911 0.1791	0.1747 0.1730	0.1684 0.1804	0.1615	0.1721	Ave		0.1750				5.0		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.0946 0.1302	0.1344 0.1279	0.1209 0.1280	0.1241	0.1255	Ave		0.1232				9.9		15.0			
Acetone	+++++ 0.0744	+++++ 0.0582	0.1306 0.0631	0.0934	0.0776	Lin1	0.7069	0.0602							0.9940		0.9900
Iodomethane	0.3151 0.3257	0.3288 0.2958	0.2910 0.3128	0.2856	0.3054	Ave		0.3075				5.2		15.0			
Carbon disulfide	0.4417 0.5378	0.4608 0.5058	0.4671 0.5456	0.4508	0.4849	Ave		0.4868				8.1		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 01:29 Calibration End Date: 09/04/2013 03:58 Calibration ID: 17222

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	+++++ 0.1114	0.0854 0.1081	0.0873 0.1130	0.0868	0.1027	Ave		0.0993				12.0		15.0			
Methyl acetate	0.1684 0.1886	0.1843 0.1550	0.1527 0.1706	0.1639	0.1643	Ave		0.1685				7.5		15.0			
Methylene Chloride	+++++ 0.2705	+++++ 0.2277	0.6300 0.2341	0.3300	0.2792	Lin1	1.6761	0.2210							0.9930		0.9900
tert-Butyl alcohol	0.0172 0.0213	0.0190 0.0163	0.0149 0.0173	0.0159	0.0162	Ave		0.0173				12.0		15.0			
Acrylonitrile	0.0839 0.0941	0.0930 0.0770	0.0764 0.0831	0.0818	0.0826	Ave		0.0840				7.7		15.0			
Methyl tert-butyl ether	0.5484 0.6550	0.5614 0.5772	0.5072 0.6186	0.5377	0.5461	Ave		0.5690				8.3		15.0			
trans-1,2-Dichloroethene	0.2089 0.2132	0.2141 0.1999	0.1931 0.2048	0.1881	0.2057	Ave		0.2035				4.5		15.0			
Hexane	0.0673 0.0561	0.0746 0.0570	0.0607 0.0574	0.0553	0.0563	Ave		0.0606				11.0		15.0			
1,1-Dichloroethane	0.3578 0.3589	0.3709 0.3293	0.3308 0.3507	0.3228	0.3371	Ave		0.3448			0.1000	5.0		15.0			
Vinyl acetate	+++++ 0.0396	0.0163 0.0352	0.0305 0.0396	0.0293	0.0321	Lin1	-0.051	0.0385							0.9960		0.9900
2-Butanone	+++++ 0.1036	0.1076 0.0859	0.0827 0.0932	0.0945	0.0894	Ave		0.0938				9.7		15.0			
cis-1,2-Dichloroethene	0.2119 0.2467	0.2309 0.2251	0.2169 0.2334	0.2208	0.2231	Ave		0.2261				4.8		15.0			
2,2-Dichloropropane	0.1613 0.1867	0.1609 0.1714	0.1543 0.1650	0.1633	0.1776	Ave		0.1676				6.2		15.0			
Bromochloromethane	0.1181 0.1217	0.1133 0.1094	0.1023 0.1170	0.1084	0.1078	Ave		0.1122				5.7		15.0			
Tetrahydrofuran	0.0618 0.0740	0.0633 0.0598	0.0542 0.0655	0.0598	0.0614	Ave		0.0625				9.1		15.0			
Chloroform	+++++ 0.3669	0.3614 0.3357	0.3366 0.3515	0.3219	0.3346	Ave		0.3441				4.7		15.0			
1,1,1-Trichloroethane	0.2360 0.2804	0.2660 0.2679	0.2275 0.2783	0.2356	0.2565	Ave		0.2560				8.0		15.0			
Cyclohexane	0.3748 0.3172	0.3800 0.3126	0.2773 0.3184	0.2854	0.3072	Ave		0.3216				12.0		15.0			
1,1-Dichloropropene	0.2126 0.2370	0.2124 0.2277	0.2048 0.2383	0.2141	0.2194	Ave		0.2208				5.6		15.0			
Carbon tetrachloride	0.1751 0.2217	0.2029 0.2173	0.1833 0.2325	0.1865	0.2011	Ave		0.2025				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 01:29 Calibration End Date: 09/04/2013 03:58 Calibration ID: 17222

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	+++++ 0.0077	+++++ 0.0061	0.0051 0.0065	0.0061	0.0062	Ave		0.0063	✓			14.0		15.0			
1,2-Dichloroethane	0.2798 0.3118	0.2957 0.2771	0.2676 0.2937	0.2779	0.2697	Ave		0.2842				5.3		15.0			
Benzene	0.7818 0.7983	0.8208 0.7450	0.7346 0.7757	0.7371	0.7383	Ave		0.7665				4.2		15.0			
n-Heptane	+++++ 0.0641	+++++ 0.0647	0.0519 0.0669	0.0605	0.0581	Ave		0.0610				8.9		15.0			
Trichloroethene	0.2379 0.2084	0.2218 0.1996	0.1934 0.2090	0.1924	0.1972	Ave		0.2075				7.6		15.0			
Methylcyclohexane	0.3031 0.3282	0.3648 0.3296	0.2833 0.3405	0.2860	0.3102	Ave		0.3182				8.8		15.0			
1,2-Dichloropropane	0.1689 0.2039	0.1942 0.1858	0.1777 0.1934	0.1820	0.1815	Ave		0.1859				5.9		15.0			
1,4-Dioxane	+++++ 0.0024	0.0019 0.0020	0.0019 0.0024	0.0020	0.0018	Ave		0.0021	✓			12.0		15.0			
Dibromomethane	0.1218 0.1312	0.1222 0.1182	0.1060 0.1265	0.1137	0.1084	Ave		0.1185				7.4		15.0			
Bromodichloromethane	+++++ 0.2620	0.1858 0.2453	0.1928 0.2689	0.2146	0.2148	Ave		0.2263				15.0		15.0			
2-Chloroethyl vinyl ether	+++++ 0.1290	0.0959 0.1166	0.0934 0.1268	0.1060	0.1024	Ave		0.1100				13.0		15.0			
cis-1,3-Dichloropropene	0.1893 0.2985	0.2165 0.2840	0.1974 0.3057	0.2288	0.2394	Lin1	-0.217	0.2961							0.9960		0.9900
4-Methyl-2-pentanone	+++++ 0.2069	0.1585 0.1692	0.1440 0.1823	0.1707	0.1721	Ave		0.1720				11.0		15.0			
Toluene	+++++ 1.4340	+++++ 1.3243	1.3730 1.4148	1.3093	1.3143	Ave		1.3616				4.0		15.0			
trans-1,3-Dichloropropene	0.2151 0.4110	0.2556 0.3827	0.2546 0.4363	0.2993	0.3074	Lin1	-0.395	0.4134							0.9920		0.9900
Ethyl methacrylate	0.2026 0.4476	0.2580 0.3890	0.2613 0.4359	0.3335	0.3320	Lin1	-0.377	0.4213							0.9940		0.9900
1,1,2-Trichloroethane	0.3113 0.3130	0.2960 0.2756	0.2686 0.3038	0.2846	0.2698	Ave		0.2904				6.3		15.0			
1,3-Dichloropropane	+++++ 0.5209	0.4738 0.4507	0.4283 0.4927	0.4713	0.4394	Ave		0.4682				6.8		15.0			
Tetrachloroethene	0.2287 0.2474	0.2560 0.2405	0.2065 0.2515	0.2240	0.2330	Ave		0.2359				6.9		15.0			
2-Hexanone	+++++ 0.2344	0.1701 0.1879	0.1505 0.2125	0.1861	0.1906	Ave		0.1903				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 01:29 Calibration End Date: 09/04/2013 03:58 Calibration ID: 17222

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	0.1741 0.3102	0.2157 0.2874	0.2080 0.3226	0.2288	0.2415	Lin1	-0.253	0.3081							0.9940		0.9900
1,2-Dibromoethane	+++++ 0.3054	0.2494 0.2612	0.2223 0.2881	0.2576	0.2478	Ave		0.2617				10.0		15.0			
Chlorobenzene	0.9165 0.9036	0.8916 0.8142	0.8029 0.8599	0.8245	0.8167	Ave		0.8537			0.3000	5.3		15.0			
1,1,1,2-Tetrachloroethane	0.2209 0.3018	0.2375 0.2776	0.2275 0.2994	0.2551	0.2576	Ave		0.2597				12.0		15.0			
Ethylbenzene	0.4124 0.4644	0.4344 0.4364	0.4085 0.4608	0.4229	0.4321	Ave		0.4340				4.7		15.0			
m-Xylene & p-Xylene	0.5021 0.5770	0.5152 0.5357	0.5230 0.5666	0.5177	0.5272	Ave		0.5331				4.9		15.0			
o-Xylene	0.3786 0.5630	0.4676 0.5099	0.4393 0.5316	0.4873	0.5124	Ave		0.4862				12.0		15.0			
Styrene	+++++ 0.9938	0.6709 0.8901	0.7227 0.9488	0.8001	0.8423	Ave		0.8384				14.0		15.0			
Bromoform	+++++ 0.1754	0.0940 0.1611	0.1059 0.1877	0.1202	0.1265	Lin1	-0.315	0.1785			0.1000				0.9920		0.9900
Isopropylbenzene	+++++ 1.3709	1.0947 1.2956	1.0056 1.3686	1.1812	1.2569	Ave		1.2248				11.0		15.0			
1,1,2,2-Tetrachloroethane	0.5160 0.7068	0.6134 0.6137	0.5657 0.6665	0.6250	0.6200	Ave		0.6159			0.3000	9.4		15.0			
Bromobenzene	0.6417 0.7992	0.6505 0.7226	0.6531 0.7294	0.6812	0.7164	Ave		0.6992				7.6		15.0			
1,2,3-Trichloropropane	0.1599 0.2531	0.2329 0.2116	0.2111 0.2239	0.2195	0.2281	Ave		0.2175				12.0		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2250	0.1328 0.2020	0.1463 0.2241	0.1693	0.1769	Lin1	-0.285	0.2183							0.9960		0.9900
n-Propylbenzene	+++++ 0.7860	0.5814 0.7555	0.5911 0.7618	0.6802	0.7453	Ave		0.7002				12.0		15.0			
2-Chlorotoluene	+++++ 0.6868	0.5633 0.6354	0.5580 0.6536	0.6273	0.6409	Ave		0.6236				7.5		15.0			
1,3,5-Trimethylbenzene	1.5860 2.2993	1.7173 2.2007	1.6904 2.2966	1.9708	2.1383	Ave		1.9874				15.0		15.0			
4-Chlorotoluene	+++++ 0.7423	0.5953 0.6806	0.5756 0.6981	0.6423	0.6877	Ave		0.6603				9.0		15.0			
tert-Butylbenzene	1.4292 1.9370	1.6262 1.8506	1.4175 2.0050	1.6663	1.9125	Ave		1.7306				13.0		15.0			
1,2,4-Trimethylbenzene	+++++ 2.4322	1.7629 2.2397	1.7390 2.4194	2.0548	2.2618	Ave		2.1300				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 01:29 Calibration End Date: 09/04/2013 03:58 Calibration ID: 17222

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	1.8739 2.6937	1.9971 2.6212	2.0289 2.8147	2.4056	2.6625	Ave		2.3872				15.0		15.0			
1,3-Dichlorobenzene	+++++ 1.4222	1.3162 1.3146	1.1700 1.3982	1.2848	1.3453	Ave		1.3216				6.3		15.0			
p-Isopropyltoluene	+++++ 2.3364	1.7454 2.2388	1.6834 2.4443	2.0098	2.2805	Ave		2.1055				14.0		15.0			
1,4-Dichlorobenzene	+++++ 1.4539	1.4366 1.3351	1.2577 1.4336	1.3155	1.3536	Ave		1.3694				5.4		15.0			
n-Butylbenzene	1.4948 2.1213	1.5329 2.0571	1.4278 2.3180	1.7481	2.0106	Lin1	-1.574	2.2097							0.9960		0.9900
1,2-Dichlorobenzene	1.2722 1.3163	1.2608 1.1727	1.1591 1.3160	1.2217	1.2423	Ave		1.2451				4.7		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0927	+++++ 0.0836	0.0771 0.1057	0.0793	0.0821	Ave		0.0868				12.0		15.0			
1,2,4-Trichlorobenzene	0.6023 0.6326	0.6608 0.5787	0.5956 0.6854	0.6489	0.6508	Ave		0.6319				5.8		15.0			
Hexachlorobutadiene	0.3383 0.2632	0.3978 0.2452	0.3004 0.3277	0.3463	0.3272	Ave		0.3183				15.0		15.0			
Naphthalene	1.2373 1.5340	1.3327 1.3772	1.2677 1.5443	1.4739	1.4835	Ave		1.4063				8.5		15.0			
1,2,3-Trichlorobenzene	0.5631 0.4975	0.6333 0.4418	0.6069 0.4956	0.6251	0.5760	Ave		0.5549				13.0		15.0			
Dibromofluoromethane (Surr)	+++++ 0.2019	0.4318 0.1867	0.2758 0.1974	0.2172	0.2116	Lin1	0.4371	0.1908							0.9990		0.9900
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2429	+++++ 0.2325	0.3653 0.2542	0.3002	0.2710	Lin1	0.5576	0.2419							0.9970		0.9900
Toluene-d8 (Surr)	+++++ 1.3934	2.9620 1.2373	1.8546 1.3044	1.5030	1.4181	Lin1	3.1595	1.2681							0.9990		0.9900
4-Bromofluorobenzene (Surr)	+++++ 0.4619	+++++ 0.4280	0.6693 0.4496	0.5446	0.5290	Lin1	1.2080	0.4362							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 04:19 Calibration End Date: 09/04/2013 06:05 Calibration ID: 17224

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-100002/16	UX87170.D
Level 2	STDA9 240-100002/15	UX87169.D
Level 3	STDA9 240-100002/14	UX87168.D
Level 4	STDA9 240-100002/13	UX87167.D
Level 5	STDA9 240-100002/12	UX87166.D
Level 6	STDA9 240-100002/11	UX87165.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylal	0.2087 0.2341	0.2096	0.2063	0.2274	0.2177	Ave		0.2173				5.2		15.0			
Acetonitrile	0.0319 0.0273	0.0303	0.0276	0.0309	0.0278	Ave		0.0293				6.7		15.0			
Diisopropyl ether	0.1895 0.2083	0.1975	0.1850	0.2141	0.2103	Ave		0.2008				5.9		15.0			
2-Chloro-1,3-butadiene	0.2818 0.3122	0.2888	0.2616	0.3103	0.3190	Ave		0.2956				7.5		15.0			
Ethyl-t-butyl ether (ETBE)	0.5645 0.6424	0.6111	0.5611	0.6583	0.6531	Ave		0.6151				7.1		15.0			
Ethyl acetate	0.1645 0.1754	0.1596	0.1562	0.1722	0.1623	Ave		0.1650				4.5		15.0			
Propionitrile	0.0349 0.0315	0.0323	0.0326	0.0348	0.0315	Ave		0.0330				4.7		15.0			
Methacrylonitrile	0.1411 0.1302	0.1377	0.1343	0.1401	0.1292	Ave		0.1354				3.7		15.0			
Tert-amyl-methyl ether (TAME)	0.4564 0.5158	0.4723	0.4489	0.5307	0.5222	Ave		0.4911				7.3		15.0			
n-Butanol	0.0047 0.0045	0.0037	0.0047	0.0048	0.0044	Ave		0.0045				8.7		15.0			
Ethyl acrylate	0.2130 0.2534	0.2087	0.2155	0.2319	0.2325	Ave		0.2258				7.4		15.0			
Methyl methacrylate	0.1615 0.1793	0.1594	0.1656	0.1766	0.1724	Ave		0.1691				4.8		15.0			
2-Nitropropane	0.0261 0.0421	0.0254	0.0261	0.0324	0.0351	Qua	-0.075	0.0289	0						1.0000		0.9900
Tetrahydrothiophene	0.1918 0.3519	0.2625	0.2920	0.3308	0.3265	Lin1	-0.874	0.3486							0.9990		0.9900
1-Chlorohexane	0.3094 0.3873	0.3599	0.3284	0.3652	0.3672	Ave		0.3529				8.1		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100002

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/04/2013 04:19 Calibration End Date: 09/04/2013 06:05 Calibration ID: 17224

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,4-Dichlorobutane	0.0949 0.1182	0.1035	0.1093	0.1177	0.1189	Ave		0.1104				8.8		15.0			
Cyclohexanone	0.0514 0.0598	0.0541	0.0550	0.0604	0.0590	Ave		0.0566				6.4		15.0			
Pentachloroethane	0.1334 0.2563	0.1085	0.1171	0.2413	0.2547	Qua	-3.360	0.2728	0						0.9980		0.9900
1,2,3-Trimethylbenzene	2.2948 2.4224	2.3162	2.2109	2.4465	2.4311	Ave		2.3536				4.0		15.0			
Benzyl chloride	0.0639 0.1909	0.0692	0.0942	0.1296	0.1484	Qua	-0.387	0.1135	0.0004						1.0000		0.9900
1,3,5-Trichlorobenzene	0.8460 0.8165	0.8203	0.7434	0.7927	0.7677	Ave		0.7978				4.7		15.0			
2-Methylnaphthalene	0.6379 0.6192	0.6505	0.8577	0.6922	0.6493	Ave		0.6845				13.0		15.0			
n-Butyl acetate	0.1851 0.2526	0.1886	0.2105	0.2496	0.2433	Ave		0.2216				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab File ID: BFB8355.D BFB Injection Date: 09/06/2013

Instrument ID: A3UX8 BFB Injection Time: 02:06

Analysis Batch No.: 100346

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.5	
75	30.0 - 60.0 % of mass 95	46.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	77.7	
175	5.0 - 9.0 % of mass 174	5.5	(7.1)1
176	95.0 - 101.0 % of mass 174	74.9	(96.4)1
177	5.0 - 9.0 % of mass 176	4.9	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-100346/4	UX87221.D	09/06/2013	03:04
	CCVIS 240-100346/5	UX87222.D	09/06/2013	03:25
	LCS 240-100346/6	UX87223.D	09/06/2013	03:47
	MB 240-99825/1-A	UX87235.D	09/06/2013	08:09
DR-SB-46I-39-40	240-28498-1	UX87236.D	09/06/2013	08:30
DR-SB-46S-19-20	240-28498-2	UX87237.D	09/06/2013	08:51

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100346/4 Calibration Date: 09/06/2013 03:04

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 04:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 06:05

Lab File ID: UX87221.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0293	0.0304		20.0	0.200	3.7	50.0
Diisopropyl ether	Ave	0.2008	0.1857		10.0	0.0200	-7.5	50.0
2-Chloro-1,3-butadiene	Ave	0.2956	0.3031		2.00	0.0200	2.5	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6151	0.5688		5.00	0.0200	-7.5	50.0
Ethyl acetate	Ave	0.1650	0.1731		4.00	0.0400	4.9	50.0
Propionitrile	Ave	0.0330	0.0346		4.00	0.200	5.1	50.0
Methacrylonitrile	Ave	0.1354	0.1442		2.00	0.200	6.5	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.4911	0.4596		5.00	0.0200	-6.4	50.0
n-Butanol	Ave	0.0045	0.0045		50.0	0.500	1.8	50.0
Ethyl acrylate	Ave	0.2258	0.2291		1.00	0.0200	1.4	50.0
Methyl methacrylate	Ave	0.1691	0.1664		2.00	0.0400	-1.6	50.0
2-Nitropropane	Qua		0.0344		2.00	0.0400	18.9	50.0
Cyclohexanone	Ave	0.0566	0.0064		20.0	0.200	-88.6*	50.0
Pentachloroethane	Qua		0.2011		1.00	0.0400	4.8	50.0
1,2,3-Trimethylbenzene	Ave	2.354	2.319		0.0197	0.0200	-1.5	50.0
Benzyl chloride	Qua		0.1247		1.00	0.0200	17.3	50.0
1,3,5-Trichlorobenzene	Ave	0.7978	0.8977		1.00	0.0200	12.5	50.0
2-Methylnaphthalene	Ave	0.6845	0.6124		5.00	0.0400	-10.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCVIS 240-100346/5 Calibration Date: 09/06/2013 03:25

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 01:29

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 03:58

Lab File ID: UX87222.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1936	0.2315		1.00	0.0200	19.6	50.0
Chloromethane	Ave	0.1956	0.2080	0.1000	1.00	0.0200	6.3	50.0
Vinyl chloride	Ave	0.1668	0.1816		1.00	0.0200	8.9	20.0
Bromomethane	Ave	0.1051	0.1141		1.00	0.0200	8.6	50.0
Chloroethane	Ave	0.1003	0.1046		1.00	0.0200	4.3	50.0
Dichlorofluoromethane	Ave	0.2617	0.2646		2.00	0.0200	1.1	50.0
Trichlorofluoromethane	Ave	0.2339	0.2564		1.00	0.0200	9.6	50.0
Ethyl ether	Ave	0.2010	0.1967		2.00	0.0200	-2.1	50.0
Acrolein	Ave	0.0198	0.0153		20.0	0.100	-22.8	50.0
1,1-Dichloroethene	Ave	0.1750	0.1954		1.00	0.0200	11.7	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1232	0.1537		1.00	0.0200	24.7	50.0
Acetone	Lin1		0.0765		10.0	0.0400	-2.3	50.0
Iodomethane	Ave	0.3075	0.3226		1.00	0.0200	4.9	50.0
Carbon disulfide	Ave	0.4868	0.5525		1.00	0.0200	13.5	50.0
3-Chloro-1-propene	Ave	0.0993	0.1114		2.00	0.0200	12.3	50.0
Methyl acetate	Ave	0.1685	0.1745		10.0	0.100	3.5	50.0
Methylene Chloride	Lin1		0.3328		1.00	0.0200	12.6	50.0
tert-Butyl alcohol	Ave	0.0173	0.0169		50.0	0.200	-2.3	50.0
Acrylonitrile	Ave	0.0840	0.0854		20.0	0.200	1.7	50.0
Methyl tert-butyl ether	Ave	0.5690	0.5754		1.00	0.0200	1.1	50.0
trans-1,2-Dichloroethene	Ave	0.2035	0.2302		1.00	0.0200	13.2	50.0
Hexane	Ave	0.0606	0.0716		1.00	0.0200	18.2	20.0
1,1-Dichloroethane	Ave	0.3448	0.3608	0.1000	1.00	0.0200	4.7	50.0
Vinyl acetate	Lin1		0.0314		2.00	0.0192	-11.6	50.0
2-Butanone	Ave	0.0938	0.0963		10.0	0.0400	2.6	50.0
cis-1,2-Dichloroethene	Ave	0.2261	0.2388		1.00	0.0200	5.6	50.0
2,2-Dichloropropane	Ave	0.1676	0.1942		1.00	0.0200	15.9	50.0
Bromochloromethane	Ave	0.1122	0.1161		1.00	0.0200	3.4	50.0
Tetrahydrofuran	Ave	0.0625	0.0663		5.00	0.0400	6.1	50.0
Chloroform	Ave	0.3441	0.3638		1.00	0.0200	5.7	20.0
1,1,1-Trichloroethane	Ave	0.2560	0.3016		1.00	0.0200	17.8	50.0
Cyclohexane	Ave	0.3216	0.3714		1.00	0.0200	15.5	50.0
1,1-Dichloropropene	Ave	0.2208	0.2636		1.00	0.0200	19.4	50.0
Carbon tetrachloride	Ave	0.2025	0.2457		1.00	0.0200	21.3	50.0
Isobutyl alcohol	Ave	0.0063	0.0067		50.0	0.500	7.7	50.0
1,2-Dichloroethane	Ave	0.2842	0.2980		1.00	0.0200	4.9	50.0
Benzene	Ave	0.7665	0.8574		1.00	0.0200	11.9	50.0
n-Heptane	Ave	0.0610	0.0754		1.00	0.0200	23.6	50.0
Trichloroethene	Ave	0.2075	0.2250		1.00	0.0200	8.4	50.0
Methylcyclohexane	Ave	0.3182	0.3752		1.00	0.0200	17.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCVIS 240-100346/5 Calibration Date: 09/06/2013 03:25

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 01:29

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 03:58

Lab File ID: UX87222.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.1859	0.2059		1.00	0.0200	10.7	20.0
Dibromomethane	Ave	0.1185	0.1272		1.00	0.0200	7.3	50.0
1,4-Dioxane	Ave	0.0021	0.0021		50.0	0.400	1.8	50.0
Bromodichloromethane	Ave	0.2263	0.2491		1.00	0.0200	10.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1100	0.1186		10.0	0.0400	7.8	50.0
cis-1,3-Dichloropropene	Lin1		0.2701		1.00	0.0200	-5.1	50.0
4-Methyl-2-pentanone	Ave	0.1720	0.1857		10.0	0.0400	8.0	50.0
Toluene	Ave	1.362	1.490		1.00	0.0200	9.4	20.0
trans-1,3-Dichloropropene	Lin1		0.3480		1.00	0.0200	-11.0	50.0
Ethyl methacrylate	Lin1		0.3842		1.00	0.0200	-4.3	50.0
1,1,2-Trichloroethane	Ave	0.2904	0.2961		1.00	0.0200	2.0	50.0
1,3-Dichloropropane	Ave	0.4682	0.5004		1.00	0.0200	6.9	50.0
Tetrachloroethene	Ave	0.2359	0.2822		1.00	0.0200	19.6	50.0
2-Hexanone	Ave	0.1903	0.2062		10.0	0.0400	8.4	50.0
Dibromochloromethane	Lin1		0.2789		1.00	0.0200	-5.4	50.0
1,2-Dibromoethane	Ave	0.2617	0.2796		1.00	0.0200	6.8	50.0
Chlorobenzene	Ave	0.8537	0.9146	0.3000	1.00	0.0200	7.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2597	0.2922		1.00	0.0200	12.5	50.0
Ethylbenzene	Ave	0.4340	0.4941		1.00	0.0200	13.8	20.0
m-Xylene & p-Xylene	Ave	0.5331	0.5826		2.00	0.0200	9.3	50.0
o-Xylene	Ave	0.4862	0.5731		1.00	0.0200	17.9	50.0
Styrene	Ave	0.8384	0.9334		1.00	0.0200	11.3	50.0
Bromoform	Lin1		0.1508	0.1000	1.00	0.0200	-6.7	50.0
Isopropylbenzene	Ave	1.225	1.440		1.00	0.0200	17.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6159	0.6762	0.3000	1.00	0.0200	9.8	50.0
Bromobenzene	Ave	0.6992	0.7956		1.00	0.0200	13.8	50.0
1,2,3-Trichloropropane	Ave	0.2175	0.2312		1.00	0.0200	6.3	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1887		1.00	0.0200	-7.0	50.0
n-Propylbenzene	Ave	0.7002	0.8375		1.00	0.0200	19.6	50.0
2-Chlorotoluene	Ave	0.6236	0.7077		1.00	0.0200	13.5	50.0
1,3,5-Trimethylbenzene	Ave	1.987	2.423		1.00	0.0200	21.9	50.0
4-Chlorotoluene	Ave	0.6603	0.7579		1.00	0.0200	14.8	50.0
tert-Butylbenzene	Ave	1.731	2.063		1.00	0.0200	19.2	50.0
1,2,4-Trimethylbenzene	Ave	2.130	2.473		1.00	0.0200	16.1	50.0
sec-Butylbenzene	Ave	2.387	2.968		1.00	0.0200	24.3	50.0
1,3-Dichlorobenzene	Ave	1.322	1.459		1.00	0.0200	10.4	50.0
p-Isopropyltoluene	Ave	2.106	2.529		0.0240	0.0200	20.1	50.0
1,4-Dichlorobenzene	Ave	1.369	1.437		1.00	0.0200	5.0	50.0
n-Butylbenzene	Lin1		2.241		1.00	0.0200	5.0	50.0
1,2-Dichlorobenzene	Ave	1.245	1.306		1.00	0.0200	4.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0868	0.0841		2.00	0.0200	-3.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCVIS 240-100346/5 Calibration Date: 09/06/2013 03:25

Instrument ID: A3UX8 Calib Start Date: 09/04/2013 01:29

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/04/2013 03:58

Lab File ID: UX87222.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Ave	0.6319	0.6388		1.00	0.0200	1.1	50.0
Hexachlorobutadiene	Ave	0.3183	0.3373		1.00	0.0200	6.0	50.0
Naphthalene	Ave	1.406	1.308		1.00	0.0200	-7.0	50.0
1,2,3-Trichlorobenzene	Ave	0.5549	0.5176		1.00	0.0200	-6.7	50.0
Dibromofluoromethane (Surr)	Lin1		0.1958		0.0490	0.0500	-2.0	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.2450		0.0483	0.0500	-3.3	50.0
Toluene-d8 (Surr)	Lin1		1.326		0.0498	0.0500	-0.4	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.4494		0.0487	0.0500	-2.5	50.0

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: STD8260 240-100285/4 Date Analyzed: 09/05/2013 13:35

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): UXJ3893.D Heated Purge: (Y/N) N

Calibration ID: 17246

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1121773	5.47	713560	8.15	252235	10.40
UPPER LIMIT		2243546	5.97	1427120	8.65	504470	10.90
LOWER LIMIT		560887	4.97	356780	7.65	126118	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-100285/14		1119942	5.47	705382	8.15	260322	10.40
CCVIS 240-100410/2		1396415	5.47	866237	8.15	298482	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: CCVIS 240-100410/2 Date Analyzed: 09/06/2013 10:48

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3907.D Heated Purge: (Y/N) N

Calibration ID: 17248

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1396415	5.47	866237	8.15	298482	10.40
UPPER LIMIT		2792830	5.97	1732474	8.65	596964	10.90
LOWER LIMIT		698208	4.97	433119	7.65	149241	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-100410/4		1309156	5.47	768106	8.15	277174	10.40
CCV 240-100410/3		1261631	5.47	736027	8.15	219652	10.40
MB 240-100410/5		1148234	5.47	683575	8.15	195385	10.40
240-28498-3	TRIP BLANK	1043194	5.47	631673	8.15	181057	10.40
240-28495-B-7 MS		1060146	5.47	661001	8.15	247456	10.40
240-28495-B-7 MSD		1099297	5.47	679241	8.15	244356	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: ICIS 240-100002/6 Date Analyzed: 09/04/2013 02:33

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX87160.D Heated Purge: (Y/N) Y

Calibration ID: 17222

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1583670	5.16	963618	7.68	465238	9.88
UPPER LIMIT		3167340	5.66	1927236	8.18	930476	10.38
LOWER LIMIT		791835	4.66	481809	7.18	232619	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-100002/17		1556113	5.16	980722	7.68	475753	9.88
CCVIS 240-100346/5		1537785	5.15	966186	7.68	471691	9.87

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: CCVIS 240-100346/5 Date Analyzed: 09/06/2013 03:25

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX87222.D Heated Purge: (Y/N) Y

Calibration ID: 17224

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1537785	5.15	966186	7.68	471691	9.87
UPPER LIMIT		3075570	5.65	1932372	8.18	943382	10.37
LOWER LIMIT		768893	4.65	483093	7.18	235846	9.37
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-100346/4		1558070	5.16	963800	7.68	462686	9.88
LCS 240-100346/6		1622732	5.16	970515	7.68	478230	9.88
MB 240-99825/1-A		1491808	5.16	933248	7.68	415353	9.88
240-28498-1	DR-SB-46I-39-40	1595866	5.16	1001137	7.68	460217	9.88
240-28498-2	DR-SB-46S-19-20	1508721	5.16	964615	7.68	448545	9.88

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab File ID: 30912004.D Lab Sample ID: MB 240-100631/23-B

Matrix: Solid Date Extracted: 09/09/2013 09:43

Instrument ID: A4HP7 Date Analyzed: 09/12/2013 09:39

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-100631/24-A	30912005.D	09/12/2013 10:03
DR-SB-46I-39-40	240-28498-1	30912014.D	09/12/2013 13:47
DR-SB-46S-19-20	240-28498-2	30912024.D	09/12/2013 17:55

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100631/23-B

Matrix: Solid | Lab File ID: 30912004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/09/2013 09:43

Sample wt/vol: 30.0(g) | Date Analyzed: 09/12/2013 09:39

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 101122 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	50	U	50	3.5
123-91-1	1,4-Dioxane	100	U	100	22
88-06-2	2,4,6-Trichlorophenol	150	U	150	8.9
95-95-4	2,4,5-Trichlorophenol	150	U	150	25
120-83-2	2,4-Dichlorophenol	150	U	150	20
105-67-9	2,4-Dimethylphenol	150	U	150	20
51-28-5	2,4-Dinitrophenol	330	U	330	21
121-14-2	2,4-Dinitrotoluene	200	U	200	17
91-58-7	2-Chloronaphthalene	50	U	50	0.45
95-57-8	2-Chlorophenol	50	U	50	8.2
91-57-6	2-Methylnaphthalene	6.7	U	6.7	0.50
95-48-7	2-Methylphenol	200	U	200	11
88-74-4	2-Nitroaniline	200	U	200	9.1
88-75-5	2-Nitrophenol	50	U	50	8.3
15831-10-4	3 & 4 Methylphenol	400	U	400	20
91-94-1	3,3'-Dichlorobenzidine	100	U	100	18
99-09-2	3-Nitroaniline	200	U	200	16
534-52-1	4,6-Dinitro-2-methylphenol	150	U	150	9.2
101-55-3	4-Bromophenyl phenyl ether	50	U	50	13
59-50-7	4-Chloro-3-methylphenol	150	U	150	21
106-47-8	4-Chloroaniline	150	U	150	17
7005-72-3	4-Chlorophenyl phenyl ether	50	U	50	13
100-01-6	4-Nitroaniline	200	U	200	26
83-32-9	Acenaphthene	6.7	U	6.7	0.76
208-96-8	Acenaphthylene	6.7	U	6.7	0.35
98-86-2	Acetophenone	100	U	100	9.2
120-12-7	Anthracene	6.7	U	6.7	0.78
1912-24-9	Atrazine	200	U	200	9.1
100-52-7	Benzaldehyde	100	U	100	12
56-55-3	Benzo[a]anthracene	6.7	U	6.7	0.63
50-32-8	Benzo[a]pyrene	6.7	U	6.7	0.64
205-99-2	Benzo[b]fluoranthene	6.7	U	6.7	0.59
191-24-2	Benzo[g,h,i]perylene	6.7	U	6.7	0.35
207-08-9	Benzo[k]fluoranthene	6.7	U	6.7	0.68

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100631/23-B

Matrix: Solid | Lab File ID: 30912004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 09/09/2013 09:43

Sample wt/vol: 30.0(g) | Date Analyzed: 09/12/2013 09:39

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 101122 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	100	U	100	22
111-44-4	Bis(2-chloroethyl)ether	100	U	100	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	25.4	J	70	19
85-68-7	Butyl benzyl phthalate	70	U	70	10
105-60-2	Caprolactam	330	U	330	37
86-74-8	Carbazole	50	U	50	27
218-01-9	Chrysene	6.7	U	6.7	1.1
84-74-2	Di-n-butyl phthalate	59.0	J	70	15
117-84-0	Di-n-octyl phthalate	70	U	70	7.9
53-70-3	Dibenzo(a,h)anthracene	6.7	U	6.7	0.66
132-64-9	Dibenzofuran	50	U	50	0.66
84-66-2	Diethyl phthalate	43.8	J	70	16
131-11-3	Dimethyl phthalate	70	U	70	17
206-44-0	Fluoranthene	6.7	U	6.7	0.55
86-73-7	Fluorene	6.7	U	6.7	0.53
118-74-1	Hexachlorobenzene	6.7	U	6.7	2.1
87-68-3	Hexachlorobutadiene	50	U	50	5.6
77-47-4	Hexachlorocyclopentadiene	330	U	330	8.1
67-72-1	Hexachloroethane	50	U	50	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	6.7	U	6.7	0.35
78-59-1	Isophorone	50	U	50	13
621-64-7	N-Nitrosodi-n-propylamine	50	U	50	6.3
62-75-9	N-Nitrosodimethylamine	100	U	100	16
86-30-6	N-Nitrosodiphenylamine	50	U	50	21
91-20-3	Naphthalene	6.7	U	6.7	0.82
98-95-3	Nitrobenzene	100	U	100	2.2
87-86-5	Pentachlorophenol	150	U	150	9.1
85-01-8	Phenanthrene	6.7	U	6.7	0.73
108-95-2	Phenol	50	U	50	7.3
129-00-0	Pyrene	6.7	U	6.7	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	100	U	100	9.5
606-20-2	2,6-Dinitrotoluene	200	U	200	21
100-02-7	4-Nitrophenol	330	U	330	17

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100631/23-B

Matrix: Solid Lab File ID: 30912004.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3540C Date Extracted: 09/09/2013 09:43

Sample wt/vol: 30.0(g) Date Analyzed: 09/12/2013 09:39

Con. Extract Vol.: 2.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 101122 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	75		36-110
4165-62-2	Phenol-d5 (Surr)	53		26-110
4165-60-0	Nitrobenzene-d5 (Surr)	48		20-110
367-12-4	2-Fluorophenol (Surr)	54		24-110
321-60-8	2-Fluorobiphenyl (Surr)	49		24-110
118-79-6	2,4,6-Tribromophenol (Surr)	46		10-110

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 30912005.D

Lab ID: LCS 240-100631/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	667	375	56	35-110	
1,4-Dioxane	667	185	28	10-110	
2,4,6-Trichlorophenol	667	353	53	12-110	
2,4,5-Trichlorophenol	667	411	62	25-110	
2,4-Dichlorophenol	667	411	62	39-110	
2,4-Dimethylphenol	667	396	59	29-110	
2,4-Dinitrophenol	1330	432	32	10-110	
2,4-Dinitrotoluene	667	503	75	48-110	
2-Chloronaphthalene	667	376	56	32-110	
2-Chlorophenol	667	379	57	37-110	
2-Methylnaphthalene	667	373	56	36-110	
2-Methylphenol	667	369	55	41-110	
2-Nitroaniline	667	440	66	45-110	
2-Nitrophenol	667	390	58	34-110	
3 & 4 Methylphenol	667	382 J	57	40-110	
3,3'-Dichlorobenzidine	1330	918	69	28-110	
3-Nitroaniline	667	465	70	44-110	
4,6-Dinitro-2-methylphenol	1330	727	55	10-110	
4-Bromophenyl phenyl ether	667	454	68	39-110	
4-Chloro-3-methylphenol	667	438	66	48-110	
4-Chloroaniline	667	374	56	30-110	
4-Chlorophenyl phenyl ether	667	430	64	40-110	
4-Nitroaniline	667	505	76	48-110	
Acenaphthene	667	382	57	38-110	
Acenaphthylene	667	369	55	40-110	
Acetophenone	667	348	52	40-110	
Anthracene	667	449	67	48-110	
Atrazine	1330	1010	76	66-127	
Benzaldehyde	1330	308	23	32-110	*
Benzo[a]anthracene	667	466	70	50-110	
Benzo[a]pyrene	667	473	71	44-110	
Benzo[b]fluoranthene	667	486	73	43-110	
Benzo[g,h,i]perylene	667	477	72	51-110	
Benzo[k]fluoranthene	667	458	69	38-105	
Bis(2-chloroethoxy)methane	667	369	55	32-110	
Bis(2-chloroethyl)ether	667	353	53	34-110	
Bis(2-ethylhexyl) phthalate	667	517	78	50-110	
Butyl benzyl phthalate	667	482	72	51-110	
Caprolactam	1330	1100	83	44-114	
Carbazole	667	482	72	50-110	
Chrysene	667	468	70	50-110	
Di-n-butyl phthalate	667	544	82	51-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 30912005.D

Lab ID: LCS 240-100631/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	667	467	70	48-110	
Dibenzo(a,h)anthracene	667	479	72	51-110	
Dibenzofuran	667	408	61	43-110	
Diethyl phthalate	667	496	74	52-110	
Dimethyl phthalate	667	443	66	50-110	
Fluoranthene	667	474	71	51-110	
Fluorene	667	421	63	46-110	
Hexachlorobenzene	667	448	67	43-110	
Hexachlorobutadiene	667	372	56	29-110	
Hexachlorocyclopentadiene	667	270 J	41	12-110	
Hexachloroethane	667	350	52	30-110	
Indeno[1,2,3-cd]pyrene	667	478	72	50-110	
Isophorone	667	355	53	36-110	
N-Nitrosodi-n-propylamine	667	346	52	38-110	
N-Nitrosodimethylamine	667	339	51	31-110	
N-Nitrosodiphenylamine	1330	887	67	46-110	
Naphthalene	667	362	54	36-110	
Nitrobenzene	667	356	53	32-110	
Pentachlorophenol	1330	673	50	10-110	
Phenanthrene	667	447	67	49-110	
Phenol	667	372	56	38-110	
Pyrene	667	454	68	49-110	
2,2'-oxybis[1-chloropropane]	667	363	54	29-110	
2,6-Dinitrotoluene	667	475	71	45-110	
4-Nitrophenol	1330	846	63	28-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
DR-SB-46I-39-40	240-28498-1	75	75	68	73	65	101
DR-SB-46S-19-20	240-28498-2	68	68	60	66	63	102
	MB 240-100631/23-B	54	53	48	49	46	75
	LCS 240-100631/24-A	58	58	53	57	56	85

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	24-110
PHL = Phenol-d5 (Surr)	26-110
NBZ = Nitrobenzene-d5 (Surr)	20-110
FBP = 2-Fluorobiphenyl (Surr)	24-110
TBP = 2,4,6-Tribromophenol (Surr)	10-110
TPH = Terphenyl-d14 (Surr)	36-110

Column to be used to flag recovery values

FORM II 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab File ID: 30905001.D DFTPP Injection Date: 09/05/2013

Instrument ID: A4HP7 DFTPP Injection Time: 15:25

Analysis Batch No.: 100302

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	36.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	43.4	
70	Less than 2.0% of mass 69	0.2	(0.6)1
127	25.0 - 75.0% of mass 198	47.5	
197	Less than 1.0% of mass 198	0.3	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	25.3	
365	Greater than 0.75% of mass 198	2.7	
441	Present, but less than mass 443	9.2	
442	40.0 - 110.0% of mass 198	62.8	
443	15.0 - 24.0% of mass 442	11.6	(18.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-100302/2	30905002.D	09/05/2013	15:47
	STD4 240-100302/3	30905003.D	09/05/2013	16:17
	STD3 240-100302/4	30905004.D	09/05/2013	16:42
	STD2 240-100302/5	30905005.D	09/05/2013	17:07
	STD1 240-100302/6	30905006.D	09/05/2013	17:32
	STD9 240-100302/7	30905007.D	09/05/2013	17:56
	STD8 240-100302/8	30905008.D	09/05/2013	18:21
	STD7 240-100302/9	30905009.D	09/05/2013	18:46
	STD6 240-100302/10	30905010.D	09/05/2013	19:11
	ICV 240-100302/11	30905011.D	09/05/2013	19:36

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-100302/6	30905006.D
Level 2	STD2 240-100302/5	30905005.D
Level 3	STD3 240-100302/4	30905004.D
Level 4	STD4 240-100302/3	30905003.D
Level 5	STD5 240-100302/2	30905002.D
Level 6	STD6 240-100302/10	30905010.D
Level 7	STD7 240-100302/9	30905009.D
Level 8	STD8 240-100302/8	30905008.D
Level 9	STD9 240-100302/7	30905007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5712	0.5686 0.5151	0.5563 0.5895	0.5026 0.5817	0.5238	Ave		0.5511				6.0		20.0			
N-Nitrosodimethylamine	0.8050	0.6484 0.8110	0.5761 0.8324	0.6865 0.8465	0.7278	Ave		0.7417				13.0		20.0			
Pyridine	1.3442	1.0642 1.2172	1.1215 1.4796	1.2156 1.4257	1.3409	Ave		1.2761				11.0		20.0			
Benzaldehyde	1.3064 1.2477	1.1483 1.1909	1.1951 1.2581	1.2038 1.2206	1.2396	Ave		1.2234			0.0100	3.7		20.0			
Phenol	1.8189	1.6269 1.7544	1.7417 1.8976	1.7447 1.8785	1.7628	Ave		1.7782			0.8000	4.9		20.0			
Aniline	2.1016	2.0153 2.0340	2.0328 2.1870	2.0892 2.1722	2.0594	Ave		2.0864				3.1		20.0			
Bis(2-chloroethyl)ether	1.4132	1.2528 1.3751	1.2571 1.4983	1.4050 1.4705	1.3829	Ave		1.3819			0.7000	6.4		20.0			
2-Chlorophenol	1.3700	1.2224 1.3134	1.2742 1.4157	1.2917 1.4276	1.2661	Ave		1.3227			0.8000	5.6		20.0			
1,3-Dichlorobenzene	1.4696	1.3499 1.4209	1.4323 1.5519	1.4055 1.5468	1.3668	Ave		1.4430				5.2		20.0			
1,4-Dichlorobenzene	1.4605	1.4126 1.4468	1.4185 1.5895	1.4339 1.5926	1.4380	Ave		1.4741				5.0		20.0			
Benzyl alcohol	0.9188	0.8913 0.8958	0.8598 0.9820	0.8924 0.9866	0.8825	Ave		0.9137				5.1		20.0			
1,2-Dichlorobenzene	1.4162	1.2775 1.3775	1.3253 1.5068	1.3286 1.4932	1.3578	Ave		1.3854				5.9		20.0			
2-Methylphenol	1.2798	1.2746 1.2365	1.2087 1.3388	1.2331 1.3212	1.2419	Ave		1.2668			0.7000	3.6		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,2'-oxybis[1-chloropropane]	1.4209	1.4467 1.3490	1.4403 1.4732	1.4104 1.4467	1.3743	Ave		1.4202				2.9		20.0			
Indene	2.5742	2.4346 2.5225	2.3906 2.7468	2.4238 2.5461	2.4529	Ave		2.5114				4.6		20.0			
3 & 4 Methylphenol	1.3879	1.2753 1.3244	1.2899 1.4567	1.3132 1.4158	1.3082	Ave		1.3464				4.9		20.0			
N-Nitrosodi-n-propylamine	1.0723	0.9822 1.0121	1.0318 1.1058	1.0746 1.0951	1.0236	Ave		1.0497			0.5000	4.2		20.0			
Acetophenone	2.1078	2.0780 2.0389	2.0072 2.1691	2.0310 2.1975	1.9786	Ave		2.0760			0.0100	3.7		20.0			
Hexachloroethane	0.6255	0.6045 0.6205	0.6300 0.6605	0.5989 0.6668	0.5932	Ave		0.6250			0.3000	4.3		20.0			
Nitrobenzene	0.4098	0.4028 0.4067	0.3975 0.4451	0.3945 0.4365	0.4102	Ave		0.4129			0.2000	4.4		20.0			
Isophorone	0.7061	0.6629 0.6987	0.6728 0.7728	0.6916 0.7575	0.6711	Ave		0.7042			0.4000	5.8		20.0			
2-Nitrophenol	0.1737	0.1327 0.1794	0.1438 0.1929	0.1572 0.1890	0.1647	Ave		0.1667			0.1000	13.0		20.0			
2,4-Dimethylphenol	0.3010	0.3335 0.2854	0.3273 0.3047	0.2790 0.3015	0.3039	Ave		0.3045			0.2000	6.1		20.0			
Benzoic acid	0.1903	+++++ 0.2061	0.1165 0.1744	0.1398 +++++	0.1656	Ave		0.1655				20.0		20.0			
Bis(2-chloroethoxy)methane	0.4030	0.3919 0.3980	0.3987 0.4362	0.3985 0.4275	0.3906	Ave		0.4055			0.3000	4.2		20.0			
2,4-Dichlorophenol	0.2677	0.2395 0.2746	0.2508 0.2980	0.2515 0.2972	0.2647	Ave		0.2680			0.2000	8.0		20.0			
1,2,4-Trichlorobenzene	0.3052	0.3042 0.3078	0.2921 0.3394	0.2999 0.3368	0.2928	Ave		0.3098				5.9		20.0			
Naphthalene	1.0085 0.9653	0.9225 0.9831	0.9326 1.0949	0.9319 1.0493	0.9584	Ave		0.9829			0.7000	5.9		20.0			
4-Chloroaniline	0.3979	0.3745 0.4048	0.3923 0.4484	0.3940 0.4453	0.3878	Ave		0.4056			0.0100	6.6		20.0			
Hexachlorobutadiene	0.1816	0.1758 0.1891	0.1761 0.2063	0.1899 0.2056	0.1821	Ave		0.1883			0.0100	6.4		20.0			
Caprolactam	0.0898	0.0924 0.0847	0.0933 0.0930	0.0990 0.0911	0.0974	Ave		0.0926			0.0100	4.8		20.0			
4-Chloro-3-methylphenol	0.3327	0.3157 0.3327	0.3153 0.3634	0.3239 0.3632	0.3207	Ave		0.3335			0.2000	5.9		20.0			
2-Methylnaphthalene	0.6877 0.6502	0.6235 0.6601	0.6208 0.7330	0.6233 0.7306	0.6207	Ave		0.6611			0.4000	7.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.6584 0.6041	0.5732 0.6145	0.5922 0.6850	0.5628 0.6788	0.5852	Ave		0.6172				7.4		20.0			
Hexachlorocyclopentadiene	0.2934	0.2561 0.3434	0.2806 0.3835	0.3093 0.3854	0.3112	Ave		0.3204			0.0500	15.0		20.0			
1,2,4,5-Tetrachlorobenzene	0.5196	0.5038 0.5357	0.5183 0.5836	0.5315 0.5907	0.5214	Ave		0.5381			0.0100	5.9		20.0			
2,4,6-Trichlorophenol	0.3370	0.2892 0.3365	0.3191 0.3716	0.3241 0.3704	0.3176	Ave		0.3332			0.2000	8.3		20.0			
2,4,5-Trichlorophenol	0.3478	0.3172 0.3530	0.3316 0.3890	0.3402 0.3900	0.3337	Ave		0.3503			0.2000	7.6		20.0			
1,1'-Biphenyl	1.5149 1.3393	1.2733 1.3894	1.3411 1.5194	1.3259 1.5495	1.2985	Ave		1.3946			0.0100	7.5		20.0			
2-Chloronaphthalene	1.1504 1.0135	0.9770 1.0473	1.0099 1.1366	1.0169 1.1616	1.0055	Ave		1.0576			0.8000	6.8		20.0			
2-Nitroaniline	0.3773	0.2958 0.3766	0.3527 0.4042	0.3491 0.4003	0.3539	Ave		0.3638			0.0100	9.5		20.0			
Dimethyl phthalate	1.1853	1.1474 1.1918	1.1662 1.2895	1.1447 1.3011	1.1362	Ave		1.1953			0.0100	5.4		20.0			
1,3-Dinitrobenzene	0.1894	0.1233 0.1956	0.1507 0.2143	0.1609 0.2157	0.1717	Ave		0.1777				18.0		20.0			
2,6-Dinitrotoluene	0.2697	0.2221 0.2680	0.2199 0.2922	0.2537 0.2887	0.2607	Ave		0.2594				10.0		20.0			
Acenaphthylene	1.8628 1.6277	1.5711 1.6844	1.5857 1.8582	1.5949 1.6980	1.5732	Ave		1.6729			0.9000	6.9		20.0			
3-Nitroaniline	0.2895	0.2140 0.2933	0.2491 0.3158	0.2780 0.3126	0.2724	Ave		0.2781			0.0100	12.0		20.0			
2,4-Dinitrophenol	0.1784	0.0641 0.1983	0.0900 0.2165	0.1210 0.2155	0.1442	Lin1	-0.228	0.2098			0.0100				0.9910		0.9900
Acenaphthene	1.3244 1.0593	1.0343 1.0932	1.0738 1.1954	1.0596 1.1960	1.0330	Ave		1.1188			0.9000	8.8		20.0			
4-Nitrophenol	0.2186	0.1777 0.2237	0.1926 0.2486	0.2029 0.2445	0.2149	Ave		0.2155				11.0		20.0			
2,4-Dinitrotoluene	0.3619	0.2770 0.3649	0.3015 0.4023	0.3056 0.3960	0.3386	Ave		0.3435			0.2000	13.0		20.0			
Dibenzofuran	1.5503 1.4763	1.4218 1.5132	1.4201 1.6553	1.4350 1.6302	1.3984	Ave		1.5001			0.8000	6.3		20.0			
2,3,4,6-Tetrachlorophenol	0.3108	0.2624 0.3113	0.2777 0.3388	0.2804 0.3450	0.2951	Ave		0.3027			0.0100	9.7		20.0			
Diethyl phthalate	1.1412	1.1608 1.1591	1.1386 1.2968	1.1621 1.2876	1.1318	Ave		1.1847			0.0100	5.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chlorophenyl phenyl ether	0.6105	0.6016 0.6296	0.5734 0.6909	0.6178 0.6824	0.5840	Ave		0.6238			0.4000	6.9		20.0			
4-Nitroaniline	0.2911	0.2132 0.2955	0.2554 0.3217	0.2835 0.3259	0.2626	Ave		0.2811			0.0100	13.0		20.0			
Fluorene	1.2141 1.2233	1.1793 1.2772	1.2016 1.3806	1.2013 1.3824	1.1674	Ave		1.2474			0.9000	6.6		20.0			
4,6-Dinitro-2-methylphenol	0.1402	0.0662 0.1493	0.0782 0.1654	0.1010 0.1605	0.1128	Lin1	-0.148	0.1584			0.0100				0.9930		0.9900
N-Nitrosodiphenylamine	0.5363	0.5026 0.5484	0.4891 0.5752	0.4987 0.5276	0.4985	Ave		0.5221			0.0100	5.8		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.8514	0.7969 0.8578	0.7876 0.9249	0.7928 0.8827	0.8013	Ave		0.8368				6.0		20.0			
Azobenzene	0.8514	0.7969 0.8578	0.7876 0.9249	0.7917 0.8827	0.8013	Ave		0.8368				6.0		20.0			
4-Bromophenyl phenyl ether	0.2003	0.1797 0.2021	0.1819 0.2210	0.1836 0.2179	0.1866	Ave		0.1966			0.1000	8.3		20.0			
Hexachlorobenzene	0.2053 0.1964	0.1782 0.1992	0.1899 0.2216	0.1861 0.2207	0.1826	Ave		0.1978			0.1000	7.9		20.0			
Atrazine	0.1815	0.1889 0.1760	0.1887 0.1867	0.1750 0.1777	0.1813	Ave		0.1820			0.0100	3.1		20.0			
Pentachlorophenol	0.1429	0.1096 0.1472	0.1117 0.1632	0.1168 0.1585	0.1300	Ave		0.1350			0.0500	16.0		20.0			
Phenanthrene	1.1771 1.0427	0.9608 1.0515	0.9787 1.1474	0.9858 1.0282	0.9888	Ave		1.0401			0.7000	7.3		20.0			
Anthracene	1.1796 1.0505	0.9709 1.0960	0.9808 1.1568	0.9829 1.0915	0.9977	Ave		1.0563			0.7000	7.5		20.0			
Carbazole	0.9137	0.8860 0.9376	0.9023 1.0350	0.8930 0.9563	0.8462	Ave		0.9213			0.0100	6.2		20.0			
Di-n-butyl phthalate	1.1504	0.9854 1.1933	0.9905 1.2364	0.9710 1.1351	1.0389	Ave		1.0876			0.0100	9.5		20.0			
Fluoranthene	1.2708 1.1643	1.0474 1.2243	1.0853 1.3485	1.0597 1.2446	1.0753	Ave		1.1689			0.6000	9.3		20.0			
Benzidine	0.1944	0.1790 +++++	0.1860 +++++	0.2178 +++++	0.1785	Ave		0.1911				8.5		20.0			
Pyrene	1.1930 1.0520	1.0028 1.0643	1.0547 1.1753	1.0140 1.1037	1.0157	Ave		1.0751			0.6000	6.4		20.0			
Butyl benzyl phthalate	0.4499	0.3765 0.4499	0.4022 0.4944	0.4262 0.4882	0.4320	Ave		0.4399			0.0100	9.1		20.0			
3,3'-Dichlorobenzidine	0.3517	0.2636 0.3624	0.2985 0.3971	0.3161 0.3997	0.3223	Ave		0.3389			0.0100	14.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100302

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:47 Calibration End Date: 09/05/2013 19:11 Calibration ID: 17254

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Bis(2-ethylhexyl) phthalate	0.6305	0.4990 0.6387	0.5549 0.7008	0.5993 0.6827	0.5923	Ave		0.6123			0.0100	11.0		20.0			
Benzo[a]anthracene	1.1595 1.0291	0.9190 1.0393	1.0010 1.1441	0.9967 1.1398	0.9882	Ave		1.0463			0.8000	8.0		20.0			
Chrysene	1.0322 0.9732	0.9078 0.9750	0.9294 1.0698	0.9332 1.0807	0.9289	Ave		0.9811			0.7000	6.6		20.0			
Di-n-octyl phthalate	1.2090	0.8186 1.2747	0.9596 1.4160	1.0323 1.4351	1.1930	Ave		1.1673			0.0100	19.0		20.0			
Benzo[b]fluoranthene	0.9564 1.0435	0.8962 1.1110	0.9510 1.2152	0.9762 1.2198	1.0377	Ave		1.0452			0.7000	11.0		20.0			
Benzo[k]fluoranthene	1.2159 1.1259	0.9920 1.1613	1.0093 1.3230	1.0436 1.3339	1.0494	Ave		1.1394			0.7000	11.0		20.0			
Benzo[a]pyrene	1.0798 1.0075	0.8832 1.0492	0.9154 1.1671	0.9375 1.1762	0.9839	Ave		1.0222			0.7000	10.0		20.0			
Indeno[1,2,3-cd]pyrene	1.1882 1.1297	0.9779 1.1565	1.0537 1.2838	1.1165 1.2928	1.1195	Ave		1.1465			0.5000	8.8		20.0			
Dibenzo(a,h)anthracene	1.0331 0.9525	0.8453 0.9915	0.8734 1.1103	0.9190 1.1240	0.9506	Ave		0.9777			0.4000	9.9		20.0			
Benzo[g,h,i]perylene	1.0207 0.9283	0.9051 0.9504	0.8934 1.0518	0.9461 1.0538	0.9496	Ave		0.9666			0.5000	6.3		20.0			
2-Fluorophenol (Surr)	1.3313	1.1342 1.2852	1.2592 1.4077	1.3403 1.4053	1.2992	Ave		1.3078				6.7		20.0			
Phenol-d5 (Surr)	1.7946	1.7109 1.7351	1.7202 1.8677	1.7163 1.8473	1.7185	Ave		1.7638				3.6		20.0			
Nitrobenzene-d5 (Surr)	0.4619 0.4166	0.4147 0.4201	0.4122 0.4600	0.4250 0.4530	0.4358	Ave		0.4333				4.6		20.0			
2-Fluorobiphenyl (Surr)	1.3100 1.1932	1.1515 1.2364	1.2142 1.3557	1.2026 1.3816	1.1649	Ave		1.2456				6.7		20.0			
2,4,6-Tribromophenol (Surr)	0.1467	0.1111 0.1558	0.1343 0.1700	0.1378 0.1710	0.1471	Ave		0.1467				13.0		20.0			
Terphenyl-d14 (Surr)	0.7506 0.6317	0.5864 0.6506	0.6180 0.7230	0.6153 0.7144	0.6117	Ave		0.6557				8.9		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab File ID: 30912001.D DFTPP Injection Date: 09/12/2013

Instrument ID: A4HP7 DFTPP Injection Time: 08:24

Analysis Batch No.: 101122

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	37.9	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	44.2	
70	Less than 2.0% of mass 69	0.3	(0.6)1
127	25.0 - 75.0% of mass 198	48.1	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	25.9	
365	Greater than 0.75% of mass 198	2.6	
441	Present, but less than mass 443	9.5	
442	40.0 - 110.0% of mass 198	64.4	
443	15.0 - 24.0% of mass 442	12.4	(19.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-101122/2	30912002.D	09/12/2013	08:49
	MB 240-100631/23-B	30912004.D	09/12/2013	09:39
	LCS 240-100631/24-A	30912005.D	09/12/2013	10:03
DR-SB-46I-39-40	240-28498-1	30912014.D	09/12/2013	13:47
DR-SB-46S-19-20	240-28498-2	30912024.D	09/12/2013	17:55

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-101122/2 Calibration Date: 09/12/2013 08:49

Instrument ID: A4HP7 Calib Start Date: 09/05/2013 15:47

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/05/2013 19:11

Lab File ID: 30912002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5511	0.5602		10.2	10.0	1.6	20.0
N-Nitrosodimethylamine	Ave	0.7417	0.7265		9.79	10.0	-2.1	20.0
Pyridine	Ave	1.276	1.342		10.5	10.0	5.2	20.0
Benzaldehyde	Ave	1.223	1.134	0.0100	18.5	20.0	-7.3	20.0
Phenol	Ave	1.778	1.715	0.8000	9.65	10.0	-3.5	20.0
Aniline	Ave	2.086	2.023		9.70	10.0	-3.0	20.0
Bis(2-chloroethyl)ether	Ave	1.382	1.315	0.7000	9.52	10.0	-4.8	20.0
2-Chlorophenol	Ave	1.323	1.318	0.8000	9.96	10.0	-0.4	20.0
1,3-Dichlorobenzene	Ave	1.443	1.422		9.86	10.0	-1.4	20.0
1,4-Dichlorobenzene	Ave	1.474	1.469		9.96	10.0	-0.4	20.0
Benzyl alcohol	Ave	0.9137	0.6716		7.35	10.0	-26.5*	20.0
1,2-Dichlorobenzene	Ave	1.385	1.387		10.0	10.0	0.1	20.0
2-Methylphenol	Ave	1.267	1.204	0.7000	9.50	10.0	-5.0	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.420	1.352		9.52	10.0	-4.8	20.0
Indene	Ave	2.511	2.455		19.5	20.0	-2.3	20.0
3 & 4 Methylphenol	Ave	1.346	1.321		9.81	10.0	-1.9	20.0
N-Nitrosodi-n-propylamine	Ave	1.050	0.9346	0.5000	8.90	10.0	-11.0	20.0
Acetophenone	Ave	2.076	1.950	0.0100	9.39	10.0	-6.1	20.0
Hexachloroethane	Ave	0.6250	0.5975	0.3000	9.56	10.0	-4.4	20.0
Nitrobenzene	Ave	0.4129	0.3898	0.2000	9.44	10.0	-5.6	20.0
Isophorone	Ave	0.7042	0.6344	0.4000	9.01	10.0	-9.9	20.0
2-Nitrophenol	Ave	0.1667	0.1765	0.1000	10.6	10.0	5.9	20.0
2,4-Dimethylphenol	Ave	0.3045	0.2861	0.2000	9.39	10.0	-6.1	20.0
Benzoic acid	Ave	0.1655	0.1932		23.3	20.0	16.7	20.0
Bis(2-chloroethoxy)methane	Ave	0.4055	0.3721	0.3000	9.18	10.0	-8.2	20.0
2,4-Dichlorophenol	Ave	0.2680	0.2664	0.2000	9.94	10.0	-0.6	20.0
1,2,4-Trichlorobenzene	Ave	0.3098	0.3079		9.94	10.0	-0.6	20.0
Naphthalene	Ave	0.9829	0.9534	0.7000	9.70	10.0	-3.0	20.0
4-Chloroaniline	Ave	0.4056	0.3877	0.0100	9.56	10.0	-4.4	20.0
Hexachlorobutadiene	Ave	0.1883	0.1864	0.0100	9.90	10.0	-1.0	20.0
Caprolactam	Ave	0.0926	0.0970	0.0100	21.0	20.0	4.8	20.0
4-Chloro-3-methylphenol	Ave	0.3335	0.3088	0.2000	9.26	10.0	-7.4	20.0
2-Methylnaphthalene	Ave	0.6611	0.6326	0.4000	9.57	10.0	-4.3	20.0
1-Methylnaphthalene	Ave	0.6172	0.5885		9.54	10.0	-4.6	20.0
Hexachlorocyclopentadiene	Ave	0.3204	0.2978	0.0500	9.30	10.0	-7.0	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5381	0.5317	0.0100	9.88	10.0	-1.2	20.0
2,4,6-Trichlorophenol	Ave	0.3332	0.3311	0.2000	9.94	10.0	-0.6	20.0
2,4,5-Trichlorophenol	Ave	0.3503	0.3477	0.2000	9.92	10.0	-0.8	20.0
1,1'-Biphenyl	Ave	1.395	1.335	0.0100	9.58	10.0	-4.2	20.0
2-Chloronaphthalene	Ave	1.058	1.034	0.8000	9.77	10.0	-2.3	20.0
2-Nitroaniline	Ave	0.3638	0.3565	0.0100	9.80	10.0	-2.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-101122/2 Calibration Date: 09/12/2013 08:49

Instrument ID: A4HP7 Calib Start Date: 09/05/2013 15:47

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/05/2013 19:11

Lab File ID: 30912002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.195	1.193	0.0100	9.98	10.0	-0.2	20.0
1,3-Dinitrobenzene	Ave	0.1777	0.1968		11.1	10.0	10.7	20.0
2,6-Dinitrotoluene	Ave	0.2594	0.2795		10.8	10.0	7.8	20.0
Acenaphthylene	Ave	1.673	1.613	0.9000	9.64	10.0	-3.6	20.0
3-Nitroaniline	Ave	0.2781	0.2896	0.0100	10.4	10.0	4.1	20.0
2,4-Dinitrophenol	Lin1		0.2013	0.0100	20.3	20.0	1.4	20.0
Acenaphthene	Ave	1.119	1.053	0.9000	9.41	10.0	-5.9	20.0
4-Nitrophenol	Ave	0.2155	0.2013		18.7	20.0	-6.6	20.0
2,4-Dinitrotoluene	Ave	0.3435	0.3629	0.2000	10.6	10.0	5.7	20.0
Dibenzofuran	Ave	1.500	1.473	0.8000	9.82	10.0	-1.8	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3027	0.3017	0.0100	9.97	10.0	-0.3	20.0
Diethyl phthalate	Ave	1.185	1.235	0.0100	10.4	10.0	4.3	20.0
4-Chlorophenyl phenyl ether	Ave	0.6238	0.6084	0.4000	9.75	10.0	-2.5	20.0
4-Nitroaniline	Ave	0.2811	0.3014	0.0100	10.7	10.0	7.2	20.0
Fluorene	Ave	1.247	1.220	0.9000	9.78	10.0	-2.2	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1427	0.0100	19.0	20.0	-5.2	20.0
N-Nitrosodiphenylamine	Ave	0.5221	0.5302	0.0100	20.3	20.0	1.6	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8368	0.7811		9.33	10.0	-6.7	20.0
4-Bromophenyl phenyl ether	Ave	0.1966	0.2036	0.1000	10.4	10.0	3.5	20.0
Hexachlorobenzene	Ave	0.1978	0.2020	0.1000	10.2	10.0	2.2	20.0
Atrazine	Ave	0.1820	0.1839	0.0100	20.2	20.0	1.0	20.0
Pentachlorophenol	Ave	0.1350	0.1487	0.0500	22.0	20.0	10.2	20.0
Phenanthrene	Ave	1.040	1.041	0.7000	10.0	10.0	0.0	20.0
Anthracene	Ave	1.056	1.041	0.7000	9.86	10.0	-1.4	20.0
Carbazole	Ave	0.9213	0.9516	0.0100	10.3	10.0	3.3	20.0
Di-n-butyl phthalate	Ave	1.088	1.144	0.0100	10.5	10.0	5.2	20.0
Fluoranthene	Ave	1.169	1.192	0.6000	10.2	10.0	2.0	20.0
Benzidine	Ave	0.1911	0.2072		21.7	20.0	8.4	20.0
Pyrene	Ave	1.075	1.052	0.6000	9.78	10.0	-2.2	20.0
Butyl benzyl phthalate	Ave	0.4399	0.4447	0.0100	10.1	10.0	1.1	20.0
3,3'-Dichlorobenzidine	Ave	0.3389	0.3650	0.0100	21.5	20.0	7.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6123	0.6305	0.0100	10.3	10.0	3.0	20.0
Benzo[a]anthracene	Ave	1.046	1.044	0.8000	9.97	10.0	-0.3	20.0
Chrysene	Ave	0.9811	0.9655	0.7000	9.84	10.0	-1.6	20.0
Di-n-octyl phthalate	Ave	1.167	1.190	0.0100	10.2	10.0	2.0	20.0
Benzo[b]fluoranthene	Ave	1.045	1.080	0.7000	10.3	10.0	3.3	20.0
Benzo[k]fluoranthene	Ave	1.139	1.124	0.7000	9.87	10.0	-1.3	20.0
Benzo[a]pyrene	Ave	1.022	1.021	0.7000	9.99	10.0	-0.1	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.147	1.174	0.5000	10.2	10.0	2.4	20.0
Dibenzo(a,h)anthracene	Ave	0.9777	0.9825	0.4000	10.0	10.0	0.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-101122/2 Calibration Date: 09/12/2013 08:49

Instrument ID: A4HP7 Calib Start Date: 09/05/2013 15:47

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/05/2013 19:11

Lab File ID: 30912002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[g,h,i]perylene	Ave	0.9666	0.9932	0.5000	10.3	10.0	2.8	20.0
2-Fluorophenol (Surr)	Ave	1.308	1.321		10.1	10.0	1.0	20.0
Phenol-d5 (Surr)	Ave	1.764	1.675		9.50	10.0	-5.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4333	0.4069		9.39	10.0	-6.1	20.0
2-Fluorobiphenyl (Surr)	Ave	1.246	1.191		9.56	10.0	-4.4	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1467	0.1562		10.6	10.0	6.5	20.0
Terphenyl-d14 (Surr)	Ave	0.6557	0.6494		9.90	10.0	-1.0	20.0

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: STD6 240-100302/10 Date Analyzed: 09/05/2013 19:11

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30905010.D Heated Purge: (Y/N) N

Calibration ID: 17254

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		292234	6.22	1223720	7.33	745016	8.83
UPPER LIMIT		584468	6.72	2447440	7.83	1490032	9.33
LOWER LIMIT		146117	5.72	611860	6.83	372508	8.33
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-100302/11		249818	6.22	1038836	7.33	612033	8.84
CCV 240-101122/2 CCVIS		238375	6.17	960763	7.31	563487	8.82

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: STD6 240-100302/10 Date Analyzed: 09/05/2013 19:11

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30905010.D Heated Purge: (Y/N) N

Calibration ID: 17254

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1260524	10.10	1443215	12.82	1266035	15.02
UPPER LIMIT		2521048	10.60	2886430	13.32	2532070	15.52
LOWER LIMIT		630262	9.60	721608	12.32	633018	14.52
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-100302/11		1017520	10.10	1185617	12.82	1033040	15.01
CCV 240-101122/2 CCVIS		962876	10.09	1125444	12.79	1015932	14.97

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: CCV 240-101122/2 Date Analyzed: 09/12/2013 08:49

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30912002.D Heated Purge: (Y/N) N

Calibration ID: 17262

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		238375	6.17	960763	7.31	563487	8.82
UPPER LIMIT		476750	6.67	1921526	7.81	1126974	9.32
LOWER LIMIT		119188	5.67	480382	6.81	281744	8.32
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-100631/23-B		190049	6.17	777485	7.30	492682	8.82
LCS 240-100631/24-A		197860	6.17	810172	7.31	509817	8.82
240-28498-1	DR-SB-46I-39-40	160899	6.17	652879	7.31	399854	8.82
240-28498-2	DR-SB-46S-19-20	167367	6.17	679340	7.31	428648	8.82

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: CCV 240-101122/2 Date Analyzed: 09/12/2013 08:49

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 30912002.D Heated Purge: (Y/N) N

Calibration ID: 17262

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		962876	10.09	1125444	12.79	1015932	14.97
UPPER LIMIT		1925752	10.59	2250888	13.29	2031864	15.47
LOWER LIMIT		481438	9.59	562722	12.29	507966	14.47
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-100631/23-B		865272	10.09	922956	12.79	866724	14.97
LCS 240-100631/24-A		898342	10.09	1027136	12.79	943365	14.97
240-28498-1	DR-SB-46I-39-40	693477	10.09	787070	12.79	747987	14.97
240-28498-2	DR-SB-46S-19-20	756628	10.09	873193	12.79	874663	14.98

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

GC VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Batch Number: 99962 Batch Start Date: 09/03/13 13:10 Batch Analyst: Shock, Ray

Batch Method: 5030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 240-99962/1		5030B, 8015C		5 g	5 mL				
LCS 240-99962/2		5030B, 8015C		5 g	5 mL				
240-28498-F-1	DR-SB-46I-39-40	5030B, 8015C	T	4.97 g	5 mL				
240-28498-F-1 MS	DR-SB-46I-39-40	5030B, 8015C	T	5.29 g	5 mL				
240-28498-F-1 MSD	DR-SB-46I-39-40	5030B, 8015C	T	5.19 g	5 mL				
240-28498-F-2	DR-SB-46S-19-20	5030B, 8015C	T	5.22 g	5 mL				

Batch Notes	
Balance ID	b045
Blank Soil Lot Number	126175

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: MB 240-99962/1-A

Matrix: Solid Date Extracted: 09/03/2013 13:10

Lab File ID:(1) YF090305.D Lab File ID:(2)

Date Analyzed:(1) 09/03/2013 13:37 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-99962/2-A	09/03/2013 14:15	
DR-SB-46I-39-40	240-28498-1	09/03/2013 15:32	
DR-SB-46I-39-40 MS	240-28498-1 MS	09/03/2013 16:10	
DR-SB-46I-39-40 MSD	240-28498-1 MSD	09/03/2013 16:49	
DR-SB-46S-19-20	240-28498-2	09/03/2013 17:27	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99962/1-A

Matrix: Solid Lab File ID: YF090305.D

Analysis Method: 8015C Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 09/03/2013 13:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99923 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	100	U	100	46

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	94		10-150

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF090306.D

Lab ID: LCS 240-99962/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	761	95	60-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF090309.D

Lab ID: 240-28498-1 MS Client ID: DR-SB-46I-39-40 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	884	120 U	782	88	10-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF090310.D

Lab ID: 240-28498-1 MSD Client ID: DR-SB-46I-39-40 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	901	750	83	4	94	10-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
DR-SB-46I-39-40	240-28498-1	40
DR-SB-46S-19-20	240-28498-2	96
	MB 240-99962/1-A	94
	LCS 240-99962/2-A	105
DR-SB-46I-39-40 MS	240-28498-1 MS	107
DR-SB-46I-39-40 MSD	240-28498-1 MSD	87

	QC LIMITS
TFT = Trifluorotoluene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8015C

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: YPID Start Date: 08/21/2013 11:53

Analysis Batch Number: 98316 End Date: 08/21/2013 16:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-98316/5 IC		08/21/2013 11:53	1	YF082105.D	RTX-VRX 0.45(mm)
STD2 240-98316/6 IC		08/21/2013 12:34	1	YF082106.D	RTX-VRX 0.45(mm)
STD3 240-98316/7 IC		08/21/2013 13:16	1	YF082107.D	RTX-VRX 0.45(mm)
STD4 240-98316/8 ICRT		08/21/2013 13:57	1	YF082108.D	RTX-VRX 0.45(mm)
STD5 240-98316/9 IC		08/21/2013 14:38	1	YF082109.D	RTX-VRX 0.45(mm)
STD6 240-98316/10 IC		08/21/2013 15:19	1	YF082110.D	RTX-VRX 0.45(mm)
ICV 240-98316/11		08/21/2013 16:00	1	YF082111.D	RTX-VRX 0.45(mm)

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 98316

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/21/2013 11:53 Calibration End Date: 08/21/2013 15:19 Calibration ID: 17011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98316/5	YF082105.D
Level 2	STD2 240-98316/6	YF082106.D
Level 3	STD3 240-98316/7	YF082107.D
Level 4	STD4 240-98316/8	YF082108.D
Level 5	STD5 240-98316/9	YF082109.D
Level 6	STD6 240-98316/10	YF082110.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.970	11.970	11.970	11.970	11.970	11.970					5.055 - 18.885	11.970
C6-C12	13.527	13.527	13.527	13.527	13.527	13.527					5.055 - 22.000	13.527
Trifluorotoluene (Surr)	9.802	9.805	9.800	9.803	9.802	9.802					9.553 - 10.053	9.802

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 98316

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/21/2013 11:53 Calibration End Date: 08/21/2013 15:19 Calibration ID: 17011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-98316/5	YF082105.D
Level 2	STD2 240-98316/6	YF082106.D
Level 3	STD3 240-98316/7	YF082107.D
Level 4	STD4 240-98316/8	YF082108.D
Level 5	STD5 240-98316/9	YF082109.D
Level 6	STD6 240-98316/10	YF082110.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	218793 178073	200683 168402	185221	179733	Ave		188484.161				9.7		20.0			
C6-C12	253410 192449	217081 182497	201115	194347	Ave		206816.484				12.0		20.0			
Trifluorotoluene (Surr)	208336 165275	165005 153793	163672	170026	Ave		171017.973				11.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: ICV 240-98316/11 Calibration Date: 08/21/2013 16:00

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082111.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	170634		724	800	-9.5	20.0
C6-C12	Ave	206816	191323		740	800	-7.5	20.0
Trifluorotoluene (Surr)	Ave	171018	169240		9.90	10.0	-1.0	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: ICV 240-98316/11 Calibration Date: 08/21/2013 16:00

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF082111.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.97	5.06	18.89
C6-C12	13.53	5.06	22.00
Trifluorotoluene (Surr)	9.80	9.55	10.05

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: YPID Start Date: 09/03/2013 12:45

Analysis Batch Number: 99923 End Date: 09/04/2013 03:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-99923/4 CCVRT		09/03/2013 12:45	1	YF090304.D	RTX-VRX 0.45(mm)
MB 240-99962/1-A		09/03/2013 13:37	1	YF090305.D	RTX-VRX 0.45(mm)
LCS 240-99962/2-A		09/03/2013 14:15	1	YF090306.D	RTX-VRX 0.45(mm)
ZZZZZ		09/03/2013 14:53	1		RTX-VRX 0.45(mm)
240-28498-1	DR-SB-46I-39-40	09/03/2013 15:32	1	YF090308.D	RTX-VRX 0.45(mm)
240-28498-1 MS	DR-SB-46I-39-40 MS	09/03/2013 16:10	1	YF090309.D	RTX-VRX 0.45(mm)
240-28498-1 MSD	DR-SB-46I-39-40 MSD	09/03/2013 16:49	1	YF090310.D	RTX-VRX 0.45(mm)
240-28498-2	DR-SB-46S-19-20	09/03/2013 17:27	1	YF090311.D	RTX-VRX 0.45(mm)
ZZZZZ		09/03/2013 18:05	1		RTX-VRX 0.45(mm)
ZZZZZ		09/03/2013 18:44	1		RTX-VRX 0.45(mm)
ZZZZZ		09/03/2013 19:22	1		RTX-VRX 0.45(mm)
CCV 240-99923/15		09/03/2013 20:01	1	YF090315.D	RTX-VRX 0.45(mm)
ZZZZZ		09/03/2013 20:40	1		RTX-VRX 0.45(mm)
ZZZZZ		09/03/2013 21:18	1		RTX-VRX 0.45(mm)
ZZZZZ		09/03/2013 21:57	1		RTX-VRX 0.45(mm)
ZZZZZ		09/03/2013 22:36	1		RTX-VRX 0.45(mm)
ZZZZZ		09/03/2013 23:14	1		RTX-VRX 0.45(mm)
ZZZZZ		09/03/2013 23:53	1		RTX-VRX 0.45(mm)
ZZZZZ		09/04/2013 00:32	1		RTX-VRX 0.45(mm)
ZZZZZ		09/04/2013 01:12	1		RTX-VRX 0.45(mm)
ZZZZZ		09/04/2013 01:51	1		RTX-VRX 0.45(mm)
ZZZZZ		09/04/2013 02:31	1		RTX-VRX 0.45(mm)
CCV 240-99923/26		09/04/2013 03:10	1		RTX-VRX 0.45(mm)

8015C

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-99923/4 Calibration Date: 09/03/2013 12:45

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090304.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	181671		771	800	-3.6	20.0
C6-C12	Ave	206816	197562		764	800	-4.5	20.0
Trifluorotoluene (Surr)	Ave	171018	167878		9.82	10.0	-1.8	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-99923/4 Calibration Date: 09/03/2013 12:45

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090304.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.98	5.05	19.01
C6-C12	13.53	5.05	22.02
Trifluorotoluene (Surr)	9.81	9.56	10.06

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-99923/15 Calibration Date: 09/03/2013 20:01

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090315.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	188484	174295		740	800	-7.5	20.0
C6-C12	Ave	206816	188331		728	800	-8.9	20.0
Trifluorotoluene (Surr)	Ave	171018	170026		9.94	10.0	-0.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-99923/15 Calibration Date: 09/03/2013 20:01

Instrument ID: YPID Calib Start Date: 08/21/2013 11:53

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/21/2013 15:19

Lab File ID: YF090315.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.98	5.05	19.01
C6-C12	13.53	5.05	22.02
Trifluorotoluene (Surr)	9.81	9.56	10.06

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: CCV 240-99923/4 Date Analyzed: 09/03/2013 12:45

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF090304.D Heated Purge: (Y/N) N

Calibration ID: 17011

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.81		
UPPER LIMIT				9.91		
LOWER LIMIT				9.71		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-99923/4 CCVRT		09/03/2013 12:45	YF090304.D	9.81		
MB 240-99962/1-A		09/03/2013 13:37	YF090305.D	9.83		
LCS 240-99962/2-A		09/03/2013 14:15	YF090306.D	9.81		
240-28498-1	DR-SB-46I-39-40	09/03/2013 15:32	YF090308.D	9.80		
240-28498-1 MS	DR-SB-46I-39-40 MS	09/03/2013 16:10	YF090309.D	9.81		
240-28498-1 MSD	DR-SB-46I-39-40 MSD	09/03/2013 16:49	YF090310.D	9.81		
240-28498-2	DR-SB-46S-19-20	09/03/2013 17:27	YF090311.D	9.80		
CCV 240-99923/15		09/03/2013 20:01	YF090315.D	9.81		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Batch Number: 100013 Batch Start Date: 09/04/13 07:26 Batch Analyst: Coast, Chris

Batch Method: 3550C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	EXDIESELSPKW 00032	EXTPHSURR 00020	
240-28498-H-1	DR-SB-46I-39-40	3550C, 8015C	T	CALC NOT SET TO RUN	29.78 g	5 mL		1 mL	
240-28498-H-2	DR-SB-46S-19-20	3550C, 8015C	T	CALC NOT SET TO RUN	29.78 g	5 mL		1 mL	
240-28500-H-2 MS		3550C, 8015C	T	CALC NOT SET TO RUN	30.12 g	5 mL	1 mL	1 mL	
240-28500-H-2 MSD		3550C, 8015C	T	CALC NOT SET TO RUN	30.37 g	5 mL	1 mL	1 mL	
MB 240-100013/23		3550C, 8015C		CALC NOT SET TO RUN	30.00 g	5 mL		1 mL	
LCS 240-100013/24		3550C, 8015C		CALC NOT SET TO RUN	30.00 g	5 mL	1 mL	1 mL	

Batch Notes	
Balance ID	b036
Na2SO4 Lot Number	963868
Prep Solvent Lot #	1141956

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: MB 240-100013/23-A

Matrix: Solid Date Extracted: 09/04/2013 07:26

Lab File ID:(1) P6F90512.D Lab File ID:(2)

Date Analyzed:(1) 09/05/2013 18:22 Date Analyzed:(2)

Instrument ID:(1) A2HP6F Instrument ID:(2)

GC Column:(1) RTX-5 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-100013/24-A	09/05/2013 18:53	
DR-SB-46I-39-40	240-28498-1	09/06/2013 04:04	
DR-SB-46S-19-20	240-28498-2	09/06/2013 04:34	
	240-28500-H-2-B MS	09/06/2013 06:36	
	240-28500-H-2-C MSD	09/06/2013 07:07	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28498-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-100013/23-A

Matrix: Solid | Lab File ID: P6F90512.D

Analysis Method: 8015C | Date Collected:

Extraction Method: 3550C | Date Extracted: 09/04/2013 07:26

Sample wt/vol: 30.00(g) | Date Analyzed: 09/05/2013 18:22

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 100244 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	17	U	17	9.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	51		10-110

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P6F90513.D

Lab ID: LCS 240-100013/24-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Diesel	83.3	69.7	84	47-138	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P6F90536.D

Lab ID: 240-28500-H-2-B MS Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Diesel	103	21 U	58.2	56	10-199	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III

DIESEL RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P6F90537.D

Lab ID: 240-28500-H-2-C MSD Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Diesel	103	59.2	58	2	30	10-199	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II

DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-5 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	C91 #
DR-SB-46I-39-40	240-28498-1	34
DR-SB-46S-19-20	240-28498-2	38
	MB 240-100013/23-A	51
	LCS 240-100013/24-A	54
	240-28500-H-2-B MS	35
	240-28500-H-2-C MSD	38

	QC LIMITS
C9 = n-Nonane	10-110

Column to be used to flag recovery values

FORM II 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: A2HP6F Start Date: 09/05/2013 15:19

Analysis Batch Number: 100244 End Date: 09/06/2013 07:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-100244/6 IC		09/05/2013 15:19	1	P6F90506.D	RTX-5 0.53(mm)
STD2 240-100244/7 IC		09/05/2013 15:49	1	P6F90507.D	RTX-5 0.53(mm)
STD3 240-100244/8 ICRT		09/05/2013 16:20	1	P6F90508.D	RTX-5 0.53(mm)
STD4 240-100244/9 IC		09/05/2013 16:50	1	P6F90509.D	RTX-5 0.53(mm)
STD5 240-100244/10 IC		09/05/2013 17:21	1	P6F90510.D	RTX-5 0.53(mm)
ICV 240-100244/11		09/05/2013 17:52	1	P6F90511.D	RTX-5 0.53(mm)
MB 240-100013/23-A		09/05/2013 18:22	1	P6F90512.D	RTX-5 0.53(mm)
LCS 240-100013/24-A		09/05/2013 18:53	1	P6F90513.D	RTX-5 0.53(mm)
ZZZZZ		09/05/2013 19:24	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 19:54	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 20:25	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 20:55	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 21:26	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 21:57	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 22:28	1		RTX-5 0.53(mm)
ZZZZZ		09/05/2013 22:59	1		RTX-5 0.53(mm)
CCV 240-100244/22		09/05/2013 23:29	1	P6F90522.D	RTX-5 0.53(mm)
ZZZZZ		09/06/2013 00:00	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 00:30	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 01:01	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 01:31	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 02:02	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 02:32	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 03:03	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 03:33	1		RTX-5 0.53(mm)
240-28498-1	DR-SB-46I-39-40	09/06/2013 04:04	1	P6F90531.D	RTX-5 0.53(mm)
240-28498-2	DR-SB-46S-19-20	09/06/2013 04:34	1	P6F90532.D	RTX-5 0.53(mm)
CCV 240-100244/33		09/06/2013 05:05	1	P6F90533.D	RTX-5 0.53(mm)
ZZZZZ		09/06/2013 05:35	1		RTX-5 0.53(mm)
ZZZZZ		09/06/2013 06:06	1		RTX-5 0.53(mm)
240-28500-H-2-B MS		09/06/2013 06:36	1	P6F90536.D	RTX-5 0.53(mm)
240-28500-H-2-C MSD		09/06/2013 07:07	1	P6F90537.D	RTX-5 0.53(mm)
CCV 240-100244/38		09/06/2013 07:37	1	P6F90538.D	RTX-5 0.53(mm)

FORM VI

DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100244

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:19 Calibration End Date: 09/05/2013 17:21 Calibration ID: 17266

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-100244/6	P6F90506.D
Level 2	STD2 240-100244/7	P6F90507.D
Level 3	STD3 240-100244/8	P6F90508.D
Level 4	STD4 240-100244/9	P6F90509.D
Level 5	STD5 240-100244/10	P6F90510.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel Range Organics [C10 - C28]	9.324	9.324	9.324	9.324	9.324						5.126 - 13.522	9.324
n-Nonane	4.109	4.107	4.108	4.109	4.109						4.059 - 4.159	4.108

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100244

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/05/2013 15:19 Calibration End Date: 09/05/2013 17:21 Calibration ID: 17266

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-100244/6	P6F90506.D
Level 2	STD2 240-100244/7	P6F90507.D
Level 3	STD3 240-100244/8	P6F90508.D
Level 4	STD4 240-100244/9	P6F90509.D
Level 5	STD5 240-100244/10	P6F90510.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	219968 206023	197355	213222	207792	Ave		208871.966				4.0		20.0			
n-Nonane	204224 217176	193811	217498	215112	Ave		209564.227				4.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: ICV 240-100244/11 Calibration Date: 09/05/2013 17:52

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F90511.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	208872	172520		414	501	-17.4	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: ICV 240-100244/11 Calibration Date: 09/05/2013 17:52

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F90511.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.32	5.13	13.52

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100244/22 Calibration Date: 09/05/2013 23:29

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F90522.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	208872	223621		535	500	7.1	20.0
n-Nonane	Ave	209564	230364		55.0	50.0	9.9	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100244/22 Calibration Date: 09/05/2013 23:29

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F90522.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.32	5.13	13.52
n-Nonane	4.11	4.06	4.16

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100244/33 Calibration Date: 09/06/2013 05:05

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F90533.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	208872	228833		548	500	9.6	20.0
n-Nonane	Ave	209564	229932		54.9	50.0	9.7	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100244/33 Calibration Date: 09/06/2013 05:05

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F90533.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.32	5.13	13.52
n-Nonane	4.11	4.06	4.16

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100244/38 Calibration Date: 09/06/2013 07:37

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F90538.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	208872	234624		562	500	12.3	20.0
n-Nonane	Ave	209564	232017		55.4	50.0	10.7	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100244/38 Calibration Date: 09/06/2013 07:37

Instrument ID: A2HP6F Calib Start Date: 09/05/2013 15:19

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 09/05/2013 17:21

Lab File ID: P6F90538.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.32	5.13	13.52
n-Nonane	4.11	4.06	4.16

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: STD3 240-100244/8 Date Analyzed: 09/05/2013 16:20

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm)

Lab File ID (Standard): P6F90508.D Heated Purge: (Y/N) N

Calibration ID: 17266

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
INITIAL CALIBRATION SURROGATE				4.11		
UPPER LIMIT				4.21		
LOWER LIMIT				4.01		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD3 240-100244/8 ICRT		09/05/2013 16:20	P6F90508.D	4.11		
MB 240-100013/23-A		09/05/2013 18:22	P6F90512.D	4.10		
LCS 240-100013/24-A		09/05/2013 18:53	P6F90513.D	4.10		
CCV 240-100244/22		09/05/2013 23:29	P6F90522.D	4.11		
240-28498-1	DR-SB-46I-39-40	09/06/2013 04:04	P6F90531.D	4.10		
240-28498-2	DR-SB-46S-19-20	09/06/2013 04:34	P6F90532.D	4.10		
CCV 240-100244/33		09/06/2013 05:05	P6F90533.D	4.11		
240-28500-H-2-B MS		09/06/2013 06:36	P6F90536.D	4.10		
240-28500-H-2-C MSD		09/06/2013 07:07	P6F90537.D	4.10		
CCV 240-100244/38		09/06/2013 07:37	P6F90538.D	4.11		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Batch Number: 100629 Batch Start Date: 09/09/13 12:40 Batch Analyst: Coast, Chris

Batch Method: 3540C Batch End Date: 09/10/13 04:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EX10PPMSPK 00009	EX2/.2SURRW 00029	AnalysisComment	
240-28498-H-1	DR-SB-46I-39-40	3540C, 8082A	T	29.88 g	10 mL		1 mL		
240-28498-H-2	DR-SB-46S-19-20	3540C, 8082A	T	29.73 g	10 mL		1 mL		
240-28528-G-3 MS		3540C, 8082A	T	30.30 g	10 mL	1 mL	1 mL		
240-28528-G-3 MSD		3540C, 8082A	T	29.96 g	10 mL	1 mL	1 mL		
MB 240-100629/23		3540C, 8082A		30.00 g	10 mL		1 mL	assoc. w/ 100624	
LCS 240-100629/24		3540C, 8082A		30.00 g	10 mL	1 mL	1 mL		

Batch Notes	
Acid used for Clean Up Reagent	1115285
Balance ID	b036
Exchange Solvent Lot #	1037686
Na2SO4 Lot Number	963860
Prep Solvent Lot #	1131846

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: MB 240-100629/23-A

Matrix: Solid Date Extracted: 09/09/2013 09:32

Lab File ID:(1) P1000025.D Lab File ID:(2) P1000025.D

Date Analyzed:(1) 09/11/2013 07:09 Date Analyzed:(2) 09/11/2013 07:09

Instrument ID:(1) A2HP10 Instrument ID:(2) A2HP10

GC Column:(1) CLP-2 ID: 0.53(mm) GC Column:(2) CLP-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
DR-SB-46I-39-40	240-28498-1	09/11/2013 03:51	09/11/2013 03:51
DR-SB-46S-19-20	240-28498-2	09/11/2013 04:06	09/11/2013 04:06
	LCS 240-100629/24-A	09/11/2013 09:38	09/11/2013 09:38
	240-28528-G-3-E MS	09/11/2013 19:18	09/11/2013 19:18
	240-28528-G-3-F MSD	09/11/2013 19:32	09/11/2013 19:32

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100629/23-A

Matrix: Solid Lab File ID: P1000025.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3540C Date Extracted: 09/09/2013 09:32

Sample wt/vol: 30.00(g) Date Analyzed: 09/11/2013 07:09

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 100924 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	33	U	33	21
11104-28-2	Aroclor-1221	33	U	33	16
11141-16-5	Aroclor-1232	33	U	33	14
53469-21-9	Aroclor-1242	33	U	33	13
12672-29-6	Aroclor-1248	33	U	33	17
11097-69-1	Aroclor-1254	33	U	33	17
11096-82-5	Aroclor-1260	33	U	33	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	147		29-151
2051-24-3	Decachlorobiphenyl	96		14-163

FORM I

PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-100629/23-A

Matrix: Solid Lab File ID: P1000025.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3540C Date Extracted: 09/09/2013 09:32

Sample wt/vol: 30.00(g) Date Analyzed: 09/11/2013 07:09

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 100924 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	78		29-151
2051-24-3	Decachlorobiphenyl	91		14-163

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P1000034.D

Lab ID: LCS 240-100629/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Aroclor-1016	333	316	95	62-120	
Aroclor-1260	333	339	102	56-122	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P1100013.D

Lab ID: 240-28528-G-3-E MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Aroclor-1016	378	38 U	368	97	22-157	
Aroclor-1260	378	38 U	373	98	13-161	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P1100014.D

Lab ID: 240-28528-G-3-F MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Aroclor-1016	383	367	96	0	30	22-157	
Aroclor-1260	383	356	93	5	30	13-161	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm) GC Column (2): CLP-1 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCB1 #	DCB2 #
DR-SB-46I-39-40	240-28498-1	100	70	85	83
DR-SB-46S-19-20	240-28498-2	77	72	90	82
	MB 240-100629/23-A	147	78	96	91
	LCS 240-100629/24-A	129	80	104	98
	240-28528-G-3-E MS	95	131	112	109
	240-28528-G-3-F MSD	87	117	112	108

	QC LIMITS
TCX = Tetrachloro-m-xylene	29-151
DCB = Decachlorobiphenyl	14-163

Column to be used to flag recovery values

FORM II 8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: A2HP10 Start Date: 09/07/2013 08:15

Analysis Batch Number: 100488 End Date: 09/07/2013 20:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 240-100488/3 IC		09/07/2013 08:15	1	P1000003.D	CLP-1 0.53(mm)
STD005 240-100488/3 IC		09/07/2013 08:15	1	P1000003.D	CLP-2 0.53(mm)
STD01 240-100488/4 IC		09/07/2013 08:30	1	P1000004.D	CLP-1 0.53(mm)
STD01 240-100488/4 IC		09/07/2013 08:30	1	P1000004.D	CLP-2 0.53(mm)
STD02 240-100488/5 IC		09/07/2013 08:45	1	P1000005.D	CLP-1 0.53(mm)
STD02 240-100488/5 IC		09/07/2013 08:45	1	P1000005.D	CLP-2 0.53(mm)
STD05 240-100488/6 IC		09/07/2013 09:00	1	P1000006.D	CLP-1 0.53(mm)
STD05 240-100488/6 IC		09/07/2013 09:00	1	P1000006.D	CLP-2 0.53(mm)
STD1 240-100488/7 IC		09/07/2013 09:15	1	P1000007.D	CLP-1 0.53(mm)
STD1 240-100488/7 IC		09/07/2013 09:15	1	P1000007.D	CLP-2 0.53(mm)
STD2 240-100488/8 IC		09/07/2013 09:30	1	P1000008.D	CLP-1 0.53(mm)
STD2 240-100488/8 IC		09/07/2013 09:30	1	P1000008.D	CLP-2 0.53(mm)
STD005 240-100488/9 IC		09/07/2013 09:46	1	P1000009.D	CLP-1 0.53(mm)
STD005 240-100488/9 IC		09/07/2013 09:46	1	P1000009.D	CLP-2 0.53(mm)
STD01 240-100488/10 IC		09/07/2013 10:01	1	P1000010.D	CLP-1 0.53(mm)
STD01 240-100488/10 IC		09/07/2013 10:01	1	P1000010.D	CLP-2 0.53(mm)
STD02 240-100488/11 IC		09/07/2013 10:16	1	P1000011.D	CLP-1 0.53(mm)
STD02 240-100488/11 IC		09/07/2013 10:16	1	P1000011.D	CLP-2 0.53(mm)
STD05 240-100488/12 IC		09/07/2013 10:31	1	P1000012.D	CLP-1 0.53(mm)
STD05 240-100488/12 IC		09/07/2013 10:31	1	P1000012.D	CLP-2 0.53(mm)
STD1 240-100488/13 IC		09/07/2013 10:46	1	P1000013.D	CLP-1 0.53(mm)
STD1 240-100488/13 IC		09/07/2013 10:46	1	P1000013.D	CLP-2 0.53(mm)
STD2 240-100488/14 IC		09/07/2013 11:01	1	P1000014.D	CLP-1 0.53(mm)
STD2 240-100488/14 IC		09/07/2013 11:01	1	P1000014.D	CLP-2 0.53(mm)
STD005 240-100488/15 IC		09/07/2013 11:16	1	P1000015.D	CLP-1 0.53(mm)
STD005 240-100488/15 IC		09/07/2013 11:16	1	P1000015.D	CLP-2 0.53(mm)
STD01 240-100488/16 IC		09/07/2013 11:31	1	P1000016.D	CLP-1 0.53(mm)
STD01 240-100488/16 IC		09/07/2013 11:31	1	P1000016.D	CLP-2 0.53(mm)
STD02 240-100488/17 IC		09/07/2013 11:46	1	P1000017.D	CLP-1 0.53(mm)
STD02 240-100488/17 IC		09/07/2013 11:46	1	P1000017.D	CLP-2 0.53(mm)
STD05 240-100488/18 IC		09/07/2013 12:02	1	P1000018.D	CLP-1 0.53(mm)
STD05 240-100488/18 IC		09/07/2013 12:02	1	P1000018.D	CLP-2 0.53(mm)
STD1 240-100488/19 IC		09/07/2013 12:17	1	P1000019.D	CLP-1 0.53(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: A2HP10 Start Date: 09/07/2013 08:15

Analysis Batch Number: 100488 End Date: 09/07/2013 20:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-100488/19 IC		09/07/2013 12:17	1	P1000019.D	CLP-2 0.53(mm)
STD2 240-100488/20 IC		09/07/2013 12:32	1	P1000020.D	CLP-1 0.53(mm)
STD2 240-100488/20 IC		09/07/2013 12:32	1	P1000020.D	CLP-2 0.53(mm)
STD005 240-100488/21 IC		09/07/2013 12:47	1	P1000021.D	CLP-1 0.53(mm)
STD005 240-100488/21 IC		09/07/2013 12:47	1	P1000021.D	CLP-2 0.53(mm)
STD01 240-100488/22 IC		09/07/2013 13:02	1	P1000022.D	CLP-1 0.53(mm)
STD01 240-100488/22 IC		09/07/2013 13:02	1	P1000022.D	CLP-2 0.53(mm)
STD02 240-100488/23 IC		09/07/2013 13:17	1	P1000023.D	CLP-1 0.53(mm)
STD02 240-100488/23 IC		09/07/2013 13:17	1	P1000023.D	CLP-2 0.53(mm)
STD05 240-100488/24 IC		09/07/2013 13:33	1	P1000024.D	CLP-1 0.53(mm)
STD05 240-100488/24 IC		09/07/2013 13:33	1	P1000024.D	CLP-2 0.53(mm)
STD1 240-100488/25 IC		09/07/2013 13:48	1	P1000025.D	CLP-1 0.53(mm)
STD1 240-100488/25 IC		09/07/2013 13:48	1	P1000025.D	CLP-2 0.53(mm)
STD2 240-100488/26 IC		09/07/2013 14:03	1	P1000026.D	CLP-1 0.53(mm)
STD2 240-100488/26 IC		09/07/2013 14:03	1	P1000026.D	CLP-2 0.53(mm)
STD005 240-100488/27 IC		09/07/2013 14:18	1	P1000027.D	CLP-1 0.53(mm)
STD005 240-100488/27 IC		09/07/2013 14:18	1	P1000027.D	CLP-2 0.53(mm)
STD01 240-100488/28 IC		09/07/2013 14:34	1	P1000028.D	CLP-1 0.53(mm)
STD01 240-100488/28 IC		09/07/2013 14:34	1	P1000028.D	CLP-2 0.53(mm)
STD02 240-100488/29 IC		09/07/2013 14:49	1	P1000029.D	CLP-1 0.53(mm)
STD02 240-100488/29 IC		09/07/2013 14:49	1	P1000029.D	CLP-2 0.53(mm)
STD05 240-100488/30 ICRT		09/07/2013 15:04	1	P1000030.D	CLP-1 0.53(mm)
STD05 240-100488/30 ICRT		09/07/2013 15:04	1	P1000030.D	CLP-2 0.53(mm)
STD1 240-100488/31 IC		09/07/2013 15:19	1	P1000031.D	CLP-1 0.53(mm)
STD1 240-100488/31 IC		09/07/2013 15:19	1	P1000031.D	CLP-2 0.53(mm)
STD2 240-100488/32 IC		09/07/2013 15:34	1	P1000032.D	CLP-1 0.53(mm)
STD2 240-100488/32 IC		09/07/2013 15:34	1	P1000032.D	CLP-2 0.53(mm)
STD005 240-100488/33 IC		09/07/2013 15:50	1		CLP-1 0.53(mm)
STD005 240-100488/33 IC		09/07/2013 15:50	1		CLP-2 0.53(mm)
STD01 240-100488/34 IC		09/07/2013 16:05	1		CLP-1 0.53(mm)
STD01 240-100488/34 IC		09/07/2013 16:05	1		CLP-2 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: A2HP10 Start Date: 09/07/2013 08:15

Analysis Batch Number: 100488 End Date: 09/07/2013 20:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD02 240-100488/35 IC		09/07/2013 16:20	1		CLP-1 0.53(mm)
STD02 240-100488/35 IC		09/07/2013 16:20	1		CLP-2 0.53(mm)
STD05 240-100488/36 IC		09/07/2013 16:35	1		CLP-1 0.53(mm)
STD05 240-100488/36 IC		09/07/2013 16:35	1		CLP-2 0.53(mm)
STD1 240-100488/37 IC		09/07/2013 16:50	1		CLP-1 0.53(mm)
STD1 240-100488/37 IC		09/07/2013 16:50	1		CLP-2 0.53(mm)
STD2 240-100488/38 IC		09/07/2013 17:06	1		CLP-1 0.53(mm)
STD2 240-100488/38 IC		09/07/2013 17:06	1		CLP-2 0.53(mm)
STD005 240-100488/39 IC		09/07/2013 17:21	1		CLP-1 0.53(mm)
STD005 240-100488/39 IC		09/07/2013 17:21	1		CLP-2 0.53(mm)
STD01 240-100488/40 IC		09/07/2013 17:36	1		CLP-1 0.53(mm)
STD01 240-100488/40 IC		09/07/2013 17:36	1		CLP-2 0.53(mm)
STD02 240-100488/41 IC		09/07/2013 17:51	1		CLP-1 0.53(mm)
STD02 240-100488/41 IC		09/07/2013 17:51	1		CLP-2 0.53(mm)
STD05 240-100488/42 IC		09/07/2013 18:06	1		CLP-1 0.53(mm)
STD05 240-100488/42 IC		09/07/2013 18:06	1		CLP-2 0.53(mm)
STD1 240-100488/43 IC		09/07/2013 18:22	1		CLP-1 0.53(mm)
STD1 240-100488/43 IC		09/07/2013 18:22	1		CLP-2 0.53(mm)
STD2 240-100488/44 IC		09/07/2013 18:37	1		CLP-1 0.53(mm)
STD2 240-100488/44 IC		09/07/2013 18:37	1		CLP-2 0.53(mm)
ICV 240-100488/45		09/07/2013 18:52	1		CLP-1 0.53(mm)
ICV 240-100488/45		09/07/2013 18:52	1		CLP-2 0.53(mm)
ICV 240-100488/46		09/07/2013 19:07	1		CLP-1 0.53(mm)
ICV 240-100488/46		09/07/2013 19:07	1		CLP-2 0.53(mm)
ICV 240-100488/47		09/07/2013 19:22	1		CLP-1 0.53(mm)
ICV 240-100488/47		09/07/2013 19:22	1		CLP-2 0.53(mm)
ICV 240-100488/48		09/07/2013 19:38	1		CLP-1 0.53(mm)
ICV 240-100488/48		09/07/2013 19:38	1		CLP-2 0.53(mm)
ICV 240-100488/49		09/07/2013 19:53	1		CLP-1 0.53(mm)
ICV 240-100488/49		09/07/2013 19:53	1		CLP-2 0.53(mm)
ICV 240-100488/50		09/07/2013 20:08	1	P1000050.D	CLP-1 0.53(mm)
ICV 240-100488/50		09/07/2013 20:08	1	P1000050.D	CLP-2 0.53(mm)
ICV 240-100488/51		09/07/2013 20:23	1		CLP-1 0.53(mm)
ICV 240-100488/51		09/07/2013 20:23	1		CLP-2 0.53(mm)
ICV 240-100488/52		09/07/2013 20:38	1		CLP-1 0.53(mm)
ICV 240-100488/52		09/07/2013 20:38	1		CLP-2 0.53(mm)

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 08:15 Calibration End Date: 09/07/2013 09:30 Calibration ID: 17342

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/3	P1000003.D
Level 2	STD01 240-100488/4	P1000004.D
Level 3	STD02 240-100488/5	P1000005.D
Level 4	STD05 240-100488/6	P1000006.D
Level 5	STD1 240-100488/7	P1000007.D
Level 6	STD2 240-100488/8	P1000008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1232 Peak 1	1.787	1.786	1.786	1.785	1.785	1.785					1.737 - 1.837	1.786
PCB-1232 Peak 2	2.126	2.123	2.125	2.125	2.124	2.122					2.076 - 2.176	2.124
PCB-1232 Peak 3	2.578	2.575	2.575	2.576	2.576	2.575					2.528 - 2.628	2.576
PCB-1232 Peak 4	2.717	2.715	2.711	2.713	2.709	2.711					2.667 - 2.767	2.713
PCB-1232 Peak 5	3.135	3.135	3.137	3.139	3.136	3.135					3.085 - 3.185	3.136

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 08:15 Calibration End Date: 09/07/2013 09:30 Calibration ID: 17342

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/3	P1000003.D
Level 2	STD01 240-100488/4	P1000004.D
Level 3	STD02 240-100488/5	P1000005.D
Level 4	STD05 240-100488/6	P1000006.D
Level 5	STD1 240-100488/7	P1000007.D
Level 6	STD2 240-100488/8	P1000008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1232 Peak 1	26039040 19805329	24513440 18303192	23911500	22696118	Ave		22544769.8				13.0		20.0			
PCB-1232 Peak 2	21713760 14231156	19332920 12718818	17944795	16825702	Ave		17127858.5				19.0		20.0			
PCB-1232 Peak 3	36688940 28968940	33231660 24239586	36012905	31584014	Ave		31787674.2				15.0		20.0			
PCB-1232 Peak 4	13824240 12669839	13367900 10137771	14703050	12350978	Ave		12842296.3				12.0		20.0			
PCB-1232 Peak 5	15721820 11585569	14741290 11353831	13719705	13086620	Ave		13368139.2				13.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 08:15 Calibration End Date: 09/07/2013 09:30 Calibration ID: 17343

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/3	P1000003.D
Level 2	STD01 240-100488/4	P1000004.D
Level 3	STD02 240-100488/5	P1000005.D
Level 4	STD05 240-100488/6	P1000006.D
Level 5	STD1 240-100488/7	P1000007.D
Level 6	STD2 240-100488/8	P1000008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1232 Peak 1	2.511	2.512	2.516	2.515	2.513	2.513					2.461 - 2.561	2.513
PCB-1232 Peak 2	2.959	2.962	2.965	2.967	2.962	2.964					2.909 - 3.009	2.963
PCB-1232 Peak 3	3.457	3.456	3.459	3.459	3.459	3.459					3.407 - 3.507	3.458
PCB-1232 Peak 4	3.606	3.604	3.610	3.610	3.612	3.610					3.556 - 3.656	3.609
PCB-1232 Peak 5	4.262	4.259	4.262	4.260	4.262	4.261					4.212 - 4.312	4.261

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 08:15 Calibration End Date: 09/07/2013 09:30 Calibration ID: 17343

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/3	P1000003.D
Level 2	STD01 240-100488/4	P1000004.D
Level 3	STD02 240-100488/5	P1000005.D
Level 4	STD05 240-100488/6	P1000006.D
Level 5	STD1 240-100488/7	P1000007.D
Level 6	STD2 240-100488/8	P1000008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1232 Peak 1	24212000 15942710	19814490 14651601	19046580	18197620	Ave		18644166.8				18.0		20.0			
PCB-1232 Peak 2	18400100 12842632	14033890 11915329	14924970	14396492	Ave		14418902.2				16.0		20.0			
PCB-1232 Peak 3	32908740 25450821	29530230 24343345	29249625	28106440	Ave		28264866.9				11.0		20.0			
PCB-1232 Peak 4	16629600 11185508	13951460 10590975	13614965	12501928	Ave		13079072.7				17.0		20.0			
PCB-1232 Peak 5	14053740 8757062	11353370 8627806	10243670	9789776	Ave		10470904.0				19.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 09:46 Calibration End Date: 09/07/2013 11:01 Calibration ID: 17348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/9	P1000009.D
Level 2	STD01 240-100488/10	P1000010.D
Level 3	STD02 240-100488/11	P1000011.D
Level 4	STD05 240-100488/12	P1000012.D
Level 5	STD1 240-100488/13	P1000013.D
Level 6	STD2 240-100488/14	P1000014.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1242 Peak 1	1.787	1.785	1.784	1.785	1.786	1.785					1.737 - 1.837	1.785
PCB-1242 Peak 2	2.123	2.121	2.124	2.121	2.122	2.122					2.073 - 2.173	2.122
PCB-1242 Peak 3	2.575	2.575	2.576	2.575	2.576	2.574					2.525 - 2.625	2.575
PCB-1242 Peak 4	2.711	2.712	2.712	2.711	2.712	2.711					2.661 - 2.761	2.712
PCB-1242 Peak 5	3.136	3.133	3.134	3.136	3.134	3.135					3.086 - 3.186	3.135

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 09:46 Calibration End Date: 09/07/2013 11:01 Calibration ID: 17348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/9	P1000009.D
Level 2	STD01 240-100488/10	P1000010.D
Level 3	STD02 240-100488/11	P1000011.D
Level 4	STD05 240-100488/12	P1000012.D
Level 5	STD1 240-100488/13	P1000013.D
Level 6	STD2 240-100488/14	P1000014.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	19764220 13018145	17654930 13279561	16328870	15723804	Ave		15961588.3				16.0		20.0			
PCB-1242 Peak 2	37514120 24160209	32720680 24040104	30562320	29049232	Ave		29674444.1				17.0		20.0			
PCB-1242 Peak 3	66098760 49335575	63246340 49947172	57538810	56787730	Ave		57159064.4				12.0		20.0			
PCB-1242 Peak 4	29585800 22243780	24376180 22611152	21834875	24886028	Ave		24256302.4				12.0		20.0			
PCB-1242 Peak 5	32409720 23049880	29691270 23089465	27154855	25410682	Ave		26800978.7				14.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 09:46 Calibration End Date: 09/07/2013 11:01 Calibration ID: 17349

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/9	P1000009.D
Level 2	STD01 240-100488/10	P1000010.D
Level 3	STD02 240-100488/11	P1000011.D
Level 4	STD05 240-100488/12	P1000012.D
Level 5	STD1 240-100488/13	P1000013.D
Level 6	STD2 240-100488/14	P1000014.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1242 Peak 1	2.511	2.512	2.514	2.512	2.512	2.514					2.461 - 2.561	2.513
PCB-1242 Peak 2	2.965	2.965	2.963	2.963	2.964	2.964					2.915 - 3.015	2.964
PCB-1242 Peak 3	3.456	3.459	3.459	3.459	3.459	3.459					3.406 - 3.506	3.459
PCB-1242 Peak 4	3.613	3.609	3.610	3.610	3.609	3.610					3.563 - 3.663	3.610
PCB-1242 Peak 5	4.131	4.130	4.129	4.127	4.130	4.129					4.081 - 4.181	4.129

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 09:46 Calibration End Date: 09/07/2013 11:01 Calibration ID: 17349

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/9	P1000009.D
Level 2	STD01 240-100488/10	P1000010.D
Level 3	STD02 240-100488/11	P1000011.D
Level 4	STD05 240-100488/12	P1000012.D
Level 5	STD1 240-100488/13	P1000013.D
Level 6	STD2 240-100488/14	P1000014.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	16282580 10775634	15245180 10592236	13906900	12635368	Ave		13239649.6				18.0		20.0			
PCB-1242 Peak 2	31827480 21630104	28758820 21163663	26913150	25588052	Ave		25980211.5				16.0		20.0			
PCB-1242 Peak 3	60819940 44127213	54893680 44607859	52957870	50448320	Ave		51309146.9				12.0		20.0			
PCB-1242 Peak 4	28181040 19028094	23450410 18679418	23382260	21634046	Ave		22392544.6				16.0		20.0			
PCB-1242 Peak 5	26774040 15047778	22541700 14711320	19475545	17127740	Lin1	732699.127	14578201.1							0.9980		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 11:16 Calibration End Date: 09/07/2013 12:32 Calibration ID: 17354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/15	P1000015.D
Level 2	STD01 240-100488/16	P1000016.D
Level 3	STD02 240-100488/17	P1000017.D
Level 4	STD05 240-100488/18	P1000018.D
Level 5	STD1 240-100488/19	P1000019.D
Level 6	STD2 240-100488/20	P1000020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1248 Peak 1	2.122	2.120	2.123	2.121	2.121	2.122					2.072 - 2.172	2.122
PCB-1248 Peak 2	2.574	2.570	2.574	2.572	2.573	2.573					2.524 - 2.624	2.573
PCB-1248 Peak 3	3.134	3.134	3.134	3.136	3.135	3.135					3.084 - 3.184	3.135
PCB-1248 Peak 4	3.761	3.760	3.761	3.762	3.762	3.760					3.711 - 3.811	3.761
PCB-1248 Peak 5	4.223	4.222	4.219	4.222	4.221	4.221					4.173 - 4.273	4.221

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 11:16 Calibration End Date: 09/07/2013 12:32 Calibration ID: 17354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/15	P1000015.D
Level 2	STD01 240-100488/16	P1000016.D
Level 3	STD02 240-100488/17	P1000017.D
Level 4	STD05 240-100488/18	P1000018.D
Level 5	STD1 240-100488/19	P1000019.D
Level 6	STD2 240-100488/20	P1000020.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	17212860 12632622	16688670 11815422	14953170	13672518	Ave		14495877.0				15.0		20.0			
PCB-1248 Peak 2	36275600 32990090	37470490 31255274	34573780	38428502	Ave		35165622.8				7.8		20.0			
PCB-1248 Peak 3	47991160 35500843	42687340 34483348	41279270	42391020	Ave		40722163.4				12.0		20.0			
PCB-1248 Peak 4	23617700 20421220	19594230 19685939	22110110	21971986	Ave		21233530.8				7.5		20.0			
PCB-1248 Peak 5	21968040 17891470	21570070 18681028	21266555	20603548	Ave		20330118.5				8.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 11:16 Calibration End Date: 09/07/2013 12:32 Calibration ID: 17355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/15	P1000015.D
Level 2	STD01 240-100488/16	P1000016.D
Level 3	STD02 240-100488/17	P1000017.D
Level 4	STD05 240-100488/18	P1000018.D
Level 5	STD1 240-100488/19	P1000019.D
Level 6	STD2 240-100488/20	P1000020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1248 Peak 1	2.960	2.960	2.961	2.963	2.963	2.962					2.910 - 3.010	2.962
PCB-1248 Peak 2	3.460	3.457	3.456	3.458	3.458	3.458					3.410 - 3.510	3.458
PCB-1248 Peak 3	4.259	4.262	4.260	4.260	4.261	4.262					4.209 - 4.309	4.261
PCB-1248 Peak 4	4.547	4.548	4.547	4.547	4.546	4.547					4.497 - 4.597	4.547
PCB-1248 Peak 5	5.301	5.300	5.297	5.296	5.296	5.298					5.251 - 5.351	5.298

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 11:16 Calibration End Date: 09/07/2013 12:32 Calibration ID: 17355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/15	P1000015.D
Level 2	STD01 240-100488/16	P1000016.D
Level 3	STD02 240-100488/17	P1000017.D
Level 4	STD05 240-100488/18	P1000018.D
Level 5	STD1 240-100488/19	P1000019.D
Level 6	STD2 240-100488/20	P1000020.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	16842780 10717062	15525330 10131593	13670985	11701002	Lin1	452742.181	10193029.6							0.9970		0.9900
PCB-1248 Peak 2	38517240 28573357	37334780 28615981	34096015	30923740	Ave		33010185.4				13.0		20.0			
PCB-1248 Peak 3	36410460 27532598	35128620 27245851	33643555	28761510	Ave		31453765.6				13.0		20.0			
PCB-1248 Peak 4	33885580 26816984	33812860 26206031	31891335	28733908	Ave		30224449.7				11.0		20.0			
PCB-1248 Peak 5	22875840 16973915	22261860 16935186	21128875	18106662	Ave		19713723.0				14.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 12:47 Calibration End Date: 09/07/2013 14:03 Calibration ID: 17318

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/21	P1000021.D
Level 2	STD01 240-100488/22	P1000022.D
Level 3	STD02 240-100488/23	P1000023.D
Level 4	STD05 240-100488/24	P1000024.D
Level 5	STD1 240-100488/25	P1000025.D
Level 6	STD2 240-100488/26	P1000026.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1221 Peak 1	1.618	1.619	1.619	1.618	1.619	1.618					1.568 - 1.668	1.619
PCB-1221 Peak 2	1.748	1.752	1.751	1.749	1.749	1.749					1.698 - 1.798	1.750
PCB-1221 Peak 3	1.784	1.785	1.785	1.783	1.786	1.786					1.734 - 1.834	1.785
PCB-1254 Peak 1	3.531	3.532	3.532	3.531	3.532	3.532					3.481 - 3.581	3.532
PCB-1254 Peak 2	4.222	4.221	4.220	4.220	4.221	4.221					4.172 - 4.272	4.221
PCB-1254 Peak 3	4.519	4.516	4.519	4.517	4.517	4.516					4.469 - 4.569	4.517
PCB-1254 Peak 4	4.717	4.718	4.715	4.717	4.717	4.716					4.667 - 4.767	4.717
PCB-1254 Peak 5	5.009	5.011	5.010	5.010	5.009	5.009					4.959 - 5.059	5.010

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 12:47 Calibration End Date: 09/07/2013 14:03 Calibration ID: 17318

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/21	P1000021.D
Level 2	STD01 240-100488/22	P1000022.D
Level 3	STD02 240-100488/23	P1000023.D
Level 4	STD05 240-100488/24	P1000024.D
Level 5	STD1 240-100488/25	P1000025.D
Level 6	STD2 240-100488/26	P1000026.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	14284240 9111735	12690910 9012891	11217185	9978126	Ave		11049181.1				19.0		20.0			
PCB-1221 Peak 2	7473660 4711185	6680670 4837707	5945855	5363752	Ave		5835471.50				19.0		20.0			
PCB-1221 Peak 3	31788360 22171762	30832980 21217772	27804305	25217490	Ave		26505444.8				17.0		20.0			
PCB-1254 Peak 1	37328820 26828647	37301130 26982968	33850925	31158280	Ave		32241795.0				15.0		20.0			
PCB-1254 Peak 2	72836560 56805745	70367700 58961940	68017240	64092740	Ave		65180320.8				9.8		20.0			
PCB-1254 Peak 3	46790780 40160039	44278890 42497651	44533230	42563270	Ave		43470643.3				5.2		20.0			
PCB-1254 Peak 4	43992680 35344225	41958250 36717663	41348140	39403828	Ave		39794130.9				8.3		20.0			
PCB-1254 Peak 5	66687860 53459817	65129060 54732214	61867920	59164776	Ave		60173607.8				9.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 12:47 Calibration End Date: 09/07/2013 14:03 Calibration ID: 17319

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/21	P1000021.D
Level 2	STD01 240-100488/22	P1000022.D
Level 3	STD02 240-100488/23	P1000023.D
Level 4	STD05 240-100488/24	P1000024.D
Level 5	STD1 240-100488/25	P1000025.D
Level 6	STD2 240-100488/26	P1000026.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1221 Peak 1	2.290	2.294	2.292	2.294	2.294	2.294					2.240 - 2.340	2.293
PCB-1221 Peak 2	2.445	2.446	2.445	2.448	2.447	2.446					2.395 - 2.495	2.446
PCB-1221 Peak 3	2.511	2.511	2.512	2.511	2.511	2.511					2.461 - 2.561	2.511
PCB-1254 Peak 1	4.586	4.586	4.588	4.586	4.587	4.587					4.536 - 4.636	4.587
PCB-1254 Peak 2	4.801	4.801	4.800	4.801	4.801	4.801					4.751 - 4.851	4.801
PCB-1254 Peak 3	5.294	5.295	5.295	5.294	5.294	5.296					5.244 - 5.344	5.295
PCB-1254 Peak 4	5.914	5.913	5.915	5.913	5.913	5.914					5.864 - 5.964	5.914
PCB-1254 Peak 5	6.121	6.124	6.120	6.121	6.122	6.121					6.071 - 6.171	6.122

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 12:47 Calibration End Date: 09/07/2013 14:03 Calibration ID: 17319

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/21	P1000021.D
Level 2	STD01 240-100488/22	P1000022.D
Level 3	STD02 240-100488/23	P1000023.D
Level 4	STD05 240-100488/24	P1000024.D
Level 5	STD1 240-100488/25	P1000025.D
Level 6	STD2 240-100488/26	P1000026.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	12599340 7695317	10862030 7641215	10008950	8546034	Lin1	311840.242	7557839.36							0.9980		0.9900
PCB-1221 Peak 2	7958240 5161120	7685610 4928971	6764455	5648454	Ave		6357808.25				20.0		20.0			
PCB-1221 Peak 3	28911560 18158460	25463410 17515414	22829960	20188164	Ave		22177828.0				20.0		20.0			
PCB-1254 Peak 1	38615500 27663745	37034690 27636501	33721265	30470792	Ave		32523748.8				14.0		20.0			
PCB-1254 Peak 2	43355260 31707771	42193240 31752485	38199830	34323046	Ave		36921938.7				14.0		20.0			
PCB-1254 Peak 3	69676200 51007612	65349200 52174985	60984480	54926218	Ave		59019782.5				13.0		20.0			
PCB-1254 Peak 4	52640560 39998476	50469890 40856767	46772620	42461190	Ave		45533250.5				12.0		20.0			
PCB-1254 Peak 5	62506980 48286861	61516870 48909706	57117975	51202896	Ave		54923548.0				12.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 14:18 Calibration End Date: 09/07/2013 15:34 Calibration ID: 17324

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/27	P1000027.D
Level 2	STD01 240-100488/28	P1000028.D
Level 3	STD02 240-100488/29	P1000029.D
Level 4	STD05 240-100488/30	P1000030.D
Level 5	STD1 240-100488/31	P1000031.D
Level 6	STD2 240-100488/32	P1000032.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1016 Peak 1	1.784	1.786	1.786	1.787	1.784	1.785					1.737 - 1.837	1.785
PCB-1016 Peak 2	2.123	2.122	2.125	2.122	2.121	2.121					2.072 - 2.172	2.122
PCB-1016 Peak 3	2.574	2.575	2.574	2.576	2.574	2.574					2.526 - 2.626	2.575
PCB-1016 Peak 4	2.710	2.714	2.712	2.712	2.711	2.711					2.662 - 2.762	2.712
PCB-1016 Peak 5	3.134	3.136	3.133	3.135	3.134	3.135					3.085 - 3.185	3.135
PCB-1260 Peak 1	4.419	4.422	4.418	4.419	4.419	4.419					4.369 - 4.469	4.419
PCB-1260 Peak 2	4.719	4.719	4.717	4.719	4.717	4.717					4.669 - 4.769	4.718
PCB-1260 Peak 3	5.010	5.008	5.008	5.007	5.007	5.007					4.957 - 5.057	5.008
PCB-1260 Peak 4	5.726	5.724	5.726	5.727	5.725	5.725					5.677 - 5.777	5.726
PCB-1260 Peak 5	6.015	6.014	6.017	6.014	6.015	6.014					5.964 - 6.064	6.015
Tetrachloro-m-xylene	1.453	1.454	1.453	1.454	1.453	1.452					1.404 - 1.504	1.453
Decachlorobiphenyl	7.186	7.184	7.186	7.185	7.184	7.184					7.135 - 7.235	7.185

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 14:18 Calibration End Date: 09/07/2013 15:34 Calibration ID: 17324

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/27	P1000027.D
Level 2	STD01 240-100488/28	P1000028.D
Level 3	STD02 240-100488/29	P1000029.D
Level 4	STD05 240-100488/30	P1000030.D
Level 5	STD1 240-100488/31	P1000031.D
Level 6	STD2 240-100488/32	P1000032.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	21385700 16802899	20794510 15484820	20111530	18943782	Ave		18920540.2				12.0		20.0			
PCB-1016 Peak 2	40588180 30363180	38253280 28258776	37014580	33277594	Ave		34625931.6				14.0		20.0			
PCB-1016 Peak 3	80978940 67142334	79579040 59592946	72559910	67169096	Ave		71170377.6				12.0		20.0			
PCB-1016 Peak 4	33667800 28374173	33798330 26449685	27413790	29874800	Ave		29929763.0				11.0		20.0			
PCB-1016 Peak 5	35193000 29189671	33994900 26735489	32452655	29195408	Ave		31126853.8				10.0		20.0			
PCB-1260 Peak 1	49397600 40252946	50016270 39196106	47425555	44821268	Ave		45184957.4				10.0		20.0			
PCB-1260 Peak 2	88425780 72185606	88244860 70500621	86241475	79277360	Ave		80812616.9				10.0		20.0			
PCB-1260 Peak 3	79476160 68860670	80324630 67832320	80958680	75149460	Ave		75433653.3				7.8		20.0			
PCB-1260 Peak 4	117670120 99853853	116372850 99215872	115951535	108599068	Ave		109610550				7.7		20.0			
PCB-1260 Peak 5	53040640 44905531	50568490 44253891	50963920	48307562	Ave		48673339.0				7.2		20.0			
Tetrachloro-m-xylene	1167322400 974696040	1133825200 941441540	1173416100	1072528480	Ave		1077204960				9.2		20.0			
Decachlorobiphenyl	1196368000 911526720	1112686400 877443510	1086590000	1014587160	Ave		1033200298				12.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 14:18 Calibration End Date: 09/07/2013 15:34 Calibration ID: 17325

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/27	P1000027.D
Level 2	STD01 240-100488/28	P1000028.D
Level 3	STD02 240-100488/29	P1000029.D
Level 4	STD05 240-100488/30	P1000030.D
Level 5	STD1 240-100488/31	P1000031.D
Level 6	STD2 240-100488/32	P1000032.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1016 Peak 1	2.512	2.510	2.512	2.512	2.511	2.509					2.462 - 2.562	2.511
PCB-1016 Peak 2	2.963	2.965	2.962	2.961	2.962	2.960					2.911 - 3.011	2.962
PCB-1016 Peak 3	3.458	3.455	3.457	3.456	3.456	3.457					3.406 - 3.506	3.457
PCB-1016 Peak 4	3.607	3.606	3.607	3.608	3.608	3.606					3.558 - 3.658	3.607
PCB-1016 Peak 5	4.124	4.126	4.127	4.126	4.126	4.125					4.076 - 4.176	4.126
PCB-1260 Peak 1	5.510	5.507	5.506	5.507	5.508	5.507					5.457 - 5.557	5.508
PCB-1260 Peak 2	5.740	5.739	5.738	5.740	5.740	5.740					5.690 - 5.790	5.740
PCB-1260 Peak 3	6.119	6.117	6.118	6.118	6.116	6.117					6.068 - 6.168	6.118
PCB-1260 Peak 4	6.813	6.813	6.812	6.812	6.812	6.811					6.762 - 6.862	6.812
PCB-1260 Peak 5	7.199	7.199	7.200	7.199	7.200	7.199					7.149 - 7.249	7.199
Tetrachloro-m-xylene	1.959	1.959	1.959	1.959	1.958	1.958					1.909 - 2.009	1.959
Decachlorobipheny1	8.449	8.449	8.447	8.449	8.448	8.447					8.399 - 8.499	8.448

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28498-1 Analy Batch No.: 100488

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/07/2013 14:18 Calibration End Date: 09/07/2013 15:34 Calibration ID: 17325

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-100488/27	P1000027.D
Level 2	STD01 240-100488/28	P1000028.D
Level 3	STD02 240-100488/29	P1000029.D
Level 4	STD05 240-100488/30	P1000030.D
Level 5	STD1 240-100488/31	P1000031.D
Level 6	STD2 240-100488/32	P1000032.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	19150720 13049793	17159250 12273569	16516075	14621006	Ave		15461735.5				17.0		20.0			
PCB-1016 Peak 2	32919640 26618415	35873860 25038161	32645060	29228824	Ave		30387326.8				14.0		20.0			
PCB-1016 Peak 3	67188260 55225060	66943700 54158652	61715220	59010000	Ave		60706815.3				9.3		20.0			
PCB-1016 Peak 4	29960880 23689823	30567460 22986528	27203320	25448790	Ave		26642800.2				12.0		20.0			
PCB-1016 Peak 5	26990340 18616344	23863540 18001213	21824795	19642840	Ave		21489845.3				16.0		20.0			
PCB-1260 Peak 1	48733040 36059036	44991680 35779884	42074590	38243740	Ave		40980328.3				13.0		20.0			
PCB-1260 Peak 2	50751560 41393071	51048860 41114689	48116810	44052932	Ave		46079653.7				9.8		20.0			
PCB-1260 Peak 3	70622700 60356707	72031750 60116810	69293915	63582564	Ave		66000741.0				8.0		20.0			
PCB-1260 Peak 4	90883820 78087330	89144170 80212670	89799280	84542502	Ave		85444961.9				6.3		20.0			
PCB-1260 Peak 5	69476040 56892974	67778370 56818760	66315090	61708556	Ave		63164965.0				8.8		20.0			
Tetrachloro-m-xylene	962488400 791834160	899508600 788329410	885171200	834437160	Ave		860294822				7.9		20.0			
Decachlorobiphenyl	871776800 644919080	786014000 631895650	776839800	720715040	Ave		738693395				12.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: A2HP10 Start Date: 09/11/2013 01:06

Analysis Batch Number: 100924 End Date: 09/11/2013 09:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-100924/3 CCVRT		09/11/2013 01:06	1	P1000003.D	CLP-1 0.53(mm)
CCV 240-100924/3 CCVRT		09/11/2013 01:06	1	P1000003.D	CLP-2 0.53(mm)
240-28498-1	DR-SB-46I-39-40	09/11/2013 03:51	1	P1000012.D	CLP-1 0.53(mm)
240-28498-1	DR-SB-46I-39-40	09/11/2013 03:51	1	P1000012.D	CLP-2 0.53(mm)
240-28498-2	DR-SB-46S-19-20	09/11/2013 04:06	1	P1000013.D	CLP-1 0.53(mm)
240-28498-2	DR-SB-46S-19-20	09/11/2013 04:06	1	P1000013.D	CLP-2 0.53(mm)
ZZZZZ		09/11/2013 04:22	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 04:22	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 04:37	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 04:37	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 04:52	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 04:52	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 05:07	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 05:07	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 05:22	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 05:22	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 05:38	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 05:38	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 05:53	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 05:53	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 06:08	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 06:08	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 06:23	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 06:23	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 06:38	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 06:38	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 06:53	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 06:53	1		CLP-2 0.53(mm)
MB 240-100629/23-A		09/11/2013 07:09	1	P1000025.D	CLP-1 0.53(mm)
MB 240-100629/23-A		09/11/2013 07:09	1	P1000025.D	CLP-2 0.53(mm)
CCV 240-100924/26		09/11/2013 07:24	1	P1000026.D	CLP-1 0.53(mm)
CCV 240-100924/26		09/11/2013 07:24	1	P1000026.D	CLP-2 0.53(mm)
ZZZZZ		09/11/2013 07:39	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 07:39	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 07:54	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 07:54	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 08:10	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 08:10	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 08:25	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 08:25	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 08:40	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 08:40	1		CLP-2 0.53(mm)
ZZZZZ		09/11/2013 08:55	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 08:55	1		CLP-2 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: A2HP10 Start Date: 09/11/2013 01:06

Analysis Batch Number: 100924 End Date: 09/11/2013 09:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		09/11/2013 09:10	1		CLP-1 0.53(mm)
ZZZZZ		09/11/2013 09:10	1		CLP-2 0.53(mm)
LCS 240-100629/24-A		09/11/2013 09:38	1	P1000034.D	CLP-1 0.53(mm)
LCS 240-100629/24-A		09/11/2013 09:38	1	P1000034.D	CLP-2 0.53(mm)
CCV 240-100924/35		09/11/2013 09:54	1	P1000035.D	CLP-1 0.53(mm)
CCV 240-100924/35		09/11/2013 09:54	1	P1000035.D	CLP-2 0.53(mm)

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100924/3 Calibration Date: 09/11/2013 01:06

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000003.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	1.79	1.74	1.84
PCB-1016 Peak 2	2.12	2.07	2.17
PCB-1016 Peak 3	2.57	2.52	2.62
PCB-1016 Peak 4	2.71	2.66	2.76
PCB-1016 Peak 5	3.13	3.08	3.18
PCB-1260 Peak 1	4.42	4.37	4.47
PCB-1260 Peak 2	4.72	4.67	4.77
PCB-1260 Peak 3	5.01	4.96	5.06
PCB-1260 Peak 4	5.72	5.67	5.77
PCB-1260 Peak 5	6.01	5.96	6.06
Tetrachloro-m-xylene	1.45	1.40	1.50
Decachlorobiphenyl	7.18	7.13	7.23

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100924/3 Calibration Date: 09/11/2013 01:06

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15461736	16133036		0.522	0.500	4.3	20.0
PCB-1016 Peak 2	Ave	30387327	32234646		0.530	0.500	6.1	20.0
PCB-1016 Peak 3	Ave	60706815	64303392		0.530	0.500	5.9	20.0
PCB-1016 Peak 4	Ave	26642800	27968658		0.525	0.500	5.0	20.0
PCB-1016 Peak 5	Ave	21489845	22482426		0.523	0.500	4.6	20.0
PCB-1260 Peak 1	Ave	40980328	43636072		0.532	0.500	6.5	20.0
PCB-1260 Peak 2	Ave	46079654	49776274		0.540	0.500	8.0	20.0
PCB-1260 Peak 3	Ave	66000741	71161996		0.539	0.500	7.8	20.0
PCB-1260 Peak 4	Ave	85444962	94448094		0.553	0.500	10.5	20.0
PCB-1260 Peak 5	Ave	63164965	69936222		0.554	0.500	10.7	20.0
Tetrachloro-m-xylene	Ave	860294822	935424360		0.0272	0.0250	8.7	20.0
Decachlorobiphenyl	Ave	738693395	824584640		0.0279	0.0250	11.6	20.0

FORM VII

PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100924/3 Calibration Date: 09/11/2013 01:06

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000003.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.51	2.46	2.56
PCB-1016 Peak 2	2.96	2.91	3.01
PCB-1016 Peak 3	3.46	3.41	3.51
PCB-1016 Peak 4	3.61	3.56	3.66
PCB-1016 Peak 5	4.13	4.08	4.18
PCB-1260 Peak 1	5.51	5.46	5.56
PCB-1260 Peak 2	5.74	5.69	5.79
PCB-1260 Peak 3	6.12	6.07	6.17
PCB-1260 Peak 4	6.81	6.76	6.86
PCB-1260 Peak 5	7.20	7.15	7.25
Tetrachloro-m-xylene	1.96	1.91	2.01
Decachlorobiphenyl	8.45	8.40	8.50

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100924/26 Calibration Date: 09/11/2013 07:24

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000026.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	18920540	18805720		0.497	0.500	-0.6	20.0
PCB-1016 Peak 2	Ave	34625932	33994030		0.491	0.500	-1.8	20.0
PCB-1016 Peak 3	Ave	71170378	68789830		0.483	0.500	-3.3	20.0
PCB-1016 Peak 4	Ave	29929763	30709548		0.513	0.500	2.6	20.0
PCB-1016 Peak 5	Ave	31126854	30612212		0.492	0.500	-1.7	20.0
PCB-1260 Peak 1	Ave	45184957	44698400		0.495	0.500	-1.1	20.0
PCB-1260 Peak 2	Ave	80812617	80038478		0.495	0.500	-1.0	20.0
PCB-1260 Peak 3	Ave	75433653	75949110		0.503	0.500	0.7	20.0
PCB-1260 Peak 4	Ave	109610550	108133232		0.493	0.500	-1.3	20.0
PCB-1260 Peak 5	Ave	48673339	49341580		0.507	0.500	1.4	20.0
Tetrachloro-m-xylene	Ave	1077204960	1058704160		0.0246	0.0250	-1.7	20.0
Decachlorobiphenyl	Ave	1033200298	1008505600		0.0244	0.0250	-2.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100924/26 Calibration Date: 09/11/2013 07:24

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000026.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	1.78	1.73	1.83
PCB-1016 Peak 2	2.12	2.07	2.17
PCB-1016 Peak 3	2.57	2.52	2.62
PCB-1016 Peak 4	2.71	2.66	2.76
PCB-1016 Peak 5	3.14	3.09	3.19
PCB-1260 Peak 1	4.42	4.37	4.47
PCB-1260 Peak 2	4.72	4.67	4.77
PCB-1260 Peak 3	5.01	4.96	5.06
PCB-1260 Peak 4	5.72	5.67	5.77
PCB-1260 Peak 5	6.01	5.96	6.06
Tetrachloro-m-xylene	1.45	1.40	1.50
Decachlorobiphenyl	7.18	7.13	7.23

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100924/26 Calibration Date: 09/11/2013 07:24

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000026.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15461736	15557246		0.503	0.500	0.6	20.0
PCB-1016 Peak 2	Ave	30387327	31354522		0.516	0.500	3.2	20.0
PCB-1016 Peak 3	Ave	60706815	63221016		0.521	0.500	4.1	20.0
PCB-1016 Peak 4	Ave	26642800	26903600		0.505	0.500	1.0	20.0
PCB-1016 Peak 5	Ave	21489845	20641122		0.480	0.500	-3.9	20.0
PCB-1260 Peak 1	Ave	40980328	41566822		0.507	0.500	1.4	20.0
PCB-1260 Peak 2	Ave	46079654	47500282		0.515	0.500	3.1	20.0
PCB-1260 Peak 3	Ave	66000741	68037476		0.515	0.500	3.1	20.0
PCB-1260 Peak 4	Ave	85444962	88756632		0.519	0.500	3.9	20.0
PCB-1260 Peak 5	Ave	63164965	64196210		0.508	0.500	1.6	20.0
Tetrachloro-m-xylene	Ave	860294822	901879400		0.0262	0.0250	4.8	20.0
Decachlorobiphenyl	Ave	738693395	761043960		0.0258	0.0250	3.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Samp1e ID: CCV 240-100924/26 Calibration Date: 09/11/2013 07:24

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000026.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.51	2.46	2.56
PCB-1016 Peak 2	2.96	2.91	3.01
PCB-1016 Peak 3	3.46	3.41	3.51
PCB-1016 Peak 4	3.61	3.56	3.66
PCB-1016 Peak 5	4.12	4.07	4.17
PCB-1260 Peak 1	5.51	5.46	5.56
PCB-1260 Peak 2	5.74	5.69	5.79
PCB-1260 Peak 3	6.12	6.07	6.17
PCB-1260 Peak 4	6.81	6.76	6.86
PCB-1260 Peak 5	7.20	7.15	7.25
Tetrachloro-m-xylene	1.96	1.91	2.01
Decachlorobiphenyl	8.45	8.40	8.50

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100924/35 Calibration Date: 09/11/2013 09:54

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000035.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	18920540	19988058		0.528	0.500	5.6	20.0
PCB-1016 Peak 2	Ave	34625932	36553444		0.528	0.500	5.6	20.0
PCB-1016 Peak 3	Ave	71170378	73889638		0.519	0.500	3.8	20.0
PCB-1016 Peak 4	Ave	29929763	33414494		0.558	0.500	11.6	20.0
PCB-1016 Peak 5	Ave	31126854	32928636		0.529	0.500	5.8	20.0
PCB-1260 Peak 1	Ave	45184957	47676974		0.528	0.500	5.5	20.0
PCB-1260 Peak 2	Ave	80812617	85116540		0.527	0.500	5.3	20.0
PCB-1260 Peak 3	Ave	75433653	81108302		0.538	0.500	7.5	20.0
PCB-1260 Peak 4	Ave	109610550	115686964		0.528	0.500	5.5	20.0
PCB-1260 Peak 5	Ave	48673339	52097350		0.535	0.500	7.0	20.0
Tetrachloro-m-xylene	Ave	1077204960	1147077240		0.0266	0.0250	6.5	20.0
Decachlorobiphenyl	Ave	1033200298	1092176440		0.0264	0.0250	5.7	20.0

FORM VII

PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100924/35 Calibration Date: 09/11/2013 09:54

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000035.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	1.78	1.73	1.83
PCB-1016 Peak 2	2.12	2.07	2.17
PCB-1016 Peak 3	2.57	2.52	2.62
PCB-1016 Peak 4	2.71	2.66	2.76
PCB-1016 Peak 5	3.14	3.09	3.19
PCB-1260 Peak 1	4.42	4.37	4.47
PCB-1260 Peak 2	4.72	4.67	4.77
PCB-1260 Peak 3	5.01	4.96	5.06
PCB-1260 Peak 4	5.73	5.68	5.78
PCB-1260 Peak 5	6.01	5.96	6.06
Tetrachloro-m-xylene	1.45	1.40	1.50
Decachlorobiphenyl	7.18	7.13	7.23

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100924/35 Calibration Date: 09/11/2013 09:54

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000035.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	15461736	16621960		0.538	0.500	7.5	20.0
PCB-1016 Peak 2	Ave	30387327	33375202		0.549	0.500	9.8	20.0
PCB-1016 Peak 3	Ave	60706815	67821788		0.559	0.500	11.7	20.0
PCB-1016 Peak 4	Ave	26642800	29183186		0.548	0.500	9.5	20.0
PCB-1016 Peak 5	Ave	21489845	22907384		0.533	0.500	6.6	20.0
PCB-1260 Peak 1	Ave	40980328	44321914		0.541	0.500	8.2	20.0
PCB-1260 Peak 2	Ave	46079654	50611302		0.549	0.500	9.8	20.0
PCB-1260 Peak 3	Ave	66000741	72463144		0.549	0.500	9.8	20.0
PCB-1260 Peak 4	Ave	85444962	92629940		0.542	0.500	8.4	20.0
PCB-1260 Peak 5	Ave	63164965	67789412		0.537	0.500	7.3	20.0
Tetrachloro-m-xylene	Ave	860294822	960884560		0.0279	0.0250	11.7	20.0
Decachlorobiphenyl	Ave	738693395	798852200		0.0270	0.0250	8.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: CCV 240-100924/35 Calibration Date: 09/11/2013 09:54

Instrument ID: A2HP10 Calib Start Date: 09/07/2013 14:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 09/07/2013 15:34

Lab File ID: P1000035.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.51	2.46	2.56
PCB-1016 Peak 2	2.96	2.91	3.01
PCB-1016 Peak 3	3.46	3.41	3.51
PCB-1016 Peak 4	3.61	3.56	3.66
PCB-1016 Peak 5	4.13	4.08	4.18
PCB-1260 Peak 1	5.51	5.46	5.56
PCB-1260 Peak 2	5.74	5.69	5.79
PCB-1260 Peak 3	6.12	6.07	6.17
PCB-1260 Peak 4	6.81	6.76	6.86
PCB-1260 Peak 5	7.20	7.15	7.25
Tetrachloro-m-xylene	1.96	1.91	2.01
Decachlorobiphenyl	8.45	8.40	8.50

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: CCV 240-100924/3 Date Analyzed: 09/11/2013 01:06

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P1000003.D Heated Purge: (Y/N) N

Calibration ID: 17324

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.45	7.18	
UPPER LIMIT				1.55	7.28	
LOWER LIMIT				1.35	7.08	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-100924/3 CCVRT		09/11/2013 01:06	P1000003.D	1.45	7.18	
240-28498-1	DR-SB-46I-39-40	09/11/2013 03:51	P1000012.D	1.45	7.18	
240-28498-2	DR-SB-46S-19-20	09/11/2013 04:06	P1000013.D	1.45	7.18	
MB 240-100629/23-A		09/11/2013 07:09	P1000025.D	1.45	7.18	
CCV 240-100924/26		09/11/2013 07:24	P1000026.D	1.45	7.18	
LCS 240-100629/24-A		09/11/2013 09:38	P1000034.D	1.46	7.19	
CCV 240-100924/35		09/11/2013 09:54	P1000035.D	1.45	7.18	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: CCV 240-100924/3 Date Analyzed: 09/11/2013 01:06

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1000003.D Heated Purge: (Y/N) N

Calibration ID: 17325

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.96	8.45	
UPPER LIMIT				2.06	8.55	
LOWER LIMIT				1.86	8.35	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-100924/3 CCVRT		09/11/2013 01:06	P1000003.D	1.96	8.45	
240-28498-1	DR-SB-46I-39-40	09/11/2013 03:51	P1000012.D	1.96	8.45	
240-28498-2	DR-SB-46S-19-20	09/11/2013 04:06	P1000013.D	1.96	8.45	
MB 240-100629/23-A		09/11/2013 07:09	P1000025.D	1.96	8.45	
CCV 240-100924/26		09/11/2013 07:24	P1000026.D	1.96	8.45	
LCS 240-100629/24-A		09/11/2013 09:38	P1000034.D	1.96	8.45	
CCV 240-100924/35		09/11/2013 09:54	P1000035.D	1.96	8.45	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: CCV 240-101041/3 Date Analyzed: 09/11/2013 16:54

Instrument ID: A2HP11 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P1100003.D Heated Purge: (Y/N) N

Calibration ID: 16897

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.90	7.16	
UPPER LIMIT				2.00	7.26	
LOWER LIMIT				1.80	7.06	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-101041/3 CCVRT		09/11/2013 16:54	P1100003.D	1.90	7.16	
240-28528-G-3-E MS		09/11/2013 19:18	P1100013.D	1.90	7.16	
240-28528-G-3-F MSD		09/11/2013 19:32	P1100014.D	1.90	7.16	
CCV 240-101041/15		09/11/2013 19:47	P1100015.D	1.90	7.16	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Sample No.: CCV 240-101041/3 Date Analyzed: 09/11/2013 16:54

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1100003.D Heated Purge: (Y/N) N

Calibration ID: 16898

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				2.46	8.25	
UPPER LIMIT				2.56	8.35	
LOWER LIMIT				2.36	8.15	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-101041/3 CCVRT		09/11/2013 16:54	P1100003.D	2.46	8.25	
240-28528-G-3-E MS		09/11/2013 19:18	P1100013.D	2.46	8.25	
240-28528-G-3-F MSD		09/11/2013 19:32	P1100014.D	2.46	8.25	
CCV 240-101041/15		09/11/2013 19:47	P1100015.D	2.46	8.25	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28498-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010C MDL Date: 03/01/2011 14:59

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Antimony	206.838	2	0.39
Arsenic	189.042	1.5	0.3
Barium	493.409	20	0.071
Beryllium	313.042	0.5	0.043
Cadmium	226.502	0.5	0.036
Chromium	267.716	1	0.2
Cobalt	228.616	1	0.16
Copper	324.753	2.5	0.74
Lead	220.353	1	0.19
Molybdenum	202.030	4	0.27
Nickel	231.604	4	0.27
Selenium	196.026	2	0.45
Silver	328.068	1	0.1
Thallium	190.864	2	0.55
Vanadium	292.402	1	0.12
Zinc	213.856	5	1

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28498-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010C XMDL Date: 03/01/2011 15:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28498-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471B MDL Date: 02/16/2010 09:48

Prep Method: 7471B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury	253.7	0.1	0.015

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-28498-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471B XMDL Date: 02/16/2010 09:48

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.6	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28498-1

SDG No.:

Instrument ID: I9 Date: 04/04/2013 11:44

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		10000	6010C
Arsenic		5000	6010C
Barium		25000	6010C
Beryllium		4000	6010C
Cadmium		2000	6010C
Chromium		20000	6010C
Cobalt		10000	6010C
Copper		30000	6010C
Lead		15000	6010C
Molybdenum		10000	6010C
Nickel		30000	6010C
Selenium		10000	6010C
Silver		2000	6010C
Thallium		10000	6010C
Vanadium		5000	6010C
Zinc		10000	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28498-1

SDG No.:

Instrument ID: H4 Date: 04/01/2011 10:50

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		50	7471B

FORM XI - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Prep Method: 7471B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-99740/1-A	08/30/2013 14:55	99740	0.60		100
LCS 240-99740/2-A	08/30/2013 14:55	99740	0.60		100
240-28498-1	08/30/2013 14:55	99740	0.55		100
240-28498-1 DU	08/30/2013 14:55	99740	0.55		100
240-28498-1 MS	08/30/2013 14:55	99740	0.55		100
240-28498-2	08/30/2013 14:55	99740	0.65		100

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-99740/1-A

Instrument Code: H4 Batch No.: 100138

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.10	U		7471B

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-99740/2-A

Lab Name: TestAmerica Canton Job No.: 240-28498-1

Sample Matrix: Solid LCS Source: MTHGCALW_00453

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.932		112	80	120		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-99736/1-A	08/30/2013 11:52	99736	1.00		100
LCS 240-99736/2-A	08/30/2013 11:52	99736	1.00		100
240-28498-1	08/30/2013 11:52	99736	1.12		100
240-28498-1 DU	08/30/2013 11:52	99736	1.12		100
240-28498-1 MS	08/30/2013 11:52	99736	1.12		100
240-28498-2	08/30/2013 11:52	99736	1.03		100

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-99736/1-A

Instrument Code: I9 Batch No.: 100170

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6010C
7440-38-2	Arsenic	1.5	U		6010C
7440-39-3	Barium	0.0843	J		6010C
7440-41-7	Beryllium	0.50	U		6010C
7440-43-9	Cadmium	0.50	U		6010C
7440-47-3	Chromium	1.0	U		6010C
7440-48-4	Cobalt	1.0	U		6010C
7440-50-8	Copper	2.5	U		6010C
7439-92-1	Lead	1.0	U		6010C
7439-98-7	Molybdenum	4.0	U		6010C
7440-02-0	Nickel	4.0	U		6010C
7782-49-2	Selenium	2.0	U		6010C
7440-22-4	Silver	1.0	U		6010C
7440-28-0	Thallium	2.0	U		6010C
7440-62-2	Vanadium	1.0	U		6010C
7440-66-6	Zinc	1.27	J		6010C

FORM III-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: DR-SB-46I-39-40 MS
Lab ID: 240-28498-1 MS
Lab Name: TestAmerica Canton
Job No.: 240-28498-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 85.5

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	49.4		0.55	J	52.2	94	75-125		6010C
Arsenic	207		2.1		209	98	75-125		6010C
Barium	189		0.45	J	209	90	75-125		6010C
Beryllium	4.72		0.52	U	5.22	90	75-125		6010C
Cadmium	5.01		0.52	U	5.22	96	75-125		6010C
Chromium	32.9		11		20.9	104	75-125		6010C
Cobalt	50.6		0.38	J	52.2	96	75-125		6010C
Copper	33.1		7.7		26.1	97	75-125		6010C
Lead	49.2		1.0	U	52.2	94	75-125		6010C
Molybdenum	102		0.34	J	104	97	75-125		6010C
Nickel	51.3		0.33	J	52.2	98	75-125		6010C
Selenium	197		2.1	U	209	94	75-125		6010C
Silver	4.83		1.0	U	5.22	93	75-125		6010C
Thallium	203		2.1	U	209	97	75-125		6010C
Vanadium	64.0		13		52.2	98	75-125		6010C
Zinc	53.4		2.1	J	52.2	98	75-125		6010C
Mercury	0.232		0.13	U	0.213	109	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

6-IN
DUPLICATES
METALS

Client ID: DR-SB-46I-39-40 DU Lab ID: 240-28498-1 DU

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

% Solids for Sample: 85.5 % Solids for Duplicate: 85.5

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	2.1	0.55	J	0.483	J	13		6010C
Arsenic	1.6	2.1		2.80		27		6010C
Barium	21	0.45	J	0.468	J	4		6010C
Beryllium	0.52	0.52	U	0.52	U	NC		6010C
Cadmium	0.52	0.52	U	0.52	U	NC		6010C
Chromium	1.0	11		14.6		26		6010C
Cobalt	1.0	0.38	J	0.447	J	16		6010C
Copper	2.6	7.7		10.1		27		6010C
Lead	1.0	1.0	U	1.0	U	NC		6010C
Molybdenum	4.2	0.34	J	0.353	J	3		6010C
Nickel	4.2	0.33	J	0.419	J	23		6010C
Selenium	2.1	2.1	U	2.1	U	NC		6010C
Silver	1.0	1.0	U	1.0	U	NC		6010C
Thallium	2.1	2.1	U	2.1	U	NC		6010C
Vanadium	1.0	13		15.6		20		6010C
Zinc	5.2	2.1	J	2.09	J	2		6010C
Mercury	0.13	0.13	U	0.13	U	NC		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-99736/2-A

Lab Name: TestAmerica Canton Job No.: 240-28498-1

Sample Matrix: Solid LCS Source: MTICP1_00023

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	49.6		99	80	120		6010C
Arsenic	200	202		101	80	120		6010C
Barium	200	185		93	80	120		6010C
Beryllium	5.00	4.62		92	80	120		6010C
Cadmium	5.00	4.95		99	80	120		6010C
Chromium	20.0	18.8		94	80	120		6010C
Cobalt	50.0	49.1		98	80	120		6010C
Copper	25.0	23.4		94	80	120		6010C
Lead	50.0	48.8		98	80	120		6010C
Molybdenum	100	101		101	80	120		6010C
Nickel	50.0	49.8		100	80	120		6010C
Selenium	200	194		97	80	120		6010C
Silver	5.00	4.76		95	80	120		6010C
Thallium	200	199		100	80	120		6010C
Vanadium	50.0	47.3		95	80	120		6010C
Zinc	50.0	51.2		102	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-28498-1

SDG No:

Lab Name: TestAmerica Canton Job No: 240-28498-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.55	J	10	U	NC		6010C
Arsenic	2.1		2.27	J	NC		6010C
Barium	0.45	J	0.437	J	NC		6010C
Beryllium	0.52	U	2.6	U	NC		6010C
Cadmium	0.52	U	2.6	U	NC		6010C
Chromium	11		11.3		1.1		6010C
Cobalt	0.38	J	5.2	U	NC		6010C
Copper	7.7		8.39	J	NC		6010C
Lead	1.0	U	5.2	U	NC		6010C
Molybdenum	0.34	J	21	U	NC		6010C
Nickel	0.33	J	21	U	NC		6010C
Selenium	2.1	U	10	U	NC		6010C
Silver	1.0	U	5.2	U	NC		6010C
Thallium	2.1	U	10	U	NC		6010C
Vanadium	13		13.1		2.4		6010C
Zinc	2.1	J	9.88	J	NC		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 09/04/2013 08:40 End Date: 09/04/2013 14:57

Lab Sample ID	D/F	Type	Time	Analytes
				Hg
IC 240-99995/1-A			08:40	X
IC 240-99995/1-A			08:42	X
IC 240-99995/2-A			08:44	X
IC 240-99995/2-A			08:47	X
IC 240-99995/3-A			08:49	X
IC 240-99995/3-A			08:52	X
IC 240-99995/4-A			08:54	X
IC 240-99995/4-A			08:56	X
IC 240-99995/5-A			08:58	X
IC 240-99995/5-A			09:00	X
IC 240-99995/6-A			09:02	X
IC 240-99995/6-A			09:04	X
IC 240-99995/7-A			09:07	X
IC 240-99995/7-A			09:09	X
ICV 240-99995/8-A			09:14	
ICB 240-99995/9-A			09:16	
CRA 240-99995/10-A			09:18	
IC 240-99995/1-A			09:27	X
IC 240-99995/1-A			09:29	X
IC 240-99995/2-A			09:30	X
IC 240-99995/2-A			09:33	X
IC 240-99995/3-A			09:35	X
IC 240-99995/3-A			09:37	X
IC 240-99995/4-A			09:40	X
IC 240-99995/4-A			09:42	X
IC 240-99995/5-A			09:44	X
IC 240-99995/5-A			09:46	X
IC 240-99995/6-A			09:50	X
IC 240-99995/6-A			09:52	X
IC 240-99995/7-A			09:54	X
IC 240-99995/7-A			09:56	X
ICV 240-99995/8-A	1		09:59	X
ICB 240-99995/9-A	1		10:01	X
CRA 240-99995/10-A	1		10:03	X
CCV 240-99995/11-A			10:11	
CCB 240-99995/12-A			10:14	
ZZZZZZ			10:16	
ZZZZZZ			10:18	
ZZZZZZ			10:20	
ZZZZZZ			10:22	
ZZZZZZ			10:24	
ZZZZZZ			10:26	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 09/04/2013 08:40 End Date: 09/04/2013 14:57

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
ZZZZZZ			10:28	
ZZZZZZ			10:31	
ZZZZZZ			10:33	
ZZZZZZ			10:35	
CCV 240-99995/11-A			10:37	
CCB 240-99995/12-A			10:40	
ZZZZZZ			10:42	
ZZZZZZ			10:44	
ZZZZZZ			10:46	
ZZZZZZ			10:48	
ZZZZZZ			10:50	
ZZZZZZ			10:53	
ZZZZZZ			10:55	
ZZZZZZ			10:56	
ZZZZZZ			10:59	
ZZZZZZ			11:01	
CCV 240-99995/11-A			11:04	
CCB 240-99995/12-A			11:06	
ZZZZZZ			11:09	
ZZZZZZ			11:11	
CCV 240-99995/11-A			11:14	
CCB 240-99995/12-A			11:16	
ZZZZZZ			11:18	
ZZZZZZ			11:22	
ZZZZZZ			11:24	
ZZZZZZ			11:27	
ZZZZZZ			11:29	
ZZZZZZ			11:32	
ZZZZZZ			11:34	
ZZZZZZ			11:36	
ZZZZZZ			11:38	
ZZZZZZ			11:40	
CCV 240-99995/11-A			11:42	
CCB 240-99995/12-A			11:45	
ZZZZZZ			11:48	
ZZZZZZ			11:50	
ZZZZZZ			11:53	
ZZZZZZ			11:55	
ZZZZZZ			11:58	
ZZZZZZ			12:00	
ZZZZZZ			12:02	
ZZZZZZ			12:04	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 09/04/2013 08:40 End Date: 09/04/2013 14:57

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
ZZZZZZ			12:06	
ZZZZZZ			12:08	
CCV 240-99995/11-A	1		12:10	X
CCB 240-99995/12-A	1		12:13	X
ZZZZZZ			12:15	
ZZZZZZ			12:17	
MB 240-99740/1-A	1	T	12:19	X
LCS 240-99740/2-A	1	T	12:21	X
240-28498-1	1	T	12:23	X
240-28498-1 DU	1	T	12:25	X
240-28498-1 MS	1	T	12:27	X
240-28498-2	1	T	12:29	X
ZZZZZZ			12:31	
ZZZZZZ			12:33	
CCV 240-99995/11-A	1		12:35	X
CCB 240-99995/12-A	1		12:37	X
ZZZZZZ			12:40	
ZZZZZZ			12:42	
ZZZZZZ			12:44	
ZZZZZZ			12:46	
ZZZZZZ			12:48	
ZZZZZZ			12:50	
ZZZZZZ			12:52	
ZZZZZZ			12:55	
ZZZZZZ			12:57	
ZZZZZZ			12:59	
CCV 240-99995/11-A			13:00	
CCB 240-99995/12-A			13:02	
ZZZZZZ			13:04	
CCV 240-99995/11-A			13:06	
CCB 240-99995/12-A			13:08	
CCV 240-99995/11-A			14:04	
CCB 240-99995/12-A			14:07	
ZZZZZZ			14:09	
ZZZZZZ			14:11	
ZZZZZZ			14:12	
ZZZZZZ			14:14	
ZZZZZZ			14:17	
CCV 240-99995/11-A			14:19	
CCB 240-99995/12-A			14:21	
CCV 240-99995/11-A			14:40	
CCB 240-99995/12-A			14:42	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 09/04/2013 08:40 End Date: 09/04/2013 14:57

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			14:44																				
ZZZZZZ			14:46																				
ZZZZZZ			14:49																				
ZZZZZZ			14:51																				
ZZZZZZ			14:53																				
CCV 240-99995/11-A			14:55																				
CCB 240-99995/12-A			14:57																				

Prep Types
T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00454

Analyte	ICV 240-99995/8-A 09/04/2013 09:59				CCV 240-99995/11-A 09/04/2013 12:10				CCV 240-99995/11-A 09/04/2013 12:35			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.47		5.00	109	10.8		10.0	108	10.7		10.0	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Method: 7471B Instrument ID: H4

Lab Sample ID: CRA 240-99995/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00454

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.140	J	70	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-99995/9-A 09/04/2013 10:01		CCB 240-99995/12-A 09/04/2013 12:13		CCB 240-99995/12-A 09/04/2013 12:37			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.60	0.60	U	0.60	U	0.60	U		

Italicized analytes were not requested for this sequence.

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 09/04/2013 14:07 End Date: 09/05/2013 10:57

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ICIS 240-100170/1	1		14:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-100170/2 IC			14:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-100170/3 IC			14:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-100170/4	1		14:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICB 240-100170/5	1		14:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-100170/6			14:27																				
ZZZZZZ			14:31																				
ICSA 240-100170/8	1		14:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-100170/9	1		14:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-100170/10			14:43																				
CCB 240-100170/11			14:47																				
ZZZZZZ			14:51																				
ZZZZZZ			14:55																				
ZZZZZZ			15:00																				
ZZZZZZ			15:04																				
ZZZZZZ			15:08																				
ZZZZZZ			15:12																				
CCV 240-100170/18			15:16																				
CCB 240-100170/19			15:20																				
CRI 240-100170/20	1		15:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			15:32																				
ZZZZZZ			15:36																				
ZZZZZZ			15:40																				
ZZZZZZ			15:44																				
ZZZZZZ			15:48																				
ZZZZZZ			15:52																				
ZZZZZZ			15:56																				
ZZZZZZ			16:00																				
ZZZZZZ			16:04																				
CCV 240-100170/30			16:08																				
CCB 240-100170/31			16:11																				
ZZZZZZ			16:16																				
ZZZZZZ			16:20																				
ZZZZZZ			16:24																				
ZZZZZZ			16:28																				
ZZZZZZ			16:31																				
ZZZZZZ			16:35																				
ZZZZZZ			16:39																				
ZZZZZZ			16:43																				
ZZZZZZ			16:47																				
ZZZZZZ			16:51																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 09/04/2013 14:07 End Date: 09/05/2013 10:57

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCV 240-100170/42			16:55																				
CCB 240-100170/43			16:59																				
ZZZZZZ			17:03																				
ZZZZZZ			17:07																				
ZZZZZZ			17:11																				
ZZZZZZ			17:15																				
ZZZZZZ			17:19																				
ZZZZZZ			17:23																				
ZZZZZZ			17:27																				
ZZZZZZ			17:31																				
ZZZZZZ			17:35																				
ZZZZZZ			17:39																				
CCV 240-100170/54			17:43																				
CCB 240-100170/55			17:47																				
ZZZZZZ			17:51																				
ZZZZZZ			17:55																				
ZZZZZZ			17:59																				
ZZZZZZ			18:03																				
ZZZZZZ			18:07																				
ZZZZZZ			18:11																				
ZZZZZZ			18:15																				
ZZZZZZ			18:19																				
ZZZZZZ			18:23																				
ZZZZZZ			18:27																				
CCV 240-100170/66	1		18:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-100170/67	1		18:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			18:39																				
ZZZZZZ			18:43																				
ZZZZZZ			18:47																				
ZZZZZZ			18:51																				
ZZZZZZ			18:55																				
MB 240-99736/1-A	1	T	18:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-99736/2-A	1	T	19:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28498-1	1	T	19:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28498-1 SD	5	T	19:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28498-1 DU	1	T	19:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-100170/78	1		19:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-100170/79	1		19:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28498-1 MS	1	T	19:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-28498-2	1	T	19:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			19:34																				
ZZZZZZ			19:38																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 09/04/2013 14:07 End Date: 09/05/2013 10:57

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			19:42																				
ZZZZZZ			19:46																				
ZZZZZZ			19:50																				
ZZZZZZ			19:54																				
ZZZZZZ			19:58																				
ZZZZZZ			20:02																				
CCV 240-100170/90	1		20:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-100170/91	1		20:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			20:14																				
ZZZZZZ			20:18																				
ZZZZZZ			20:22																				
ZZZZZZ			20:26																				
ZZZZZZ			20:30																				
ZZZZZZ			20:34																				
ZZZZZZ			20:38																				
ZZZZZZ			20:42																				
ZZZZZZ			20:46																				
ZZZZZZ			20:50																				
CCV 240-100170/102			20:54																				
CCB 240-100170/103			20:58																				
ZZZZZZ			21:02																				
ZZZZZZ			21:06																				
ZZZZZZ			21:10																				
ZZZZZZ			21:15																				
ZZZZZZ			21:19																				
ZZZZZZ			21:24																				
ZZZZZZ			21:28																				
ZZZZZZ			21:32																				
ZZZZZZ			21:36																				
ZZZZZZ			21:41																				
CCV 240-100170/114			21:45																				
CCB 240-100170/115			21:49																				
ZZZZZZ			21:53																				
ZZZZZZ			21:57																				
ZZZZZZ			22:01																				
ZZZZZZ			22:06																				
ZZZZZZ			22:10																				
ZZZZZZ			22:14																				
ZZZZZZ			22:18																				
ZZZZZZ			22:22																				
CCV 240-100170/124			22:26																				
CCB 240-100170/125			22:30																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 09/04/2013 14:07 End Date: 09/05/2013 10:57

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCV 240-100170/126			08:37																					
CCB 240-100170/127			08:41																					
CCV 240-100170/128			08:47																					
CCB 240-100170/129			08:51																					
ZZZZZZ			09:00																					
ZZZZZZ			09:04																					
CCV 240-100170/132			09:07																					
CCB 240-100170/133			09:11																					
CRI 240-100170/134	1		09:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-100170/135			09:39																					
CCB 240-100170/136			09:43																					
ZZZZZZ			09:47																					
CCV 240-100170/138			09:51																					
CCB 240-100170/139			09:55																					
ZZZZZZ			09:59																					
ZZZZZZ			10:03																					
ZZZZZZ			10:07																					
ZZZZZZ			10:11																					
ZZZZZZ			10:15																					
ZZZZZZ			10:19																					
ZZZZZZ			10:23																					
ZZZZZZ			10:27																					
ZZZZZZ			10:31																					
ZZZZZZ			10:35																					
CCV 240-100170/150			10:39																					
CCB 240-100170/151			10:43																					
ZZZZZZ			10:47																					
CCV 240-100170/153			10:53																					
CCB 240-100170/154			10:57																					

Prep Types

T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

ICV Source: MT6500ICV_00012 Concentration Units: ug/L

CCV Source: MTICPCCV_00006

Analyte	ICV 240-100170/4 09/04/2013 14:19				CCV 240-100170/66 09/04/2013 18:31				CCV 240-100170/78 09/04/2013 19:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	396		375	105	524		500	105	515		500	103
Arsenic	396		375	106	532		500	106	526		500	105
Barium	1500		1500	100	1960		2000	98	1950		2000	98
Beryllium	1540		1500	102	2010		2000	101	2000		2000	100
Cadmium	391		375	104	524		500	105	517		500	103
Chromium	1500		1500	100	1980		2000	99	1980		2000	99
Cobalt	1540		1500	103	2130		2000	106	2100		2000	105
Copper	1490		1500	100	1960		2000	98	1960		2000	98
Lead	382		375	102	510		500	102	506		500	101
Molybdenum	1570		1500	104	2120		2000	106	2090		2000	105
Nickel	1570		1500	104	2120		2000	106	2090		2000	105
Selenium	388		375	104	520		500	104	511		500	102
Silver	763		750	102	989		1000	99	988		1000	99
Thallium	775		750	103	1060		1000	106	1040		1000	104
Vanadium	1530		1500	102	2030		2000	102	2020		2000	101
Zinc	1580		1500	105	2170		2000	108	2130		2000	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

ICV Source: MT6500ICV_00012 Concentration Units: ug/L

CCV Source: MTICPCCV_00006

Analyte	CCV 240-100170/90 09/04/2013 20:06											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	514		500	103								
Arsenic	527		500	105								
Barium	1940		2000	97								
Beryllium	1970		2000	99								
Cadmium	516		500	103								
Chromium	1960		2000	98								
Cobalt	2100		2000	105								
Copper	1930		2000	97								
Lead	503		500	101								
Molybdenum	2090		2000	105								
Nickel	2100		2000	105								
Selenium	513		500	103								
Silver	978		1000	98								
Thallium	1040		1000	104								
Vanadium	2000		2000	100								
Zinc	2140		2000	107								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-100170/20 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	22.5		113	70-130
Arsenic	15.0	14.5	J	97	70-130
Barium	200	195	J	98	70-130
Beryllium	5.00	4.85	J	97	70-130
Cadmium	5.00	5.21		104	70-130
Chromium	10.0	10.0		100	70-130
Cobalt	10.0	10.5		105	70-130
Copper	20.0	21.3	J	107	70-130
Lead	10.0	10.1		101	70-130
Molybdenum	40.0	41.0		102	70-130
Nickel	40.0	41.4		103	70-130
Selenium	20.0	20.3		101	70-130
Silver	10.0	10.1		101	70-130
Thallium	20.0	21.0		105	70-130
Vanadium	10.0	9.85	J	98	70-130
Zinc	50.0	51.0		102	70-130

Lab Sample ID: CRI 240-100170/134 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	22.8		114	70-130
Arsenic	15.0	15.1		101	70-130
Barium	200	189	J	95	70-130
Beryllium	5.00	4.75	J	95	70-130
Cadmium	5.00	4.85	J	97	70-130
Chromium	10.0	9.50	J	95	70-130
Cobalt	10.0	10.1		101	70-130
Copper	20.0	20.0	J	100	70-130
Lead	10.0	10.0		100	70-130
Molybdenum	40.0	40.0		100	70-130
Nickel	40.0	39.8	J	100	70-130
Selenium	20.0	21.1		105	70-130
Silver	10.0	9.79	J	98	70-130
Thallium	20.0	20.4		102	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-100170/134 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	10.0	10.6		106	70-130
Zinc	50.0	50.1		100	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-100170/5 09/04/2013 14:23		CCB 240-100170/67 09/04/2013 18:35		CCB 240-100170/79 09/04/2013 19:22		CCB 240-100170/91 09/04/2013 20:10	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	4.24	J	2.17	J	2.82	J	2.18	J
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	200	U	200	U
Beryllium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Lead	10	10	U	10	U	10	U	10	U
Molybdenum	40	1.36	J	40	U	40	U	40	U
Nickel	40	40	U	40	U	40	U	40	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	10	U	10	U	10	U	10	U
Zinc	50	50	U	50	U	50	U	50	U

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: ICSA 240-100170/8 Instrument ID: I9

Lab File ID: I9090413A.asc ICS Source: MTTRICSAW_00019

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.909**	
Arsenic		**-1.79**	
Barium		**0.234**	
Beryllium		**-0.308**	
Cadmium		**0.320**	
Chromium		**3.15**	
Cobalt		**-0.687**	
Copper		**0.911**	
Lead		**-0.824**	
Molybdenum		**-3.49**	
Nickel		**3.24**	
Selenium		**-1.85**	
Silver		**0.0780**	
Thallium		**3.77**	
Vanadium		**0.306**	
Zinc		**10.0**	
Aluminum	*500000*	*508790*	*102*
Boron		*-0.564*	
Calcium	*500000*	*478490*	*96*
Iron	*200000*	*191120*	*96*
Lithium		*-29.4*	
Magnesium	*500000*	*509950*	*102*
Manganese		*2.60*	
Potassium		*182*	
Silicon		*0.862*	
Sodium		*214*	
Strontium		*10.9*	
Tin		*2.66*	
Titanium		*0.0260*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28498-1

SDG No.:

Lab Sample ID: ICSAB 240-100170/9 Instrument ID: I9

Lab File ID: I9090413A.asc ICS Source: MTICPICSABW_00001

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**1000**	**1046**	**105**
Arsenic	**1000**	**1063**	**106**
Barium	**500**	**502**	**100**
Beryllium	**500**	**498**	**100**
Cadmium	**1000**	**1077**	**108**
Chromium	**500**	**492**	**98**
Cobalt	**500**	**522**	**104**
Copper	**500**	**528**	**106**
Lead	**1000**	**941**	**94**
Molybdenum	**1000**	**1008**	**101**
Nickel	**1000**	**1038**	**104**
Selenium	**1000**	**1041**	**104**
Silver	**1000**	**1089**	**109**
Thallium	**1000**	**1002**	**100**
Vanadium	**500**	**493**	**99**
Zinc	**1000**	**1054**	**105**
Aluminum	*500000*	*516570*	*103*
Boron	*500*	*521*	*104*
Calcium	*500000*	*486480*	*97*
Iron	*200000*	*193200*	*97*
Lithium	*500*	*492*	*98*
Magnesium	*500000*	*516320*	*103*
Manganese	*500*	*497*	*99*
Potassium	*10000*	*10736*	*107*
Silicon	*10000*	*9986*	*100*
Sodium	*10000*	*10833*	*108*
Strontium	*1500*	*1465*	*98*
Tin	*500*	*530*	*106*
Titanium	*500*	*506*	*101*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **December 12, 2013**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION- VOCs, SVOC, TPH, SELECT METALS, DISSOLVED GASES, ALKALINITY, AMMONIA-N, CHLORIDE, DOC, NITRATE-N, NITRITE-N, ORTHOPHOSPHATE-P, SULFATE, AND TDS**
LOCKHEED-MATRIN STATE AIRPORT
DUMP ROAD SOURCE AREAS
SDG 240-30485-1

SAMPLES: 7/Aqueous/

MSA-DUP01-102113	MSA-MW44S-102113
MSA-MW50D-102113	MSA-MW51D-102113
MSA-MW51I-102113	MSA-MW51S-102113
TB-102113	

Overview

The sample set for Lockheed MSA, SDG 240-30485-1, consists of six (6) aqueous environmental samples and one trip blank. This SDG contained one field duplicate pair: MSA-DUP01-102113/ MSA-MW44S-102113.

All samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOC), total petroleum hydrocarbons (TPH), and select metals. TB-102113 was only analyzed for VOC. Samples MSA-MW51D-102113, MSA-MW51I-102113, and MSA-MW51S-102113 were analyzed for alkalinity, ammonia-N, chloride, dissolved organic carbon (DOC), nitrate-N, nitrite-N, orthophosphate-P, sulfate, and total dissolved solids (TDS), methane, and ethane. The samples were collected by Tetra Tech October 21st, 2013 and analyzed by TestAmerica and Microseeps. VOC analyses were conducted using method 8260B. SVOC analyses were conducted using method 8270D. TPH analyses were conducted using method 8015C. TPH analyses were conducted using method 8015C. Metals analyses were conducted using method 6010C. Mercury analyses were conducted using method 7470. Alkalinity analyses were conducted using method 310.1. Ammonia-N analyses were conducted using method 350.3. Chloride, nitrate-N, nitrite-N, orthophosphate-P, and sulfate were conducted using method 300.0. DOC analyses were conducted using method 9060. TDS analyses were conducted using method 160.1. Methane and ethane analyses were conducted using Microseeps method AM20GAX.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, GC/MS tuning, MS tuning, initial and continuing calibration verification results, laboratory method / preparation blank results, ICP interference results, ICP internal standard recoveries, ICP serial dilution, surrogate standard recoveries, laboratory control sample recoveries, matrix spike recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems-

- The initial calibration analyzed on10/29/13 on instrument A3UX16 had a relative response factor

< 0.05 for tert-butyl alcohol. All samples were affected. All tert-butyl alcohol results were qualified as rejected (UR).

- The continuing calibration analyzed on 10/31/13 on instrument A3UX16 had a relative response factor < 0.05 for tert-butyl alcohol. All samples were affected. All tert-butyl alcohol results were qualified as rejected (UR).

Minor Problems-

- The following contaminants were detected in preparation and calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Naphthalene [1]	0.75 ug/L	3.8 ug/L
4-methyl-2-pentanone [1]	0.83 ug/L	4.2 ug/L
Carbon disulfide [2]	3.9 ug/L	19.5 ug/L
Chloroform [2]	0.62 ug/L	3.1 ug/L
Toluene [2]	0.70 ug/L	3.5 ug/L
Bis(2-ethylhexyl)phthalate[3]	0.28 ug/L	1.4 ug/L
TPH (C6-C10) [4]	61.4 ug/L	307 ug/L
Barium [5]	0.87 ug/L	4.4 ug/L
Zinc [5]	14.9 ug/L	74.5 ug/L
Calcium [6]	313 ug/L	1565 ug/L
Magnesium [6]	34 ug/L	170 ug/L
Potassium [7]	81.3 ug/L	407 ug/L
Vanadium [7]	2.83 ug/L	14.2 ug/L
Antimony [8]	2.3 ug/L	11.5 ug/L
Barium [8]	1.05 ug/L	5.0 ug/L
Manganese [8]	0.72 ug/L	3.6 ug/L
Nickel [8]	22.5 ug/L	112.5 ug/L
Silica dioxide [8]	28.9 ug/L	144 ug/L
Vanadium [8]	0.98 ug/L	4.9 ug/L
Zinc [8]	9.3 ug/L	46.5 ug/L

[1] Maximum concentration found in preparation blank affecting all VOC analyses.
[2] Maximum concentration found in a trip blank affecting all samples.
[3] Maximum concentration found in preparation blank affecting all SVOC analyses.
[4] Maximum concentration found in preparation blank affecting samples MSA-DUP01-102113, MSA-MW44S-102113, MSA-MW50D-102113, and MSA-MW51D-102113.
[5] Maximum concentration found in preparation blank affecting samples in preparation batch 106927.
[6] Maximum concentration found in preparation blank affecting samples in preparation batch 107845.
[7] Maximum concentration found in a calibration blank affecting samples MSA-DUP01-102113 and MSA-MW44S-102113.
[8] Maximum concentration found in a calibration blank affecting samples MSA-MW50D-102113, MSA-MW51D-102113, MSA-MW51I-102113, and MSA-MW51S-102113.

An action level of 5X or 10X (acetone and methylene chloride) the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Detected carbon disulfide, chloroform, nickel, toluene, TPH(C06-C10), vanadium, and zinc results

less than the blank action level were qualified (B) for blank contamination.

- The CRDL standard analyzed in 10/30/13 had percent recoveries > 110% for vanadium, arsenic, chromium, and iron and percent recoveries < 90% for lead and vanadium. Samples MSA-DUP01-102113 and MSA-MW44S-102113 were affected. Detected arsenic, vanadium, and chromium results <2X CRDL were qualified as either biased low (L) or estimated (J) due to conflicting directional bias. Non-detected lead results were qualified as biased low (UL). No action was warranted for iron results.

- The CRDL standard analyzed in 11/5/13 had a percent recovery < 90% for vanadium. Samples MSA-MW50D-102113, MSA-MW51D-102113, MSA-MW51I-102113, and MSA-MW51S-102113 were affected. The non-detected vanadium results were qualified as biased low (UL).

- The matrix spike and matrix spike duplicate for preparation batch 106647 had a percent recovery < 80% for orthophosphate-P. Corrective action was taken by re-analyzing the samples. The re-analysis also had poor recoveries for the MS and was out of holding time. The original analysis was selected to be validated. The detected result was qualified as estimated and the non-detected results were qualified as biased low (UL).

- For the methane and ethane analyses samples MSA-MW51D-102113, MSA-MW51I-102113, and MSA-MW51S-102113 were analyzed for preserved with hydrochloric acid. The method required sulfuric acid preservation. The project manager was made aware and the lab was instructed to proceed with the analyses. Positive methane and ethane results were qualified as estimated (J).

- The TPH (C6-C10) result in sample MSA-MW51S-102113 is qualified as biased high, (K), because the reviewer suspects that chlorinated VOCs are contributing toward the high concentration.

- TICs were qualified as presumptively present "NJ"

Notes

Non-detected results were reported at the MDL.

The VOC LCS had a percent recovery >120% for 1,1-dichloropropene and trans-1,3-dichloropropene. No validation action was warranted as sample results were non-detect.

The following samples were analyzed at dilutions for VOC analyses MSA-DUP01-102113 (10X), MSA-MW44S-102113 (7.14X), MSA-MW51I-102113 (1.25X), and MSA-MW51S-102113 (200X).

Samples MSA-MW51D-102113, MSA-MW51I-102113, and MSA-MW51S-102113 were analyzed for methane and ethane by Microseeps. Ethene was not reported by the lab.

For samples MSA-MW51D-102113, MSA-MW51I-102113, and MSA-MW51S-102113 the lab reported 7 additional metals.

Executive Summary

Laboratory Performance: Calibration non-compliances for tert-butyl alcohol resulted in the rejection of sample results. Preparation and calibration blank contamination resulted in the qualification of sample

results as non-detected. CRDL standard non-compliances for arsenic vandaim and chromium resulted in the qualification of sample results.

Other Factors Affecting Data Quality: Matrix spike and matrix spike duplicate non-compliances resulted in the qualification of orthophosphate-P results. Deviation from the preservation methodology resulted in the qualification of methane and ethane results.

The data for these analyses were reviewed with reference to the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993) and U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994).

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	MSA-DUP01-102113			MSA-MW44S-102113			MSA-MW50D-102113			MSA-MW51D-102113		
SDG: 240-30485-1	LAB_ID	240-30485-7			240-30485-5			240-30485-4			240-30485-3		
FRACTION: OV	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	FD			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	2.3	U		1.6	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE	2.2	U		1.6	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	1.8	U		1.3	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	2.8	U		2	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE	3.9	J	P	4	J	P	0.15	U		0.15	U	
1,1-DICHLOROETHENE	1.9	U		1.4	U		0.21	J	P	0.19	J	P
1,1-DICHLOROPROPENE	1.3	U		0.93	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE	1.7	U		1.2	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE	4.3	U		3.1	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE	0.059	U		0.042	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE	1.5	U		1.1	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	1.2	U		0.86	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	6.7	U		4.8	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE	2.4	U		1.7	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE	1.3	U		0.93	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE	2.2	U		1.6	U		1.2			0.22	U	
1,2-DICHLOROPROPANE	1.8	U		1.3	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE	1.4	U		1	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE	1.6	U		1.1	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE	3.2	J	P	2.9	J	P	0.13	U		0.13	U	
2,2-DICHLOROPROPANE	1.3	U		0.93	U		0.13	U		0.13	U	
2-BUTANONE	5.7	U		4.1	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER	9.9	U		7.1	U		0.99	U		0.99	U	
2-CHLOROTOLUENE	1.1	U		0.79	U		0.11	U		0.11	U	
2-HEXANONE	4.1	U		2.9	U		0.41	U		0.41	U	
4-CHLOROTOLUENE	1.8	U		1.3	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE	1.2	U		0.86	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE	3.2	U		2.3	U		0.32	U		0.32	U	
ACETONE	11	U		12	J	P	1.6	J	P	1.7	J	P
BENZENE	1.3	U		0.93	U		0.27	J	P	0.13	J	P
BROMOBENZENE	1.3	U		0.93	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE	2.9	U		2.1	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE	1.5	U		1.1	U		0.15	U		0.88	J	P
BROMOFORM	6.4	U		4.6	U		0.64	U		0.64	U	
BROMOMETHANE	4.1	U		2.9	U		0.41	U		0.41	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW51I-102113			MSA-MW51S-102113			TB-102113-240-30485-1		
SDG: 240-30485-1	LAB_ID	240-30485-2			240-30485-1			240-30485-6		
FRACTION: OV	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.29	U		46	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.28	U		44	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.23	U		36	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.35	U		56	U		0.28	U	
1,1-DICHLOROETHANE		0.19	U		30	U		0.15	U	
1,1-DICHLOROETHENE		0.24	J	P	38	U		0.19	U	
1,1-DICHLOROPROPENE		0.16	U		26	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.21	U		34	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.54	U		86	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0074	U		1.2	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.19	U		30	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.15	U		24	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.84	U		130	U		0.67	U	
1,2-DIBROMOETHANE		0.3	U		48	U		0.24	U	
1,2-DICHLOROBENZENE		0.16	U		26	U		0.13	U	
1,2-DICHLOROETHANE		0.28	U		44	U		0.22	U	
1,2-DICHLOROPROPANE		0.23	U		36	U		0.18	U	
1,3-DICHLOROBENZENE		0.18	U		28	U		0.14	U	
1,3-DICHLOROPROPANE		0.2	U		32	U		0.16	U	
1,4-DICHLOROBENZENE		0.16	U		26	U		0.13	U	
2,2-DICHLOROPROPANE		0.16	U		26	U		0.13	U	
2-BUTANONE		0.71	U		110	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		1.2	U		200	U		0.99	U	
2-CHLOROTOLUENE		0.14	U		22	U		0.11	U	
2-HEXANONE		0.51	U		82	U		0.41	U	
4-CHLOROTOLUENE		0.23	U		36	U		0.18	U	
4-ISOPROPYLTOLUENE		0.15	U		24	U		0.12	U	
4-METHYL-2-PENTANONE		0.4	U		64	U		0.32	U	
ACETONE		1.4	U		220	U		1.1	U	
BENZENE		0.16	U		26	U		0.13	U	
BROMOBENZENE		0.16	U		26	U		0.13	U	
BROMOCHLOROMETHANE		0.36	U		58	U		0.29	U	
BROMODICHLOROMETHANE		0.19	U		30	U		0.15	U	
BROMOFORM		0.8	U		130	U		0.64	U	
BROMOMETHANE		0.51	U		82	U		0.41	U	

PROJ_NO: 04882	NSAMPLE	MSA-DUP01-102113			MSA-MW44S-102113			MSA-MW50D-102113			MSA-MW51D-102113		
SDG: 240-30485-1	LAB_ID	240-30485-7			240-30485-5			240-30485-4			240-30485-3		
FRACTION: OV	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	FD			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		5.4	B	B	3.4	B	B	0.82	B	B	1.1	B	B
CARBON TETRACHLORIDE		1.3	U		0.93	U		0.13	U		0.13	U	
CHLOROBENZENE		1.5	U		1.1	U		0.9	J	P	0.15	U	
CHLORODIBROMOMETHANE		1.8	U		1.3	U		0.18	U		0.18	U	
CHLOROETHANE		2.9	U		2.1	U		0.29	U		0.29	U	
CHLOROFORM		1.6	U		1.1	U		2.4	B	B	24		
CHLOROMETHANE		3	U		2.1	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		1.7	U		1.2	U		46			10		
CIS-1,3-DICHLOROPROPENE		1.4	U		1	U		0.14	U		0.14	U	
DIBROMOMETHANE		2.8	U		2	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		3.1	U		2.2	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		15	U		11	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		1.1	U		0.79	U		0.11	U		0.11	U	
ETHYLBENZENE		1.7	U		1.7	J	P	0.17	U		0.17	U	
HEXACHLOROBUTADIENE		3	U		2.1	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		1.3	U		0.93	U		0.13	U		0.13	U	
M+P-XYLENES		2.4	U		1.8	J	P	0.24	U		0.26	J	P
METHYL TERT-BUTYL ETHER		1.7	U		1.2	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		3.3	U		2.4	U		0.33	U		0.33	U	
NAPHTHALENE		310			380			0.24	U		0.24	U	
N-BUTYLBENZENE		1.2	U		0.86	U		0.12	U		0.12	U	
N-PROPYLBENZENE		1.4	U		1	U		0.14	U		0.14	U	
O-XYLENE		1.4	U		1	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		1.3	U		0.93	U		0.13	U		0.13	U	
STYRENE		1.1	U		0.79	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.67	U		0.48	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		1.3	U		0.93	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		39	UR	C	28	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		2.9	U		2.1	U		0.29	U		0.37	J	P
TOLUENE		5.8	B	B	4.7	B	B	0.62	B	B	0.72	B	B
TOTAL XYLENES		1.4	U		1.8	J	P	0.14	U		0.26	J	P
TRANS-1,2-DICHLOROETHENE		1.9	U		1.4	U		1.2			0.33	J	P
TRANS-1,3-DICHLOROPROPENE		1.9	U		1.4	U		0.19	U		0.19	U	
TRICHLOROETHENE		4.8	J	P	5.2	J	P	64			40		
TRICHLOROFLUOROMETHANE		2.1	U		1.5	U		0.21	U		0.21	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW51I-102113			MSA-MW51S-102113			TB-102113-240-30485-1		
SDG: 240-30485-1	LAB_ID	240-30485-2			240-30485-1			240-30485-6		
FRACTION: OV	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1.2	B	B	30	J	P	3.9		
CARBON TETRACHLORIDE		0.16	U		26	U		0.13	U	
CHLOROBENZENE		0.19	U		30	U		0.15	U	
CHLORODIBROMOMETHANE		0.23	U		36	U		0.18	U	
CHLOROETHANE		0.36	U		58	U		0.29	U	
CHLOROFORM		0.2	U		32	U		0.62	J	P
CHLOROMETHANE		0.38	U		60	U		0.3	U	
CIS-1,2-DICHLOROETHENE		70			5200			0.17	U	
CIS-1,3-DICHLOROPROPENE		0.18	U		28	U		0.14	U	
DIBROMOMETHANE		0.35	U		56	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.39	U		62	U		0.31	U	
DIISOPROPYL ETHER		1.9	U		300	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.14	U		22	U		0.11	U	
ETHYLBENZENE		0.21	U		34	U		0.17	U	
HEXACHLOROBUTADIENE		0.38	U		60	U		0.3	U	
ISOPROPYLBENZENE		0.16	U		26	U		0.13	U	
M+P-XYLENES		0.3	U		48	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.21	U		34	U		0.17	U	
METHYLENE CHLORIDE		0.41	U		66	U		0.33	U	
NAPHTHALENE		0.3	U		48	U		0.24	U	
N-BUTYLBENZENE		0.15	U		24	U		0.12	U	
N-PROPYLBENZENE		0.18	U		28	U		0.14	U	
O-XYLENE		0.18	U		28	U		0.14	U	
SEC-BUTYLBENZENE		0.16	U		26	U		0.13	U	
STYRENE		0.14	U		22	U		0.11	U	
TERT-AMYL METHYL ETHER		0.084	U		13	U		0.067	U	
TERT-BUTYLBENZENE		0.16	U		26	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		4.9	UR	C	780	UR	C	3.9	U	
TETRACHLOROETHENE		0.36	U		58	U		0.29	U	
TOLUENE		0.32	B	B	26	U		0.7	J	P
TOTAL XYLENES		0.18	U		28	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.93	J	P	38	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.24	U		38	U		0.19	U	
TRICHLOROETHENE		58			13000			0.17	U	
TRICHLOROFLUOROMETHANE		0.26	U		42	U		0.21	U	

PROJ_NO: 04882	NSAMPLE	MSA-DUP01-102113			MSA-MW44S-102113			MSA-MW50D-102113			MSA-MW51D-102113		
SDG: 240-30485-1	LAB_ID	240-30485-7			240-30485-5			240-30485-4			240-30485-3		
FRACTION: OV	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	FD			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		1.9	U		1.4	U		0.19	U		0.19	U	
VINYL CHLORIDE		2.2	U		1.8	J	P	9.7			0.92	J	P

PROJ_NO: 04882	NSAMPLE	MSA-MW51I-102113			MSA-MW51S-102113			TB-102113-240-30485-1		
SDG: 240-30485-1	LAB_ID	240-30485-2			240-30485-1			240-30485-6		
FRACTION: OV	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.24	U		38	U		0.19	U	
VINYL CHLORIDE		3.3			150	J	P	0.22	U	

PROJ_NO: 04882	NSAMPLE	MSA-DUP01-102113			MSA-MW44S-102113			MSA-MW50D-102113			MSA-MW51D-102113		
SDG: 240-30485-1	LAB_ID	240-30485-7			240-30485-5			240-30485-4			240-30485-3		
FRACTION: OS	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	FD			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	MSA-MW44S-102113											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		3.6	J	P	3.6	J	P	0.13	U		0.14	U	
1,4-DIOXANE		13			10			2.7			2.5		
2,2'-OXYBIS(1-CHLOROPROPANE)		1.6	U		1.5	U		0.4	U		0.43	U	
2,4,5-TRICHLOROPHENOL		1.2	U		1.1	U		0.3	U		0.33	U	
2,4,6-TRICHLOROPHENOL		0.95	U		0.91	U		0.24	U		0.26	U	
2,4-DICHLOROPHENOL		0.75	U		0.72	U		0.19	U		0.21	U	
2,4-DIMETHYLPHENOL		0.99	U		0.95	U		0.25	U		0.27	U	
2,4-DINITROPHENOL		1.3	U		1.2	U		0.32	U		0.35	U	
2,4-DINITROTOLUENE		0.99	U		0.95	U		0.25	U		0.27	U	
2,6-DINITROTOLUENE		3.2	U		3	U		0.81	U		0.87	U	
2-CHLORONAPHTHALENE		0.4	U		0.38	U		0.1	U		0.11	U	
2-CHLOROPHENOL		1.1	U		1.1	U		0.29	U		0.32	U	
2-METHYLNAPHTHALENE		7			6.3			0.091	U		0.098	U	
2-METHYLPHENOL		0.67	U		0.65	U		0.17	U		0.18	U	
2-NITROANILINE		0.83	U		0.8	U		0.21	U		0.23	U	
2-NITROPHENOL		1.1	U		1.1	U		0.28	U		0.3	U	
3&4-METHYLPHENOL		3.2	U		3	U		0.81	U		0.87	U	
3,3'-DICHLOROBENZIDINE		1.5	U		1.4	U		0.37	U		0.4	U	
3-NITROANILINE		1.1	U		1.1	U		0.28	U		0.3	U	
4,6-DINITRO-2-METHYLPHENOL		9.5	U		9.1	U		2.4	U		2.6	U	
4-BROMOPHENYL PHENYL ETHER		0.87	U		0.84	U		0.22	U		0.24	U	
4-CHLORO-3-METHYLPHENOL		0.83	U		0.8	U		0.21	U		0.23	U	
4-CHLOROANILINE		0.83	U		0.8	U		0.21	U		0.23	U	
4-CHLOROPHENYL PHENYL ETHER		1.2	U		1.1	U		0.3	U		0.33	U	
4-NITROANILINE		0.87	U		0.84	U		0.22	U		0.24	U	
4-NITROPHENOL		1.1	U		1.1	U		0.29	U		0.32	U	
ACENAPHTHENE		39			42			0.045	U		0.048	U	
ACENAPHTHYLENE		0.19	U		0.18	U		0.049	U		0.052	U	
ACETOPHENONE		1.3	U		1.3	U		0.34	U		0.37	U	
ANTHRACENE		2.3			2.3			0.089	U		0.096	U	
ATRAZINE		1.3	U		1.3	U		0.34	U		0.37	U	
BENZALDEHYDE		1.5	U		1.5	U		0.39	U		0.42	U	
BENZO(A)ANTHRACENE		0.12	U		0.11	U		0.03	U		0.032	U	
BENZO(A)PYRENE		0.2	U		0.2	U		0.052	U		0.056	U	
BENZO(B)FLUORANTHENE		0.16	U		0.15	U		0.04	U		0.043	U	
BENZO(G,H,I)PERYLENE		0.18	U		0.18	U		0.047	U		0.05	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW51I-102113			MSA-MW51S-102113		
SDG: 240-30485-1	LAB_ID	240-30485-2			240-30485-1		
FRACTION: OS	SAMP_DATE	10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		0.14	U		0.14	U	
1,4-DIOXANE		1.8			43		
2,2'-OXYBIS(1-CHLOROPROPANE)		0.43	U		0.43	U	
2,4,5-TRICHLOROPHENOL		0.33	U		0.33	U	
2,4,6-TRICHLOROPHENOL		0.26	U		0.26	U	
2,4-DICHLOROPHENOL		0.21	U		0.21	U	
2,4-DIMETHYLPHENOL		0.27	U		0.27	U	
2,4-DINITROPHENOL		0.35	U		0.35	U	
2,4-DINITROTOLUENE		0.27	U		0.27	U	
2,6-DINITROTOLUENE		0.87	U		0.87	U	
2-CHLORONAPHTHALENE		0.11	U		0.11	U	
2-CHLOROPHENOL		0.32	U		0.32	U	
2-METHYLNAPHTHALENE		0.098	U		0.14	J	P
2-METHYLPHENOL		0.18	U		0.18	U	
2-NITROANILINE		0.23	U		0.23	U	
2-NITROPHENOL		0.3	U		0.3	U	
3&4-METHYLPHENOL		0.87	U		0.87	U	
3,3'-DICHLOROBENZIDINE		0.4	U		0.4	U	
3-NITROANILINE		0.3	U		0.3	U	
4,6-DINITRO-2-METHYLPHENOL		2.6	U		2.6	U	
4-BROMOPHENYL PHENYL ETHER		0.24	U		0.24	U	
4-CHLORO-3-METHYLPHENOL		0.23	U		0.23	U	
4-CHLOROANILINE		0.23	U		0.23	U	
4-CHLOROPHENYL PHENYL ETHER		0.33	U		0.33	U	
4-NITROANILINE		0.24	U		0.24	U	
4-NITROPHENOL		0.32	U		0.32	U	
ACENAPHTHENE		0.048	U		0.048	U	
ACENAPHTHYLENE		0.052	U		0.052	U	
ACETOPHENONE		0.37	U		0.37	U	
ANTHRACENE		0.096	U		0.096	U	
ATRAZINE		0.37	U		0.37	U	
BENZALDEHYDE		0.42	U		0.42	U	
BENZO(A)ANTHRACENE		0.032	U		0.032	U	
BENZO(A)PYRENE		0.056	U		0.056	U	
BENZO(B)FLUORANTHENE		0.043	U		0.043	U	
BENZO(G,H,I)PERYLENE		0.05	U		0.05	U	

PROJ_NO: 04882	NSAMPLE	MSA-DUP01-102113			MSA-MW44S-102113			MSA-MW50D-102113			MSA-MW51D-102113		
SDG: 240-30485-1	LAB_ID	240-30485-7			240-30485-5			240-30485-4			240-30485-3		
FRACTION: OS	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	FD			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	MSA-MW44S-102113											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(K)FLUORANTHENE		0.18	U		0.17	U		0.045	U		0.049	U	
BIS(2-CHLOROETHOXY)METHANE		1.3	U		1.2	U		0.32	U		0.35	U	
BIS(2-CHLOROETHYL)ETHER		0.4	U		0.38	U		0.1	U		0.11	U	
BIS(2-ETHYLHEXYL)PHTHALATE		0.87	U		0.84	U		0.22	U		0.32	B	A
BUTYL BENZYL PHTHALATE		1	U		0.99	U		0.26	U		0.28	U	
CAPROLACTAM		0.79	U		0.76	U		0.2	U		0.22	U	
CARBAZOLE		11			8.9			0.28	U		0.3	U	
CHRYSENE		0.2	U		0.19	U		0.051	U		0.055	U	
DIBENZO(A,H)ANTHRACENE		0.18	U		0.17	U		0.045	U		0.048	U	
DIBENZOFURAN		17			17			0.02	U		0.022	U	
DIETHYL PHTHALATE		2.4	U		2.3	U		0.61	U		0.65	U	
DIMETHYL PHTHALATE		1.1	U		1.1	U		0.29	U		0.32	U	
DI-N-BUTYL PHTHALATE		2.7	U		2.6	U		0.68	U		0.73	U	
DI-N-OCTYL PHTHALATE		0.91	U		0.88	U		0.23	U		0.25	U	
FLUORANTHENE		3.4			3.6			0.045	U		0.048	U	
FLUORENE		17			18			0.041	U		0.044	U	
HEXACHLOROBENZENE		0.34	U		0.32	U		0.086	U		0.093	U	
HEXACHLOROBUTADIENE		1.1	U		1	U		0.27	U		0.29	U	
HEXACHLOROCYCLOPENTADIENE		0.95	U		0.91	U		0.24	U		0.26	U	
HEXACHLOROETHANE		0.75	U		0.72	U		0.19	U		0.21	U	
INDENO(1,2,3-CD)PYRENE		0.17	U		0.16	U		0.044	U		0.047	U	
ISOPHORONE		1.1	U		1	U		0.27	U		0.29	U	
NAPHTHALENE		160			150			0.063	U		0.068	U	
NITROBENZENE		0.16	U		0.15	U		0.04	U		0.043	U	
N-NITROSODIMETHYLAMINE		1.2	U		1.2	U		0.31	U		0.34	U	
N-NITROSO-DI-N-PROPYLAMINE		0.95	U		0.91	U		0.24	U		0.26	U	
N-NITROSODIPHENYLAMINE		1.2	U		1.2	U		0.31	U		0.34	U	
PENTACHLOROPHENOL		1.1	U		1	U		0.27	U		0.29	U	
PHENANTHRENE		18			19			0.063	U		0.067	U	
PHENOL		2.4	U		2.3	U		0.61	U		0.65	U	
PYRENE		1.7			2			0.042	U		0.046	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW51I-102113			MSA-MW51S-102113		
SDG: 240-30485-1	LAB_ID	240-30485-2			240-30485-1		
FRACTION: OS	SAMP_DATE	10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(K)FLUORANTHENE		0.049	U		0.049	U	
BIS(2-CHLOROETHOXY)METHANE		0.35	U		0.35	U	
BIS(2-CHLOROETHYL)ETHER		0.11	U		0.11	U	
BIS(2-ETHYLHEXYL)PHTHALATE		0.24	U		0.3	B	A
BUTYL BENZYL PHTHALATE		0.28	U		0.28	U	
CAPROLACTAM		0.22	U		0.22	U	
CARBAZOLE		0.3	U		0.3	U	
CHRYSENE		0.055	U		0.055	U	
DIBENZO(A,H)ANTHRACENE		0.048	U		0.048	U	
DIBENZOFURAN		0.022	U		0.022	U	
DIETHYL PHTHALATE		0.65	U		0.65	U	
DIMETHYL PHTHALATE		0.32	U		0.32	U	
DI-N-BUTYL PHTHALATE		0.73	U		0.73	U	
DI-N-OCTYL PHTHALATE		0.25	U		0.25	U	
FLUORANTHENE		0.048	U		0.048	U	
FLUORENE		0.044	U		0.044	U	
HEXACHLOROBENZENE		0.093	U		0.093	U	
HEXACHLOROBUTADIENE		0.29	U		0.29	U	
HEXACHLOROCYCLOPENTADIENE		0.26	U		0.26	U	
HEXACHLOROETHANE		0.21	U		0.21	U	
INDENO(1,2,3-CD)PYRENE		0.047	U		0.047	U	
ISOPHORONE		0.29	U		0.29	U	
NAPHTHALENE		0.068	U		1.2		
NITROBENZENE		0.043	U		0.043	U	
N-NITROSODIMETHYLAMINE		0.34	U		0.34	U	
N-NITROSO-DI-N-PROPYLAMINE		0.26	U		0.26	U	
N-NITROSODIPHENYLAMINE		0.34	U		0.34	U	
PENTACHLOROPHENOL		0.29	U		0.29	U	
PHENANTHRENE		0.067	U		0.067	U	
PHENOL		0.65	U		0.65	U	
PYRENE		0.046	U		0.046	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW51D-102113			MSA-MW51I-102113			MSA-MW51S-102113		
SDG: 240-30485-1	LAB_ID	104610003			104610002			104610001		
FRACTION: OVG	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ETHANE		5.5			6.7			4.8		
METHANE		15			38			38		

PROJ_NO: 04882	NSAMPLE	MSA-DUP01-102113			MSA-MW44S-102113			MSA-MW50D-102113			MSA-MW51D-102113		
SDG: 240-30485-1	LAB_ID	240-30485-7			240-30485-5			240-30485-4			240-30485-3		
FRACTION: PET	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	FD			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	MSA-MW44S-102113											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		60	B	A	55	B	A	89	B	A	70	B	A
TPH (C10-C32)		990			840			230	U		1700		

PROJ_NO: 04882	NSAMPLE	MSA-MW51I-102113			MSA-MW51S-102113		
SDG: 240-30485-1	LAB_ID	240-30485-2			240-30485-1		
FRACTION: PET	SAMP_DATE	10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		64	J	P	6200	K	O
TPH (C10-C32)		260	U		270	J	P

PROJ_NO: 04882	NSAMPLE	MSA-DUP01-102113			MSA-MW44S-102113			MSA-MW50D-102113			MSA-MW51D-102113		
SDG: 240-30485-1	LAB_ID	240-30485-7			240-30485-5			240-30485-4			240-30485-3		
FRACTION: M	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	FD			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	MSA-MW44S-102113											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.8	U		1.8	U		1.8	U		1.8	U	
ARSENIC		3.2	U		4.2	J	CP	3.2	U		3.2	U	
BARIUM		170	J	P	170	J	P	79	J	P	60	J	P
BERYLLIUM		0.46	U		0.46	U		0.46	U		0.46	U	
CADMIUM		0.66	J	P	0.66	U		0.66	U		0.66	U	
CALCIUM											36000		
CHROMIUM		2.2	J	CP	2.2	J	CP	4.8	J	P	2.3	J	P
COBALT		1.7	U		1.7	U		58			28		
COPPER		4.5	U		4.5	U		4.5	U		4.5	U	
IRON											27000		
LEAD		1.9	UL	C	1.9	UL	C	1.9	U		2.1	J	P
MAGNESIUM											15000		
MANGANESE											1400		
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.3	U		1.3	U		1.3	U		1.3	J	P
NICKEL		3.2	U		3.2	U		30	B	A	6.2	B	A
POTASSIUM											4000	J	P
SELENIUM		4.1	U		4.1	U		4.1	U		4.1	U	
SILICON DIOXIDE											12000		
SILVER		2.2	U		2.2	U		2.2	U		2.2	U	
SODIUM											57000		
THALLIUM		4.7	U		4.7	U		4.7	U		4.7	U	
VANADIUM		17	L	C	13	B	A	0.64	UL	C	0.64	UL	C
ZINC		12	B	A	11	B	A	32	B	A	19	B	A

PROJ_NO: 04882	NSAMPLE	MSA-MW51I-102113			MSA-MW51S-102113		
SDG: 240-30485-1	LAB_ID	240-30485-2			240-30485-1		
FRACTION: M	SAMP_DATE	10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.8	U		1.8	U	
ARSENIC		4.7	J	P	3.2	U	
BARIUM		25	J	P	25	J	P
BERYLLIUM		0.6	J	P	1	J	P
CADMIUM		0.66	U		0.66	U	
CALCIUM		40000			80000		
CHROMIUM		17			14		
COBALT		71			35		
COPPER		4.5	U		4.5	U	
IRON		68000			72000		
LEAD		1.9	U		1.9	U	
MAGNESIUM		32000			55000		
MANGANESE		2900			5000		
MERCURY		0.12	U		0.12	U	
MOLYBDENUM		1.3	U		1.3	U	
NICKEL		28	B	A	23	B	A
POTASSIUM		4000	J	P	9800		
SELENIUM		4.1	U		4.1	U	
SILICON DIOXIDE		16000			18000		
SILVER		2.2	U		2.2	U	
SODIUM		130000			120000		
THALLIUM		4.7	U		4.7	U	
VANADIUM		0.64	UL	C	0.64	UL	C
ZINC		43	B	A	22	B	A

PROJ_NO: 04882	NSAMPLE	MSA-DUP01-102113			MSA-MW44S-102113			MSA-MW50D-102113			MSA-MW51D-102113		
SDG: 240-30485-1	LAB_ID	240-30485-7			240-30485-5			240-30485-4			240-30485-3		
FRACTION: MF	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	FD			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	MSA-MW44S-102113											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.8	U		1.8	U		1.8	U		1.8	U	
ARSENIC		3.2	U		3.6	J	CP	3.2	U		3.2	U	
BARIUM		160	J	P	160	J	P	79	J	P	45	J	P
BERYLLIUM		0.46	U		0.46	U		0.46	U		0.46	U	
CADMIUM		0.66	U		0.66	U		0.66	U		0.66	U	
CHROMIUM		2.6	J	CP	2.6	J	CP	4.3	J	P	2.2	U	
COBALT		1.7	U		1.7	U		59			28		
COPPER		4.5	U		4.5	U		4.5	U		4.5	U	
LEAD		1.9	UL	C	1.9	UL	C	1.9	U		1.9	U	
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.3	U		1.3	U		1.3	U		1.3	U	
NICKEL		3.2	U		3.2	U		33	B	A	5.7	B	A
SELENIUM		4.1	U		4.1	U		4.1	U		4.1	U	
SILVER		2.2	U		2.2	U		2.2	U		2.2	U	
THALLIUM		4.7	U		4.7	U		4.7	U		4.7	U	
VANADIUM		9.9	B	A	5.9	B	A	1.7	B	A	0.64	UL	C
ZINC		5	U		5	U		32	B	A	6	B	A

PROJ_NO: 04882	NSAMPLE	MSA-MW51I-102113			MSA-MW51S-102113		
SDG: 240-30485-1	LAB_ID	240-30485-2			240-30485-1		
FRACTION: MF	SAMP_DATE	10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.8	U		1.8	U	
ARSENIC		3.2	U		3.2	U	
BARIUM		25	J	P	24	J	P
BERYLLIUM		0.59	J	P	0.96	J	P
CADMIUM		0.66	U		0.66	U	
CHROMIUM		14			13		
COBALT		66			34		
COPPER		4.5	U		4.5	U	
LEAD		1.9	U		2.1	J	P
MERCURY		0.12	U		0.12	U	
MOLYBDENUM		1.3	U		1.3	U	
NICKEL		25	B	A	24	B	A
SELENIUM		4.1	U		4.1	U	
SILVER		2.2	U		2.2	U	
THALLIUM		4.7	U		4.7	U	
VANADIUM		0.64	UL	C	0.64	UL	C
ZINC		35	B	A	23	B	A

PROJ_NO: 04882	NSAMPLE	MSA-MW51D-102113			MSA-MW51D-102113A			MSA-MW51I-102113			MSA-MW51I-102113A		
SDG: 240-30485-1	LAB_ID	240-30485-3			240-30485-3			240-30485-2			240-30485-2		
FRACTION: MISC	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ALKALINITY		36						52					
AMMONIA-N		6.7						1.1					
CHLORIDE		110						240					
DISSOLVED ORGANIC CARBON		11						7.7					
NITRATE-N		0.023	U					0.057	J	P			
NITRITE-N		0.012	U					0.012	U				
ORTHOPHOSPHATE-P					0.044	UL	D				0.044	UL	D
SULFATE		140						440					
TOTAL DISSOLVED SOLIDS		390						1100					

PROJ_NO: 04882	NSAMPLE	MSA-MW51S-102113			MSA-MW51S-102113A		
SDG: 240-30485-1	LAB_ID	240-30485-1			240-30485-1		
FRACTION: MISC	SAMP_DATE	10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ALKALINITY		49					
AMMONIA-N		2.2					
CHLORIDE		140					
DISSOLVED ORGANIC CARBON		6.4					
NITRATE-N		0.023	U				
NITRITE-N		0.012	U				
ORTHOPHOSPHATE-P					0.087	J	DP
SULFATE		760					
TOTAL DISSOLVED SOLIDS		1300					

PROJ_NO: 04882	NSAMPLE	MSA-MW44S-102113			MSA-MW50D-102113			MSA-MW51D-102113			MSA-MW51D-102113A		
SDG: 240-30485-1	LAB_ID	240-30485-5			240-30485-4			240-30485-3			240-30485-3		
FRACTION: TICOV	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-PROPENE, 2-FLUORO-								3.7	J	Z1			
1-PROPENE, 2-METHYL-								4.1	J	Z1			
CYCLOTETRASILOXANE, OCTAMETHYL-								3.4	R	Z1			
NAPHTHALENE, DECAHYDRO-2-METHYL-								3.8	J	Z1	3.2	J	Z
SILANOL, TRIMETHYL-		20	R	Z2	3	R	Z2	7.8	R	Z2			
SPIRO[5.6]DODECANE								5.5	J	Z1			
TRANS-DECALIN, 2-METHYL-								3.1	J	Z1			
UNDECANE, 2,6-DIMETHYL-								2.9	J	Z1			

PROJ_NO: 04882	NSAMPLE	MSA-MW51I-102113			TB-102113		
SDG: 240-30485-1	LAB_ID	240-30485-2			240-30485-6		
FRACTION: TICOV	SAMP_DATE	10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-PROPENE, 2-FLUORO-							
1-PROPENE, 2-METHYL-							
CYCLOTETRASILOXANE, OCTAMETHYL-							
NAPHTHALENE, DECAHYDRO-2-METHYL -							
SILANOL, TRIMETHYL-		4.3	R	Z2	3	R	Z2
SPIRO[5.6]DODECANE							
TRANS-DECALIN, 2-METHYL-							
UNDECANE, 2,6-DIMETHYL-							

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-DUP01-102113 | Lab Sample ID: 240-30485-7

Matrix: Water | Lab File ID: UXM1355.D

Analysis Method: 8260B | Date Collected: 10/21/2013 00:00

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 18:00

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	10	U	10	2.3
71-55-6	1,1,1-Trichloroethane	10	U	10	2.2
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	1.8
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	10	U	10	2.8
75-34-3	1,1-Dichloroethane	3.9	J	10	1.5
75-35-4	1,1-Dichloroethene	10	U	10	1.9
563-58-6	1,1-Dichloropropene	10	U *	10	1.3
87-61-6	1,2,3-Trichlorobenzene	10	U	10	1.7
96-18-4	1,2,3-Trichloropropane	10	U	10	4.3
526-73-8	1,2,3-Trimethylbenzene	50	U	50	0.059
120-82-1	1,2,4-Trichlorobenzene	10	U	10	1.5
95-63-6	1,2,4-Trimethylbenzene	10	U	10	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	20	U	20	6.7
95-50-1	1,2-Dichlorobenzene	10	U	10	1.3
107-06-2	1,2-Dichloroethane	10	U	10	2.2
78-87-5	1,2-Dichloropropane	10	U	10	1.8
541-73-1	1,3-Dichlorobenzene	10	U	10	1.4
142-28-9	1,3-Dichloropropane	10	U	10	1.6
106-46-7	1,4-Dichlorobenzene	3.2	J	10	1.3
594-20-7	2,2-Dichloropropane	10	U	10	1.3
110-75-8	2-Chloroethyl vinyl ether	100	U	100	9.9
95-49-8	2-Chlorotoluene	10	U	10	1.1
591-78-6	2-Hexanone	100	U	100	4.1
108-86-1	Bromobenzene	10	U	10	1.3
74-97-5	Bromochloromethane	10	U	10	2.9
106-43-4	4-Chlorotoluene	10	U	10	1.8
99-87-6	p-Isopropyltoluene	10	U	10	1.2
67-64-1	Acetone	100	U	100	11
71-43-2	Benzene	10	U	10	1.3
75-25-2	Bromoform	10	U	10	6.4
74-83-9	Bromomethane	10	U	10	4.1
75-15-0	Carbon disulfide	5.4	J	10	1.3
56-23-5	Carbon tetrachloride	10	U	10	1.3
108-90-7	Chlorobenzene	10	U	10	1.5
75-00-3	Chloroethane	10	U	10	2.9

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-DUP01-102113 | Lab Sample ID: 240-30485-7

Matrix: Water | Lab File ID: UXM1355.D

Analysis Method: 8260B | Date Collected: 10/21/2013 00:00

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 18:00

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	10	U	10	1.6
74-87-3	Chloromethane	10	U	10	3.0
156-59-2	cis-1,2-Dichloroethene	10	U	10	1.7
10061-01-5	cis-1,3-Dichloropropene	10	U	10	1.4
87-68-3	Hexachlorobutadiene	10	U	10	3.0
74-95-3	Dibromomethane	10	U	10	2.8
75-27-4	Bromodichloromethane	10	U	10	1.5
75-71-8	Dichlorodifluoromethane	10	U	10	3.1
100-41-4	Ethylbenzene	10	U	10	1.7
106-93-4	1,2-Dibromoethane	10	U	10	2.4
108-20-3	Diisopropyl ether	100	U	100	15
91-20-3	Naphthalene	310	B	10	2.4
179601-23-1	m-Xylene & p-Xylene	20	U	20	2.4
104-51-8	n-Butylbenzene	10	U	10	1.2
98-82-8	Isopropylbenzene	10	U	10	1.3
103-65-1	n-Propylbenzene	10	U	10	1.4
78-93-3	2-Butanone	100	U	100	5.7
108-10-1	4-Methyl-2-pentanone	100	U	100	3.2
135-98-8	sec-Butylbenzene	10	U	10	1.3
1634-04-4	Methyl tert-butyl ether	10	U	10	1.7
994-05-8	Tert-amyl-methyl ether (TAME)	50	U	50	0.67
75-09-2	Methylene Chloride	10	U	10	3.3
95-47-6	o-Xylene	10	U	10	1.4
100-42-5	Styrene	10	U	10	1.1
637-92-3	Ethyl-t-butyl ether (ETBE)	50	U	50	1.1
98-06-6	tert-Butylbenzene	10	U	10	1.3
127-18-4	Tetrachloroethene	10	U	10	2.9
108-88-3	Toluene	5.8	J B	10	1.3
156-60-5	trans-1,2-Dichloroethene	10	U	10	1.9
10061-02-6	trans-1,3-Dichloropropene	10	U *	10	1.9
79-01-6	Trichloroethene	4.8	J	10	1.7
75-69-4	Trichlorofluoromethane	10	U	10	2.1
108-05-4	Vinyl acetate	20	U	20	1.9
75-01-4	Vinyl chloride	10	U	10	2.2
75-65-0	tert-Butyl alcohol	500	U	500	39
1330-20-7	Xylenes, Total	20	U	20	1.4

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-DUP01-102113 | Lab Sample ID: 240-30485-7

Matrix: Water | Lab File ID: UXM1355.D

Analysis Method: 8260B | Date Collected: 10/21/2013 00:00

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 18:00

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	10	U	10	1.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	96		66-117
2037-26-5	Toluene-d8 (Surr)	102		74-115
1868-53-7	Dibromofluoromethane (Surr)	101		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-DUP01-102113 | Lab Sample ID: 240-30485-7

Matrix: Water | Lab File ID: UXM1355.D

Analysis Method: 8260B | Date Collected: 10/21/2013 00:00

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 18:00

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW44S-102113 | Lab Sample ID: 240-30485-5

Matrix: Water | Lab File ID: UXM1354.D

Analysis Method: 8260B | Date Collected: 10/21/2013 13:30

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 17:38

Soil Aliquot Vol: | Dilution Factor: 7.14

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	7.1	U	7.1	1.6
71-55-6	1,1,1-Trichloroethane	7.1	U	7.1	1.6
79-34-5	1,1,2,2-Tetrachloroethane	7.1	U	7.1	1.3
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	7.1	U	7.1	2.0
75-34-3	1,1-Dichloroethane	4.0	J	7.1	1.1
75-35-4	1,1-Dichloroethene	7.1	U	7.1	1.4
563-58-6	1,1-Dichloropropene	7.1	U *	7.1	0.93
87-61-6	1,2,3-Trichlorobenzene	7.1	U	7.1	1.2
96-18-4	1,2,3-Trichloropropane	7.1	U	7.1	3.1
526-73-8	1,2,3-Trimethylbenzene	36	U	36	0.042
120-82-1	1,2,4-Trichlorobenzene	7.1	U	7.1	1.1
95-63-6	1,2,4-Trimethylbenzene	7.1	U	7.1	0.86
96-12-8	1,2-Dibromo-3-Chloropropane	14	U	14	4.8
95-50-1	1,2-Dichlorobenzene	7.1	U	7.1	0.93
107-06-2	1,2-Dichloroethane	7.1	U	7.1	1.6
78-87-5	1,2-Dichloropropane	7.1	U	7.1	1.3
541-73-1	1,3-Dichlorobenzene	7.1	U	7.1	1.0
142-28-9	1,3-Dichloropropane	7.1	U	7.1	1.1
106-46-7	1,4-Dichlorobenzene	2.9	J	7.1	0.93
594-20-7	2,2-Dichloropropane	7.1	U	7.1	0.93
110-75-8	2-Chloroethyl vinyl ether	71	U	71	7.1
95-49-8	2-Chlorotoluene	7.1	U	7.1	0.79
591-78-6	2-Hexanone	71	U	71	2.9
108-86-1	Bromobenzene	7.1	U	7.1	0.93
74-97-5	Bromochloromethane	7.1	U	7.1	2.1
106-43-4	4-Chlorotoluene	7.1	U	7.1	1.3
99-87-6	p-Isopropyltoluene	7.1	U	7.1	0.86
67-64-1	Acetone	12	J	71	7.9
71-43-2	Benzene	7.1	U	7.1	0.93
75-25-2	Bromoform	7.1	U	7.1	4.6
74-83-9	Bromomethane	7.1	U	7.1	2.9
75-15-0	Carbon disulfide	3.4	J	7.1	0.93
56-23-5	Carbon tetrachloride	7.1	U	7.1	0.93
108-90-7	Chlorobenzene	7.1	U	7.1	1.1
75-00-3	Chloroethane	7.1	U	7.1	2.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW44S-102113 | Lab Sample ID: 240-30485-5

Matrix: Water | Lab File ID: UXM1354.D

Analysis Method: 8260B | Date Collected: 10/21/2013 13:30

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 17:38

Soil Aliquot Vol: | Dilution Factor: 7.14

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	7.1	U	7.1	1.1
74-87-3	Chloromethane	7.1	U	7.1	2.1
156-59-2	cis-1,2-Dichloroethene	7.1	U	7.1	1.2
10061-01-5	cis-1,3-Dichloropropene	7.1	U	7.1	1.0
87-68-3	Hexachlorobutadiene	7.1	U	7.1	2.1
74-95-3	Dibromomethane	7.1	U	7.1	2.0
75-27-4	Bromodichloromethane	7.1	U	7.1	1.1
75-71-8	Dichlorodifluoromethane	7.1	U	7.1	2.2
100-41-4	Ethylbenzene	1.7	J	7.1	1.2
106-93-4	1,2-Dibromoethane	7.1	U	7.1	1.7
108-20-3	Diisopropyl ether	71	U	71	11
91-20-3	Naphthalene	380	B	7.1	1.7
179601-23-1	m-Xylene & p-Xylene	1.8	J	14	1.7
104-51-8	n-Butylbenzene	7.1	U	7.1	0.86
98-82-8	Isopropylbenzene	7.1	U	7.1	0.93
103-65-1	n-Propylbenzene	7.1	U	7.1	1.0
78-93-3	2-Butanone	71	U	71	4.1
108-10-1	4-Methyl-2-pentanone	71	U	71	2.3
135-98-8	sec-Butylbenzene	7.1	U	7.1	0.93
1634-04-4	Methyl tert-butyl ether	7.1	U	7.1	1.2
994-05-8	Tert-amyl-methyl ether (TAME)	36	U	36	0.48
75-09-2	Methylene Chloride	7.1	U	7.1	2.4
95-47-6	o-Xylene	7.1	U	7.1	1.0
100-42-5	Styrene	7.1	U	7.1	0.79
637-92-3	Ethyl-t-butyl ether (ETBE)	36	U	36	0.79
98-06-6	tert-Butylbenzene	7.1	U	7.1	0.93
127-18-4	Tetrachloroethene	7.1	U	7.1	2.1
108-88-3	Toluene	4.7	J B	7.1	0.93
156-60-5	trans-1,2-Dichloroethene	7.1	U	7.1	1.4
10061-02-6	trans-1,3-Dichloropropene	7.1	U *	7.1	1.4
79-01-6	Trichloroethene	5.2	J	7.1	1.2
75-69-4	Trichlorofluoromethane	7.1	U	7.1	1.5
108-05-4	Vinyl acetate	14	U	14	1.4
75-01-4	Vinyl chloride	1.8	J	7.1	1.6
75-65-0	tert-Butyl alcohol	360	U	360	28
1330-20-7	Xylenes, Total	1.8	J	14	1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW44S-102113 | Lab Sample ID: 240-30485-5

Matrix: Water | Lab File ID: UXM1354.D

Analysis Method: 8260B | Date Collected: 10/21/2013 13:30

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 17:38

Soil Aliquot Vol: | Dilution Factor: 7.14

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	7.1	U	7.1	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
2037-26-5	Toluene-d8 (Surr)	102		74-115
1868-53-7	Dibromofluoromethane (Surr)	103		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW44S-102113 | Lab Sample ID: 240-30485-5

Matrix: Water | Lab File ID: UXM1354.D

Analysis Method: 8260B | Date Collected: 10/21/2013 13:30

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 17:38

Soil Aliquot Vol: | Dilution Factor: 7.14

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 20

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.50	20	T J N

FORM I-TIC 8260B

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW50D-102113 | Lab Sample ID: 240-30485-4

Matrix: Water | Lab File ID: UXM1352.D

Analysis Method: 8260B | Date Collected: 10/21/2013 11:15

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 16:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	0.21	J	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U *	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.2		1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	1.6	J	10	1.1
71-43-2	Benzene	0.27	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.82	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	0.90	J	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW50D-102113 | Lab Sample ID: 240-30485-4

Matrix: Water | Lab File ID: UXM1352.D

Analysis Method: 8260B | Date Collected: 10/21/2013 11:15

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 16:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	2.4		1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	46		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.62	J B	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.2		1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.19
79-01-6	Trichloroethene	64		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	9.7		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW50D-102113 | Lab Sample ID: 240-30485-4

Matrix: Water | Lab File ID: UXM1352.D

Analysis Method: 8260B | Date Collected: 10/21/2013 11:15

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 16:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
2037-26-5	Toluene-d8 (Surr)	104		74-115
1868-53-7	Dibromofluoromethane (Surr)	105		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW50D-102113 Lab Sample ID: 240-30485-4

Matrix: Water Lab File ID: UXM1352.D

Analysis Method: 8260B Date Collected: 10/21/2013 11:15

Sample wt/vol: 10(mL) Date Analyzed: 10/31/2013 16:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107835 Units: ug/L

Number TICs Found: 1 TIC Result Total: 3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.50	3.0	T J N

FORM I-TIC 8260B

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51D-102113 Lab Sample ID: 240-30485-3

Matrix: Water Lab File ID: UXM1351.D

Analysis Method: 8260B Date Collected: 10/21/2013 13:55

Sample wt/vol: 10(mL) Date Analyzed: 10/31/2013 16:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107835 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	0.19	J	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U *	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	1.7	J	10	1.1
71-43-2	Benzene	0.13	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.1		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51D-102113 | Lab Sample ID: 240-30485-3

Matrix: Water | Lab File ID: UXM1351.D

Analysis Method: 8260B | Date Collected: 10/21/2013 13:55

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 16:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	24		1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	10		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	0.88	J	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	0.26	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	0.37	J	1.0	0.29
108-88-3	Toluene	0.72	J B	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	0.33	J	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.19
79-01-6	Trichloroethene	40		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.92	J	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	0.26	J	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51D-102113 | Lab Sample ID: 240-30485-3

Matrix: Water | Lab File ID: UXM1351.D

Analysis Method: 8260B | Date Collected: 10/21/2013 13:55

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 16:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	93		66-117
2037-26-5	Toluene-d8 (Surr)	100		74-115
1868-53-7	Dibromofluoromethane (Surr)	101		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51D-102113 | Lab Sample ID: 240-30485-3

Matrix: Water | Lab File ID: UXM1351.D

Analysis Method: 8260B | Date Collected: 10/21/2013 13:55

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 16:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

Number TICs Found: 10 | TIC Result Total: 46.1

CAS NO.	COMPOUND NAME	RT	RESULT	Q
115-11-7	1-Propene, 2-methyl-	1.84	4.1	T J N
1184-60-7	1-Propene, 2-fluoro-	4.17	3.7	T J N
1066-40-6	Silanol, trimethyl-	4.50	7.8	T J N
556-67-2	Cyclotetrasiloxane, octamethyl-	9.58	3.4	T J N
1000152-47-3	trans-Decalin, 2-methyl-	11.55	3.1	T J N
2958-76-1	Naphthalene, decahydro-2-methyl-	11.76	3.8	T J N
112-40-3	Dodecane	12.08	8.6	T J N
2958-76-1	Naphthalene, decahydro-2-methyl-	12.14	3.2	T J N
17301-23-4	Undecane, 2,6-dimethyl-	12.24	2.9	T J N
181-15-7	Spiro[5.6]dodecane	12.31	5.5	T J N

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51I-102113 | Lab Sample ID: 240-30485-2

Matrix: Water | Lab File ID: UXM1350.D

Analysis Method: 8260B | Date Collected: 10/21/2013 12:35

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 16:09

Soil Aliquot Vol: | Dilution Factor: 1.25

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.3	U	1.3	0.29
71-55-6	1,1,1-Trichloroethane	1.3	U	1.3	0.28
79-34-5	1,1,2,2-Tetrachloroethane	1.3	U	1.3	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.3	U	1.3	0.35
75-34-3	1,1-Dichloroethane	1.3	U	1.3	0.19
75-35-4	1,1-Dichloroethene	0.24	J	1.3	0.24
563-58-6	1,1-Dichloropropene	1.3	U *	1.3	0.16
87-61-6	1,2,3-Trichlorobenzene	1.3	U	1.3	0.21
96-18-4	1,2,3-Trichloropropane	1.3	U	1.3	0.54
526-73-8	1,2,3-Trimethylbenzene	6.3	U	6.3	0.0074
120-82-1	1,2,4-Trichlorobenzene	1.3	U	1.3	0.19
95-63-6	1,2,4-Trimethylbenzene	1.3	U	1.3	0.15
96-12-8	1,2-Dibromo-3-Chloropropane	2.5	U	2.5	0.84
95-50-1	1,2-Dichlorobenzene	1.3	U	1.3	0.16
107-06-2	1,2-Dichloroethane	1.3	U	1.3	0.28
78-87-5	1,2-Dichloropropane	1.3	U	1.3	0.23
541-73-1	1,3-Dichlorobenzene	1.3	U	1.3	0.18
142-28-9	1,3-Dichloropropane	1.3	U	1.3	0.20
106-46-7	1,4-Dichlorobenzene	1.3	U	1.3	0.16
594-20-7	2,2-Dichloropropane	1.3	U	1.3	0.16
110-75-8	2-Chloroethyl vinyl ether	13	U	13	1.2
95-49-8	2-Chlorotoluene	1.3	U	1.3	0.14
591-78-6	2-Hexanone	13	U	13	0.51
108-86-1	Bromobenzene	1.3	U	1.3	0.16
74-97-5	Bromochloromethane	1.3	U	1.3	0.36
106-43-4	4-Chlorotoluene	1.3	U	1.3	0.23
99-87-6	p-Isopropyltoluene	1.3	U	1.3	0.15
67-64-1	Acetone	13	U	13	1.4
71-43-2	Benzene	1.3	U	1.3	0.16
75-25-2	Bromoform	1.3	U	1.3	0.80
74-83-9	Bromomethane	1.3	U	1.3	0.51
75-15-0	Carbon disulfide	1.2	J	1.3	0.16
56-23-5	Carbon tetrachloride	1.3	U	1.3	0.16
108-90-7	Chlorobenzene	1.3	U	1.3	0.19
75-00-3	Chloroethane	1.3	U	1.3	0.36

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51I-102113 | Lab Sample ID: 240-30485-2

Matrix: Water | Lab File ID: UXM1350.D

Analysis Method: 8260B | Date Collected: 10/21/2013 12:35

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 16:09

Soil Aliquot Vol: | Dilution Factor: 1.25

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.3	U	1.3	0.20
74-87-3	Chloromethane	1.3	U	1.3	0.38
156-59-2	cis-1,2-Dichloroethene	70		1.3	0.21
10061-01-5	cis-1,3-Dichloropropene	1.3	U	1.3	0.18
87-68-3	Hexachlorobutadiene	1.3	U	1.3	0.38
74-95-3	Dibromomethane	1.3	U	1.3	0.35
75-27-4	Bromodichloromethane	1.3	U	1.3	0.19
75-71-8	Dichlorodifluoromethane	1.3	U	1.3	0.39
100-41-4	Ethylbenzene	1.3	U	1.3	0.21
106-93-4	1,2-Dibromoethane	1.3	U	1.3	0.30
108-20-3	Diisopropyl ether	13	U	13	1.9
91-20-3	Naphthalene	1.3	U	1.3	0.30
179601-23-1	m-Xylene & p-Xylene	2.5	U	2.5	0.30
104-51-8	n-Butylbenzene	1.3	U	1.3	0.15
98-82-8	Isopropylbenzene	1.3	U	1.3	0.16
103-65-1	n-Propylbenzene	1.3	U	1.3	0.18
78-93-3	2-Butanone	13	U	13	0.71
108-10-1	4-Methyl-2-pentanone	13	U	13	0.40
135-98-8	sec-Butylbenzene	1.3	U	1.3	0.16
1634-04-4	Methyl tert-butyl ether	1.3	U	1.3	0.21
994-05-8	Tert-amyl-methyl ether (TAME)	6.3	U	6.3	0.084
75-09-2	Methylene Chloride	1.3	U	1.3	0.41
95-47-6	o-Xylene	1.3	U	1.3	0.18
100-42-5	Styrene	1.3	U	1.3	0.14
637-92-3	Ethyl-t-butyl ether (ETBE)	6.3	U	6.3	0.14
98-06-6	tert-Butylbenzene	1.3	U	1.3	0.16
127-18-4	Tetrachloroethene	1.3	U	1.3	0.36
108-88-3	Toluene	0.32	J B	1.3	0.16
156-60-5	trans-1,2-Dichloroethene	0.93	J	1.3	0.24
10061-02-6	trans-1,3-Dichloropropene	1.3	U *	1.3	0.24
79-01-6	Trichloroethene	58		1.3	0.21
75-69-4	Trichlorofluoromethane	1.3	U	1.3	0.26
108-05-4	Vinyl acetate	2.5	U	2.5	0.24
75-01-4	Vinyl chloride	3.3		1.3	0.28
75-65-0	tert-Butyl alcohol	63	U	63	4.9
1330-20-7	Xylenes, Total	2.5	U	2.5	0.18

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51I-102113 Lab Sample ID: 240-30485-2

Matrix: Water Lab File ID: UXM1350.D

Analysis Method: 8260B Date Collected: 10/21/2013 12:35

Sample wt/vol: 10(mL) Date Analyzed: 10/31/2013 16:09

Soil Aliquot Vol: Dilution Factor: 1.25

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107835 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.3	U	1.3	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51I-102113 | Lab Sample ID: 240-30485-2

Matrix: Water | Lab File ID: UXM1350.D

Analysis Method: 8260B | Date Collected: 10/21/2013 12:35

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 16:09

Soil Aliquot Vol: | Dilution Factor: 1.25

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 4.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.50	4.3	T J N

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51S-102113 | Lab Sample ID: 240-30485-1

Matrix: Water | Lab File ID: UXM1349.D

Analysis Method: 8260B | Date Collected: 10/21/2013 10:55

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 15:47

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	200	U	200	46
71-55-6	1,1,1-Trichloroethane	200	U	200	44
79-34-5	1,1,2,2-Tetrachloroethane	200	U	200	36
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	200	U	200	56
75-34-3	1,1-Dichloroethane	200	U	200	30
75-35-4	1,1-Dichloroethene	200	U	200	38
563-58-6	1,1-Dichloropropene	200	U *	200	26
87-61-6	1,2,3-Trichlorobenzene	200	U	200	34
96-18-4	1,2,3-Trichloropropane	200	U	200	86
526-73-8	1,2,3-Trimethylbenzene	1000	U	1000	1.2
120-82-1	1,2,4-Trichlorobenzene	200	U	200	30
95-63-6	1,2,4-Trimethylbenzene	200	U	200	24
96-12-8	1,2-Dibromo-3-Chloropropane	400	U	400	130
95-50-1	1,2-Dichlorobenzene	200	U	200	26
107-06-2	1,2-Dichloroethane	200	U	200	44
78-87-5	1,2-Dichloropropane	200	U	200	36
541-73-1	1,3-Dichlorobenzene	200	U	200	28
142-28-9	1,3-Dichloropropane	200	U	200	32
106-46-7	1,4-Dichlorobenzene	200	U	200	26
594-20-7	2,2-Dichloropropane	200	U	200	26
110-75-8	2-Chloroethyl vinyl ether	2000	U	2000	200
95-49-8	2-Chlorotoluene	200	U	200	22
591-78-6	2-Hexanone	2000	U	2000	82
108-86-1	Bromobenzene	200	U	200	26
74-97-5	Bromochloromethane	200	U	200	58
106-43-4	4-Chlorotoluene	200	U	200	36
99-87-6	p-Isopropyltoluene	200	U	200	24
67-64-1	Acetone	2000	U	2000	220
71-43-2	Benzene	200	U	200	26
75-25-2	Bromoform	200	U	200	130
74-83-9	Bromomethane	200	U	200	82
75-15-0	Carbon disulfide	30	J	200	26
56-23-5	Carbon tetrachloride	200	U	200	26
108-90-7	Chlorobenzene	200	U	200	30
75-00-3	Chloroethane	200	U	200	58

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51S-102113 | Lab Sample ID: 240-30485-1

Matrix: Water | Lab File ID: UXM1349.D

Analysis Method: 8260B | Date Collected: 10/21/2013 10:55

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 15:47

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	200	U	200	32
74-87-3	Chloromethane	200	U	200	60
156-59-2	cis-1,2-Dichloroethene	5200		200	34
10061-01-5	cis-1,3-Dichloropropene	200	U	200	28
87-68-3	Hexachlorobutadiene	200	U	200	60
74-95-3	Dibromomethane	200	U	200	56
75-27-4	Bromodichloromethane	200	U	200	30
75-71-8	Dichlorodifluoromethane	200	U	200	62
100-41-4	Ethylbenzene	200	U	200	34
106-93-4	1,2-Dibromoethane	200	U	200	48
108-20-3	Diisopropyl ether	2000	U	2000	300
91-20-3	Naphthalene	200	U	200	48
179601-23-1	m-Xylene & p-Xylene	400	U	400	48
104-51-8	n-Butylbenzene	200	U	200	24
98-82-8	Isopropylbenzene	200	U	200	26
103-65-1	n-Propylbenzene	200	U	200	28
78-93-3	2-Butanone	2000	U	2000	110
108-10-1	4-Methyl-2-pentanone	2000	U	2000	64
135-98-8	sec-Butylbenzene	200	U	200	26
1634-04-4	Methyl tert-butyl ether	200	U	200	34
994-05-8	Tert-amyl-methyl ether (TAME)	1000	U	1000	13
75-09-2	Methylene Chloride	200	U	200	66
95-47-6	o-Xylene	200	U	200	28
100-42-5	Styrene	200	U	200	22
637-92-3	Ethyl-t-butyl ether (ETBE)	1000	U	1000	22
98-06-6	tert-Butylbenzene	200	U	200	26
127-18-4	Tetrachloroethene	200	U	200	58
108-88-3	Toluene	200	U	200	26
156-60-5	trans-1,2-Dichloroethene	200	U	200	38
10061-02-6	trans-1,3-Dichloropropene	200	U *	200	38
79-01-6	Trichloroethene	13000		200	34
75-69-4	Trichlorofluoromethane	200	U	200	42
108-05-4	Vinyl acetate	400	U	400	38
75-01-4	Vinyl chloride	150	J	200	44
75-65-0	tert-Butyl alcohol	10000	U	10000	780
1330-20-7	Xylenes, Total	400	U	400	28

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51S-102113 | Lab Sample ID: 240-30485-1

Matrix: Water | Lab File ID: UXM1349.D

Analysis Method: 8260B | Date Collected: 10/21/2013 10:55

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 15:47

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	200	U	200	36

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	91		66-117
2037-26-5	Toluene-d8 (Surr)	97		74-115
1868-53-7	Dibromofluoromethane (Surr)	98		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51S-102113 Lab Sample ID: 240-30485-1

Matrix: Water Lab File ID: UXM1349.D

Analysis Method: 8260B Date Collected: 10/21/2013 10:55

Sample wt/vol: 10(mL) Date Analyzed: 10/31/2013 15:47

Soil Aliquot Vol: Dilution Factor: 200

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107835 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: TB-102113 | Lab Sample ID: 240-30485-6

Matrix: Water | Lab File ID: UXM1353.D

Analysis Method: 8260B | Date Collected: 10/21/2013 00:00

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 17:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U *	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	3.9		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: TB-102113 Lab Sample ID: 240-30485-6

Matrix: Water Lab File ID: UXM1353.D

Analysis Method: 8260B Date Collected: 10/21/2013 00:00

Sample wt/vol: 10(mL) Date Analyzed: 10/31/2013 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107835 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.62	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.70	J B	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: TB-102113 | Lab Sample ID: 240-30485-6

Matrix: Water | Lab File ID: UXM1353.D

Analysis Method: 8260B | Date Collected: 10/21/2013 00:00

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 17:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	92		66-117
2037-26-5	Toluene-d8 (Surr)	99		74-115
1868-53-7	Dibromofluoromethane (Surr)	97		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: TB-102113 Lab Sample ID: 240-30485-6

Matrix: Water Lab File ID: UXM1353.D

Analysis Method: 8260B Date Collected: 10/21/2013 00:00

Sample wt/vol: 10(mL) Date Analyzed: 10/31/2013 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107835 Units: ug/L

Number TICs Found: 1 TIC Result Total: 3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.50	3.0	T J N

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-DUP01-102113 | Lab Sample ID: 240-30485-7

Matrix: Water | Lab File ID: 31028025.D

Analysis Method: 8270D | Date Collected: 10/21/2013 00:00

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 1010(mL) | Date Analyzed: 10/28/2013 18:55

Con. Extract Vol.: 2(mL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	3.6	J	4.0	0.51
123-91-1	1,4-Dioxane	13		4.0	1.9
88-06-2	2,4,6-Trichlorophenol	20	U	20	0.95
95-95-4	2,4,5-Trichlorophenol	20	U	20	1.2
120-83-2	2,4-Dichlorophenol	7.9	U	7.9	0.75
105-67-9	2,4-Dimethylphenol	7.9	U	7.9	0.99
51-28-5	2,4-Dinitrophenol	20	U	20	1.3
121-14-2	2,4-Dinitrotoluene	20	U	20	0.99
91-58-7	2-Chloronaphthalene	4.0	U	4.0	0.40
95-57-8	2-Chlorophenol	4.0	U	4.0	1.1
91-57-6	2-Methylnaphthalene	7.0		0.79	0.36
95-48-7	2-Methylphenol	4.0	U	4.0	0.67
88-74-4	2-Nitroaniline	7.9	U	7.9	0.83
88-75-5	2-Nitrophenol	7.9	U	7.9	1.1
15831-10-4	3 & 4 Methylphenol	7.9	U	7.9	3.2
91-94-1	3,3'-Dichlorobenzidine	20	U	20	1.5
99-09-2	3-Nitroaniline	7.9	U	7.9	1.1
534-52-1	4,6-Dinitro-2-methylphenol	20	U	20	9.5
101-55-3	4-Bromophenyl phenyl ether	7.9	U	7.9	0.87
59-50-7	4-Chloro-3-methylphenol	7.9	U	7.9	0.83
106-47-8	4-Chloroaniline	7.9	U	7.9	0.83
7005-72-3	4-Chlorophenyl phenyl ether	7.9	U	7.9	1.2
100-01-6	4-Nitroaniline	7.9	U	7.9	0.87
83-32-9	Acenaphthene	39		0.79	0.18
208-96-8	Acenaphthylene	0.79	U	0.79	0.19
98-86-2	Acetophenone	4.0	U	4.0	1.3
120-12-7	Anthracene	2.3		0.79	0.35
1912-24-9	Atrazine	4.0	U	4.0	1.3
100-52-7	Benzaldehyde	4.0	U	4.0	1.5
56-55-3	Benzo[a]anthracene	0.79	U	0.79	0.12
50-32-8	Benzo[a]pyrene	0.79	U	0.79	0.20
205-99-2	Benzo[b]fluoranthene	0.79	U	0.79	0.16
191-24-2	Benzo[g,h,i]perylene	0.79	U	0.79	0.18
207-08-9	Benzo[k]fluoranthene	0.79	U	0.79	0.18

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-DUP01-102113 | Lab Sample ID: 240-30485-7

Matrix: Water | Lab File ID: 31028025.D

Analysis Method: 8270D | Date Collected: 10/21/2013 00:00

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 1010(mL) | Date Analyzed: 10/28/2013 18:55

Con. Extract Vol.: 2(mL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	4.0	U	4.0	1.3
111-44-4	Bis(2-chloroethyl)ether	4.0	U	4.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	7.9	U	7.9	0.87
85-68-7	Butyl benzyl phthalate	7.9	U	7.9	1.0
105-60-2	Caprolactam	20	U	20	0.79
86-74-8	Carbazole	11		4.0	1.1
218-01-9	Chrysene	0.79	U	0.79	0.20
84-74-2	Di-n-butyl phthalate	7.9	U	7.9	2.7
117-84-0	Di-n-octyl phthalate	7.9	U	7.9	0.91
53-70-3	Dibenzo(a,h)anthracene	0.79	U	0.79	0.18
132-64-9	Dibenzofuran	17		4.0	0.079
84-66-2	Diethyl phthalate	7.9	U	7.9	2.4
131-11-3	Dimethyl phthalate	7.9	U	7.9	1.1
206-44-0	Fluoranthene	3.4		0.79	0.18
86-73-7	Fluorene	17		0.79	0.16
118-74-1	Hexachlorobenzene	0.79	U	0.79	0.34
87-68-3	Hexachlorobutadiene	4.0	U	4.0	1.1
77-47-4	Hexachlorocyclopentadiene	40	U	40	0.95
67-72-1	Hexachloroethane	4.0	U	4.0	0.75
193-39-5	Indeno[1,2,3-cd]pyrene	0.79	U	0.79	0.17
78-59-1	Isophorone	4.0	U	4.0	1.1
621-64-7	N-Nitrosodi-n-propylamine	4.0	U	4.0	0.95
62-75-9	N-Nitrosodimethylamine	4.0	U	4.0	1.2
86-30-6	N-Nitrosodiphenylamine	4.0	U	4.0	1.2
91-20-3	Naphthalene	160		0.79	0.25
98-95-3	Nitrobenzene	4.0	U	4.0	0.16
87-86-5	Pentachlorophenol	20	U	20	1.1
85-01-8	Phenanthrene	18		0.79	0.25
108-95-2	Phenol	4.0	U	4.0	2.4
129-00-0	Pyrene	1.7		0.79	0.17
108-60-1	2,2'-oxybis[1-chloropropane]	4.0	U	4.0	1.6
606-20-2	2,6-Dinitrotoluene	20	U	20	3.2
100-02-7	4-Nitrophenol	20	U	20	1.1

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-DUP01-102113 | Lab Sample ID: 240-30485-7

Matrix: Water | Lab File ID: 31028025.D

Analysis Method: 8270D | Date Collected: 10/21/2013 00:00

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 1010(mL) | Date Analyzed: 10/28/2013 18:55

Con. Extract Vol.: 2(mL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	71		24-110
4165-62-2	Phenol-d5 (Surr)	69		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	61		21-110
367-12-4	2-Fluorophenol (Surr)	64		10-110
321-60-8	2-Fluorobiphenyl (Surr)	70		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	78		21-110

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW44S-102113 | Lab Sample ID: 240-30485-5

Matrix: Water | Lab File ID: 31028024.D

Analysis Method: 8270D | Date Collected: 10/21/2013 13:30

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 1050(mL) | Date Analyzed: 10/28/2013 18:30

Con. Extract Vol.: 2(mL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	3.6	J	3.8	0.50
123-91-1	1,4-Dioxane	10		3.8	1.9
88-06-2	2,4,6-Trichlorophenol	19	U	19	0.91
95-95-4	2,4,5-Trichlorophenol	19	U	19	1.1
120-83-2	2,4-Dichlorophenol	7.6	U	7.6	0.72
105-67-9	2,4-Dimethylphenol	7.6	U	7.6	0.95
51-28-5	2,4-Dinitrophenol	19	U	19	1.2
121-14-2	2,4-Dinitrotoluene	19	U	19	0.95
91-58-7	2-Chloronaphthalene	3.8	U	3.8	0.38
95-57-8	2-Chlorophenol	3.8	U	3.8	1.1
91-57-6	2-Methylnaphthalene	6.3		0.76	0.34
95-48-7	2-Methylphenol	3.8	U	3.8	0.65
88-74-4	2-Nitroaniline	7.6	U	7.6	0.80
88-75-5	2-Nitrophenol	7.6	U	7.6	1.1
15831-10-4	3 & 4 Methylphenol	7.6	U	7.6	3.0
91-94-1	3,3'-Dichlorobenzidine	19	U	19	1.4
99-09-2	3-Nitroaniline	7.6	U	7.6	1.1
534-52-1	4,6-Dinitro-2-methylphenol	19	U	19	9.1
101-55-3	4-Bromophenyl phenyl ether	7.6	U	7.6	0.84
59-50-7	4-Chloro-3-methylphenol	7.6	U	7.6	0.80
106-47-8	4-Chloroaniline	7.6	U	7.6	0.80
7005-72-3	4-Chlorophenyl phenyl ether	7.6	U	7.6	1.1
100-01-6	4-Nitroaniline	7.6	U	7.6	0.84
83-32-9	Acenaphthene	42		0.76	0.17
208-96-8	Acenaphthylene	0.76	U	0.76	0.18
98-86-2	Acetophenone	3.8	U	3.8	1.3
120-12-7	Anthracene	2.3		0.76	0.33
1912-24-9	Atrazine	3.8	U	3.8	1.3
100-52-7	Benzaldehyde	3.8	U	3.8	1.5
56-55-3	Benzo[a]anthracene	0.76	U	0.76	0.11
50-32-8	Benzo[a]pyrene	0.76	U	0.76	0.20
205-99-2	Benzo[b]fluoranthene	0.76	U	0.76	0.15
191-24-2	Benzo[g,h,i]perylene	0.76	U	0.76	0.18
207-08-9	Benzo[k]fluoranthene	0.76	U	0.76	0.17

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW44S-102113 | Lab Sample ID: 240-30485-5

Matrix: Water | Lab File ID: 31028024.D

Analysis Method: 8270D | Date Collected: 10/21/2013 13:30

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 1050(mL) | Date Analyzed: 10/28/2013 18:30

Con. Extract Vol.: 2(mL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	3.8	U	3.8	1.2
111-44-4	Bis(2-chloroethyl)ether	3.8	U	3.8	0.38
117-81-7	Bis(2-ethylhexyl) phthalate	7.6	U	7.6	0.84
85-68-7	Butyl benzyl phthalate	7.6	U	7.6	0.99
105-60-2	Caprolactam	19	U	19	0.76
86-74-8	Carbazole	8.9		3.8	1.1
218-01-9	Chrysene	0.76	U	0.76	0.19
84-74-2	Di-n-butyl phthalate	7.6	U	7.6	2.6
117-84-0	Di-n-octyl phthalate	7.6	U	7.6	0.88
53-70-3	Dibenzo(a,h)anthracene	0.76	U	0.76	0.17
132-64-9	Dibenzofuran	17		3.8	0.076
84-66-2	Diethyl phthalate	7.6	U	7.6	2.3
131-11-3	Dimethyl phthalate	7.6	U	7.6	1.1
206-44-0	Fluoranthene	3.6		0.76	0.17
86-73-7	Fluorene	18		0.76	0.15
118-74-1	Hexachlorobenzene	0.76	U	0.76	0.32
87-68-3	Hexachlorobutadiene	3.8	U	3.8	1.0
77-47-4	Hexachlorocyclopentadiene	38	U	38	0.91
67-72-1	Hexachloroethane	3.8	U	3.8	0.72
193-39-5	Indeno[1,2,3-cd]pyrene	0.76	U	0.76	0.16
78-59-1	Isophorone	3.8	U	3.8	1.0
621-64-7	N-Nitrosodi-n-propylamine	3.8	U	3.8	0.91
62-75-9	N-Nitrosodimethylamine	3.8	U	3.8	1.2
86-30-6	N-Nitrosodiphenylamine	3.8	U	3.8	1.2
91-20-3	Naphthalene	150		0.76	0.24
98-95-3	Nitrobenzene	3.8	U	3.8	0.15
87-86-5	Pentachlorophenol	19	U	19	1.0
85-01-8	Phenanthrene	19		0.76	0.24
108-95-2	Phenol	3.8	U	3.8	2.3
129-00-0	Pyrene	2.0		0.76	0.16
108-60-1	2,2'-oxybis[1-chloropropane]	3.8	U	3.8	1.5
606-20-2	2,6-Dinitrotoluene	19	U	19	3.0
100-02-7	4-Nitrophenol	19	U	19	1.1

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW44S-102113 | Lab Sample ID: 240-30485-5

Matrix: Water | Lab File ID: 31028024.D

Analysis Method: 8270D | Date Collected: 10/21/2013 13:30

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 1050(mL) | Date Analyzed: 10/28/2013 18:30

Con. Extract Vol.: 2(mL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	78		24-110
4165-62-2	Phenol-d5 (Surr)	69		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	62		21-110
367-12-4	2-Fluorophenol (Surr)	62		10-110
321-60-8	2-Fluorobiphenyl (Surr)	71		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	86		21-110

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW50D-102113 | Lab Sample ID: 240-30485-4

Matrix: Water | Lab File ID: 31028009.D

Analysis Method: 8270D | Date Collected: 10/21/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 990(mL) | Date Analyzed: 10/28/2013 12:11

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.0	U	1.0	0.13
123-91-1	1,4-Dioxane	2.7		1.0	0.49
88-06-2	2,4,6-Trichlorophenol	5.1	U	5.1	0.24
95-95-4	2,4,5-Trichlorophenol	5.1	U	5.1	0.30
120-83-2	2,4-Dichlorophenol	2.0	U	2.0	0.19
105-67-9	2,4-Dimethylphenol	2.0	U	2.0	0.25
51-28-5	2,4-Dinitrophenol	5.1	U	5.1	0.32
121-14-2	2,4-Dinitrotoluene	5.1	U	5.1	0.25
91-58-7	2-Chloronaphthalene	1.0	U	1.0	0.10
95-57-8	2-Chlorophenol	1.0	U	1.0	0.29
91-57-6	2-Methylnaphthalene	0.20	U	0.20	0.091
95-48-7	2-Methylphenol	1.0	U	1.0	0.17
88-74-4	2-Nitroaniline	2.0	U	2.0	0.21
88-75-5	2-Nitrophenol	2.0	U	2.0	0.28
15831-10-4	3 & 4 Methylphenol	2.0	U	2.0	0.81
91-94-1	3,3'-Dichlorobenzidine	5.1	U	5.1	0.37
99-09-2	3-Nitroaniline	2.0	U	2.0	0.28
534-52-1	4,6-Dinitro-2-methylphenol	5.1	U	5.1	2.4
101-55-3	4-Bromophenyl phenyl ether	2.0	U	2.0	0.22
59-50-7	4-Chloro-3-methylphenol	2.0	U	2.0	0.21
106-47-8	4-Chloroaniline	2.0	U	2.0	0.21
7005-72-3	4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30
100-01-6	4-Nitroaniline	2.0	U	2.0	0.22
83-32-9	Acenaphthene	0.20	U	0.20	0.045
208-96-8	Acenaphthylene	0.20	U	0.20	0.049
98-86-2	Acetophenone	1.0	U	1.0	0.34
120-12-7	Anthracene	0.20	U	0.20	0.089
1912-24-9	Atrazine	1.0	U	1.0	0.34
100-52-7	Benzaldehyde	1.0	U	1.0	0.39
56-55-3	Benzo[a]anthracene	0.20	U	0.20	0.030
50-32-8	Benzo[a]pyrene	0.20	U	0.20	0.052
205-99-2	Benzo[b]fluoranthene	0.20	U	0.20	0.040
191-24-2	Benzo[g,h,i]perylene	0.20	U	0.20	0.047
207-08-9	Benzo[k]fluoranthene	0.20	U	0.20	0.045

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW50D-102113 | Lab Sample ID: 240-30485-4

Matrix: Water | Lab File ID: 31028009.D

Analysis Method: 8270D | Date Collected: 10/21/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 990(mL) | Date Analyzed: 10/28/2013 12:11

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.0	U	1.0	0.32
111-44-4	Bis(2-chloroethyl)ether	1.0	U	1.0	0.10
117-81-7	Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.22
85-68-7	Butyl benzyl phthalate	2.0	U	2.0	0.26
105-60-2	Caprolactam	5.1	U	5.1	0.20
86-74-8	Carbazole	1.0	U	1.0	0.28
218-01-9	Chrysene	0.20	U	0.20	0.051
84-74-2	Di-n-butyl phthalate	2.0	U	2.0	0.68
117-84-0	Di-n-octyl phthalate	2.0	U	2.0	0.23
53-70-3	Dibenzo(a,h)anthracene	0.20	U	0.20	0.045
132-64-9	Dibenzofuran	1.0	U	1.0	0.020
84-66-2	Diethyl phthalate	2.0	U	2.0	0.61
131-11-3	Dimethyl phthalate	2.0	U	2.0	0.29
206-44-0	Fluoranthene	0.20	U	0.20	0.045
86-73-7	Fluorene	0.20	U	0.20	0.041
118-74-1	Hexachlorobenzene	0.20	U	0.20	0.086
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.27
77-47-4	Hexachlorocyclopentadiene	10	U	10	0.24
67-72-1	Hexachloroethane	1.0	U	1.0	0.19
193-39-5	Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.044
78-59-1	Isophorone	1.0	U	1.0	0.27
621-64-7	N-Nitrosodi-n-propylamine	1.0	U	1.0	0.24
62-75-9	N-Nitrosodimethylamine	1.0	U	1.0	0.31
86-30-6	N-Nitrosodiphenylamine	1.0	U	1.0	0.31
91-20-3	Naphthalene	0.20	U	0.20	0.063
98-95-3	Nitrobenzene	1.0	U	1.0	0.040
87-86-5	Pentachlorophenol	5.1	U	5.1	0.27
85-01-8	Phenanthrene	0.20	U	0.20	0.063
108-95-2	Phenol	1.0	U	1.0	0.61
129-00-0	Pyrene	0.20	U	0.20	0.042
108-60-1	2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.40
606-20-2	2,6-Dinitrotoluene	5.1	U	5.1	0.81
100-02-7	4-Nitrophenol	5.1	U	5.1	0.29

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW50D-102113 | Lab Sample ID: 240-30485-4

Matrix: Water | Lab File ID: 31028009.D

Analysis Method: 8270D | Date Collected: 10/21/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 990(mL) | Date Analyzed: 10/28/2013 12:11

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	94		24-110
4165-62-2	Phenol-d5 (Surr)	78		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	75		21-110
367-12-4	2-Fluorophenol (Surr)	74		10-110
321-60-8	2-Fluorobiphenyl (Surr)	76		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	89		21-110

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51D-102113 | Lab Sample ID: 240-30485-3

Matrix: Water | Lab File ID: 31028011.D

Analysis Method: 8270D | Date Collected: 10/21/2013 13:55

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 920(mL) | Date Analyzed: 10/28/2013 13:02

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.1	U	1.1	0.14
123-91-1	1,4-Dioxane	2.5		1.1	0.53
88-06-2	2,4,6-Trichlorophenol	5.4	U	5.4	0.26
95-95-4	2,4,5-Trichlorophenol	5.4	U	5.4	0.33
120-83-2	2,4-Dichlorophenol	2.2	U	2.2	0.21
105-67-9	2,4-Dimethylphenol	2.2	U	2.2	0.27
51-28-5	2,4-Dinitrophenol	5.4	U	5.4	0.35
121-14-2	2,4-Dinitrotoluene	5.4	U	5.4	0.27
91-58-7	2-Chloronaphthalene	1.1	U	1.1	0.11
95-57-8	2-Chlorophenol	1.1	U	1.1	0.32
91-57-6	2-Methylnaphthalene	0.22	U	0.22	0.098
95-48-7	2-Methylphenol	1.1	U	1.1	0.18
88-74-4	2-Nitroaniline	2.2	U	2.2	0.23
88-75-5	2-Nitrophenol	2.2	U	2.2	0.30
15831-10-4	3 & 4 Methylphenol	2.2	U	2.2	0.87
91-94-1	3,3'-Dichlorobenzidine	5.4	U	5.4	0.40
99-09-2	3-Nitroaniline	2.2	U	2.2	0.30
534-52-1	4,6-Dinitro-2-methylphenol	5.4	U	5.4	2.6
101-55-3	4-Bromophenyl phenyl ether	2.2	U	2.2	0.24
59-50-7	4-Chloro-3-methylphenol	2.2	U	2.2	0.23
106-47-8	4-Chloroaniline	2.2	U	2.2	0.23
7005-72-3	4-Chlorophenyl phenyl ether	2.2	U	2.2	0.33
100-01-6	4-Nitroaniline	2.2	U	2.2	0.24
83-32-9	Acenaphthene	0.22	U	0.22	0.048
208-96-8	Acenaphthylene	0.22	U	0.22	0.052
98-86-2	Acetophenone	1.1	U	1.1	0.37
120-12-7	Anthracene	0.22	U	0.22	0.096
1912-24-9	Atrazine	1.1	U	1.1	0.37
100-52-7	Benzaldehyde	1.1	U	1.1	0.42
56-55-3	Benzo[a]anthracene	0.22	U	0.22	0.032
50-32-8	Benzo[a]pyrene	0.22	U	0.22	0.056
205-99-2	Benzo[b]fluoranthene	0.22	U	0.22	0.043
191-24-2	Benzo[g,h,i]perylene	0.22	U	0.22	0.050
207-08-9	Benzo[k]fluoranthene	0.22	U	0.22	0.049

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51D-102113 | Lab Sample ID: 240-30485-3

Matrix: Water | Lab File ID: 31028011.D

Analysis Method: 8270D | Date Collected: 10/21/2013 13:55

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 920(mL) | Date Analyzed: 10/28/2013 13:02

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.1	U	1.1	0.35
111-44-4	Bis(2-chloroethyl)ether	1.1	U	1.1	0.11
117-81-7	Bis(2-ethylhexyl) phthalate	0.32	J B	2.2	0.24
85-68-7	Butyl benzyl phthalate	2.2	U	2.2	0.28
105-60-2	Caprolactam	5.4	U	5.4	0.22
86-74-8	Carbazole	1.1	U	1.1	0.30
218-01-9	Chrysene	0.22	U	0.22	0.055
84-74-2	Di-n-butyl phthalate	2.2	U	2.2	0.73
117-84-0	Di-n-octyl phthalate	2.2	U	2.2	0.25
53-70-3	Dibenzo(a,h)anthracene	0.22	U	0.22	0.048
132-64-9	Dibenzofuran	1.1	U	1.1	0.022
84-66-2	Diethyl phthalate	2.2	U	2.2	0.65
131-11-3	Dimethyl phthalate	2.2	U	2.2	0.32
206-44-0	Fluoranthene	0.22	U	0.22	0.048
86-73-7	Fluorene	0.22	U	0.22	0.044
118-74-1	Hexachlorobenzene	0.22	U	0.22	0.093
87-68-3	Hexachlorobutadiene	1.1	U	1.1	0.29
77-47-4	Hexachlorocyclopentadiene	11	U	11	0.26
67-72-1	Hexachloroethane	1.1	U	1.1	0.21
193-39-5	Indeno[1,2,3-cd]pyrene	0.22	U	0.22	0.047
78-59-1	Isophorone	1.1	U	1.1	0.29
621-64-7	N-Nitrosodi-n-propylamine	1.1	U	1.1	0.26
62-75-9	N-Nitrosodimethylamine	1.1	U	1.1	0.34
86-30-6	N-Nitrosodiphenylamine	1.1	U	1.1	0.34
91-20-3	Naphthalene	0.22	U	0.22	0.068
98-95-3	Nitrobenzene	1.1	U	1.1	0.043
87-86-5	Pentachlorophenol	5.4	U	5.4	0.29
85-01-8	Phenanthrene	0.22	U	0.22	0.067
108-95-2	Phenol	1.1	U	1.1	0.65
129-00-0	Pyrene	0.22	U	0.22	0.046
108-60-1	2,2'-oxybis[1-chloropropane]	1.1	U	1.1	0.43
606-20-2	2,6-Dinitrotoluene	5.4	U	5.4	0.87
100-02-7	4-Nitrophenol	5.4	U	5.4	0.32

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51D-102113 | Lab Sample ID: 240-30485-3

Matrix: Water | Lab File ID: 31028011.D

Analysis Method: 8270D | Date Collected: 10/21/2013 13:55

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 920(mL) | Date Analyzed: 10/28/2013 13:02

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	83		24-110
4165-62-2	Phenol-d5 (Surr)	65		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	58		21-110
367-12-4	2-Fluorophenol (Surr)	60		10-110
321-60-8	2-Fluorobiphenyl (Surr)	59		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	83		21-110

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51I-102113 | Lab Sample ID: 240-30485-2

Matrix: Water | Lab File ID: 31028010.D

Analysis Method: 8270D | Date Collected: 10/21/2013 12:35

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 920(mL) | Date Analyzed: 10/28/2013 12:37

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.1	U	1.1	0.14
123-91-1	1,4-Dioxane	1.8		1.1	0.53
88-06-2	2,4,6-Trichlorophenol	5.4	U	5.4	0.26
95-95-4	2,4,5-Trichlorophenol	5.4	U	5.4	0.33
120-83-2	2,4-Dichlorophenol	2.2	U	2.2	0.21
105-67-9	2,4-Dimethylphenol	2.2	U	2.2	0.27
51-28-5	2,4-Dinitrophenol	5.4	U	5.4	0.35
121-14-2	2,4-Dinitrotoluene	5.4	U	5.4	0.27
91-58-7	2-Chloronaphthalene	1.1	U	1.1	0.11
95-57-8	2-Chlorophenol	1.1	U	1.1	0.32
91-57-6	2-Methylnaphthalene	0.22	U	0.22	0.098
95-48-7	2-Methylphenol	1.1	U	1.1	0.18
88-74-4	2-Nitroaniline	2.2	U	2.2	0.23
88-75-5	2-Nitrophenol	2.2	U	2.2	0.30
15831-10-4	3 & 4 Methylphenol	2.2	U	2.2	0.87
91-94-1	3,3'-Dichlorobenzidine	5.4	U	5.4	0.40
99-09-2	3-Nitroaniline	2.2	U	2.2	0.30
534-52-1	4,6-Dinitro-2-methylphenol	5.4	U	5.4	2.6
101-55-3	4-Bromophenyl phenyl ether	2.2	U	2.2	0.24
59-50-7	4-Chloro-3-methylphenol	2.2	U	2.2	0.23
106-47-8	4-Chloroaniline	2.2	U	2.2	0.23
7005-72-3	4-Chlorophenyl phenyl ether	2.2	U	2.2	0.33
100-01-6	4-Nitroaniline	2.2	U	2.2	0.24
83-32-9	Acenaphthene	0.22	U	0.22	0.048
208-96-8	Acenaphthylene	0.22	U	0.22	0.052
98-86-2	Acetophenone	1.1	U	1.1	0.37
120-12-7	Anthracene	0.22	U	0.22	0.096
1912-24-9	Atrazine	1.1	U	1.1	0.37
100-52-7	Benzaldehyde	1.1	U	1.1	0.42
56-55-3	Benzo[a]anthracene	0.22	U	0.22	0.032
50-32-8	Benzo[a]pyrene	0.22	U	0.22	0.056
205-99-2	Benzo[b]fluoranthene	0.22	U	0.22	0.043
191-24-2	Benzo[g,h,i]perylene	0.22	U	0.22	0.050
207-08-9	Benzo[k]fluoranthene	0.22	U	0.22	0.049

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51I-102113 | Lab Sample ID: 240-30485-2

Matrix: Water | Lab File ID: 31028010.D

Analysis Method: 8270D | Date Collected: 10/21/2013 12:35

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 920(mL) | Date Analyzed: 10/28/2013 12:37

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.1	U	1.1	0.35
111-44-4	Bis(2-chloroethyl)ether	1.1	U	1.1	0.11
117-81-7	Bis(2-ethylhexyl) phthalate	2.2	U	2.2	0.24
85-68-7	Butyl benzyl phthalate	2.2	U	2.2	0.28
105-60-2	Caprolactam	5.4	U	5.4	0.22
86-74-8	Carbazole	1.1	U	1.1	0.30
218-01-9	Chrysene	0.22	U	0.22	0.055
84-74-2	Di-n-butyl phthalate	2.2	U	2.2	0.73
117-84-0	Di-n-octyl phthalate	2.2	U	2.2	0.25
53-70-3	Dibenzo(a,h)anthracene	0.22	U	0.22	0.048
132-64-9	Dibenzofuran	1.1	U	1.1	0.022
84-66-2	Diethyl phthalate	2.2	U	2.2	0.65
131-11-3	Dimethyl phthalate	2.2	U	2.2	0.32
206-44-0	Fluoranthene	0.22	U	0.22	0.048
86-73-7	Fluorene	0.22	U	0.22	0.044
118-74-1	Hexachlorobenzene	0.22	U	0.22	0.093
87-68-3	Hexachlorobutadiene	1.1	U	1.1	0.29
77-47-4	Hexachlorocyclopentadiene	11	U	11	0.26
67-72-1	Hexachloroethane	1.1	U	1.1	0.21
193-39-5	Indeno[1,2,3-cd]pyrene	0.22	U	0.22	0.047
78-59-1	Isophorone	1.1	U	1.1	0.29
621-64-7	N-Nitrosodi-n-propylamine	1.1	U	1.1	0.26
62-75-9	N-Nitrosodimethylamine	1.1	U	1.1	0.34
86-30-6	N-Nitrosodiphenylamine	1.1	U	1.1	0.34
91-20-3	Naphthalene	0.22	U	0.22	0.068
98-95-3	Nitrobenzene	1.1	U	1.1	0.043
87-86-5	Pentachlorophenol	5.4	U	5.4	0.29
85-01-8	Phenanthrene	0.22	U	0.22	0.067
108-95-2	Phenol	1.1	U	1.1	0.65
129-00-0	Pyrene	0.22	U	0.22	0.046
108-60-1	2,2'-oxybis[1-chloropropane]	1.1	U	1.1	0.43
606-20-2	2,6-Dinitrotoluene	5.4	U	5.4	0.87
100-02-7	4-Nitrophenol	5.4	U	5.4	0.32

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51I-102113 | Lab Sample ID: 240-30485-2

Matrix: Water | Lab File ID: 31028010.D

Analysis Method: 8270D | Date Collected: 10/21/2013 12:35

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 920(mL) | Date Analyzed: 10/28/2013 12:37

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	80		24-110
4165-62-2	Phenol-d5 (Surr)	65		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	58		21-110
367-12-4	2-Fluorophenol (Surr)	60		10-110
321-60-8	2-Fluorobiphenyl (Surr)	62		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	80		21-110

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51S-102113 | Lab Sample ID: 240-30485-1

Matrix: Water | Lab File ID: 31028012.D

Analysis Method: 8270D | Date Collected: 10/21/2013 10:55

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 920(mL) | Date Analyzed: 10/28/2013 13:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.1	U	1.1	0.14
123-91-1	1,4-Dioxane	43		1.1	0.53
88-06-2	2,4,6-Trichlorophenol	5.4	U	5.4	0.26
95-95-4	2,4,5-Trichlorophenol	5.4	U	5.4	0.33
120-83-2	2,4-Dichlorophenol	2.2	U	2.2	0.21
105-67-9	2,4-Dimethylphenol	2.2	U	2.2	0.27
51-28-5	2,4-Dinitrophenol	5.4	U	5.4	0.35
121-14-2	2,4-Dinitrotoluene	5.4	U	5.4	0.27
91-58-7	2-Chloronaphthalene	1.1	U	1.1	0.11
95-57-8	2-Chlorophenol	1.1	U	1.1	0.32
91-57-6	2-Methylnaphthalene	0.14	J	0.22	0.098
95-48-7	2-Methylphenol	1.1	U	1.1	0.18
88-74-4	2-Nitroaniline	2.2	U	2.2	0.23
88-75-5	2-Nitrophenol	2.2	U	2.2	0.30
15831-10-4	3 & 4 Methylphenol	2.2	U	2.2	0.87
91-94-1	3,3'-Dichlorobenzidine	5.4	U	5.4	0.40
99-09-2	3-Nitroaniline	2.2	U	2.2	0.30
534-52-1	4,6-Dinitro-2-methylphenol	5.4	U	5.4	2.6
101-55-3	4-Bromophenyl phenyl ether	2.2	U	2.2	0.24
59-50-7	4-Chloro-3-methylphenol	2.2	U	2.2	0.23
106-47-8	4-Chloroaniline	2.2	U	2.2	0.23
7005-72-3	4-Chlorophenyl phenyl ether	2.2	U	2.2	0.33
100-01-6	4-Nitroaniline	2.2	U	2.2	0.24
83-32-9	Acenaphthene	0.22	U	0.22	0.048
208-96-8	Acenaphthylene	0.22	U	0.22	0.052
98-86-2	Acetophenone	1.1	U	1.1	0.37
120-12-7	Anthracene	0.22	U	0.22	0.096
1912-24-9	Atrazine	1.1	U	1.1	0.37
100-52-7	Benzaldehyde	1.1	U	1.1	0.42
56-55-3	Benzo[a]anthracene	0.22	U	0.22	0.032
50-32-8	Benzo[a]pyrene	0.22	U	0.22	0.056
205-99-2	Benzo[b]fluoranthene	0.22	U	0.22	0.043
191-24-2	Benzo[g,h,i]perylene	0.22	U	0.22	0.050
207-08-9	Benzo[k]fluoranthene	0.22	U	0.22	0.049

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51S-102113 | Lab Sample ID: 240-30485-1

Matrix: Water | Lab File ID: 31028012.D

Analysis Method: 8270D | Date Collected: 10/21/2013 10:55

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 920(mL) | Date Analyzed: 10/28/2013 13:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.1	U	1.1	0.35
111-44-4	Bis(2-chloroethyl)ether	1.1	U	1.1	0.11
117-81-7	Bis(2-ethylhexyl) phthalate	0.30	J B	2.2	0.24
85-68-7	Butyl benzyl phthalate	2.2	U	2.2	0.28
105-60-2	Caprolactam	5.4	U	5.4	0.22
86-74-8	Carbazole	1.1	U	1.1	0.30
218-01-9	Chrysene	0.22	U	0.22	0.055
84-74-2	Di-n-butyl phthalate	2.2	U	2.2	0.73
117-84-0	Di-n-octyl phthalate	2.2	U	2.2	0.25
53-70-3	Dibenzo(a,h)anthracene	0.22	U	0.22	0.048
132-64-9	Dibenzofuran	1.1	U	1.1	0.022
84-66-2	Diethyl phthalate	2.2	U	2.2	0.65
131-11-3	Dimethyl phthalate	2.2	U	2.2	0.32
206-44-0	Fluoranthene	0.22	U	0.22	0.048
86-73-7	Fluorene	0.22	U	0.22	0.044
118-74-1	Hexachlorobenzene	0.22	U	0.22	0.093
87-68-3	Hexachlorobutadiene	1.1	U	1.1	0.29
77-47-4	Hexachlorocyclopentadiene	11	U	11	0.26
67-72-1	Hexachloroethane	1.1	U	1.1	0.21
193-39-5	Indeno[1,2,3-cd]pyrene	0.22	U	0.22	0.047
78-59-1	Isophorone	1.1	U	1.1	0.29
621-64-7	N-Nitrosodi-n-propylamine	1.1	U	1.1	0.26
62-75-9	N-Nitrosodimethylamine	1.1	U	1.1	0.34
86-30-6	N-Nitrosodiphenylamine	1.1	U	1.1	0.34
91-20-3	Naphthalene	1.2		0.22	0.068
98-95-3	Nitrobenzene	1.1	U	1.1	0.043
87-86-5	Pentachlorophenol	5.4	U	5.4	0.29
85-01-8	Phenanthrene	0.22	U	0.22	0.067
108-95-2	Phenol	1.1	U	1.1	0.65
129-00-0	Pyrene	0.22	U	0.22	0.046
108-60-1	2,2'-oxybis[1-chloropropane]	1.1	U	1.1	0.43
606-20-2	2,6-Dinitrotoluene	5.4	U	5.4	0.87
100-02-7	4-Nitrophenol	5.4	U	5.4	0.32

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51S-102113 | Lab Sample ID: 240-30485-1

Matrix: Water | Lab File ID: 31028012.D

Analysis Method: 8270D | Date Collected: 10/21/2013 10:55

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 920(mL) | Date Analyzed: 10/28/2013 13:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	85		24-110
4165-62-2	Phenol-d5 (Surr)	67		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	60		21-110
367-12-4	2-Fluorophenol (Surr)	60		10-110
321-60-8	2-Fluorobiphenyl (Surr)	64		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	89		21-110

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-DUP01-102113 Lab Sample ID: 240-30485-7

Matrix: Water Lab File ID: YF103020.D

Analysis Method: 8015C Date Collected: 10/21/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2013 03:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107778 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	60	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	76		40-133

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW44S-102113 Lab Sample ID: 240-30485-5

Matrix: Water Lab File ID: YF103019.D

Analysis Method: 8015C Date Collected: 10/21/2013 13:30

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2013 02:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107778 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	55	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	77		40-133

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW50D-102113 Lab Sample ID: 240-30485-4

Matrix: Water Lab File ID: YF103018.D

Analysis Method: 8015C Date Collected: 10/21/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2013 01:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107778 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	89	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	75		40-133

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51D-102113 Lab Sample ID: 240-30485-3

Matrix: Water Lab File ID: YF103017.D

Analysis Method: 8015C Date Collected: 10/21/2013 13:55

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2013 01:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107778 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	70	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	80		40-133

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51I-102113 | Lab Sample ID: 240-30485-2

Matrix: Water | Lab File ID: O1110108.D

Analysis Method: 8015C | Date Collected: 10/21/2013 12:35

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2013 19:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108135 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	64	J	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	105		40-133

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51S-102113 | Lab Sample ID: 240-30485-1

Matrix: Water | Lab File ID: YF110414.D

Analysis Method: 8015C | Date Collected: 10/21/2013 10:55

Sample wt/vol: 5(mL) | Date Analyzed: 11/04/2013 17:03

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 108231 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	6200		1000	250

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	98		40-133

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-DUP01-102113 | Lab Sample ID: 240-30485-7

Matrix: Water | Lab File ID: P5F28020.D

Analysis Method: 8015C | Date Collected: 10/21/2013 00:00

Extraction Method: 3520C | Date Extracted: 10/25/2013 08:18

Sample wt/vol: 1020(mL) | Date Analyzed: 10/28/2013 23:24

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: | ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107373 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	990		490	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	69		20-120

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW44S-102113 Lab Sample ID: 240-30485-5

Matrix: Water Lab File ID: P5F28019.D

Analysis Method: 8015C Date Collected: 10/21/2013 13:30

Extraction Method: 3520C Date Extracted: 10/25/2013 08:18

Sample wt/vol: 1000(mL) Date Analyzed: 10/28/2013 22:53

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 107373 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	840		500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	53		20-120

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW50D-102113 Lab Sample ID: 240-30485-4

Matrix: Water Lab File ID: P5F28017.D

Analysis Method: 8015C Date Collected: 10/21/2013 11:15

Extraction Method: 3520C Date Extracted: 10/25/2013 08:18

Sample wt/vol: 1020(mL) Date Analyzed: 10/28/2013 21:53

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 107373 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	490	U	490	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	50		20-120

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51D-102113 | Lab Sample ID: 240-30485-3

Matrix: Water | Lab File ID: P5F28016.D

Analysis Method: 8015C | Date Collected: 10/21/2013 13:55

Extraction Method: 3520C | Date Extracted: 10/25/2013 08:18

Sample wt/vol: 920(mL) | Date Analyzed: 10/28/2013 21:23

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107373 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	1700		540	260

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	46		20-120

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51I-102113 Lab Sample ID: 240-30485-2

Matrix: Water Lab File ID: P5F28015.D

Analysis Method: 8015C Date Collected: 10/21/2013 12:35

Extraction Method: 3520C Date Extracted: 10/25/2013 08:18

Sample wt/vol: 910(mL) Date Analyzed: 10/28/2013 20:52

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 107373 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	550	U	550	260

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	61		20-120

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: MSA-MW51S-102113 Lab Sample ID: 240-30485-1

Matrix: Water Lab File ID: P5F28014.D

Analysis Method: 8015C Date Collected: 10/21/2013 10:55

Extraction Method: 3520C Date Extracted: 10/25/2013 08:18

Sample wt/vol: 980(mL) Date Analyzed: 10/28/2013 20:22

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 107373 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	270	J	510	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	69		20-120

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/30/2013 08:00 End Date: 10/31/2013 04:50

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
ICIS 240-107816/1	1		08:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CALSTD 240-107816/2 IC			08:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CALSTD 240-107816/3 IC			08:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 240-107816/4	1		08:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB 240-107816/5	1		08:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 240-107816/6			08:20																				
ZZZZZZ			08:24																				
ICSA 240-107816/8	1		08:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSAB 240-107816/9	1		08:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV 240-107816/10			08:36																				
CCB 240-107816/11			08:40																				
ZZZZZZ			08:44																				
ZZZZZZ			08:48																				
ZZZZZZ			08:53																				
ZZZZZZ			08:57																				
ZZZZZZ			09:01																				
ZZZZZZ			09:05																				
CCV 240-107816/18	1		09:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-107816/19	1		09:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 240-107816/20	1		09:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:21																				
ZZZZZZ			09:25																				
ZZZZZZ			09:29																				
ZZZZZZ			09:34																				
ZZZZZZ			09:37																				
ZZZZZZ			09:42																				
ZZZZZZ			09:46																				
MB 240-106927/1-A	1	R	09:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 240-106927/2-A	1	R	09:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 240-107816/30	1		09:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-107816/31	1		10:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:06																				
240-30254-H-2-A SD ^5	5	R	10:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-30254-H-2-C DU	1	R	10:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-30254-H-2-B MS	1	R	10:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:22																				
ZZZZZZ			10:26																				
ZZZZZZ			10:30																				
ZZZZZZ			10:35																				
ZZZZZZ			10:39																				
ZZZZZZ			10:43																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/30/2013 08:00 End Date: 10/31/2013 04:50

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
CCV 240-107816/42	1		10:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-107816/43	1		10:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:55																				
240-30485-5	1	R	10:59	X	X	X	X		X	X	X	X					X		X	X	X	X	
240-30485-7	1	R	11:03	X	X	X	X		X	X	X	X					X		X	X	X	X	
ZZZZZZ			11:07																				
ZZZZZZ			11:11																				
ZZZZZZ			11:15																				
ZZZZZZ			11:20																				
ZZZZZZ			11:24																				
ZZZZZZ			11:28																				
ZZZZZZ			11:32																				
CCV 240-107816/54	1		11:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-107816/55	1		11:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			11:44																				
240-30485-5	1	D	11:48	X	X	X	X		X	X	X	X					X		X	X	X	X	
240-30485-7	1	D	11:52	X	X	X	X		X	X	X	X					X		X	X	X	X	
ZZZZZZ			11:57																				
ZZZZZZ			12:01																				
ZZZZZZ			12:05																				
ZZZZZZ			12:08																				
ZZZZZZ			12:12																				
ZZZZZZ			12:16																				
ZZZZZZ			12:20																				
CCV 240-107816/66	1		12:24	X	X	X	X		X	X	X	X					X		X	X	X	X	
CCB 240-107816/67	1		12:28	X	X	X	X		X	X	X	X					X		X	X	X	X	
ZZZZZZ			12:32																				
ZZZZZZ			12:36																				
ZZZZZZ			12:40																				
ZZZZZZ			12:44																				
ZZZZZZ			12:48																				
ZZZZZZ			12:52																				
ZZZZZZ			12:56																				
ZZZZZZ			13:01																				
ZZZZZZ			13:05																				
ZZZZZZ			13:08																				
CCV 240-107816/78			13:12																				
CCB 240-107816/79			13:16																				
ZZZZZZ			13:21																				
ZZZZZZ			13:25																				
ZZZZZZ			13:28																				
ZZZZZZ			13:32																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/30/2013 08:00 End Date: 10/31/2013 04:50

Lab Sample ID	D/F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
ZZZZZZ			13:36																				
ZZZZZZ			13:41																				
ZZZZZZ			13:45																				
ZZZZZZ			13:49																				
ZZZZZZ			13:53																				
ZZZZZZ			13:57																				
CCV 240-107816/90			14:02																				
CCB 240-107816/91			14:05																				
ZZZZZZ			14:10																				
ZZZZZZ			14:14																				
ZZZZZZ			14:18																				
ZZZZZZ			14:22																				
CRI 240-107816/96	1		14:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			14:30																				
ZZZZZZ			14:35																				
ZZZZZZ			14:39																				
ZZZZZZ			14:43																				
ZZZZZZ			14:47																				
CCV 240-107816/102			14:51																				
CCB 240-107816/103			14:55																				
ZZZZZZ			14:59																				
ZZZZZZ			15:03																				
ZZZZZZ			15:07																				
ZZZZZZ			15:11																				
ZZZZZZ			15:16																				
ZZZZZZ			15:20																				
ZZZZZZ			15:24																				
ZZZZZZ			15:29																				
ZZZZZZ			15:33																				
ZZZZZZ			15:37																				
CCV 240-107816/114			15:42																				
CCB 240-107816/115			15:45																				
ZZZZZZ			15:50																				
ZZZZZZ			15:54																				
ZZZZZZ			15:58																				
ZZZZZZ			16:02																				
ZZZZZZ			16:07																				
ZZZZZZ			16:10																				
ZZZZZZ			16:15																				
ZZZZZZ			16:19																				
ZZZZZZ			16:22																				
ZZZZZZ			16:27																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/30/2013 08:00 End Date: 10/31/2013 04:50

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
CCV 240-107816/126			16:31																				
CCB 240-107816/127			16:35																				
ZZZZZZ			16:39																				
ZZZZZZ			16:43																				
ZZZZZZ			16:47																				
ZZZZZZ			16:51																				
ZZZZZZ			16:55																				
ZZZZZZ			17:00																				
ZZZZZZ			17:04																				
ZZZZZZ			17:08																				
CRI 240-107816/136			17:12																				
ZZZZZZ			17:16																				
CCV 240-107816/138			17:20																				
CCB 240-107816/139			17:24																				
ZZZZZZ			17:28																				
ZZZZZZ			17:32																				
ZZZZZZ			17:36																				
ZZZZZZ			17:41																				
ZZZZZZ			17:45																				
ZZZZZZ			17:49																				
ZZZZZZ			17:53																				
ZZZZZZ			17:57																				
ZZZZZZ			18:01																				
ZZZZZZ			18:06																				
CCV 240-107816/150			18:10																				
CCB 240-107816/151			18:14																				
ZZZZZZ			18:18																				
ZZZZZZ			18:22																				
ZZZZZZ			18:26																				
ZZZZZZ			18:30																				
ZZZZZZ			18:34																				
ZZZZZZ			18:38																				
ZZZZZZ			18:42																				
ZZZZZZ			18:46																				
ZZZZZZ			18:50																				
ZZZZZZ			18:54																				
CCV 240-107816/162			18:58																				
CCB 240-107816/163			19:02																				
ZZZZZZ			19:06																				
ZZZZZZ			19:10																				
ZZZZZZ			19:14																				
ZZZZZZ			19:18																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/30/2013 08:00 End Date: 10/31/2013 04:50

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
ZZZZZZ			19:22																				
ZZZZZZ			19:26																				
ZZZZZZ			19:30																				
ZZZZZZ			19:34																				
ZZZZZZ			19:38																				
ZZZZZZ			19:43																				
CCV 240-107816/174			04:29																				
CCB 240-107816/175			04:33																				
ZZZZZZ			04:37																				
ZZZZZZ			04:42																				
CCV 240-107816/178			04:46																				
CCB 240-107816/179			04:50																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/30/2013 08:00 End Date: 10/31/2013 04:50

Lab Sample ID	D / F	Type	Time	Analytes																				
				Tl	V	Zn																		
ICIS 240-107816/1	1		08:00	X	X	X																		
CALSTD 240-107816/2 IC			08:04	X	X	X																		
CALSTD 240-107816/3 IC			08:08	X	X	X																		
ICV 240-107816/4	1		08:12	X	X	X																		
ICB 240-107816/5	1		08:16	X	X	X																		
CRI 240-107816/6			08:20																					
ZZZZZZ			08:24																					
ICSA 240-107816/8	1		08:28	X	X	X																		
ICSAB 240-107816/9	1		08:32	X	X	X																		
CCV 240-107816/10			08:36																					
CCB 240-107816/11			08:40																					
ZZZZZZ			08:44																					
ZZZZZZ			08:48																					
ZZZZZZ			08:53																					
ZZZZZZ			08:57																					
ZZZZZZ			09:01																					
ZZZZZZ			09:05																					
CCV 240-107816/18	1		09:09	X	X	X																		
CCB 240-107816/19	1		09:13	X	X	X																		
CRI 240-107816/20	1		09:17	X	X	X																		
ZZZZZZ			09:21																					
ZZZZZZ			09:25																					
ZZZZZZ			09:29																					
ZZZZZZ			09:34																					
ZZZZZZ			09:37																					
ZZZZZZ			09:42																					
ZZZZZZ			09:46																					
MB 240-106927/1-A	1	R	09:50	X	X	X																		
LCS 240-106927/2-A	1	R	09:54	X	X	X																		
CCV 240-107816/30	1		09:58	X	X	X																		
CCB 240-107816/31	1		10:02	X	X	X																		
ZZZZZZ			10:06																					
240-30254-H-2-A SD ^5	5	R	10:10	X	X	X																		
240-30254-H-2-C DU	1	R	10:14	X	X	X																		
240-30254-H-2-B MS	1	R	10:18	X	X	X																		
ZZZZZZ			10:22																					
ZZZZZZ			10:26																					
ZZZZZZ			10:30																					
ZZZZZZ			10:35																					
ZZZZZZ			10:39																					
ZZZZZZ			10:43																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/30/2013 08:00 End Date: 10/31/2013 04:50

| Lab Sample ID | D / F | Type | Time | Analytes | | |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/30/2013 08:00 End Date: 10/31/2013 04:50

Lab Sample ID	D / F	Type	Time	Analytes																					
				Tl	V	Zn																			
ZZZZZZ			13:36																						
ZZZZZZ			13:41																						
ZZZZZZ			13:45																						
ZZZZZZ			13:49																						
ZZZZZZ			13:53																						
ZZZZZZ			13:57																						
CCV 240-107816/90			14:02																						
CCB 240-107816/91			14:05																						
ZZZZZZ			14:10																						
ZZZZZZ			14:14																						
ZZZZZZ			14:18																						
ZZZZZZ			14:22																						
CRI 240-107816/96	1		14:26	X	X	X																			
ZZZZZZ			14:30																						
ZZZZZZ			14:35																						
ZZZZZZ			14:39																						
ZZZZZZ			14:43																						
ZZZZZZ			14:47																						
CCV 240-107816/102			14:51																						
CCB 240-107816/103			14:55																						
ZZZZZZ			14:59																						
ZZZZZZ			15:03																						
ZZZZZZ			15:07																						
ZZZZZZ			15:11																						
ZZZZZZ			15:16																						
ZZZZZZ			15:20																						
ZZZZZZ			15:24																						
ZZZZZZ			15:29																						
ZZZZZZ			15:33																						
ZZZZZZ			15:37																						
CCV 240-107816/114			15:42																						
CCB 240-107816/115			15:45																						
ZZZZZZ			15:50																						
ZZZZZZ			15:54																						
ZZZZZZ			15:58																						
ZZZZZZ			16:02																						
ZZZZZZ			16:07																						
ZZZZZZ			16:10																						
ZZZZZZ			16:15																						
ZZZZZZ			16:19																						
ZZZZZZ			16:22																						
ZZZZZZ			16:27																						

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/30/2013 08:00 End Date: 10/31/2013 04:50

Lab Sample ID	D / F	Type	Time	Analytes																					
				Tl	V	Zn																			
CCV 240-107816/126			16:31																						
CCB 240-107816/127			16:35																						
ZZZZZZ			16:39																						
ZZZZZZ			16:43																						
ZZZZZZ			16:47																						
ZZZZZZ			16:51																						
ZZZZZZ			16:55																						
ZZZZZZ			17:00																						
ZZZZZZ			17:04																						
ZZZZZZ			17:08																						
CRI 240-107816/136			17:12																						
ZZZZZZ			17:16																						
CCV 240-107816/138			17:20																						
CCB 240-107816/139			17:24																						
ZZZZZZ			17:28																						
ZZZZZZ			17:32																						
ZZZZZZ			17:36																						
ZZZZZZ			17:41																						
ZZZZZZ			17:45																						
ZZZZZZ			17:49																						
ZZZZZZ			17:53																						
ZZZZZZ			17:57																						
ZZZZZZ			18:01																						
ZZZZZZ			18:06																						
CCV 240-107816/150			18:10																						
CCB 240-107816/151			18:14																						
ZZZZZZ			18:18																						
ZZZZZZ			18:22																						
ZZZZZZ			18:26																						
ZZZZZZ			18:30																						
ZZZZZZ			18:34																						
ZZZZZZ			18:38																						
ZZZZZZ			18:42																						
ZZZZZZ			18:46																						
ZZZZZZ			18:50																						
ZZZZZZ			18:54																						
CCV 240-107816/162			18:58																						
CCB 240-107816/163			19:02																						
ZZZZZZ			19:06																						
ZZZZZZ			19:10																						
ZZZZZZ			19:14																						
ZZZZZZ			19:18																						

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 10/30/2013 08:00 End Date: 10/31/2013 04:50

Lab Sample ID	D / F	Type	Time	Analytes																				
				Tl	V	Zn																		
ZZZZZZ			19:22																					
ZZZZZZ			19:26																					
ZZZZZZ			19:30																					
ZZZZZZ			19:34																					
ZZZZZZ			19:38																					
ZZZZZZ			19:43																					
CCV 240-107816/174			04:29																					
CCB 240-107816/175			04:33																					
ZZZZZZ			04:37																					
ZZZZZZ			04:42																					
CCV 240-107816/178			04:46																					
CCB 240-107816/179			04:50																					

Prep Types

D = Dissolved

P = TCLP

R = Total Recoverable

T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

ICV Source: MT6500ICV_00013 Concentration Units: ug/L

CCV Source: MTICPCCV_00011

Analyte	ICV 240-107816/4 10/30/2013 08:12				CCV 240-107816/18 10/30/2013 09:09				CCV 240-107816/30 10/30/2013 09:58			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	385		375	103	513		500	103	510		500	102
Arsenic	388		375	103	502		500	100	500		500	100
Barium	1510		1500	101	2010		2000	101	2000		2000	100
Beryllium	1520		1500	101	2010		2000	100	1990		2000	100
Cadmium	380		375	101	511		500	102	511		500	102
Calcium	25600		25000	102	49900		50000	100	50000		50000	100
Chromium	1510		1500	101	1950		2000	97	1960		2000	98
Cobalt	1480		1500	98	1970		2000	99	1970		2000	99
Copper	1510		1500	101	2020		2000	101	2010		2000	100
Iron	12800		12500	102	24500		25000	98	24700		25000	99
Lead	372		375	99	482		500	96	486		500	97
Magnesium	25200		25000	101	49400		50000	99	49500		50000	99
Manganese	1510		1500	100	1990		2000	99	1980		2000	99
Molybdenum	1510		1500	101	1950		2000	98	1960		2000	98
Nickel	1510		1500	100	1960		2000	98	1960		2000	98
Potassium	24800		25000	99	50200		50000	100	50400		50000	101
Selenium	387		375	103	526		500	105	519		500	104
Silver	771		750	103	1020		1000	102	1020		1000	102
SiO2, Silica	6660		6420	104	10700		10700	100	10700		10700	100
Sodium	24700		25000	99	50300		50000	101	50400		50000	101
Thallium	752		750	100	978		1000	98	978		1000	98
Vanadium	1510		1500	101	2080		2000	104	2060		2000	103
Zinc	1510		1500	101	1970		2000	99	1980		2000	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

ICV Source: MT6500ICV_00013 Concentration Units: ug/L

CCV Source: MTICPCCV_00011

Analyte	CCV 240-107816/42 10/30/2013 10:47				CCV 240-107816/54 10/30/2013 11:36				CCV 240-107816/66 10/30/2013 12:24			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	511		500	102	506		500	101	511		500	102
Arsenic	504		500	101	508		500	102	509		500	102
Barium	2000		2000	100	2000		2000	100	2010		2000	100
Beryllium	2010		2000	101	2010		2000	101	2010		2000	100
Cadmium	511		500	102	511		500	102	514		500	103
Calcium	50300		50000	101	50300		50000	101				
Chromium	1990		2000	99	2000		2000	100	2010		2000	101
Cobalt	2000		2000	100	2020		2000	101	2030		2000	102
Copper	2000		2000	100	2000		2000	100	2000		2000	100
Iron	25100		25000	100	25300		25000	101				
Lead	491		500	98	496		500	99	500		500	100
Magnesium	50200		50000	100	50100		50000	100				
Manganese	2000		2000	100	2010		2000	100				
Molybdenum	1990		2000	100	2010		2000	101	2020		2000	101
Nickel	1990		2000	99	2000		2000	100	2020		2000	101
Potassium	50700		50000	101	51100		50000	102				
Selenium	519		500	104	511		500	102	512		500	102
Silver	1010		1000	101	1010		1000	101	1010		1000	101
SiO2, Silica	10900		10700	102	11000		10700	103				
Sodium	50800		50000	102	51100		50000	102				
Thallium	996		1000	100	1010		1000	101	1020		1000	102
Vanadium	2050		2000	102	2020		2000	101	2010		2000	100
Zinc	2010		2000	100	2030		2000	101	2040		2000	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-107816/20 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	10.3		103	70-130
Arsenic	15.0	15.7		104	70-130
Beryllium	5.00	4.96	J	99	70-130
Cadmium	5.00	5.10		102	70-130
Barium	200	202		101	70-130
Copper	20.0	19.5	J	98	70-130
Chromium	10.0	10.2		102	70-130
Nickel	40.0	39.6	J	99	70-130
Lead	10.0	9.42	J	94	70-130
Antimony	20.0	20.1		101	70-130
Cobalt	10.0	9.53	J	95	70-130
Selenium	20.0	21.2		106	70-130
Thallium	20.0	20.1		101	70-130
Zinc	50.0	49.2	J	98	70-130
Molybdenum	40.0	39.1	J	98	70-130
Vanadium	10.0	12.5		125	70-130
Sodium	5000	4860	J	97	70-130
Potassium	5000	4830	J	97	70-130
SiO2, Silica	1070	1050	J	98	70-130
Calcium	5000	5100		102	70-130
Iron	200	201		101	70-130
Magnesium	5000	5120		102	70-130
Manganese	15.0	15.3		102	70-130

Lab Sample ID: CRI 240-107816/96 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	9.95	J	100	70-130
Arsenic	15.0	18.2		121	70-130
Beryllium	5.00	4.80	J	96	70-130
Cadmium	5.00	5.23		105	70-130
Barium	200	203		101	70-130
Copper	20.0	21.2	J	106	70-130
Chromium	10.0	11.2		112	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-107816/96 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Nickel	40.0	41.9		105	70-130
Lead	10.0	8.46	J	85	70-130
Antimony	20.0	20.3		101	70-130
Cobalt	10.0	9.88	J	99	70-130
Selenium	20.0	19.9	J	100	70-130
Thallium	20.0	21.7		109	70-130
Zinc	50.0	51.4		103	70-130
Molybdenum	40.0	42.1		105	70-130
Vanadium	10.0	7.40	J	74	70-130
Sodium	5000	5050		101	70-130
Potassium	5000	5110		102	70-130
SiO2, Silica	1070	1040	J	98	70-130
Calcium	5000	5120		102	70-130
Iron	200	243		122	70-130
Magnesium	5000	4960	J	99	70-130
Manganese	15.0	16.2		108	70-130

Lab Sample ID: CRI 240-108547/20 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	10.4		104	70-130
Arsenic	15.0	15.8		105	70-130
Beryllium	5.00	5.03		101	70-130
Cadmium	5.00	5.17		103	70-130
Barium	200	201		100	70-130
Copper	20.0	19.8	J	99	70-130
Chromium	10.0	10.4		104	70-130
Nickel	40.0	40.1		100	70-130
Lead	10.0	10.8		108	70-130
Antimony	20.0	20.6		103	70-130
Cobalt	10.0	10.2		102	70-130
Selenium	20.0	21.4		107	70-130
Thallium	20.0	20.0		100	70-130
Zinc	50.0	50.0		100	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-108547/20 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Molybdenum	40.0	41.3		103	70-130
Vanadium	10.0	8.86	J	89	70-130
Sodium	5000	4820	J	96	70-130
Potassium	5000	4780	J	96	70-130
SiO2, Silica	1070	1100		103	70-130
Calcium	5000	5110		102	70-130
Iron	200	211		105	70-130
Magnesium	5000	5060		101	70-130
Manganese	15.0	15.6		104	70-130

Lab Sample ID: CRI 240-108547/97 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	10.8		108	70-130
Arsenic	15.0	15.1		100	70-130
Beryllium	5.00	4.92	J	98	70-130
Cadmium	5.00	5.33		107	70-130
Barium	200	206		103	70-130
Copper	20.0	20.6	J	103	70-130
Chromium	10.0	10.0		100	70-130
Nickel	40.0	40.3		101	70-130
Lead	10.0	10.6		106	70-130
Antimony	20.0	21.4		107	70-130
Cobalt	10.0	10.2		102	70-130
Selenium	20.0	21.5		108	70-130
Thallium	20.0	20.4		102	70-130
Zinc	50.0	49.9	J	100	70-130
Molybdenum	40.0	40.9		102	70-130
Vanadium	10.0	9.73	J	97	70-130
Sodium	5000	4990	J	100	70-130
Potassium	5000	4840	J	97	70-130
SiO2, Silica	1070	1080	J	101	70-130
Calcium	5000	5070		101	70-130
Iron	200	203		102	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-108547/97 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Magnesium	5000	4940	J	99	70-130
Manganese	15.0	15.7		104	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-107816/5 10/30/2013 08:16		CCB 240-107816/19 10/30/2013 09:13		CCB 240-107816/31 10/30/2013 10:02		CCB 240-107816/43 10/30/2013 10:51	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	20	U	20	U	20	U
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	0.770	J	200	U	200	U	200	U
Beryllium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Calcium	5000	5000	U	5000	U	5000	U	5000	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Iron	200	200	U	200	U	200	U	200	U
Lead	10	10	U	10	U	10	U	10	U
Magnesium	5000	5000	U	5000	U	5000	U	5000	U
Manganese	15	15	U	15	U	15	U	15	U
Molybdenum	40	40	U	40	U	40	U	40	U
Nickel	40	40	U	40	U	40	U	40	U
Potassium	5000	5000	U	5000	U	89.9	J	81.3	J
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
SiO2, Silica	1100	1100	U	1100	U	1100	U	1100	U
Sodium	5000	5000	U	5000	U	5000	U	5000	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	2.83	J	2.72	J	2.55	J	10	U
Zinc	50	50	U	50	U	50	U	50	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-107816/55 10/30/2013 11:40		CCB 240-107816/67 10/30/2013 12:28					
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	20	U				
Arsenic	15	15	U	15	U				
Barium	200	200	U	200	U				
Beryllium	5.0	5.0	U	5.0	U				
Cadmium	5.0	5.0	U	5.0	U				
Calcium	5000	5000	U						
Chromium	10	10	U	10	U				
Cobalt	10	10	U	10	U				
Copper	25	25	U	25	U				
Iron	200	200	U						
Lead	10	10	U	10	U				
Magnesium	5000	5000	U						
Manganese	15	15	U						
Molybdenum	40	40	U	40	U				
Nickel	40	40	U	40	U				
Potassium	5000	5000	U						
Selenium	20	20	U	20	U				
Silver	10	10	U	10	U				
SiO2, Silica	1100	1100	U						
Sodium	5000	5000	U						
Thallium	20	20	U	20	U				
Vanadium	10	2.65	J	10	U				
Zinc	50	50	U	50	U				

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: ICSA 240-107816/8 Instrument ID: I9

Lab File ID: I9103013A.asc ICS Source: MTTRICSAW_00020

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-5.34**	
Arsenic		**0.345**	
Barium		**0.519**	
Beryllium		**-0.259**	
Cadmium		**-0.0290**	
Calcium	**500000**	**490420**	**98**
Chromium		**3.07**	
Cobalt		**-1.30**	
Copper		**0.288**	
Iron	**200000**	**196520**	**98**
Lead		**0.0949**	
Magnesium	**500000**	**504630**	**101**
Manganese		**2.57**	
Molybdenum		**-3.56**	
Nickel		**3.89**	
Potassium		**81.2**	
Selenium		**-3.97**	
Silver		**-0.0304**	
Sodium		**50.8**	
Thallium		**-2.88**	
Vanadium		**-0.600**	
Zinc		**10.8**	
Aluminum	*500000*	*504660*	*101*
Boron		*0.393*	
Lithium		*-11.5*	
Silicon		*6.12*	
Strontium		*-5.99*	
Tin		*1.69*	
Titanium		*0.0977*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: ICSAB 240-107816/9 Instrument ID: I9

Lab File ID: I9103013A.asc ICS Source: MTICPICSABW_00002

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**1000**	**1032**	**103**
Arsenic	**1000**	**1014**	**101**
Barium	**500**	**505**	**101**
Beryllium	**500**	**493**	**99**
Cadmium	**1000**	**1031**	**103**
Calcium	**500000**	**489610**	**98**
Chromium	**500**	**490**	**98**
Cobalt	**500**	**498**	**100**
Copper	**500**	**525**	**105**
Iron	**200000**	**194910**	**97**
Lead	**1000**	**929**	**93**
Magnesium	**500000**	**504190**	**101**
Manganese	**500**	**493**	**99**
Molybdenum	**1000**	**973**	**97**
Nickel	**1000**	**993**	**99**
Potassium	**10000**	**10603**	**106**
Selenium	**1000**	**1022**	**102**
Silver	**1000**	**1089**	**109**
Sodium	**10000**	**10511**	**105**
Thallium	**1000**	**973**	**97**
Vanadium	**500**	**497**	**99**
Zinc	**1000**	**997**	**100**
Aluminum	*500000*	*503200*	*101*
Boron	*500*	*510*	*102*
Lithium	*500*	*524*	*105*
Silicon	*10000*	*10077*	*101*
Strontium	*1500*	*1469*	*98*
Tin	*500*	*525*	*105*
Titanium	*500*	*506*	*101*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
ICIS 240-108547/1	1		06:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CALSTD 240-108547/2 IC			06:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CALSTD 240-108547/3 IC			06:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 240-108547/4	1		06:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB 240-108547/5	1		06:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 240-108547/6			07:03																				
ZZZZZZ			07:07																				
ICSA 240-108547/8	1		07:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSAB 240-108547/9	1		07:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV 240-108547/10			07:19																				
CCB 240-108547/11			07:23																				
ZZZZZZ			07:27																				
ZZZZZZ			07:31																				
ZZZZZZ			07:35																				
ZZZZZZ			07:40																				
ZZZZZZ			07:44																				
ZZZZZZ			07:48																				
CCV 240-108547/18	1		07:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-108547/19	1		07:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 240-108547/20	1		08:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 240-107845/1-A	1	R	08:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 240-107845/2-A	1	R	08:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			08:12																				
240-30670-D-1-A SD ^5	5	R	08:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-30670-D-1-B DU	1	R	08:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-30670-D-1-C MS	1	R	08:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			08:28																				
ZZZZZZ			08:32																				
ZZZZZZ			08:36																				
CCV 240-108547/30	1		08:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-108547/31	1		08:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			08:48																				
ZZZZZZ			08:53																				
ZZZZZZ			08:57																				
ZZZZZZ			09:01																				
ZZZZZZ			09:05																				
ZZZZZZ			09:09																				
ZZZZZZ			09:13																				
ZZZZZZ			09:17																				
ZZZZZZ			09:21																				
ZZZZZZ			09:25																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
CCV 240-108547/42			09:29																				
CCB 240-108547/43			09:33																				
ZZZZZZ			09:37																				
ZZZZZZ			09:41																				
ZZZZZZ			09:45																				
ZZZZZZ			09:49																				
ZZZZZZ			09:53																				
ZZZZZZ			09:57																				
ZZZZZZ			10:01																				
ZZZZZZ			10:05																				
ZZZZZZ			10:10																				
ZZZZZZ			10:14																				
CCV 240-108547/54			10:18																				
CCB 240-108547/55			10:22																				
ZZZZZZ			10:26																				
ZZZZZZ			10:30																				
ZZZZZZ			10:34																				
ZZZZZZ			10:39																				
ZZZZZZ			10:43																				
ZZZZZZ			10:47																				
ZZZZZZ			10:51																				
ZZZZZZ			10:55																				
ZZZZZZ			10:59																				
ZZZZZZ			11:03																				
CCV 240-108547/66	1		11:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-108547/67	1		11:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			11:15																				
ZZZZZZ			11:20																				
CRI 240-108547/70			11:24																				
ICSA 240-108547/71			11:28																				
ICSAB 240-108547/72			11:33																				
ZZZZZZ			11:36																				
ZZZZZZ			11:41																				
ZZZZZZ			11:45																				
ZZZZZZ			11:49																				
240-30485-1	1	R	11:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 240-108547/78	1		11:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-108547/79	1		12:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-30485-1	1	D	12:06	X	X	X	X		X	X	X	X					X		X	X	X	X	
240-30485-2	1	R	12:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-30485-2	1	D	12:14	X	X	X	X		X	X	X	X					X		X	X	X	X	
240-30485-3	1	R	12:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
240-30485-3	1	D	12:22	X	X	X	X		X	X	X	X					X		X	X	X	X	
240-30485-4	1	R	12:26	X	X	X	X		X	X	X	X					X		X	X	X	X	
240-30485-4	1	D	12:30	X	X	X	X		X	X	X	X					X		X	X	X	X	
ZZZZZZ			12:34																				
ZZZZZZ			12:38																				
ZZZZZZ			12:43																				
CCV 240-108547/90	1		12:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-108547/91	1		12:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			12:55																				
ZZZZZZ			12:59																				
ZZZZZZ			13:03																				
ZZZZZZ			13:07																				
ZZZZZZ			13:11																				
CRI 240-108547/97	1		13:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			13:19																				
ZZZZZZ			13:23																				
ZZZZZZ			13:27																				
ZZZZZZ			13:31																				
CCV 240-108547/102			13:35																				
CCB 240-108547/103			13:39																				
ZZZZZZ			13:43																				
ZZZZZZ			13:47																				
ZZZZZZ			13:51																				
ZZZZZZ			13:55																				
ZZZZZZ			13:59																				
ZZZZZZ			14:03																				
ZZZZZZ			14:07																				
ZZZZZZ			14:11																				
ZZZZZZ			14:15																				
ZZZZZZ			14:20																				
CCV 240-108547/114			14:24																				
CCB 240-108547/115			14:28																				
ZZZZZZ			14:32																				
ZZZZZZ			14:36																				
ZZZZZZ			14:40																				
ZZZZZZ			14:44																				
ZZZZZZ			14:49																				
ZZZZZZ			14:52																				
ZZZZZZ			14:57																				
ZZZZZZ			15:01																				
ZZZZZZ			15:05																				
ZZZZZZ			15:09																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
CCV 240-108547/126			15:13																				
CCB 240-108547/127			15:17																				
ZZZZZZ			15:22																				
ZZZZZZ			15:26																				
ZZZZZZ			15:30																				
ZZZZZZ			15:34																				
ZZZZZZ			15:38																				
ZZZZZZ			15:42																				
ZZZZZZ			15:47																				
ZZZZZZ			15:51																				
ZZZZZZ			15:55																				
ZZZZZZ			15:59																				
CCV 240-108547/138			16:03																				
CCB 240-108547/139			16:07																				
ZZZZZZ			16:11																				
ZZZZZZ			16:15																				
ZZZZZZ			16:19																				
ZZZZZZ			16:23																				
ZZZZZZ			16:27																				
ZZZZZZ			16:31																				
ZZZZZZ			16:35																				
ZZZZZZ			16:39																				
ZZZZZZ			16:43																				
ZZZZZZ			16:47																				
CCV 240-108547/150			16:52																				
CCB 240-108547/151			16:55																				
ZZZZZZ			17:00																				
ZZZZZZ			17:04																				
ZZZZZZ			17:08																				
ZZZZZZ			17:12																				
ZZZZZZ			17:16																				
ZZZZZZ			17:20																				
ZZZZZZ			17:24																				
ZZZZZZ			17:28																				
ZZZZZZ			17:33																				
ZZZZZZ			17:37																				
CCV 240-108547/162			17:41																				
CCB 240-108547/163			17:45																				
ZZZZZZ			17:49																				
ZZZZZZ			17:53																				
ZZZZZZ			17:57																				
ZZZZZZ			18:01																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
ZZZZZZ			18:05																				
ZZZZZZ			18:09																				
ZZZZZZ			18:13																				
ZZZZZZ			18:17																				
ZZZZZZ			18:21																				
ZZZZZZ			18:25																				
CCV 240-108547/174			18:29																				
CCB 240-108547/175			18:33																				
ZZZZZZ			18:37																				
ZZZZZZ			18:41																				
ZZZZZZ			18:45																				
ZZZZZZ			18:49																				
ZZZZZZ			18:53																				
ZZZZZZ			18:57																				
ZZZZZZ			19:01																				
ZZZZZZ			19:05																				
ZZZZZZ			19:09																				
ZZZZZZ			19:13																				
CCV 240-108547/186			19:17																				
CCB 240-108547/187			19:21																				
ZZZZZZ			19:25																				
ZZZZZZ			19:29																				
ZZZZZZ			19:34																				
ZZZZZZ			19:37																				
ZZZZZZ			19:41																				
ZZZZZZ			19:45																				
ZZZZZZ			19:49																				
ZZZZZZ			19:54																				
ZZZZZZ			19:58																				
ZZZZZZ			20:02																				
CCV 240-108547/198			20:06																				
CCB 240-108547/199			20:10																				
ZZZZZZ			20:14																				
ZZZZZZ			20:18																				
ZZZZZZ			20:22																				
ZZZZZZ			20:27																				
ZZZZZZ			20:31																				
ZZZZZZ			20:35																				
ZZZZZZ			20:39																				
ZZZZZZ			20:43																				
ZZZZZZ			20:47																				
CCV 240-108547/209			20:51																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	SiO2
CCB 240-108547/210			20:55																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D / F	Type	Time	Analytes																						
				Tl	V	Zn																				
ICIS 240-108547/1	1		06:43	X	X	X																				
CALSTD 240-108547/2 IC			06:47	X	X	X																				
CALSTD 240-108547/3 IC			06:51	X	X	X																				
ICV 240-108547/4	1		06:55	X	X	X																				
ICB 240-108547/5	1		06:59	X	X	X																				
CRI 240-108547/6			07:03																							
ZZZZZZ			07:07																							
ICSA 240-108547/8	1		07:11	X	X	X																				
ICSAB 240-108547/9	1		07:15	X	X	X																				
CCV 240-108547/10			07:19																							
CCB 240-108547/11			07:23																							
ZZZZZZ			07:27																							
ZZZZZZ			07:31																							
ZZZZZZ			07:35																							
ZZZZZZ			07:40																							
ZZZZZZ			07:44																							
ZZZZZZ			07:48																							
CCV 240-108547/18	1		07:52	X	X	X																				
CCB 240-108547/19	1		07:56	X	X	X																				
CRI 240-108547/20	1		08:00	X	X	X																				
MB 240-107845/1-A	1	R	08:04	X	X	X																				
LCS 240-107845/2-A	1	R	08:08	X	X	X																				
ZZZZZZ			08:12																							
240-30670-D-1-A SD ^5	5	R	08:16	X	X	X																				
240-30670-D-1-B DU	1	R	08:20	X	X	X																				
240-30670-D-1-C MS	1	R	08:24	X	X	X																				
ZZZZZZ			08:28																							
ZZZZZZ			08:32																							
ZZZZZZ			08:36																							
CCV 240-108547/30	1		08:40	X	X	X																				
CCB 240-108547/31	1		08:44	X	X	X																				
ZZZZZZ			08:48																							
ZZZZZZ			08:53																							
ZZZZZZ			08:57																							
ZZZZZZ			09:01																							
ZZZZZZ			09:05																							
ZZZZZZ			09:09																							
ZZZZZZ			09:13																							
ZZZZZZ			09:17																							
ZZZZZZ			09:21																							
ZZZZZZ			09:25																							

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D / F	Type	Time	Analytes																						
				Tl	V	Zn																				
CCV 240-108547/42			09:29																							
CCB 240-108547/43			09:33																							
ZZZZZZ			09:37																							
ZZZZZZ			09:41																							
ZZZZZZ			09:45																							
ZZZZZZ			09:49																							
ZZZZZZ			09:53																							
ZZZZZZ			09:57																							
ZZZZZZ			10:01																							
ZZZZZZ			10:05																							
ZZZZZZ			10:10																							
ZZZZZZ			10:14																							
CCV 240-108547/54			10:18																							
CCB 240-108547/55			10:22																							
ZZZZZZ			10:26																							
ZZZZZZ			10:30																							
ZZZZZZ			10:34																							
ZZZZZZ			10:39																							
ZZZZZZ			10:43																							
ZZZZZZ			10:47																							
ZZZZZZ			10:51																							
ZZZZZZ			10:55																							
ZZZZZZ			10:59																							
ZZZZZZ			11:03																							
CCV 240-108547/66	1		11:07	X	X	X																				
CCB 240-108547/67	1		11:11	X	X	X																				
ZZZZZZ			11:15																							
ZZZZZZ			11:20																							
CRI 240-108547/70			11:24																							
ICSA 240-108547/71			11:28																							
ICSAB 240-108547/72			11:33																							
ZZZZZZ			11:36																							
ZZZZZZ			11:41																							
ZZZZZZ			11:45																							
ZZZZZZ			11:49																							
240-30485-1	1	R	11:53	X	X	X																				
CCV 240-108547/78	1		11:57	X	X	X																				
CCB 240-108547/79	1		12:01	X	X	X																				
240-30485-1	1	D	12:06	X	X	X																				
240-30485-2	1	R	12:10	X	X	X																				
240-30485-2	1	D	12:14	X	X	X																				
240-30485-3	1	R	12:18	X	X	X																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D / F	Type	Time	Analytes																					
				Tl	V	Zn																			
240-30485-3	1	D	12:22	X	X	X																			
240-30485-4	1	R	12:26	X	X	X																			
240-30485-4	1	D	12:30	X	X	X																			
ZZZZZZ			12:34																						
ZZZZZZ			12:38																						
ZZZZZZ			12:43																						
CCV 240-108547/90	1		12:46	X	X	X																			
CCB 240-108547/91	1		12:50	X	X	X																			
ZZZZZZ			12:55																						
ZZZZZZ			12:59																						
ZZZZZZ			13:03																						
ZZZZZZ			13:07																						
ZZZZZZ			13:11																						
CRI 240-108547/97	1		13:15	X	X	X																			
ZZZZZZ			13:19																						
ZZZZZZ			13:23																						
ZZZZZZ			13:27																						
ZZZZZZ			13:31																						
CCV 240-108547/102			13:35																						
CCB 240-108547/103			13:39																						
ZZZZZZ			13:43																						
ZZZZZZ			13:47																						
ZZZZZZ			13:51																						
ZZZZZZ			13:55																						
ZZZZZZ			13:59																						
ZZZZZZ			14:03																						
ZZZZZZ			14:07																						
ZZZZZZ			14:11																						
ZZZZZZ			14:15																						
ZZZZZZ			14:20																						
CCV 240-108547/114			14:24																						
CCB 240-108547/115			14:28																						
ZZZZZZ			14:32																						
ZZZZZZ			14:36																						
ZZZZZZ			14:40																						
ZZZZZZ			14:44																						
ZZZZZZ			14:49																						
ZZZZZZ			14:52																						
ZZZZZZ			14:57																						
ZZZZZZ			15:01																						
ZZZZZZ			15:05																						
ZZZZZZ			15:09																						

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D / F	Type	Time	Analytes																				
				Tl	V	Zn																		
CCV 240-108547/126			15:13																					
CCB 240-108547/127			15:17																					
ZZZZZZ			15:22																					
ZZZZZZ			15:26																					
ZZZZZZ			15:30																					
ZZZZZZ			15:34																					
ZZZZZZ			15:38																					
ZZZZZZ			15:42																					
ZZZZZZ			15:47																					
ZZZZZZ			15:51																					
ZZZZZZ			15:55																					
ZZZZZZ			15:59																					
CCV 240-108547/138			16:03																					
CCB 240-108547/139			16:07																					
ZZZZZZ			16:11																					
ZZZZZZ			16:15																					
ZZZZZZ			16:19																					
ZZZZZZ			16:23																					
ZZZZZZ			16:27																					
ZZZZZZ			16:31																					
ZZZZZZ			16:35																					
ZZZZZZ			16:39																					
ZZZZZZ			16:43																					
ZZZZZZ			16:47																					
CCV 240-108547/150			16:52																					
CCB 240-108547/151			16:55																					
ZZZZZZ			17:00																					
ZZZZZZ			17:04																					
ZZZZZZ			17:08																					
ZZZZZZ			17:12																					
ZZZZZZ			17:16																					
ZZZZZZ			17:20																					
ZZZZZZ			17:24																					
ZZZZZZ			17:28																					
ZZZZZZ			17:33																					
ZZZZZZ			17:37																					
CCV 240-108547/162			17:41																					
CCB 240-108547/163			17:45																					
ZZZZZZ			17:49																					
ZZZZZZ			17:53																					
ZZZZZZ			17:57																					
ZZZZZZ			18:01																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D / F	Type	Time	Analytes																					
				Tl	V	Zn																			
ZZZZZZ			18:05																						
ZZZZZZ			18:09																						
ZZZZZZ			18:13																						
ZZZZZZ			18:17																						
ZZZZZZ			18:21																						
ZZZZZZ			18:25																						
CCV 240-108547/174			18:29																						
CCB 240-108547/175			18:33																						
ZZZZZZ			18:37																						
ZZZZZZ			18:41																						
ZZZZZZ			18:45																						
ZZZZZZ			18:49																						
ZZZZZZ			18:53																						
ZZZZZZ			18:57																						
ZZZZZZ			19:01																						
ZZZZZZ			19:05																						
ZZZZZZ			19:09																						
ZZZZZZ			19:13																						
CCV 240-108547/186			19:17																						
CCB 240-108547/187			19:21																						
ZZZZZZ			19:25																						
ZZZZZZ			19:29																						
ZZZZZZ			19:34																						
ZZZZZZ			19:37																						
ZZZZZZ			19:41																						
ZZZZZZ			19:45																						
ZZZZZZ			19:49																						
ZZZZZZ			19:54																						
ZZZZZZ			19:58																						
ZZZZZZ			20:02																						
CCV 240-108547/198			20:06																						
CCB 240-108547/199			20:10																						
ZZZZZZ			20:14																						
ZZZZZZ			20:18																						
ZZZZZZ			20:22																						
ZZZZZZ			20:27																						
ZZZZZZ			20:31																						
ZZZZZZ			20:35																						
ZZZZZZ			20:39																						
ZZZZZZ			20:43																						
ZZZZZZ			20:47																						
CCV 240-108547/209			20:51																						

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/05/2013 06:43 End Date: 11/05/2013 20:55

Lab Sample ID	D / F	Type	Time	Analytes																				
				Tl	V	Zn																		
CCB 240-108547/210			20:55																					

Prep Types

D = Dissolved

R = Total Recoverable

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

ICV Source: MT6500ICV_00013 Concentration Units: ug/L

CCV Source: MTICPCCV_00011

Analyte	ICV 240-108547/4 11/05/2013 06:55				CCV 240-108547/18 11/05/2013 07:52				CCV 240-108547/30 11/05/2013 08:40			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	385		375	103	511		500	102	516		500	103
Arsenic	390		375	104	516		500	103	518		500	104
Barium	1510		1500	101	2010		2000	100	2020		2000	101
Beryllium	1540		1500	103	2040		2000	102	2040		2000	102
Cadmium	384		375	102	516		500	103	517		500	103
Calcium	25700		25000	103	50800		50000	102	50700		50000	101
Chromium	1510		1500	101	2030		2000	102	2030		2000	101
Cobalt	1510		1500	101	2090		2000	104	2080		2000	104
Copper	1500		1500	100	2010		2000	101	2030		2000	101
Iron	12800		12500	102	25800		25000	103	25800		25000	103
Lead	376		375	100	499		500	100	500		500	100
Magnesium	25600		25000	103	50700		50000	101	50500		50000	101
Manganese	1510		1500	101	2030		2000	101	2020		2000	101
Molybdenum	1520		1500	101	2050		2000	102	2040		2000	102
Nickel	1540		1500	102	2090		2000	104	2080		2000	104
Potassium	24700		25000	99	50700		50000	101	50600		50000	101
Selenium	381		375	102	511		500	102	519		500	104
Silver	770		750	103	1020		1000	102	1030		1000	103
SiO2, Silica	6790		6420	106	11200		10700	105	11200		10700	105
Sodium	24900		25000	100	51100		50000	102	50900		50000	102
Thallium	763		750	102	1040		1000	104	1030		1000	103
Vanadium	1530		1500	102	2020		2000	101	2030		2000	101
Zinc	1550		1500	103	2120		2000	106	2110		2000	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

ICV Source: MT6500ICV_00013 Concentration Units: ug/L

CCV Source: MTICPCCV_00011

Analyte	CCV 240-108547/66 11/05/2013 11:07				CCV 240-108547/78 11/05/2013 11:57				CCV 240-108547/90 11/05/2013 12:46			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	521		500	104	519		500	104	522		500	104
Arsenic	521		500	104	516		500	103	514		500	103
Barium	2060		2000	103	2070		2000	103	2060		2000	103
Beryllium	2010		2000	101	2000		2000	100	1990		2000	99
Cadmium	522		500	104	520		500	104	519		500	104
Calcium	50700		50000	101	50100		50000	100	50000		50000	100
Chromium	2020		2000	101	2000		2000	100	1990		2000	99
Cobalt	2080		2000	104	2080		2000	104	2070		2000	104
Copper	2050		2000	103	2040		2000	102	2040		2000	102
Iron	25300		25000	101	25200		25000	101	25000		25000	100
Lead	496		500	99	496		500	99	492		500	98
Magnesium	49500		50000	99	48900		50000	98	48700		50000	97
Manganese	2030		2000	101	2020		2000	101	2020		2000	101
Molybdenum	2040		2000	102	2030		2000	102	2020		2000	101
Nickel	2080		2000	104	2080		2000	104	2070		2000	103
Potassium	52000		50000	104	53100		50000	106	52800		50000	106
Selenium	523		500	105	522		500	104	522		500	104
Silver	1040		1000	104	1030		1000	103	1040		1000	104
SiO2, Silica	11100		10700	103	11100		10700	104	11000		10700	103
Sodium	51600		50000	103	52400		50000	105	52100		50000	104
Thallium	1020		1000	102	1020		1000	102	1020		1000	102
Vanadium	2050		2000	103	2040		2000	102	2040		2000	102
Zinc	2110		2000	105	2090		2000	105	2090		2000	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Client: Tetra Tech, Inc. Job Number: 240-30485-1

Client Sample ID: **MSA-DUP01-102113**

Lab Sample ID: 240-30485-7FD Date Sampled: 10/21/2013 0000
Client Matrix: Water Date Received: 10/22/2013 0920

6010C Metals (ICP)-Total Recoverable

Analysis Method:	6010C	Analysis Batch:	240-107816	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-106927	Lab File ID:	I9103013A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/30/2013 1103			Final Weight/Volume:	50 mL
Prep Date:	10/24/2013 0937				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	5.0	U	0.46	5.0
Cadmium	0.66	J	0.66	5.0
Barium	170	J B	0.67	200
Copper	25	U	4.5	25
Chromium	2.2	J	2.2	10
Nickel	40	U	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	10	U	1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	12	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	17	B	0.64	10

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	240-107816	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-106927	Lab File ID:	I9103013A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/30/2013 1152			Final Weight/Volume:	50 mL
Prep Date:	10/24/2013 0937				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	5.0	U	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	160	J B	0.67	200
Copper	25	U	4.5	25
Chromium	2.6	J	2.2	10
Nickel	40	U	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	10	U	1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	50	U	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	9.9	J B	0.64	10

7470A Mercury (CVAA)

Client: Tetra Tech, Inc.

Job Number: 240-30485-1

Client Sample ID: **MSA-DUP01-102113**

Lab Sample ID: 240-30485-7FD
Client Matrix: Water

Date Sampled: 10/21/2013 0000
Date Received: 10/22/2013 0920

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	240-107332	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-106929	Lab File ID:	102513A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/25/2013 2035			Final Weight/Volume:	50 mL
Prep Date:	10/24/2013 1515				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-107332	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-106929	Lab File ID:	102513A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/25/2013 2015			Final Weight/Volume:	50 mL
Prep Date:	10/24/2013 1515				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: Tetra Tech, Inc.

Job Number: 240-30485-1

Client Sample ID: **MSA-MW44S-102113**

Lab Sample ID: 240-30485-5
Client Matrix: Water

Date Sampled: 10/21/2013 1330
Date Received: 10/22/2013 0920

6010C Metals (ICP)-Total Recoverable

Analysis Method:	6010C	Analysis Batch:	240-107816	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-106927	Lab File ID:	I9103013A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/30/2013 1059			Final Weight/Volume:	50 mL
Prep Date:	10/24/2013 0937				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	4.2	J	3.2	15
Beryllium	5.0	U	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	170	J B	0.67	200
Copper	25	U	4.5	25
Chromium	2.2	J	2.2	10
Nickel	40	U	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	10	U	1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	11	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	13	B	0.64	10

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	240-107816	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-106927	Lab File ID:	I9103013A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/30/2013 1148			Final Weight/Volume:	50 mL
Prep Date:	10/24/2013 0937				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	3.6	J	3.2	15
Beryllium	5.0	U	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	160	J B	0.67	200
Copper	25	U	4.5	25
Chromium	2.6	J	2.2	10
Nickel	40	U	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	10	U	1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	50	U	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	5.9	J B	0.64	10

7470A Mercury (CVAA)

Client: Tetra Tech, Inc.

Job Number: 240-30485-1

Client Sample ID: **MSA-MW44S-102113**

Lab Sample ID: 240-30485-5
Client Matrix: Water

Date Sampled: 10/21/2013 1330
Date Received: 10/22/2013 0920

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	240-107332	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-106929	Lab File ID:	102513A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/25/2013 2034			Final Weight/Volume:	50 mL
Prep Date:	10/24/2013 1515				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-107332	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-106929	Lab File ID:	102513A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/25/2013 2014			Final Weight/Volume:	50 mL
Prep Date:	10/24/2013 1515				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: Tetra Tech, Inc. Job Number: 240-30485-1

Client Sample ID: **MSA-MW50D-102113**

Lab Sample ID: 240-30485-4 Date Sampled: 10/21/2013 1115
Client Matrix: Water Date Received: 10/22/2013 0920

6010C Metals (ICP)-Total Recoverable

Analysis Method:	6010C	Analysis Batch:	240-108547	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-107845	Lab File ID:	I9110513A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/05/2013 1226			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 0828				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	5.0	U	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	79	J B	0.67	200
Copper	25	U	4.5	25
Chromium	4.8	J	2.2	10
Nickel	30	J	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	58		1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	32	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	10	U	0.64	10

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	240-108547	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-107845	Lab File ID:	I9110513A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/05/2013 1230			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 0828				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	5.0	U	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	79	J B	0.67	200
Copper	25	U	4.5	25
Chromium	4.3	J	2.2	10
Nickel	33	J	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	59		1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	32	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	1.7	J	0.64	10

7470A Mercury (CVAA)

Client: Tetra Tech, Inc.

Job Number: 240-30485-1

Client Sample ID: **MSA-MW50D-102113**

Lab Sample ID: 240-30485-4
Client Matrix: Water

Date Sampled: 10/21/2013 1115
Date Received: 10/22/2013 0920

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	240-108226	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-107851	Lab File ID:	110113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/01/2013 1632			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 1525				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-108226	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-107851	Lab File ID:	110113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/01/2013 1635			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 1525				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: Tetra Tech, Inc. Job Number: 240-30485-1

Client Sample ID: **MSA-MW51D-102113**

Lab Sample ID: 240-30485-3 Date Sampled: 10/21/2013 1355
Client Matrix: Water Date Received: 10/22/2013 0920

6010C Metals (ICP)-Total Recoverable

Analysis Method:	6010C	Analysis Batch:	240-108547	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-107845	Lab File ID:	I9110513A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/05/2013 1218			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 0828				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	5.0	U	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	60	J B	0.67	200
Copper	25	U	4.5	25
Chromium	2.3	J	2.2	10
Nickel	6.2	J	3.2	40
Lead	2.1	J	1.9	10
Antimony	20	U	1.8	20
Cobalt	28		1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	19	J B	5.0	50
Molybdenum	1.3	J	1.3	40
Vanadium	10	U	0.64	10
Sodium	57000		590	5000
Potassium	4000	J	72	5000
SiO2, Silica	12000		14	1100
Calcium	36000	B	130	5000
Iron	27000		81	200
Magnesium	15000	B	34	5000
Manganese	1400		0.41	15

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	240-108547	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-107845	Lab File ID:	I9110513A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/05/2013 1222			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 0828				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	5.0	U	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	45	J B	0.67	200
Copper	25	U	4.5	25
Chromium	10	U	2.2	10
Nickel	5.7	J	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	28		1.7	10
Selenium	20	U	4.1	20

Client: Tetra Tech, Inc. Job Number: 240-30485-1

Client Sample ID: **MSA-MW51D-102113**

Lab Sample ID: 240-30485-3 Date Sampled: 10/21/2013 1355
Client Matrix: Water Date Received: 10/22/2013 0920

6010C Metals (ICP)-Dissolved

Analyte	Result (ug/L)	Qualifier	MDL	RL
Thallium	20	U	4.7	20
Zinc	6.0	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	10	U	0.64	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	240-108226	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-107851	Lab File ID:	110113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/01/2013 1629			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 1525				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-108226	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-107851	Lab File ID:	110113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/01/2013 1631			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 1525				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: Tetra Tech, Inc.

Job Number: 240-30485-1

Client Sample ID: **MSA-MW51I-102113**

Lab Sample ID: 240-30485-2
Client Matrix: Water

Date Sampled: 10/21/2013 1235
Date Received: 10/22/2013 0920

6010C Metals (ICP)-Total Recoverable

Analysis Method:	6010C	Analysis Batch:	240-108547	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-107845	Lab File ID:	I9110513A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/05/2013 1210			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 0828				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	4.7	J	3.2	15
Beryllium	0.60	J	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	25	J B	0.67	200
Copper	25	U	4.5	25
Chromium	17		2.2	10
Nickel	28	J	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	71		1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	43	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	10	U	0.64	10
Sodium	130000		590	5000
Potassium	4000	J	72	5000
SiO2, Silica	16000		14	1100
Calcium	40000	B	130	5000
Iron	68000		81	200
Magnesium	32000	B	34	5000
Manganese	2900		0.41	15

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	240-108547	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-107845	Lab File ID:	I9110513A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/05/2013 1214			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 0828				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	0.59	J	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	25	J B	0.67	200
Copper	25	U	4.5	25
Chromium	14		2.2	10
Nickel	25	J	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	66		1.7	10
Selenium	20	U	4.1	20

Client: Tetra Tech, Inc.

Job Number: 240-30485-1

Client Sample ID: **MSA-MW51I-102113**

Lab Sample ID: 240-30485-2
Client Matrix: Water

Date Sampled: 10/21/2013 1235
Date Received: 10/22/2013 0920

6010C Metals (ICP)-Dissolved

Analyte	Result (ug/L)	Qualifier	MDL	RL
Thallium	20	U	4.7	20
Zinc	35	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	10	U	0.64	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	240-108226	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-107851	Lab File ID:	110113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/01/2013 1621			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 1525				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-108226	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-107851	Lab File ID:	110113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/01/2013 1623			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 1525				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: Tetra Tech, Inc. Job Number: 240-30485-1

Client Sample ID: **MSA-MW51S-102113**

Lab Sample ID: 240-30485-1 Date Sampled: 10/21/2013 1055
Client Matrix: Water Date Received: 10/22/2013 0920

6010C Metals (ICP)-Total Recoverable

Analysis Method:	6010C	Analysis Batch:	240-108547	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-107845	Lab File ID:	I9110513A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/05/2013 1153			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 0828				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	1.0	J	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	25	J B	0.67	200
Copper	25	U	4.5	25
Chromium	14		2.2	10
Nickel	23	J	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	35		1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	22	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	10	U	0.64	10
Sodium	120000		590	5000
Potassium	9800		72	5000
SiO2, Silica	18000		14	1100
Calcium	80000	B	130	5000
Iron	72000		81	200
Magnesium	55000	B	34	5000
Manganese	5000		0.41	15

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	240-108547	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-107845	Lab File ID:	I9110513A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/05/2013 1206			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 0828				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	0.96	J	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	24	J B	0.67	200
Copper	25	U	4.5	25
Chromium	13		2.2	10
Nickel	24	J	3.2	40
Lead	2.1	J	1.9	10
Antimony	20	U	1.8	20
Cobalt	34		1.7	10
Selenium	20	U	4.1	20

Client: Tetra Tech, Inc. Job Number: 240-30485-1

Client Sample ID: **MSA-MW51S-102113**

Lab Sample ID: 240-30485-1 Date Sampled: 10/21/2013 1055
Client Matrix: Water Date Received: 10/22/2013 0920

6010C Metals (ICP)-Dissolved

Analyte	Result (ug/L)	Qualifier	MDL	RL
Thallium	20	U	4.7	20
Zinc	23	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	10	U	0.64	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	240-108226	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-107851	Lab File ID:	110113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/01/2013 1618			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 1525				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-108226	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-107851	Lab File ID:	110113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/01/2013 1620			Final Weight/Volume:	50 mL
Prep Date:	10/31/2013 1525				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-MW51D-102113 Lab Sample ID: 240-30485-3

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2013 13:55

Reporting Basis: WET Date Received: 10/22/2013 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	11	1.0	0.24	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-MW51I-102113 Lab Sample ID: 240-30485-2

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2013 12:35

Reporting Basis: WET Date Received: 10/22/2013 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	7.7	1.0	0.24	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-MW51S-102113 Lab Sample ID: 240-30485-1

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2013 10:55

Reporting Basis: WET Date Received: 10/22/2013 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	6.4	1.0	0.24	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MSA-MW51D-102113 Lab Sample ID: 240-30485-3

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2013 13:55

Reporting Basis: WET Date Received: 10/22/2013 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	36	5.0	1.9	mg/L			1	310.1
	Total Dissolved Solids	390	10	7.4	mg/L			1	160.1
16887-00-6	Chloride	110	1.0	0.10	mg/L			1	300.0
14797-65-0	Nitrite as N	0.10	0.10	0.012	mg/L	U		1	300.0
14797-55-8	Nitrate as N	0.10	0.10	0.023	mg/L	U		1	300.0
14808-79-8	Sulfate	140	1.0	0.12	mg/L			1	300.0
	Orthophosphate as P	0.50	0.50	0.044	mg/L	U	^	1	300.0
	Orthophosphate as P	0.72	0.50	0.044	mg/L		H	1	300.0
7664-41-7	Ammonia (as N)	6.7	0.40	0.050	mg/L		B	2	350.3

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MSA-MW51I-102113 Lab Sample ID: 240-30485-2

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2013 12:35

Reporting Basis: WET Date Received: 10/22/2013 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	52	5.0	1.9	mg/L			1	310.1
	Total Dissolved Solids	1100	10	7.4	mg/L			1	160.1
16887-00-6	Chloride	240	10	1.0	mg/L			10	300.0
14797-65-0	Nitrite as N	0.10	0.10	0.012	mg/L	U		1	300.0
14797-55-8	Nitrate as N	0.057	0.10	0.023	mg/L	J		1	300.0
14808-79-8	Sulfate	440	10	1.2	mg/L			10	300.0
	Orthophosphate as P	0.50	0.50	0.044	mg/L	U	^	1	300.0
	Orthophosphate as P	0.21	0.50	0.044	mg/L	J	H	1	300.0
7664-41-7	Ammonia (as N)	1.1	0.20	0.025	mg/L		B	1	350.3

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MSA-MW51S-102113 Lab Sample ID: 240-30485-1

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2013 10:55

Reporting Basis: WET Date Received: 10/22/2013 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	49	5.0	1.9	mg/L			1	310.1
	Total Dissolved Solids	1300	20	15	mg/L			1	160.1
16887-00-6	Chloride	140	1.0	0.10	mg/L			1	300.0
14797-65-0	Nitrite as N	0.10	0.10	0.012	mg/L	U		1	300.0
14797-55-8	Nitrate as N	0.10	0.10	0.023	mg/L	U		1	300.0
14808-79-8	Sulfate	760	10	1.2	mg/L			10	300.0
	Orthophosphate as P	0.087	0.50	0.044	mg/L	J	^	1	300.0
	Orthophosphate as P	0.19	0.50	0.044	mg/L	J	H	1	300.0
7664-41-7	Ammonia (as N)	2.2	0.20	0.025	mg/L		B	1	350.3

Microseeps
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 10461 240-30485-1

Lab ID: **104610003** Date Received: 10/23/2013 10:30 Matrix: Water

Sample ID: **MSA-MW51D-102113(240-30485-3)** Date Collected: 10/21/2013 13:55

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	15	ug/l	0.10	0.029	1			11/1/2013 08:17	BW	
Ethane	5.5	ug/l	0.025	0.0030	1			11/1/2013 08:17	BW	

CERTIFICATE OF ANALYSIS

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Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 10461 240-30485-1

Lab ID: **104610002** Date Received: 10/23/2013 10:30 Matrix: Water

Sample ID: **MSA-MW51I-102113(240-30485-2)** Date Collected: 10/21/2013 12:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**38**	ug/l	0.10	0.029	1			11/1/2013 08:08	BW	
Ethane	**6.7**	ug/l	0.025	0.0030	1			11/1/2013 08:08	BW	

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ANALYTICAL RESULTS

Workorder: 10461 240-30485-1

Lab ID: **104610001** Date Received: 10/23/2013 10:30 Matrix: Water

Sample ID: **MSA-MW51S-102113(240-30485-1)** Date Collected: 10/21/2013 10:55

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**38**	ug/l	0.10	0.029	1			11/1/2013 07:57	BW	
Ethane	**4.8**	ug/l	0.025	0.0030	1			11/1/2013 07:57	BW	

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APPENDIX C

SUPPORT DOCUMENTATION

Field Duplicate

Fraction		MSA-DUP01-102113		MSA-MW44S-102113		units	RPD	%D	CRDL	MDL
M	ARSENIC	3.2	U	4.2	J	UG/L	-27.03	-1	15	3.2
M	BARIUM	170	J	170	J	UG/L	0.00	0	200	0.67
M	CADMIUM	0.66	J	0.66	U	UG/L	0.00	0	5	0.66
M	CHROMIUM	2.2	J	2.2	J	UG/L	0.00	0	10	2.2
M	VANADIUM	17		13	B	UG/L	26.67	4	10	0.64
M	ZINC	12	B	11	B	UG/L	8.70	1	50	5
MF	ARSENIC	3.2	U	3.6	J	UG/L	-11.76	-0.4	15	3.2
MF	BARIUM	160	J	160	J	UG/L	0.00	0	200	0.67
MF	CHROMIUM	2.6	J	2.6	J	UG/L	0.00	0	10	2.2
MF	VANADIUM	9.9	J	5.9	J	UG/L	50.63	4	10	0.64
OS	1,1-BIPHENYL	3.6	J	3.6	J	UG/L	0.00	0	3.8	0.5
OS	1,4-DIOXANE	13		10		UG/L	26.09	3	3.8	1.9
OS	2-METHYLNAPHTHALENE	7		6.3		UG/L	10.53	0.7	0.76	0.34
OS	ACENAPHTHENE	39		42		UG/L	-7.41	-3	0.76	0.17
OS	ANTHRACENE	2.3		2.3		UG/L	0.00	0	0.76	0.33
OS	CARBAZOLE	11		8.9		UG/L	21.11	2.1	3.8	1.1
OS	DIBENZOFURAN	17		17		UG/L	0.00	0	3.8	0.076
OS	FLUORANTHENE	3.4		3.6		UG/L	-5.71	-0.2	0.76	0.17
OS	FLUORENE	17		18		UG/L	-5.71	-1	0.76	0.15
OS	NAPHTHALENE	160		150		UG/L	6.45	10	0.76	0.24
OS	PHENANTHRENE	18		19		UG/L	-5.41	-1	0.76	0.24
OS	PYRENE	1.7		2		UG/L	-16.22	-0.3	0.76	0.16
OV	1,1-DICHLOROETHANE	3.9	J	4	J	UG/L	-2.53	-0.1	7.1	1.1
OV	1,4-DICHLOROBENZENE	3.2	J	2.9	J	UG/L	9.84	0.3	7.1	0.93
OV	ACETONE	11	U	12	J	UG/L	-8.70	-1	71	7.9
OV	CARBON DISULFIDE	5.4	J	3.4	J	UG/L	45.45	2	7.1	0.93
OV	ETHYLBENZENE	1.7	U	1.7	J	UG/L	0.00	0	7.1	1.2
OV	M+P-XYLENES	2.4	U	1.8	J	UG/L	28.57	0.6	14	1.7
OV	NAPHTHALENE	310		380		UG/L	-20.29	-70	7.1	1.7
OV	TOLUENE	5.8	B	4.7	B	UG/L	20.95	1.1	7.1	0.93
OV	TOTAL XYLENES	1.4	U	1.8	J	UG/L	-25.00	-0.4	14	1
OV	TRICHLOROETHENE	4.8	J	5.2	J	UG/L	-8.00	-0.4	7.1	1.2
OV	VINYL CHLORIDE	2.2	U	1.8	J	UG/L	20.00	0.4	7.1	1.6
PET	TPH (C06-C10)	60	B	55	B	UG/L	8.70	5	100	25
PET	TPH (C10-C32)	990		840		UG/L	16.39	150	500	240

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

1.0 1.7 2.3
1.2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 10/21/2013	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 14 DAY			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler:
Site: MSA Frog Mortar Creek	☐ 2 days			
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Total Metals	Dissolved Metals	TPH-GRO	TPH-DRO	SVOCs and 1,4-Dioxane	Alkalinity, Anions, and TDS	Ammonia	Dissolved Organic Carbon	Metals (6010B, ICP)	Dissolved Gasses	Sample Specific Notes:
MSA-MW51S-102113	10/21/13	1055	GW	AQ	18		3	1	1	2	2	2	1	1	2	1	2	
MSA-MW51I-102113	10/21/13	1235	GW	AQ	18		3	1	1	2	2	2	1	1	2	1	2	
MSA-MW51D-102113	10/21/13	1355	GW	AQ	18		3	1	1	2	2	2	1	1	2	1	2	
MSA-MW50D-102113	10/21/13	1115	GW	AQ	11		3	1	1	2	2	2	1	1	2	1	2	MU
~~MSA-MW43S-102113~~	~~10/21/13~~		GW	AQ	11		3	1	1	2	2	2						
MSA-MW44S-102113	10/21/13	1330	GW	AQ	11		3	1	1	2	2	2						
TB-102113	–	–	TB	AQ	2		2											
MSA-DUP01-102113	10/21/13	✓	GW	AQ	11		3	1	1	2	2	2						

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	10/21/13 1530		TestAmerica	10/21/13 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	10/21/13 1650		TA	10-22-13 920
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MSA Surface Water Sampling

Report Number: 240-30485-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The Methane and Ethane by AM 20GAX analysis was performed at Microseeps.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 10/22/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 1.0, 1.2, 1.7 and 2.3 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2), MSA-MW51D-102113 (240-30485-3), MSA-MW50D-102113 (240-30485-4), MSA-MW44S-102113 (240-30485-5), TB-102113 (240-30485-6) and MSA-DUP01-102113 (240-30485-7) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/31/2013.

2-Hexanone, 4-Methyl-2-pentanone, Naphthalene and Toluene were detected in method blank MB 240-107835/5 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,1-Dichloropropene and trans-1,3-Dichloropropene failed the recovery criteria high for LCS 240-107835/4.

Samples MSA-MW51S-102113 (240-30485-1)[200X], MSA-MW51I-102113 (240-30485-2)[1.25X], MSA-MW44S-102113 (240-30485-5) [7.14X] and MSA-DUP01-102113 (240-30485-7)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 107835 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2), MSA-MW51D-102113 (240-30485-3), MSA-MW50D-102113 (240-30485-4), MSA-MW44S-102113 (240-30485-5) and MSA-DUP01-102113 (240-30485-7) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 10/23/2013 and analyzed on 10/28/2013.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Bis(2-ethylhexyl) phthalate was detected in method blank MB 240-106706/21-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples MSA-MW44S-102113 (240-30485-5)[4X] and MSA-DUP01-102113 (240-30485-7)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 106706, 3520_Acid, 8270C.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2), MSA-MW51D-102113 (240-30485-3), MSA-MW50D-102113 (240-30485-4), MSA-MW44S-102113 (240-30485-5) and MSA-DUP01-102113 (240-30485-7) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 10/31/2013, 11/01/2013 and 11/04/2013.

Total Petroleum Hydrocarbons (C6-C10) was detected in method blank MB 240-107778/7 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Sample MSA-MW51S-102113 (240-30485-1)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

An MS/MSD was analyzed with batch 107778, but could not be reported becuase it exceeded the calibration range of the instrument.

No other difficulties were encountered during the gasoline analysis. All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)

Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2), MSA-MW51D-102113 (240-30485-3), MSA-MW50D-102113 (240-30485-4), MSA-MW44S-102113 (240-30485-5) and MSA-DUP01-102113 (240-30485-7) were analyzed for diesel range organics (DRO) in accordance with EPA-SW-846 Method 8015C - DRO. The samples were prepared on 10/25/2013 and analyzed on 10/28/2013.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 107075, 3520C, 8015B_DRO.

No other difficulties were encountered during the DRO analysis. All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP)

Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2), MSA-MW51D-102113 (240-30485-3), MSA-MW50D-102113 (240-30485-4), MSA-MW44S-102113 (240-30485-5) and MSA-DUP01-102113 (240-30485-7) were analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 10/24/2013 and 10/31/2013 and analyzed on 10/30/2013 and 11/05/2013.

No difficulties were encountered during the metals analysis. All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICP)

Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2), MSA-MW51D-102113 (240-30485-3), MSA-MW50D-102113 (240-30485-4), MSA-MW44S-102113 (240-30485-5) and MSA-DUP01-102113 (240-30485-7) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 10/24/2013 and 10/31/2013 and analyzed on 10/30/2013 and 11/05/2013.

Barium, Calcium, Magnesium, Vanadium and Zinc were detected in method blank MB 240-106927/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Barium, Calcium, Magnesium and Zinc were detected in method blank MB 240-107845/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2), MSA-MW51D-102113 (240-30485-3), MSA-MW50D-102113 (240-30485-4), MSA-MW44S-102113 (240-30485-5) and MSA-DUP01-102113 (240-30485-7) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/24/2013 and 10/31/2013 and analyzed on 10/25/2013 and 11/01/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

TOTAL MERCURY
Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2), MSA-MW51D-102113 (240-30485-3), MSA-MW50D-102113 (240-30485-4), MSA-MW44S-102113 (240-30485-5) and MSA-DUP01-102113 (240-30485-7) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/24/2013 and 10/31/2013 and analyzed on 10/25/2013 and 11/01/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

TOTAL DISSOLVED SOLIDS
Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2) and MSA-MW51D-102113 (240-30485-3) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 10/25/2013.

No difficulties were encountered during the TDS analysis. All quality control parameters were within the acceptance limits.

ANIONS
Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2) and MSA-MW51D-102113 (240-30485-3) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 10/22/2013 and 10/24/2013.

For the MSD of sample MSA-MW51S-102113MSD (240-30485-1) in batch 240-107030, Orthophosphate as P failed the recovery criteria low. Nitrite as N failed the recovery criteria high. Also, Orthophosphate as P exceeded the RPD limit.

Due to failing QC reanalysis of the following samples was performed outside of the analytical holding time: MSA-MW51D-102113 (240-30485-3), MSA-MW51I-102113 (240-30485-2), MSA-MW51S-102113 (240-30485-1). Both sets of data are reported.

No other difficulties were encountered during the anions analysis. All other quality control parameters were within the acceptance limits.

ANIONS
Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2) and MSA-MW51D-102113 (240-30485-3) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 10/22/2013 and 11/06/2013.

Samples MSA-MW51S-102113 (240-30485-1)[10X] and MSA-MW51I-102113 (240-30485-2)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the anions analysis. All other quality control parameters were within the acceptance limits.

ALKALINITY
Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2) and MSA-MW51D-102113 (240-30485-3) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 10/31/2013.

No difficulties were encountered during the alkalinity analysis. All quality control parameters were within the acceptance limits.

AMMONIA
Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2) and MSA-MW51D-102113 (240-30485-3) were analyzed for ammonia in accordance with EPA Method 350.3. The samples were analyzed on 10/25/2013.

Ammonia (as N) was detected in method blank MB 240-107230/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Sample MSA-MW51D-102113 (240-30485-3)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the ammonia analysis. All other quality control parameters were within the acceptance limits.

DISSOLVED ORGANIC CARBON
Samples MSA-MW51S-102113 (240-30485-1), MSA-MW51I-102113 (240-30485-2) and MSA-MW51D-102113 (240-30485-3) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 10/28/2013.

No difficulties were encountered during the TOC analysis. All quality control parameters were within the acceptance limits.

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 10-22-13 Opened on 10-22-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # Multi Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   - IR GUN# A (CF +2 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   - IR GUN# 4 (CF +1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   - IR GUN# 5 (CF +2 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   - IR GUN# 8 (CF -0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

   ☑ See Multiple Cooler Form
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 4 Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC376062**
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

TestAmerica Multiple Cooler Receipt Form/Narrative — Login # : _____
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client Cooler	8	1.0	1.0	Ice
TA No #	1	1.7	1.7	1
1	1	2.3	2.3	1
	1	1.2	1.2	1

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
MSA-MW51S-102113	240-30485-K-1	Plastic 500ml - with Sulfuric Acid	<2		
MSA-MW51S-102113	240-30485-L-1	Plastic 500ml - with Nitric Acid	<2		
MSA-MW51S-102113	240-30485-M-1	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-MW51S-102113	240-30485-N-1	Plastic 500ml - with Nitric Acid	<2		
MSA-MW51I-102113	240-30485-K-2	Plastic 500ml - with Sulfuric Acid	<2		
MSA-MW51I-102113	240-30485-L-2	Plastic 500ml - with Nitric Acid	<2		
MSA-MW51I-102113	240-30485-M-2	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-MW51I-102113	240-30485-N-2	Plastic 500ml - with Nitric Acid	<2		
MSA-MW51D-102113	240-30485-K-3	Plastic 500ml - with Sulfuric Acid	<2		
MSA-MW51D-102113	240-30485-L-3	Plastic 500ml - with Nitric Acid	<2		
MSA-MW51D-102113	240-30485-M-3	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-MW51D-102113	240-30485-N-3	Plastic 500ml - with Nitric Acid	<2		
MSA-MW50D-102113	240-30485-F-4	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-MW50D-102113	240-30485-G-4	Plastic 500ml - with Nitric Acid	<2		
MSA-MW44S-102113	240-30485-F-5	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-MW44S-102113	240-30485-G-5	Plastic 500ml - with Nitric Acid	<2		
MSA-DUP01-102113	240-30485-F-7	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-DUP01-102113	240-30485-G-7	Plastic 500ml - with Nitric Acid	<2		

HOLDTIME

SDG 240-30485-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/31/2013	11/01/2013	10	1	11
HG	UG/L	MSA-MW44S-102113	240-30485-5	NM	10/21/2013	10/24/2013	10/25/2013	3	1	4
HG	UG/L	MSA-MW50D-102113	240-30485-4	NM	10/21/2013	10/31/2013	11/01/2013	10	1	11
HG	UG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/31/2013	11/01/2013	10	1	11
HG	UG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/31/2013	11/01/2013	10	1	11
M	UG/L	MSA-MW44S-102113	240-30485-5	NM	10/21/2013	10/24/2013	10/30/2013	3	6	9
M	UG/L	MSA-MW50D-102113	240-30485-4	NM	10/21/2013	10/31/2013	11/05/2013	10	5	15
M	UG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/31/2013	11/05/2013	10	5	15
M	UG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/31/2013	11/05/2013	10	5	15
M	UG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/31/2013	11/05/2013	10	5	15
	MG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/24/2013	10/24/2013	3	0	3
	MG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
	MG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/24/2013	10/24/2013	3	0	3
	MG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	11/06/2013	11/06/2013	16	0	16
	MG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
	MG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/24/2013	10/24/2013	3	0	3
	MG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	11/06/2013	11/06/2013	16	0	16
	MG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
ALK	MG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
ALK	MG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
ALK	MG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
NH3	MG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/25/2013	10/25/2013	4	0	4
NH3	MG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/25/2013	10/25/2013	4	0	4
NH3	MG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/25/2013	10/25/2013	4	0	4
TDS	MG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/25/2013	10/25/2013	4	0	4
TDS	MG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/25/2013	10/25/2013	4	0	4
TDS	MG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/25/2013	10/25/2013	4	0	4
TOC	MG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/28/2013	10/28/2013	7	0	7
TOC	MG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/28/2013	10/28/2013	7	0	7
TOC	MG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/28/2013	10/28/2013	7	0	7
OS	UG/L	MSA-MW44S-102113	240-30485-5	NM	10/21/2013	10/23/2013	10/28/2013	2	5	7
OS	UG/L	MSA-MW50D-102113	240-30485-4	NM	10/21/2013	10/23/2013	10/28/2013	2	5	7
OS	UG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/23/2013	10/28/2013	2	5	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/23/2013	10/28/2013	2	5	7
OS	UG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/23/2013	10/28/2013	2	5	7
OV	UG/L	TB-102113	240-30485-6	TB	10/21/2013	10/31/2013	10/31/2013	10	0	10
OV	UG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
OV	UG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
OV	UG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
OV	UG/L	MSA-MW50D-102113	240-30485-4	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
OV	UG/L	MSA-MW44S-102113	240-30485-5	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
	UG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/25/2013	10/28/2013	4	3	7
	UG/L	MSA-MW44S-102113	240-30485-5	NM	10/21/2013	10/25/2013	10/28/2013	4	3	7
	UG/L	MSA-MW44S-102113	240-30485-5	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
	UG/L	MSA-MW50D-102113	240-30485-4	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
	UG/L	MSA-MW51D-102113	240-30485-3	NM	10/21/2013	10/31/2013	10/31/2013	10	0	10
	UG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	10/25/2013	10/28/2013	4	3	7
	UG/L	MSA-MW51I-102113	240-30485-2	NM	10/21/2013	11/01/2013	11/01/2013	11	0	11
	UG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	10/25/2013	10/28/2013	4	3	7
	UG/L	MSA-MW51S-102113	240-30485-1	NM	10/21/2013	11/04/2013	11/04/2013	14	0	14
	UG/L	MSA-MW50D-102113	240-30485-4	NM	10/21/2013	10/25/2013	10/28/2013	4	3	7

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab File ID: UXM1338.D Lab Sample ID: MB 240-107835/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX16 Date Analyzed: 10/31/2013 11:01

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-107835/4	UXM1337.D	10/31/2013 10:39
MSA-MW51S-102113	240-30485-1	UXM1349.D	10/31/2013 15:47
MSA-MW51I-102113	240-30485-2	UXM1350.D	10/31/2013 16:09
MSA-MW51D-102113	240-30485-3	UXM1351.D	10/31/2013 16:31
MSA-MW50D-102113	240-30485-4	UXM1352.D	10/31/2013 16:53
TB-102113	240-30485-6	UXM1353.D	10/31/2013 17:16
MSA-MW44S-102113	240-30485-5	UXM1354.D	10/31/2013 17:38
MSA-DUP01-102113	240-30485-7	UXM1355.D	10/31/2013 18:00
	240-30484-B-1 MS	UXM1359.D	10/31/2013 19:29
	240-30484-B-1 MSD	UXM1360.D	10/31/2013 19:51

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-107835/5

Matrix: Water Lab File ID: UXM1338.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 10(mL) Date Analyzed: 10/31/2013 11:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107835 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	0.760	J	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	0.834	J	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.392	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107835/5

Matrix: Water | Lab File ID: UXM1338.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 11:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	94		66-117
2037-26-5	Toluene-d8 (Surr)	102		74-115
1868-53-7	Dibromofluoromethane (Surr)	96		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107835/5

Matrix: Water | Lab File ID: UXM1338.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 10(mL) | Date Analyzed: 10/31/2013 11:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107835 | Units: ug/L

Number TICs Found: 2 | TIC Result Total: 10.424

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	4.86	0.424	J
78-83-1	Isobutyl alcohol	5.25	10.0	J

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM1337.D

Lab ID: LCS 240-107835/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	25.0	27.5	110	72-116	
1,1,1-Trichloroethane	25.0	28.3	113	74-118	
1,1,2,2-Tetrachloroethane	25.0	23.5	94	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	25.0	26.2	105	74-151	
1,1-Dichloroethane	25.0	27.3	109	82-115	
1,1-Dichloroethene	25.0	27.4	110	78-131	
1,1-Dichloropropene	25.0	30.4	122	83-114	*
1,2,3-Trichlorobenzene	25.0	24.4	97	54-126	
1,2,3-Trichloropropane	25.0	24.0	96	73-129	
1,2,4-Trichlorobenzene	25.0	25.4	101	48-135	
1,2,4-Trimethylbenzene	25.0	26.2	105	76-120	
1,2-Dibromo-3-Chloropropane	25.0	24.5	98	42-136	
1,2-Dichlorobenzene	25.0	24.5	98	81-110	
1,2-Dichloroethane	25.0	26.4	105	71-127	
1,2-Dichloropropane	25.0	26.5	106	81-115	
1,3-Dichlorobenzene	25.0	24.8	99	80-110	
1,3-Dichloropropane	25.0	25.8	103	79-116	
1,4-Dichlorobenzene	25.0	24.8	99	82-110	
2,2-Dichloropropane	25.0	26.9	108	50-129	
2-Chloroethyl vinyl ether	30.0	31.5	105	52-131	
2-Chlorotoluene	25.0	26.3	105	76-116	
2-Hexanone	50.0	52.2	104	55-133	
Bromobenzene	25.0	25.6	102	76-115	
Bromochloromethane	25.0	26.9	108	77-120	
4-Chlorotoluene	25.0	25.9	104	77-115	
p-Isopropyltoluene	25.0	27.3	109	74-120	
Acetone	50.0	55.7	111	43-136	
Benzene	25.0	26.8	107	83-112	
Bromoform	25.0	22.9	92	40-131	
Bromomethane	25.0	23.9	95	11-185	
Carbon disulfide	25.0	29.2	117	62-142	
Carbon tetrachloride	25.0	26.8	107	66-128	
Chlorobenzene	25.0	25.8	103	85-110	
Chloroethane	25.0	24.6	98	25-153	
Chloroform	25.0	26.8	107	79-117	
Chloromethane	25.0	22.5	90	44-126	
cis-1,2-Dichloroethene	25.0	27.1	109	80-113	
cis-1,3-Dichloropropene	25.0	28.1	112	61-115	
Hexachlorobutadiene	25.0	27.2	109	36-134	
Dibromomethane	25.0	26.5	106	81-120	
Bromodichloromethane	25.0	27.3	109	72-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM1337.D

Lab ID: LCS 240-107835/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	25.0	22.0	88	19-129	
Ethylbenzene	25.0	26.7	107	83-112	
1,2-Dibromoethane	25.0	25.9	104	79-113	
Naphthalene	25.0	23.8	95	32-141	
m-Xylene & p-Xylene	25.0	26.9	108	83-113	
n-Butylbenzene	25.0	27.6	110	66-125	
Isopropylbenzene	25.0	27.3	109	75-114	
n-Propylbenzene	25.0	27.2	109	74-121	
2-Butanone	50.0	55.2	110	60-126	
4-Methyl-2-pentanone	50.0	51.8	104	63-128	
sec-Butylbenzene	25.0	27.4	110	70-117	
Methyl tert-butyl ether	25.0	26.0	104	52-144	
Methylene Chloride	25.0	22.5	90	66-131	
o-Xylene	25.0	26.5	106	83-113	
Styrene	25.0	26.5	106	79-114	
tert-Butylbenzene	25.0	27.3	109	71-115	
Tetrachloroethene	25.0	28.1	112	79-114	
Toluene	25.0	25.4	102	84-111	
trans-1,2-Dichloroethene	25.0	27.7	111	83-117	
trans-1,3-Dichloropropene	25.0	29.9	120	58-117	*
Trichloroethene	25.0	28.4	113	76-117	
Trichlorofluoromethane	25.0	25.2	101	49-157	
Vinyl acetate	40.0	46.1	115	46-161	
Vinyl chloride	25.0	24.8	99	53-127	
tert-Butyl alcohol	250	234	94	70-130	
Xylenes, Total	50.0	53.4	107	83-112	
Dibromochloromethane	25.0	27.8	111	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM1359.D

Lab ID: 240-30484-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	1.0 U	24.1	97	68-121	
1,1-Dichloroethane	25.0	1.0 U	24.4	98	79-116	
1,1-Dichloroethene	25.0	1.0 U	22.6	90	74-135	
1,2-Dichloroethane	25.0	1.0 U	24.3	97	68-129	
Benzene	25.0	1.0 U	24.2	97	72-121	
Chloroethane	25.0	1.0 U	21.0	84	21-165	
Chloroform	25.0	1.0 U	24.7	99	76-118	
cis-1,2-Dichloroethene	25.0	1.0 U	24.2	97	70-120	
Ethylbenzene	25.0	1.0 U	24.4	98	75-116	
m-Xylene & p-Xylene	25.0	2.0 U	24.1	97	75-117	
2-Butanone	50.0	10 U	41.5	83	54-129	
Methyl tert-butyl ether	25.0	1.0 U	22.5	90	46-144	
Methylene Chloride	25.0	1.0 U	18.6	74	63-128	
o-Xylene	25.0	1.0 U	24.6	98	76-116	
Tetrachloroethene	25.0	1.0 U	24.2	97	70-117	
Toluene	25.0	0.24 J	22.8	90	78-114	
trans-1,2-Dichloroethene	25.0	1.0 U	24.3	97	80-119	
Trichloroethene	25.0	1.0 U	24.8	99	66-120	
Vinyl chloride	25.0	1.0 U	19.6	78	49-130	
Xylenes, Total	50.0	2.0 U	48.7	97	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM1360.D

Lab ID: 240-30484-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	27.8	111	14	30	68-121	
1,1-Dichloroethane	25.0	27.3	109	11	30	79-116	
1,1-Dichloroethene	25.0	27.0	108	18	30	74-135	
1,2-Dichloroethane	25.0	27.2	109	11	30	68-129	
Benzene	25.0	27.0	108	11	30	72-121	
Chloroethane	25.0	25.2	101	18	30	21-165	
Chloroform	25.0	27.0	108	9	30	76-118	
cis-1,2-Dichloroethene	25.0	26.7	107	10	30	70-120	
Ethylbenzene	25.0	26.4	106	8	30	75-116	
m-Xylene & p-Xylene	25.0	26.1	105	8	30	75-117	
2-Butanone	50.0	49.3	99	17	30	54-129	
Methyl tert-butyl ether	25.0	25.7	103	13	30	46-144	
Methylene Chloride	25.0	21.2	85	13	30	63-128	
o-Xylene	25.0	26.3	105	7	30	76-116	
Tetrachloroethene	25.0	27.1	108	11	30	70-117	
Toluene	25.0	25.2	100	10	30	78-114	
trans-1,2-Dichloroethene	25.0	27.2	109	11	30	80-119	
Trichloroethene	25.0	27.6	111	11	30	66-120	
Vinyl chloride	25.0	23.9	96	20	30	49-130	
Xylenes, Total	50.0	52.4	105	7	30	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MSA-MW51S-102113	240-30485-1	98	90	97	91
MSA-MW51I-102113	240-30485-2	93	89	93	86
MSA-MW51D-102113	240-30485-3	101	95	100	93
MSA-MW50D-102113	240-30485-4	105	99	104	97
MSA-MW44S-102113	240-30485-5	103	101	102	97
TB-102113	240-30485-6	97	93	99	92
MSA-DUP01-102113	240-30485-7	101	94	102	96
	MB 240-107835/5	96	89	102	94
	LCS 240-107835/4	96	91	100	92
	240-30484-B-1 MS	90	84	95	89
	240-30484-B-1 MSD	100	93	105	98

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab File ID: BFB3573.D BFB Injection Date: 10/29/2013

Instrument ID: A3UX16 BFB Injection Time: 10:48

Analysis Batch No.: 107557

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.7	
75	30.0 - 60.0 % of mass 95	47.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.3	(0.3)1
174	50.0 - 120.00 % of mass 95	90.1	
175	5.0 - 9.0 % of mass 174	6.3	(6.9)1
176	95.0 - 101.0 % of mass 174	87.3	(96.8)1
177	5.0 - 9.0 % of mass 176	5.9	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-107557/2	UXM1272.D	10/29/2013	11:14
	STD8260 240-107557/3	UXM1273.D	10/29/2013	11:36
	STD8260 240-107557/4	UXM1274.D	10/29/2013	11:59
	STD8260 240-107557/5	UXM1275.D	10/29/2013	12:21
	STD8260 240-107557/6	UXM1276.D	10/29/2013	12:43
	STD8260 240-107557/7	UXM1277.D	10/29/2013	13:05
	STD8260 240-107557/8	UXM1278.D	10/29/2013	13:27
	STDA9 240-107557/9	UXM1279.D	10/29/2013	13:49
	STDA9 240-107557/10	UXM1280.D	10/29/2013	14:12
	STDA9 240-107557/11	UXM1281.D	10/29/2013	14:34
	STDA9 240-107557/12	UXM1282.D	10/29/2013	14:56
	STDA9 240-107557/13	UXM1283.D	10/29/2013	15:18
	STDA9 240-107557/14	UXM1284.D	10/29/2013	15:41
	ICV 240-107557/16	UXM1286.D	10/29/2013	16:25

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 107557

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 11:14 Calibration End Date: 10/29/2013 13:27 Calibration ID: 18529

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-107557/8	UXM1278.D
Level 2	STD8260 240-107557/7	UXM1277.D
Level 3	STD8260 240-107557/6	UXM1276.D
Level 4	STD8260 240-107557/5	UXM1275.D
Level 5	STD8260 240-107557/4	UXM1274.D
Level 6	STD8260 240-107557/3	UXM1273.D
Level 7	STD8260 240-107557/2	UXM1272.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1944 0.3155	0.2732 0.3066	0.3031	0.3042	0.3725	Lin1	-0.089	0.3195							0.9940		0.9900
Chloromethane	0.4093 0.4238	0.4171 0.3917	0.4121	0.4235	0.4797	Ave		0.4224			0.1000	6.5		15.0			
Vinyl chloride	0.2547 0.3283	0.2960 0.3083	0.3158	0.3186	0.3731	Ave		0.3135				11.0		15.0			
Bromomethane	0.1825 0.1659	0.1721 0.1389	0.1743	0.1726	0.1960	Ave		0.1718				10.0		15.0			
Chloroethane	0.1726 0.1903	0.1856 0.1701	0.1866	0.1890	0.2208	Ave		0.1879				8.8		15.0			
Dichlorofluoromethane	0.3914 0.4283	0.3970 0.4214	0.4074	0.4100	0.4836	Ave		0.4199				7.4		15.0			
Trichlorofluoromethane	0.2618 0.3889	0.3208 0.4022	0.3534	0.3575	0.4432	Lin1	-0.164	0.4049							0.9970		0.9900
Ethyl ether	0.2351 0.2076	0.2225 0.2160	0.2295	0.2273	0.2218	Ave		0.2228				4.1		15.0			
Acrolein	0.0060 0.0053	0.0046 0.0067	0.0062	0.0076	0.0070	Qua	0.0554	0.0047	0						0.9930		0.9900
1,1-Dichloroethene	0.1930 0.2318	0.2206 0.2472	0.2326	0.2290	0.2604	Ave		0.2307				9.2		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1272 0.1965	0.1868 0.2195	0.2112	0.1957	0.2292	Lin1	-0.075	0.2153							0.9970		0.9900
Acetone	0.1794 0.0709	0.0980 0.0731	0.0941	0.1008	0.0777	Lin1	0.2015	0.0722							0.9940		0.9900
Iodomethane	0.3846 0.4007	0.4082 0.4271	0.4097	0.4068	0.4423	Ave		0.4113				4.5		15.0			
Carbon disulfide	0.6179 0.7471	0.6674 0.8088	0.7449	0.7242	0.8381	Ave		0.7355				10.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 107557

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 11:14 Calibration End Date: 10/29/2013 13:27 Calibration ID: 18529

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.1201 0.1502	0.1396 0.1598	0.1472	0.1473	0.1707	Ave		0.1478				11.0		15.0			
Methyl acetate	0.1942 0.1643	0.1667 0.1777	0.1826	0.1939	0.1723	Ave		0.1788				6.8		15.0			
Methylene Chloride	1.7082 0.2772	1.0174 0.2704	0.5093	0.4420	0.3468	Lin1	1.4758	0.2588							0.9950		0.9900
tert-Butyl alcohol	0.0201 0.0180	0.0179 0.0195	0.0217	0.0235	0.0182	Ave		0.0199				11.0		15.0			
Acrylonitrile	0.0843 0.0724	0.0706 0.0776	0.0783	0.0848	0.0764	Ave		0.0778				6.9		15.0			
Methyl tert-butyl ether	0.5867 0.5818	0.5513 0.6369	0.6086	0.6425	0.6259	Ave		0.6048				5.5		15.0			
trans-1,2-Dichloroethene	0.2564 0.2631	0.2713 0.2846	0.2754	0.2676	0.3045	Ave		0.2747				5.8		15.0			
Hexane	0.0549 0.0721	0.0612 0.0832	0.0762	0.0728	0.0858	Ave		0.0723				15.0		15.0			
1,1-Dichloroethane	0.4799 0.4768	0.4918 0.5198	0.4989	0.4959	0.5370	Ave		0.5000			0.1000	4.3		15.0			
Vinyl acetate	0.2863 0.3525	0.3009 0.4013	0.3409	0.3668	0.3716	Ave		0.3457				12.0		15.0			
cis-1,2-Dichloroethene	0.2742 0.2703	0.2926 0.2968	0.2885	0.2860	0.3079	Ave		0.2880				4.5		15.0			
2-Butanone	0.1101 0.0932	0.0933 0.1043	0.1065	0.1157	0.1014	Ave		0.1035				8.1		15.0			
2,2-Dichloropropane	0.2422 0.3123	0.2808 0.3324	0.3040	0.3036	0.3586	Ave		0.3048				12.0		15.0			
Bromochloromethane	0.1298 0.1188	0.1239 0.1326	0.1300	0.1299	0.1327	Ave		0.1283				4.0		15.0			
Tetrahydrofuran	0.1230 0.0636	0.0774 0.0708	0.0794	0.0802	0.0681	Lin1	0.0929	0.0679							0.9960		0.9900
Chloroform	0.4183 0.4067	0.4277 0.4508	0.4475	0.4284	0.4595	Ave		0.4341				4.4		15.0			
1,1,1-Trichloroethane	0.2906 0.3607	0.3395 0.4094	0.3672	0.3576	0.4112	Ave		0.3623				11.0		15.0			
Cyclohexane	0.3503 0.5149	0.4647 0.5934	0.5581	0.5173	0.6165	Lin1	-0.226	0.5768							0.9950		0.9900
1,1-Dichloropropene	0.2510 0.3129	0.3030 0.3605	0.3253	0.3212	0.3656	Ave		0.3199				12.0		15.0			
Carbon tetrachloride	0.2241 0.3149	0.2738 0.3704	0.3153	0.3038	0.3581	Lin1	-0.170	0.3539							0.9950		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 107557

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 11:14 Calibration End Date: 10/29/2013 13:27 Calibration ID: 18529

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0078 0.0075	0.0077 0.0083	0.0105	0.0105	0.0079	Ave		0.0086				15.0		15.0			
1,2-Dichloroethane	0.3250 0.2999	0.3138 0.3418	0.3299	0.3260	0.3319	Ave		0.3240				4.2		15.0			
Benzene	1.0177 0.9985	1.0634 1.1474	1.0610	1.0358	1.1318	Ave		1.0651				5.3		15.0			
n-Heptane	0.0515 0.0854	0.0767 0.1051	0.0873	0.0848	0.1017	Lin1	-0.055	0.0995							0.9920		0.9900
Trichloroethene	0.2620 0.2755	0.2863 0.3222	0.2936	0.2826	0.3134	Ave		0.2908				7.2		15.0			
Methylcyclohexane	0.2824 0.4446	0.3939 0.5351	0.4741	0.4459	0.5273	Lin1	-0.253	0.5108							0.9930		0.9900
1,2-Dichloropropane	0.2487 0.2454	0.2583 0.2816	0.2660	0.2584	0.2729	Ave		0.2616				4.9		15.0			
Dibromomethane	0.1137 0.1082	0.1180 0.1273	0.1169	0.1181	0.1169	Ave		0.1170				4.9		15.0			
1,4-Dioxane	0.0009 0.0016	0.0013 0.0019	0.0017	0.0019	0.0017	Lin1	-0.016	0.0018							0.9960		0.9900
Bromodichloromethane	0.2639 0.2861	0.2631 0.3399	0.2835	0.2913	0.3093	Ave		0.2910				9.2		15.0			
2-Chloroethyl vinyl ether	0.0423 0.0680	0.0396 0.0826	0.0511	0.0610	0.0622	Qua	-0.017	0.0547	0.0001						1.0000		0.9900
cis-1,3-Dichloropropene	0.2764 0.3378	0.3028 0.4035	0.3310	0.3423	0.3676	Ave		0.3374				12.0		15.0			
4-Methyl-2-pentanone	0.2180 0.1994	0.1834 0.2236	0.2222	0.2478	0.2040	Ave		0.2141				9.7		15.0			
Toluene	1.9741 1.5381	1.5701 1.7389	1.6873	1.5585	1.7039	Ave		1.6816				9.0		15.0			
trans-1,3-Dichloropropene	0.3156 0.3957	0.3156 0.4555	0.3578	0.3827	0.4077	Ave		0.3758				13.0		15.0			
Ethyl methacrylate	0.2416 0.3284	0.2454 0.3642	0.3049	0.3447	0.3246	Ave		0.3077				15.0		15.0			
1,1,2-Trichloroethane	0.3031 0.2394	0.2534 0.2667	0.2679	0.2618	0.2514	Ave		0.2634				7.6		15.0			
1,3-Dichloropropane	0.4298 0.4239	0.4121 0.4768	0.4324	0.4581	0.4454	Ave		0.4398				5.0		15.0			
Tetrachloroethene	0.2595 0.3008	0.3041 0.3535	0.3079	0.2909	0.3415	Ave		0.3083				10.0		15.0			
2-Hexanone	0.2200 0.2056	0.1948 0.2178	0.2282	0.2554	0.2130	Ave		0.2193				8.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 107557

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 11:14 Calibration End Date: 10/29/2013 13:27 Calibration ID: 18529

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	0.2422 0.2831	0.2352 0.3292	0.2520	0.2711	0.2848	Ave		0.2711				12.0		15.0			
1,2-Dibromoethane	0.2170 0.2252	0.2134 0.2530	0.2311	0.2408	0.2366	Ave		0.2310				6.0		15.0			
Chlorobenzene	1.0248 0.9946	1.0804 1.1293	1.0577	1.0376	1.0980	Ave		1.0603			0.3000	4.3		15.0			
1,1,1,2-Tetrachloroethane	0.3030 0.3331	0.3163 0.3819	0.3265	0.3368	0.3586	Ave		0.3366				7.9		15.0			
Ethylbenzene	0.4914 0.5528	0.5324 0.6422	0.5601	0.5456	0.6162	Ave		0.5629				9.1		15.0			
m-Xylene & p-Xylene	0.6091 0.6823	0.6566 0.8025	0.6963	0.6790	0.7634	Ave		0.6985				9.3		15.0			
o-Xylene	0.6053 0.6579	0.6537 0.7523	0.6818	0.6621	0.7300	Ave		0.6776				7.3		15.0			
Styrene	0.8910 1.0771	0.9690 1.2353	1.0233	1.0537	1.1603	Ave		1.0585				11.0		15.0			
Bromoform	0.1066 0.1523	0.1103 0.1844	0.1303	0.1469	0.1488	Lin1	-0.117	0.1712			0.1000				0.9900		0.9900
Isopropylbenzene	1.3233 1.7271	1.6106 2.0710	1.7917	1.6800	1.9505	Ave		1.7363				14.0		15.0			
1,1,2,2-Tetrachloroethane	0.5308 0.5042	0.5454 0.5463	0.5849	0.6053	0.5253	Ave		0.5489			0.3000	6.4		15.0			
Bromobenzene	0.7337 0.7603	0.7826 0.8430	0.8199	0.7885	0.8275	Ave		0.7937				4.9		15.0			
1,2,3-Trichloropropane	0.2047 0.1635	0.1809 0.1810	0.2022	0.1923	0.1693	Ave		0.1848				8.5		15.0			
trans-1,4-Dichloro-2-butene	0.1430 0.1705	0.1440 0.1908	0.1660	0.1808	0.1678	Ave		0.1661				11.0		15.0			
n-Propylbenzene	0.7532 0.9078	0.9069 1.0678	0.9588	0.8790	1.0392	Ave		0.9304				11.0		15.0			
2-Chlorotoluene	0.7174 0.7664	0.8083 0.8744	0.8022	0.7571	0.8535	Ave		0.7971				6.9		15.0			
1,3,5-Trimethylbenzene	2.1683 2.6847	2.5859 3.1202	2.7978	2.5765	3.0060	Ave		2.7056				12.0		15.0			
4-Chlorotoluene	0.7875 0.8068	0.8641 0.9053	0.8535	0.8135	0.9018	Ave		0.8475				5.5		15.0			
tert-Butylbenzene	1.8977 2.4469	2.3334 2.8984	2.6001	2.2886	2.7991	Ave		2.4663				14.0		15.0			
1,2,4-Trimethylbenzene	2.2423 2.7566	2.6950 3.1712	2.8767	2.6923	3.1162	Ave		2.7929				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 107557

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 11:14 Calibration End Date: 10/29/2013 13:27 Calibration ID: 18529

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	2.5735 3.3860	3.2338 4.0672	3.7038	3.1688	3.9236	Ave		3.4367				15.0		15.0			
1,3-Dichlorobenzene	1.5584 1.4998	1.7110 1.6979	1.6681	1.5614	1.6794	Ave		1.6251				5.1		15.0			
p-Isopropyltoluene	2.3327 3.0378	2.9081 3.6347	3.2612	2.8403	3.5849	Ave		3.0857				15.0		15.0			
1,4-Dichlorobenzene	1.7190 1.5075	1.7940 1.6737	1.6846	1.6133	1.6979	Ave		1.6700				5.4		15.0			
n-Butylbenzene	1.8368 2.3879	2.3063 2.8939	2.5957	2.2462	2.8218	Ave		2.4412				15.0		15.0			
1,2-Dichlorobenzene	1.4948 1.3504	1.5981 1.4843	1.5291	1.4708	1.5149	Ave		1.4918				5.0		15.0			
1,2-Dibromo-3-Chloropropane	0.0555 0.0800	0.0614 0.0920	0.0887	0.0961	0.0826	Lin1	-0.034	0.0885							0.9950		0.9900
1,2,4-Trichlorobenzene	0.7749 0.7722	0.8696 0.8589	0.9036	0.8578	0.9296	Ave		0.8524				7.0		15.0			
Hexachlorobutadiene	0.3706 0.3812	0.4622 0.4626	0.4974	0.3780	0.5021	Ave		0.4363				13.0		15.0			
Naphthalene	1.4828 1.4822	1.6303 1.5500	1.7327	1.8042	1.6981	Ave		1.6257				7.8		15.0			
1,2,3-Trichlorobenzene	0.7416 0.6514	0.7982 0.7004	0.8158	0.7861	0.7859	Ave		0.7542				7.9		15.0			
Dibromofluoromethane (Surr)	0.2134 0.2200	0.1913 0.2480	0.2275	0.2372	0.2492	Ave		0.2267				9.1		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2765 0.2464	0.2277 0.2834	0.2624	0.2808	0.2751	Ave		0.2646				7.8		15.0			
Toluene-d8 (Surr)	1.1526 1.3576	1.0929 1.5363	1.3550	1.3772	1.5164	Ave		1.3411				12.0		15.0			
4-Bromofluorobenzene (Surr)	0.4441 0.4370	0.4005 0.5183	0.4796	0.4811	0.5029	Ave		0.4662				8.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 107557

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 13:49 Calibration End Date: 10/29/2013 15:41 Calibration ID: 18532

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-107557/14	UXM1284.D
Level 2	STDA9 240-107557/13	UXM1283.D
Level 3	STDA9 240-107557/12	UXM1282.D
Level 4	STDA9 240-107557/11	UXM1281.D
Level 5	STDA9 240-107557/10	UXM1280.D
Level 6	STDA9 240-107557/9	UXM1279.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acetonitrile	0.0265 0.0267	0.0294	0.0307	0.0275	0.0239	Ave		0.0275				8.7		15.0			
Diisopropyl ether	0.2001 0.2245	0.2047	0.2297	0.2340	0.2126	Ave		0.2176				6.4		15.0			
2-Chloro-1,3-butadiene	0.4050 0.5096	0.4021	0.4962	0.5142	0.4528	Ave		0.4633				11.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.7254 0.8245	0.7204	0.8026	0.7942	0.7325	Ave		0.7666				6.0		15.0			
Propionitrile	0.0235 0.0272	0.0280	0.0302	0.0270	0.0240	Ave		0.0266				9.4		15.0			
Ethyl acetate	0.1690 0.1855	0.1942	0.1994	0.1764	0.1574	Ave		0.1803				8.8		15.0			
Methacrylonitrile	0.1236 0.1528	0.1517	0.1635	0.1462	0.1322	Ave		0.1450				10.0		15.0			
Tert-amyl-methyl ether (TAME)	0.4983 0.6233	0.5033	0.5744	0.5703	0.5317	Ave		0.5502				8.7		15.0			
n-Butanol	0.0055 0.0054	0.0065	0.0059	0.0049	0.0047	Ave		0.0055				12.0		15.0			
Ethyl acrylate	0.1979 0.2563	0.2224	0.2520	0.2325	0.2160	Ave		0.2295				9.7		15.0			
Methyl methacrylate	0.1721 0.2159	0.1912	0.2199	0.2021	0.1851	Ave		0.1977				9.3		15.0			
2-Nitropropane	0.0322 0.0486	0.0381	0.0416	0.0405	0.0383	Ave		0.0399				13.0		15.0			
Cyclohexanone	0.0199 0.0150	0.0202	0.0175	0.0150	0.0138	Lin1	0.0812	0.0146							0.9970		0.9900
Pentachloroethane	0.1352 0.2263	0.1709	0.1923	0.2050	0.2020	Lin1	-0.207	0.2174							0.9970		0.9900
1,2,3-Trimethylbenzene	2.4431 3.0960	2.5537	2.8436	2.9162	2.6932	Ave		2.7576				8.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 107557

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2013 13:49 Calibration End Date: 10/29/2013 15:41 Calibration ID: 18532

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Benzyl chloride	0.0769 0.2424	0.1217	0.1606	0.1779	0.1890	Qua	0.0127	0.1433	0.0010						1.0000		0.9900
1,3,5-Trichlorobenzene	1.0398 1.1846	1.0689	1.1276	1.1411	1.0074	Ave		1.0949				6.1		15.0			
2-Methylnaphthalene	0.9282 0.9691	1.1924	1.0938	1.0404	0.9572	Ave		1.0302				9.7		15.0			
n-Butyl acetate	0.3117 0.2967	0.3284	0.3095	0.2806	0.2588	Ave		0.2976				8.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab File ID: BFB3575.D BFB Injection Date: 10/31/2013

Instrument ID: A3UX16 BFB Injection Time: 08:47

Analysis Batch No.: 107835

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.5	
75	30.0 - 60.0 % of mass 95	48.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.3	(0.4)1
174	50.0 - 120.00 % of mass 95	84.8	
175	5.0 - 9.0 % of mass 174	6.2	(7.3)1
176	95.0 - 101.0 % of mass 174	84.0	(99.1)1
177	5.0 - 9.0 % of mass 176	4.8	(5.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-107835/3	UXM1335.D	10/31/2013	09:33
	CCVIS 240-107835/2	UXM1336.D	10/31/2013	10:01
	LCS 240-107835/4	UXM1337.D	10/31/2013	10:39
	MB 240-107835/5	UXM1338.D	10/31/2013	11:01
MSA-MW51S-102113	240-30485-1	UXM1349.D	10/31/2013	15:47
MSA-MW51I-102113	240-30485-2	UXM1350.D	10/31/2013	16:09
MSA-MW51D-102113	240-30485-3	UXM1351.D	10/31/2013	16:31
MSA-MW50D-102113	240-30485-4	UXM1352.D	10/31/2013	16:53
TB-102113	240-30485-6	UXM1353.D	10/31/2013	17:16
MSA-MW44S-102113	240-30485-5	UXM1354.D	10/31/2013	17:38
MSA-DUP01-102113	240-30485-7	UXM1355.D	10/31/2013	18:00
	240-30484-B-1 MS	UXM1359.D	10/31/2013	19:29
	240-30484-B-1 MSD	UXM1360.D	10/31/2013	19:51

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCVIS 240-107835/2 Calibration Date: 10/31/2013 10:01

Instrument ID: A3UX16 Calib Start Date: 10/29/2013 11:14

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/29/2013 13:27

Lab File ID: UXM1336.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.3051		1.00	0.0250	-3.4	50.0
Chloromethane	Ave	0.4224	0.3802	0.1000	1.00	0.0250	-10.0	50.0
Vinyl chloride	Ave	0.3135	0.3014		1.00	0.0250	-3.9	20.0
Bromomethane	Ave	0.1718	0.1566		1.00	0.0250	-8.8	50.0
Chloroethane	Ave	0.1879	0.1774		1.00	0.0250	-5.6	50.0
Dichlorofluoromethane	Ave	0.4199	0.3931		2.00	0.0250	-6.4	50.0
Trichlorofluoromethane	Lin1		0.3795		1.00	0.0250	-4.7	50.0
Ethyl ether	Ave	0.2228	0.1893		2.00	0.0250	-15.1	50.0
Acrolein	Qua		0.0109		20.0	0.125	87.9*	50.0
1,1-Dichloroethene	Ave	0.2307	0.2000		1.00	0.0250	-13.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1832		1.00	0.0250	-13.5	50.0
Acetone	Lin1		0.0767		10.0	0.0500	0.6	50.0
Iodomethane	Ave	0.4113	0.3358		1.00	0.0250	-18.4	50.0
Carbon disulfide	Ave	0.7355	0.5875		1.00	0.0250	-20.1	50.0
3-Chloro-1-propene	Ave	0.1478	0.1349		2.00	0.0250	-8.7	50.0
Methyl acetate	Ave	0.1788	0.1765		10.0	0.125	-1.3	50.0
Methylene Chloride	Lin1		0.2506		1.00	0.0250	-26.0	50.0
tert-Butyl alcohol	Ave	0.0199	0.0205		50.0	0.250	4.8	50.0
Acrylonitrile	Ave	0.0778	0.0778		20.0	0.250	0.0	50.0
Methyl tert-butyl ether	Ave	0.6048	0.5773		1.00	0.0250	-4.6	50.0
trans-1,2-Dichloroethene	Ave	0.2747	0.2527		1.00	0.0250	-8.0	50.0
Hexane	Ave	0.0723	0.0682		1.00	0.0250	-5.7	20.0
1,1-Dichloroethane	Ave	0.5000	0.4641	0.1000	1.00	0.0250	-7.2	50.0
Vinyl acetate	Ave	0.3457	0.3402		2.00	0.0240	-1.6	50.0
2-Butanone	Ave	0.1035	0.1142		10.0	0.0500	10.3	50.0
2,2-Dichloropropane	Ave	0.3048	0.3004		1.00	0.0250	-1.5	50.0
cis-1,2-Dichloroethene	Ave	0.2880	0.2698		1.00	0.0250	-6.3	50.0
Bromochloromethane	Ave	0.1283	0.1253		1.00	0.0250	-2.3	50.0
Tetrahydrofuran	Lin1		0.0736		5.00	0.0500	5.7	50.0
Chloroform	Ave	0.4341	0.4177		1.00	0.0250	-3.8	20.0
1,1,1-Trichloroethane	Ave	0.3623	0.3712		1.00	0.0250	2.4	50.0
Cyclohexane	Lin1		0.5169		1.00	0.0250	-8.8	50.0
1,1-Dichloropropene	Ave	0.3199	0.3303		1.00	0.0250	3.2	50.0
Carbon tetrachloride	Lin1		0.3303		1.00	0.0250	-4.8	50.0
Isobutyl alcohol	Ave	0.0086	0.0090		50.0	0.625	4.8	50.0
1,2-Dichloroethane	Ave	0.3240	0.3204		1.00	0.0250	-1.1	50.0
Benzene	Ave	1.065	1.019		1.00	0.0250	-4.3	50.0
n-Heptane	Lin1		0.0930		1.00	0.0250	-4.2	50.0
Trichloroethene	Ave	0.2908	0.2927		1.00	0.0250	0.7	50.0
1,2-Dichloropropane	Ave	0.2616	0.2534		1.00	0.0250	-3.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCVIS 240-107835/2 Calibration Date: 10/31/2013 10:01

Instrument ID: A3UX16 Calib Start Date: 10/29/2013 11:14

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/29/2013 13:27

Lab File ID: UXM1336.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin1		0.4768		1.00	0.0250	-4.7	50.0
Dibromomethane	Ave	0.1170	0.1188		1.00	0.0250	1.5	50.0
1,4-Dioxane	Lin1		0.0018		50.0	0.500	2.1	50.0
Bromodichloromethane	Ave	0.2910	0.2975		1.00	0.0250	2.2	50.0
2-Chloroethyl vinyl ether	Qua		0.0647		10.0	0.0500	4.9	50.0
cis-1,3-Dichloropropene	Ave	0.3374	0.3494		1.00	0.0250	3.6	50.0
4-Methyl-2-pentanone	Ave	0.2141	0.2380		10.0	0.0500	11.2	50.0
Toluene	Ave	1.682	1.528		1.00	0.0250	-9.1	20.0
trans-1,3-Dichloropropene	Ave	0.3758	0.4009		1.00	0.0250	6.7	50.0
Ethyl methacrylate	Ave	0.3077	0.3536		1.00	0.0250	14.9	50.0
1,1,2-Trichloroethane	Ave	0.2634	0.2506		1.00	0.0250	-4.8	50.0
1,3-Dichloropropane	Ave	0.4398	0.4468		1.00	0.0250	1.6	50.0
Tetrachloroethene	Ave	0.3083	0.3266		1.00	0.0250	5.9	50.0
2-Hexanone	Ave	0.2193	0.2416		10.0	0.0500	10.2	50.0
Dibromochloromethane	Ave	0.2711	0.2900		1.00	0.0250	7.0	50.0
1,2-Dibromoethane	Ave	0.2310	0.2390		1.00	0.0250	3.4	50.0
Chlorobenzene	Ave	1.060	1.026	0.3000	1.00	0.0250	-3.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3366	0.3454		1.00	0.0250	2.6	50.0
Ethylbenzene	Ave	0.5629	0.5739		1.00	0.0250	2.0	20.0
m-Xylene & p-Xylene	Ave	0.6985	0.7107		2.00	0.0250	1.8	50.0
o-Xylene	Ave	0.6776	0.6825		1.00	0.0250	0.7	50.0
Styrene	Ave	1.059	1.086		1.00	0.0250	2.6	50.0
Bromoform	Lin1		0.1609	0.1000	1.00	0.0250	-3.3	50.0
Isopropylbenzene	Ave	1.736	1.867		1.00	0.0250	7.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5489	0.5236	0.3000	1.00	0.0250	-4.6	50.0
Bromobenzene	Ave	0.7937	0.7450		1.00	0.0250	-6.1	50.0
1,2,3-Trichloropropane	Ave	0.1848	0.1715		1.00	0.0250	-7.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1661	0.1656		1.00	0.0250	-0.3	50.0
n-Propylbenzene	Ave	0.9304	0.9234		1.00	0.0250	-0.8	50.0
2-Chlorotoluene	Ave	0.7971	0.7496		1.00	0.0250	-5.9	50.0
1,3,5-Trimethylbenzene	Ave	2.706	2.679		1.00	0.0250	-1.0	50.0
4-Chlorotoluene	Ave	0.8475	0.8007		1.00	0.0250	-5.5	50.0
tert-Butylbenzene	Ave	2.466	2.509		1.00	0.0250	1.7	50.0
1,2,4-Trimethylbenzene	Ave	2.793	2.759		1.00	0.0250	-1.2	50.0
sec-Butylbenzene	Ave	3.437	3.561		1.00	0.0250	3.6	50.0
1,3-Dichlorobenzene	Ave	1.625	1.522		1.00	0.0250	-6.3	50.0
p-Isopropyltoluene	Ave	3.086	3.220		0.0261	0.0250	4.4	50.0
1,4-Dichlorobenzene	Ave	1.670	1.538		1.00	0.0250	-7.9	50.0
n-Butylbenzene	Ave	2.441	2.599		1.00	0.0250	6.5	50.0
1,2-Dichlorobenzene	Ave	1.492	1.377		1.00	0.0250	-7.7	50.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0890		2.00	0.0250	2.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCVIS 240-107835/2 Calibration Date: 10/31/2013 10:01

Instrument ID: A3UX16 Calib Start Date: 10/29/2013 11:14

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/29/2013 13:27

Lab File ID: UXM1336.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Ave	0.8524	0.8650		1.00	0.0250	1.5	50.0
Hexachlorobutadiene	Ave	0.4363	0.4734		1.00	0.0250	8.5	50.0
Naphthalene	Ave	1.626	1.647		1.00	0.0250	1.3	50.0
1,2,3-Trichlorobenzene	Ave	0.7542	0.7546		1.00	0.0250	0.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2267	0.2056		0.0259	0.0285	-9.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2646	0.2333		0.0251	0.0285	-11.8	50.0
Toluene-d8 (Surr)	Ave	1.341	1.243		0.0264	0.0285	-7.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4662	0.4140		0.0253	0.0285	-11.2	50.0

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Sample No.: STD8260 240-107557/4 Date Analyzed: 10/29/2013 11:59

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM1274.D Heated Purge: (Y/N) N

Calibration ID: 18529

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1776552	5.60	1208724	8.30	651698	10.53
UPPER LIMIT		3553104	6.10	2417448	8.80	1303396	11.03
LOWER LIMIT		888276	5.10	604362	7.80	325849	10.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-107557/16		1763388	5.60	1204749	8.30	660326	10.53
CCVIS 240-107835/2		1833178	5.60	1284900	8.30	740357	10.53

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Sample No.: CCVIS 240-107835/2 Date Analyzed: 10/31/2013 10:01

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM1336.D Heated Purge: (Y/N) N

Calibration ID: 18532

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1833178	5.60	1284900	8.30	740357	10.53
UPPER LIMIT		3666356	6.10	2569800	8.80	1480714	11.03
LOWER LIMIT		916589	5.10	642450	7.80	370179	10.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-107835/4		1821514	5.60	1256427	8.29	682214	10.53
MB 240-107835/5		1503752	5.60	1038359	8.30	518220	10.53
240-30485-1	MSA-MW51S-102113	1355126	5.60	976468	8.30	503565	10.53
240-30485-2	MSA-MW51I-102113	1506442	5.60	1056501	8.30	549070	10.53
240-30485-3	MSA-MW51D-102113	1376746	5.59	966801	8.30	501985	10.53
240-30485-4	MSA-MW50D-102113	1319437	5.60	928723	8.30	486398	10.53
240-30485-6	TB-102113	1361908	5.60	949036	8.30	496436	10.53
240-30485-5	MSA-MW44S-102113	1334671	5.59	949661	8.30	495157	10.53
240-30485-7	MSA-DUP01-102113	1293526	5.60	911645	8.30	472191	10.53
240-30484-B-1 MS		1627194	5.60	1135174	8.30	635414	10.53
240-30484-B-1 MSD		1581688	5.59	1084241	8.30	607797	10.53

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab File ID: 31028003.D Lab Sample ID: MB 240-106706/21-A

Matrix: Water Date Extracted: 10/23/2013 08:25

Instrument ID: A4HP7 Date Analyzed: 10/28/2013 09:41

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-106706/22-A	31028004.D	10/28/2013 10:06
MSA-MW50D-102113	240-30485-4	31028009.D	10/28/2013 12:11
MSA-MW51I-102113	240-30485-2	31028010.D	10/28/2013 12:37
MSA-MW51D-102113	240-30485-3	31028011.D	10/28/2013 13:02
MSA-MW51S-102113	240-30485-1	31028012.D	10/28/2013 13:27
MSA-MW44S-102113	240-30485-5	31028024.D	10/28/2013 18:30
MSA-DUP01-102113	240-30485-7	31028025.D	10/28/2013 18:55

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-106706/21-A

Matrix: Water | Lab File ID: 31028003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 1000(mL) | Date Analyzed: 10/28/2013 09:41

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.0	U	1.0	0.13
123-91-1	1,4-Dioxane	1.0	U	1.0	0.49
88-06-2	2,4,6-Trichlorophenol	5.0	U	5.0	0.24
95-95-4	2,4,5-Trichlorophenol	5.0	U	5.0	0.30
120-83-2	2,4-Dichlorophenol	2.0	U	2.0	0.19
105-67-9	2,4-Dimethylphenol	2.0	U	2.0	0.25
51-28-5	2,4-Dinitrophenol	5.0	U	5.0	0.32
121-14-2	2,4-Dinitrotoluene	5.0	U	5.0	0.25
91-58-7	2-Chloronaphthalene	1.0	U	1.0	0.10
95-57-8	2-Chlorophenol	1.0	U	1.0	0.29
91-57-6	2-Methylnaphthalene	0.20	U	0.20	0.090
95-48-7	2-Methylphenol	1.0	U	1.0	0.17
88-74-4	2-Nitroaniline	2.0	U	2.0	0.21
88-75-5	2-Nitrophenol	2.0	U	2.0	0.28
15831-10-4	3 & 4 Methylphenol	2.0	U	2.0	0.80
91-94-1	3,3'-Dichlorobenzidine	5.0	U	5.0	0.37
99-09-2	3-Nitroaniline	2.0	U	2.0	0.28
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	5.0	2.4
101-55-3	4-Bromophenyl phenyl ether	2.0	U	2.0	0.22
59-50-7	4-Chloro-3-methylphenol	2.0	U	2.0	0.21
106-47-8	4-Chloroaniline	2.0	U	2.0	0.21
7005-72-3	4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30
100-01-6	4-Nitroaniline	2.0	U	2.0	0.22
83-32-9	Acenaphthene	0.20	U	0.20	0.044
208-96-8	Acenaphthylene	0.20	U	0.20	0.048
98-86-2	Acetophenone	1.0	U	1.0	0.34
120-12-7	Anthracene	0.20	U	0.20	0.088
1912-24-9	Atrazine	1.0	U	1.0	0.34
100-52-7	Benzaldehyde	1.0	U	1.0	0.39
56-55-3	Benzo[a]anthracene	0.20	U	0.20	0.030
50-32-8	Benzo[a]pyrene	0.20	U	0.20	0.051
205-99-2	Benzo[b]fluoranthene	0.20	U	0.20	0.039
191-24-2	Benzo[g,h,i]perylene	0.20	U	0.20	0.046
207-08-9	Benzo[k]fluoranthene	0.20	U	0.20	0.045

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-106706/21-A

Matrix: Water | Lab File ID: 31028003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 1000(mL) | Date Analyzed: 10/28/2013 09:41

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.0	U	1.0	0.32
111-44-4	Bis(2-chloroethyl)ether	1.0	U	1.0	0.10
117-81-7	Bis(2-ethylhexyl) phthalate	0.281	J	2.0	0.22
85-68-7	Butyl benzyl phthalate	2.0	U	2.0	0.26
105-60-2	Caprolactam	5.0	U	5.0	0.20
86-74-8	Carbazole	1.0	U	1.0	0.28
218-01-9	Chrysene	0.20	U	0.20	0.050
84-74-2	Di-n-butyl phthalate	2.0	U	2.0	0.67
117-84-0	Di-n-octyl phthalate	2.0	U	2.0	0.23
53-70-3	Dibenzo(a,h)anthracene	0.20	U	0.20	0.045
132-64-9	Dibenzofuran	1.0	U	1.0	0.020
84-66-2	Diethyl phthalate	2.0	U	2.0	0.60
131-11-3	Dimethyl phthalate	2.0	U	2.0	0.29
206-44-0	Fluoranthene	0.20	U	0.20	0.045
86-73-7	Fluorene	0.20	U	0.20	0.041
118-74-1	Hexachlorobenzene	0.20	U	0.20	0.085
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.27
77-47-4	Hexachlorocyclopentadiene	10	U	10	0.24
67-72-1	Hexachloroethane	1.0	U	1.0	0.19
193-39-5	Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.043
78-59-1	Isophorone	1.0	U	1.0	0.27
621-64-7	N-Nitrosodi-n-propylamine	1.0	U	1.0	0.24
62-75-9	N-Nitrosodimethylamine	1.0	U	1.0	0.31
86-30-6	N-Nitrosodiphenylamine	1.0	U	1.0	0.31
91-20-3	Naphthalene	0.20	U	0.20	0.063
98-95-3	Nitrobenzene	1.0	U	1.0	0.040
87-86-5	Pentachlorophenol	5.0	U	5.0	0.27
85-01-8	Phenanthrene	0.20	U	0.20	0.062
108-95-2	Phenol	1.0	U	1.0	0.60
129-00-0	Pyrene	0.20	U	0.20	0.042
108-60-1	2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.40
606-20-2	2,6-Dinitrotoluene	5.0	U	5.0	0.80
100-02-7	4-Nitrophenol	5.0	U	5.0	0.29

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-106706/21-A

Matrix: Water | Lab File ID: 31028003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/23/2013 08:25

Sample wt/vol: 1000(mL) | Date Analyzed: 10/28/2013 09:41

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107326 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	81		24-110
4165-62-2	Phenol-d5 (Surr)	70		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	62		21-110
367-12-4	2-Fluorophenol (Surr)	67		10-110
321-60-8	2-Fluorobiphenyl (Surr)	65		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	74		21-110

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 31028004.D

Lab ID: LCS 240-106706/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	20.0	13.7	68	43-110	
1,4-Dioxane	20.0	9.85	49	27-110	
2,4,6-Trichlorophenol	20.0	14.9	74	45-110	
2,4,5-Trichlorophenol	20.0	14.9	75	48-110	
2,4-Dichlorophenol	20.0	14.8	74	41-110	
2,4-Dimethylphenol	20.0	12.7	63	32-110	
2,4-Dinitrophenol	40.0	23.9	60	10-110	
2,4-Dinitrotoluene	20.0	15.5	77	53-110	
2-Chloronaphthalene	20.0	13.8	69	43-110	
2-Chlorophenol	20.0	14.3	72	29-110	
2-Methylnaphthalene	20.0	14.1	71	45-110	
2-Methylphenol	20.0	13.7	68	42-110	
2-Nitroaniline	20.0	16.1	81	54-110	
2-Nitrophenol	20.0	15.5	78	40-110	
3 & 4 Methylphenol	20.0	13.2	66	44-110	
3,3'-Dichlorobenzidine	40.0	29.3	73	22-110	
3-Nitroaniline	20.0	15.4	77	53-110	
4,6-Dinitro-2-methylphenol	40.0	25.0	63	31-110	
4-Bromophenyl phenyl ether	20.0	15.0	75	45-110	
4-Chloro-3-methylphenol	20.0	15.4	77	52-110	
4-Chloroaniline	20.0	12.8	64	44-110	
4-Chlorophenyl phenyl ether	20.0	15.0	75	47-110	
4-Nitroaniline	20.0	15.0	75	54-110	
Acenaphthene	20.0	14.1	71	47-110	
Acenaphthylene	20.0	13.0	65	49-110	
Acetophenone	20.0	14.6	73	46-110	
Anthracene	20.0	14.2	71	52-110	
Atrazine	40.0	27.8	70	66-126	
Benzaldehyde	40.0	29.7	74	38-110	
Benzo[a]anthracene	20.0	14.3	71	52-110	
Benzo[a]pyrene	20.0	13.8	69	44-110	
Benzo[b]fluoranthene	20.0	14.5	72	48-110	
Benzo[g,h,i]perylene	20.0	15.0	75	50-110	
Benzo[k]fluoranthene	20.0	15.0	75	49-110	
Bis(2-chloroethoxy)methane	20.0	15.2	76	43-110	
Bis(2-chloroethyl)ether	20.0	14.2	71	40-110	
Bis(2-ethylhexyl) phthalate	20.0	14.5	72	39-116	
Butyl benzyl phthalate	20.0	14.8	74	55-110	
Caprolactam	40.0	22.8	57	45-111	
Carbazole	20.0	14.4	72	55-110	
Chrysene	20.0	14.4	72	55-110	
Di-n-butyl phthalate	20.0	15.4	77	57-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 31028004.D

Lab ID: LCS 240-106706/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	20.0	14.7	74	40-110	
Dibenzo(a,h)anthracene	20.0	14.8	74	49-110	
Dibenzofuran	20.0	14.2	71	51-110	
Diethyl phthalate	20.0	15.6	78	58-110	
Dimethyl phthalate	20.0	15.1	76	57-110	
Fluoranthene	20.0	14.5	72	54-110	
Fluorene	20.0	14.2	71	52-110	
Hexachlorobenzene	20.0	14.6	73	50-110	
Hexachlorobutadiene	20.0	12.7	64	33-110	
Hexachlorocyclopentadiene	20.0	5.24 J	26	4-110	
Hexachloroethane	20.0	12.7	64	35-110	
Indeno[1,2,3-cd]pyrene	20.0	14.7	74	50-110	
Isophorone	20.0	14.2	71	49-110	
N-Nitrosodi-n-propylamine	20.0	15.0	75	47-110	
N-Nitrosodimethylamine	20.0	12.5	62	40-110	
N-Nitrosodiphenylamine	40.0	29.6	74	50-110	
Naphthalene	20.0	13.8	69	44-110	
Nitrobenzene	20.0	15.7	79	42-110	
Pentachlorophenol	40.0	22.4	56	18-110	
Phenanthrene	20.0	14.4	72	53-110	
Phenol	20.0	11.0	55	33-110	
Pyrene	20.0	15.0	75	52-110	
2,2'-oxybis[1-chloropropane]	20.0	14.5	73	37-110	
2,6-Dinitrotoluene	20.0	15.4	77	54-110	
4-Nitrophenol	40.0	23.4	58	33-112	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MSA-MW51S-102113	240-30485-1	60	67	60	64	89	85
MSA-MW51I-102113	240-30485-2	60	65	58	62	80	80
MSA-MW51D-102113	240-30485-3	60	65	58	59	83	83
MSA-MW50D-102113	240-30485-4	74	78	75	76	89	94
MSA-MW44S-102113	240-30485-5	62	69	62	71	86	78
MSA-DUP01-102113	240-30485-7	64	69	61	70	78	71
	MB 240-106706/21-A	67	70	62	65	74	81
	LCS 240-106706/22-A	63	57	74	73	87	85

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-110
PHL = Phenol-d5 (Surr)	21-110
NBZ = Nitrobenzene-d5 (Surr)	21-110
FBP = 2-Fluorobiphenyl (Surr)	20-110
TBP = 2,4,6-Tribromophenol (Surr)	21-110
TPH = Terphenyl-d14 (Surr)	24-110

Column to be used to flag recovery values

FORM II 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab File ID: 31021001.D DFTPP Injection Date: 10/21/2013

Instrument ID: A4HP7 DFTPP Injection Time: 14:48

Analysis Batch No.: 106341

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	41.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	46.6	
70	Less than 2.0% of mass 69	0.3	(0.7)1
127	25.0 - 75.0% of mass 198	50.3	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.3	
275	10.0- 30.0% of mass 198	27.4	
365	Greater than 0.75% of mass 198	3.2	
441	Present, but less than mass 443	9.5	
442	40.0 - 110.0% of mass 198	61.3	
443	15.0 - 24.0% of mass 442	12.2	(20.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-106341/2	31021002.D	10/21/2013	15:11
	STD4 240-106341/3	31021003.D	10/21/2013	15:37
	STD3 240-106341/4	31021004.D	10/21/2013	16:03
	STD2 240-106341/5	31021005.D	10/21/2013	16:29
	STD1 240-106341/6	31021006.D	10/21/2013	16:54
	STD9 240-106341/7	31021007.D	10/21/2013	17:20
	STD8 240-106341/8	31021008.D	10/21/2013	17:46
	STD7 240-106341/9	31021009.D	10/21/2013	18:12
	STD6 240-106341/10	31021010.D	10/21/2013	18:37
	ICV 240-106341/11	31021011.D	10/21/2013	19:03

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-106341/6	31021006.D
Level 2	STD2 240-106341/5	31021005.D
Level 3	STD3 240-106341/4	31021004.D
Level 4	STD4 240-106341/3	31021003.D
Level 5	STD5 240-106341/2	31021002.D
Level 6	STD6 240-106341/10	31021010.D
Level 7	STD7 240-106341/9	31021009.D
Level 8	STD8 240-106341/8	31021008.D
Level 9	STD9 240-106341/7	31021007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5108	0.5510 0.4571	0.5028 0.4815	0.4783 0.4944	0.5117	Ave		0.4985				5.6		20.0			
N-Nitrosodimethylamine	0.7869	0.6560 0.7747	0.6526 0.7737	0.7126 0.7880	0.6639	Ave		0.7261				8.5		20.0			
Pyridine	1.3613	1.2783 1.2478	1.2113 1.3741	1.3268 1.2991	1.3296	Ave		1.3035				4.3		20.0			
Benzaldehyde	1.2354 1.2301	1.1874 1.2141	1.2463 1.1927	1.2223 1.1549	1.2110	Ave		1.2105			0.0100	2.3		20.0			
Phenol	1.6513	1.5783 1.6093	1.7397 1.5932	1.5695 1.6099	1.5718	Ave		1.6154			0.8000	3.5		20.0			
Aniline	2.1142	1.9597 2.0467	2.0428 2.0696	1.9776 2.0792	2.0320	Ave		2.0402				2.5		20.0			
Bis(2-chloroethyl)ether	1.3159	1.3419 1.3156	1.3217 1.3119	1.3002 1.2992	1.2495	Ave		1.3070			0.7000	2.0		20.0			
2-Chlorophenol	1.2614	1.0929 1.2361	1.1871 1.2518	1.2114 1.2578	1.2254	Ave		1.2155			0.8000	4.6		20.0			
1,3-Dichlorobenzene	1.3482	1.2793 1.3322	1.3280 1.3712	1.3208 1.3766	1.3005	Ave		1.3321				2.5		20.0			
1,4-Dichlorobenzene	1.3686	1.3151 1.3684	1.3635 1.4048	1.3621 1.3968	1.4006	Ave		1.3725				2.1		20.0			
Benzyl alcohol	0.8714	0.8997 0.8475	0.8585 0.8740	0.8325 0.8553	0.8229	Ave		0.8577				2.8		20.0			
1,2-Dichlorobenzene	1.3099	1.2428 1.2793	1.2616 1.3242	1.2571 1.3290	1.2881	Ave		1.2865				2.5		20.0			
2-Methylphenol	1.2032	1.0619 1.2057	1.1665 1.1941	1.1563 1.1966	1.1736	Ave		1.1698			0.7000	4.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,2'-oxybis[1-chloropropane]	1.3679	1.4117 1.3414	1.3367 1.3314	1.3484 1.3263	1.3129	Ave		1.3471				2.3		20.0			
Indene	2.3252	2.2034 2.3674	2.2250 2.3928	2.1874 2.4447	2.2482	Ave		2.2993				4.2		20.0			
3 & 4 Methylphenol	1.2721	1.1475 1.2572	1.2429 1.2623	1.2242 1.2936	1.2278	Ave		1.2409				3.6		20.0			
N-Nitrosodi-n-propylamine	1.0783	0.9950 1.0453	1.0354 1.0643	1.0312 1.0721	1.0101	Ave		1.0415			0.5000	2.8		20.0			
Acetophenone	2.0271	1.9458 1.9833	1.9828 2.0164	1.9751 2.0322	1.9440	Ave		1.9883			0.0100	1.7		20.0			
Hexachloroethane	0.6038	0.5063 0.5955	0.5463 0.6026	0.5793 0.6063	0.5827	Ave		0.5778			0.3000	6.0		20.0			
Nitrobenzene	0.3892	0.3590 0.4130	0.4052 0.4014	0.3910 0.4000	0.3716	Ave		0.3913			0.2000	4.6		20.0			
Isophorone	0.6593	0.6133 0.6915	0.6470 0.6700	0.6454 0.6809	0.6228	Ave		0.6538			0.4000	4.2		20.0			
2,4-Dimethylphenol	0.3409	0.3511 0.3587	0.3437 0.3541	0.3528 0.3540	0.3353	Ave		0.3488			0.2000	2.3		20.0			
2-Nitrophenol	0.1643	0.1247 0.1767	0.1533 0.1757	0.1532 0.1784	0.1519	Ave		0.1598			0.1000	11.0		20.0			
Benzoic acid	0.1664	+++++ 0.1900	0.0867 0.1948	0.1111 0.1938	0.1308	Lin1	-0.305	0.1959							0.9940		0.9900
Bis(2-chloroethoxy)methane	0.3696	0.3415 0.3765	0.3586 0.3737	0.3615 0.3817	0.3514	Ave		0.3643			0.3000	3.7		20.0			
2,4-Dichlorophenol	0.2482	0.2434 0.2636	0.2447 0.2636	0.2508 0.2646	0.2514	Ave		0.2538			0.2000	3.5		20.0			
1,2,4-Trichlorobenzene	0.2813	0.2866 0.3039	0.2813 0.2994	0.2836 0.3076	0.2817	Ave		0.2907				3.8		20.0			
Naphthalene	1.0051 0.8975	0.8657 0.9544	0.8773 0.9781	0.9085 0.9761	0.8835	Ave		0.9274			0.7000	5.6		20.0			
4-Chloroaniline	0.4156	0.4091 0.4051	0.4039 0.4052	0.4098 0.4088	0.3858	Ave		0.4054			0.0100	2.2		20.0			
Hexachlorobutadiene	0.1933	0.1691 0.1971	0.1863 0.1941	0.1990 0.2018	0.1821	Ave		0.1904			0.0100	5.7		20.0			
Caprolactam	0.0850	0.0819 0.0818	0.0944 0.0791	0.0896 0.0793	0.0917	Ave		0.0853			0.0100	6.9		20.0			
4-Chloro-3-methylphenol	0.3153	0.2904 0.3331	0.3107 0.3327	0.3162 0.3361	0.3074	Ave		0.3177			0.2000	4.9		20.0			
2-Methylnaphthalene	0.6344 0.6149	0.5663 0.6395	0.6216 0.6447	0.6228 0.6702	0.5791	Ave		0.6215			0.4000	5.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.5681 0.5773	0.5232 0.6046	0.5576 0.6007	0.5815 0.6214	0.5425	Ave		0.5752				5.4		20.0			
Hexachlorocyclopentadiene	0.3620	0.3191 0.3859	0.3319 0.3897	0.3260 0.4115	0.3543	Ave		0.3601			0.0500	9.3		20.0			
1,2,4,5-Tetrachlorobenzene	0.5034	0.5159 0.5238	0.4799 0.5203	0.4912 0.5446	0.5031	Ave		0.5103			0.0100	4.0		20.0			
2,4,6-Trichlorophenol	0.3179	0.2803 0.3325	0.3269 0.3336	0.3021 0.3504	0.3064	Ave		0.3188			0.2000	6.9		20.0			
2,4,5-Trichlorophenol	0.3374	0.2724 0.3492	0.3273 0.3471	0.3170 0.3584	0.3335	Ave		0.3303			0.2000	8.1		20.0			
1,1'-Biphenyl	1.2992 1.2803	1.2251 1.3398	1.2753 1.3418	1.2483 1.4062	1.2443	Ave		1.2956			0.0100	4.5		20.0			
2-Chloronaphthalene	1.0067 0.9649	0.9516 1.0056	0.9709 1.0054	0.9620 1.0454	0.9461	Ave		0.9843			0.8000	3.4		20.0			
2-Nitroaniline	0.3892	0.3112 0.3829	0.3444 0.3776	0.3524 0.3840	0.3482	Ave		0.3612			0.0100	7.5		20.0			
Dimethyl phthalate	1.1509	1.1101 1.1519	1.1344 1.1221	1.1241 1.1832	1.1163	Ave		1.1366			0.0100	2.1		20.0			
1,3-Dinitrobenzene	0.1872	0.1403 0.1865	0.1664 0.1891	0.1615 0.1958	0.1749	Ave		0.1752				11.0		20.0			
2,6-Dinitrotoluene	0.2611	0.2159 0.2601	0.2520 0.2555	0.2428 0.2641	0.2415	Ave		0.2491				6.3		20.0			
Acenaphthylene	1.6339 1.5169	1.3808 1.5885	1.5093 1.6037	1.5111 1.6860	1.4715	Ave		1.5446			0.9000	6.0		20.0			
3-Nitroaniline	0.2564	0.2196 0.2601	0.2684 0.2665	0.2624 0.2769	0.2673	Ave		0.2597			0.0100	6.7		20.0			
2,4-Dinitrophenol	0.1776	+++++ 0.1910	0.1214 0.1963	0.1231 0.2115	0.1531	Lin1	-0.257	0.2037			0.0100				0.9950		0.9900
Acenaphthene	1.0073 1.0240	0.9435 1.0696	1.0212 1.0903	0.9803 1.1475	0.9906	Ave		1.0305			0.9000	6.1		20.0			
4-Nitrophenol	0.2684	0.2209 0.2760	0.2406 0.2715	0.2398 0.2876	0.2421	Ave		0.2559				9.0		20.0			
2,4-Dinitrotoluene	0.3452	0.3049 0.3426	0.3565 0.3488	0.3366 0.3635	0.3370	Ave		0.3419			0.2000	5.1		20.0			
Dibenzofuran	1.5411 1.3758	1.3837 1.4617	1.4104 1.4384	1.3860 1.5200	1.3399	Ave		1.4286			0.8000	4.8		20.0			
2,3,4,6-Tetrachlorophenol	0.2790	0.2645 0.2901	0.3022 0.2890	0.2738 0.3125	0.2811	Ave		0.2865			0.0100	5.4		20.0			
Diethyl phthalate	1.1064	1.1335 1.1660	1.1661 1.1751	1.1473 1.2438	1.1382	Ave		1.1595			0.0100	3.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chlorophenyl phenyl ether	0.6099	0.5855 0.6358	0.6126 0.6183	0.5770 0.6457	0.5797	Ave		0.6081			0.4000	4.2		20.0			
4-Nitroaniline	0.2697	0.2098 0.2882	0.2544 0.2892	0.2630 0.3097	0.2436	Ave		0.2659			0.0100	12.0		20.0			
Fluorene	1.4828 1.1969	1.0813 1.2299	1.1972 1.2151	1.1462 1.2675	1.1211	Ave		1.2153			0.9000	9.5		20.0			
4,6-Dinitro-2-methylphenol	0.1461	0.0720 0.1570	0.1031 0.1632	0.1117 0.1617	0.1247	Lin1	-0.124	0.1606			0.0100				0.9960		0.9900
N-Nitrosodiphenylamine	0.4978	0.4266 0.5196	0.4501 0.5271	0.4664 0.5303	0.4772	Ave		0.4869			0.0100	7.8		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.8892	0.7234 0.8843	0.7535 0.8411	0.7807 0.8175	0.8051	Ave		0.8108				7.5		20.0			
Azobenzene	0.8892	0.7169 0.8848	0.7513 0.8411	0.7807 0.8175	0.8051	Ave		0.8108				7.5		20.0			
4-Bromophenyl phenyl ether	0.2062	0.1837 0.2018	0.1937 0.2036	0.2031 0.2017	0.1980	Ave		0.1990			0.1000	3.6		20.0			
Hexachlorobenzene	0.2134 0.2064	0.1725 0.2085	0.1975 0.2075	0.2058 0.2073	0.1978	Ave		0.2018			0.1000	6.0		20.0			
Atrazine	0.2119	0.1789 0.2077	0.1855 0.2076	0.1781 0.2055	0.1860	Ave		0.1952			0.0100	7.3		20.0			
Pentachlorophenol	0.1445	0.0890 0.1549	0.1108 0.1650	0.1156 0.1646	0.1290	Lin1	-0.109	0.1612			0.0500				0.9960		0.9900
Phenanthrene	1.0926 0.9572	0.9018 0.9812	0.9099 1.0281	0.9154 1.0351	0.9153	Ave		0.9707			0.7000	7.0		20.0			
Anthracene	1.0129 0.9843	0.9260 1.0341	0.9469 1.0562	0.9777 1.0759	0.9563	Ave		0.9967			0.7000	5.2		20.0			
Carbazole	0.9151	0.7257 0.9824	0.8156 0.9987	0.8403 1.0111	0.8348	Ave		0.8905			0.0100	12.0		20.0			
Di-n-butyl phthalate	1.2334	0.9662 1.2864	1.0311 1.3272	1.0268 1.2612	1.0683	Ave		1.1501			0.0100	12.0		20.0			
Fluoranthene	1.1297 1.1777	0.9129 1.2538	0.9950 1.2955	1.0287 1.3107	1.0406	Ave		1.1272			0.6000	13.0		20.0			
Benzidine	0.4070	0.4067 0.3792	0.3831 0.3618	0.4086 0.3454	0.3762	Ave		0.3835				6.0		20.0			
Pyrene	0.9187 0.8790	0.8505 0.9491	0.8789 0.9638	0.8968 0.9831	0.8560	Ave		0.9084			0.6000	5.3		20.0			
Butyl benzyl phthalate	0.4198	0.3906 0.4339	0.4181 0.4339	0.4204 0.4362	0.4173	Ave		0.4213			0.0100	3.5		20.0			
3,3'-Dichlorobenzidine	0.3331	0.2844 0.3549	0.3132 0.3678	0.3197 0.3807	0.3209	Ave		0.3343			0.0100	9.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Bis(2-ethylhexyl) phthalate	0.6135	0.5493 0.6451	0.6287 0.6481	0.6055 0.6703	0.6147	Ave		0.6219			0.0100	5.9		20.0			
Benzo[a]anthracene	1.0467 0.9256	0.8813 0.9666	0.9602 0.9631	0.9481 0.9763	0.9219	Ave		0.9544			0.8000	4.8		20.0			
Chrysene	0.9181 0.8721	0.8280 0.8943	0.8938 0.9009	0.8994 0.9252	0.8575	Ave		0.8877			0.7000	3.4		20.0			
Di-n-octyl phthalate	1.1818	0.9324 1.2197	1.0653 1.2442	1.0939 1.3038	1.1248	Ave		1.1457			0.0100	10.0		20.0			
Benzo[b]fluoranthene	0.9887 0.9911	0.8540 1.0403	0.9348 1.0343	1.0086 1.0781	0.9437	Ave		0.9860			0.7000	6.8		20.0			
Benzo[k]fluoranthene	1.0157 1.0399	0.9570 1.0805	1.0076 1.1313	1.0081 1.1378	1.0126	Ave		1.0434			0.7000	5.8		20.0			
Benzo[a]pyrene	1.0418 0.9695	0.8867 1.0129	0.9421 1.0234	0.9637 1.0503	0.9240	Ave		0.9794			0.7000	5.8		20.0			
Indeno[1,2,3-cd]pyrene	1.1852 1.1195	1.0009 1.1552	1.0792 1.1595	1.1247 1.1638	1.0744	Ave		1.1180			0.5000	5.2		20.0			
Dibenzo(a,h)anthracene	0.9362 0.9611	0.8406 0.9932	0.8831 1.0160	0.9270 1.0320	0.9154	Ave		0.9450			0.4000	6.6		20.0			
Benzo[g,h,i]perylene	1.0405 0.9338	0.8780 0.9425	0.9099 0.9404	0.9260 0.9404	0.9016	Ave		0.9348			0.5000	4.8		20.0			
2-Fluorophenol (Surr)	1.1744	1.1572 1.1664	1.1978 1.1706	1.2337 1.1505	1.2204	Ave		1.1839				2.6		20.0			
Phenol-d5 (Surr)	1.5745	1.3915 1.5486	1.6151 1.5596	1.5401 1.5459	1.5519	Ave		1.5409				4.2		20.0			
Nitrobenzene-d5 (Surr)	0.4347 0.4285	0.4275 0.4399	0.4220 0.4293	0.4175 0.4273	0.4003	Ave		0.4252				2.7		20.0			
2-Fluorobiphenyl (Surr)	1.2468 1.1375	1.0932 1.1628	1.1165 1.1658	1.0951 1.2245	1.0814	Ave		1.1471				5.1		20.0			
2,4,6-Tribromophenol (Surr)	0.1407	0.1437 0.1504	0.1624 0.1473	0.1428 0.1551	0.1475	Ave		0.1488				4.8		20.0			
Terphenyl-d14 (Surr)	0.8792 0.5822	0.5854 0.6116	0.6016 0.6166	0.5831 0.6282	0.5607	Ave		0.6276				15.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab File ID: 31028001.D DFTPP Injection Date: 10/28/2013

Instrument ID: A4HP7 DFTPP Injection Time: 08:51

Analysis Batch No.: 107326

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	45.0	
68	Less than 2.0% of mass 69	0.9	(1.9)1
69	Mass 69 relative abundance	46.4	
70	Less than 2.0% of mass 69	0.3	(0.7)1
127	25.0 - 75.0% of mass 198	49.3	
197	Less than 1.0% of mass 198	0.3	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.9	
275	10.0- 30.0% of mass 198	27.6	
365	Greater than 0.75% of mass 198	3.8	
441	Present, but less than mass 443	10.7	
442	40.0 - 110.0% of mass 198	69.3	
443	15.0 - 24.0% of mass 442	12.4	(17.9)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-107326/2	31028002.D	10/28/2013	09:16
	MB 240-106706/21-A	31028003.D	10/28/2013	09:41
	LCS 240-106706/22-A	31028004.D	10/28/2013	10:06
MSA-MW50D-102113	240-30485-4	31028009.D	10/28/2013	12:11
MSA-MW51I-102113	240-30485-2	31028010.D	10/28/2013	12:37
MSA-MW51D-102113	240-30485-3	31028011.D	10/28/2013	13:02
MSA-MW51S-102113	240-30485-1	31028012.D	10/28/2013	13:27
MSA-MW44S-102113	240-30485-5	31028024.D	10/28/2013	18:30
MSA-DUP01-102113	240-30485-7	31028025.D	10/28/2013	18:55

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107326/2 Calibration Date: 10/28/2013 09:16

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31028002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4985	0.5420		10.9	10.0	8.7	20.0
N-Nitrosodimethylamine	Ave	0.7261	0.7120		9.81	10.0	-1.9	20.0
Pyridine	Ave	1.304	1.325		10.2	10.0	1.6	20.0
Benzaldehyde	Ave	1.210	1.156	0.0100	19.1	20.0	-4.5	20.0
Phenol	Ave	1.615	1.573	0.8000	9.73	10.0	-2.7	20.0
Aniline	Ave	2.040	1.980		9.71	10.0	-2.9	20.0
Bis(2-chloroethyl)ether	Ave	1.307	1.220	0.7000	9.33	10.0	-6.7	20.0
2-Chlorophenol	Ave	1.215	1.212	0.8000	9.97	10.0	-0.3	20.0
1,3-Dichlorobenzene	Ave	1.332	1.308		9.82	10.0	-1.8	20.0
1,4-Dichlorobenzene	Ave	1.372	1.372		10.0	10.0	-0.0	20.0
Benzyl alcohol	Ave	0.8577	0.7636		8.90	10.0	-11.0	20.0
1,2-Dichlorobenzene	Ave	1.287	1.268		9.86	10.0	-1.4	20.0
2-Methylphenol	Ave	1.170	1.126	0.7000	9.62	10.0	-3.8	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.347	1.300		9.65	10.0	-3.5	20.0
Indene	Ave	2.299	2.268		19.7	20.0	-1.4	20.0
3 & 4 Methylphenol	Ave	1.241	1.227		9.89	10.0	-1.1	20.0
N-Nitrosodi-n-propylamine	Ave	1.041	0.9790	0.5000	9.40	10.0	-6.0	20.0
Acetophenone	Ave	1.988	1.904	0.0100	9.58	10.0	-4.2	20.0
Hexachloroethane	Ave	0.5778	0.5806	0.3000	10.0	10.0	0.5	20.0
Nitrobenzene	Ave	0.3913	0.4065	0.2000	10.4	10.0	3.9	20.0
Isophorone	Ave	0.6538	0.6438	0.4000	9.85	10.0	-1.5	20.0
2,4-Dimethylphenol	Ave	0.3488	0.3552	0.2000	10.2	10.0	1.8	20.0
2-Nitrophenol	Ave	0.1598	0.1713	0.1000	10.7	10.0	7.2	20.0
Benzoic acid	Lin1		0.1901		21.0	20.0	4.8	20.0
Bis(2-chloroethoxy)methane	Ave	0.3643	0.3599	0.3000	9.88	10.0	-1.2	20.0
2,4-Dichlorophenol	Ave	0.2538	0.2546	0.2000	10.0	10.0	0.3	20.0
1,2,4-Trichlorobenzene	Ave	0.2907	0.2975		10.2	10.0	2.3	20.0
Naphthalene	Ave	0.9274	0.9025	0.7000	9.73	10.0	-2.7	20.0
4-Chloroaniline	Ave	0.4054	0.3938	0.0100	9.71	10.0	-2.9	20.0
Hexachlorobutadiene	Ave	0.1904	0.1966	0.0100	10.3	10.0	3.3	20.0
Caprolactam	Ave	0.0853	0.0868	0.0100	20.3	20.0	1.7	20.0
4-Chloro-3-methylphenol	Ave	0.3177	0.3163	0.2000	9.95	10.0	-0.5	20.0
2-Methylnaphthalene	Ave	0.6215	0.6259	0.4000	10.1	10.0	0.7	20.0
1-Methylnaphthalene	Ave	0.5752	0.5733		9.97	10.0	-0.3	20.0
Hexachlorocyclopentadiene	Ave	0.3601	0.3528	0.0500	9.80	10.0	-2.0	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5103	0.5332	0.0100	10.5	10.0	4.5	20.0
2,4,6-Trichlorophenol	Ave	0.3188	0.3317	0.2000	10.4	10.0	4.1	20.0
2,4,5-Trichlorophenol	Ave	0.3303	0.3547	0.2000	10.7	10.0	7.4	20.0
1,1'-Biphenyl	Ave	1.296	1.322	0.0100	10.2	10.0	2.0	20.0
2-Chloronaphthalene	Ave	0.9843	1.014	0.8000	10.3	10.0	3.0	20.0
2-Nitroaniline	Ave	0.3612	0.3967	0.0100	11.0	10.0	9.8	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107326/2 Calibration Date: 10/28/2013 09:16

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31028002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.137	1.192	0.0100	10.5	10.0	4.9	20.0
1,3-Dinitrobenzene	Ave	0.1752	0.2040		11.6	10.0	16.4	20.0
2,6-Dinitrotoluene	Ave	0.2491	0.2692		10.8	10.0	8.1	20.0
Acenaphthylene	Ave	1.545	1.574	0.9000	10.2	10.0	1.9	20.0
3-Nitroaniline	Ave	0.2597	0.2838	0.0100	10.9	10.0	9.3	20.0
2,4-Dinitrophenol	Lin1		0.2027	0.0100	21.2	20.0	5.8	20.0
Acenaphthene	Ave	1.030	1.065	0.9000	10.3	10.0	3.4	20.0
4-Nitrophenol	Ave	0.2559	0.2879		22.5	20.0	12.5	20.0
2,4-Dinitrotoluene	Ave	0.3419	0.3481	0.2000	10.2	10.0	1.8	20.0
Dibenzofuran	Ave	1.429	1.459	0.8000	10.2	10.0	2.1	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2865	0.3013	0.0100	10.5	10.0	5.1	20.0
Diethyl phthalate	Ave	1.160	1.196	0.0100	10.3	10.0	3.1	20.0
4-Chlorophenyl phenyl ether	Ave	0.6081	0.6139	0.4000	10.1	10.0	1.0	20.0
4-Nitroaniline	Ave	0.2659	0.2892	0.0100	10.9	10.0	8.7	20.0
Fluorene	Ave	1.215	1.215	0.9000	10.0	10.0	0.0	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1451	0.0100	18.8	20.0	-5.8	20.0
N-Nitrosodiphenylamine	Ave	0.4869	0.5200	0.0100	21.4	20.0	6.8	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8108	0.8686		10.7	10.0	7.1	20.0
4-Bromophenyl phenyl ether	Ave	0.1990	0.2191	0.1000	11.0	10.0	10.1	20.0
Hexachlorobenzene	Ave	0.2018	0.2193	0.1000	10.9	10.0	8.6	20.0
Atrazine	Ave	0.1952	0.1985	0.0100	20.3	20.0	1.7	20.0
Pentachlorophenol	Lin1		0.1643	0.0500	21.1	20.0	5.3	20.0
Phenanthrene	Ave	0.9707	0.9518	0.7000	9.81	10.0	-1.9	20.0
Anthracene	Ave	0.997	1.007	0.7000	10.1	10.0	1.0	20.0
Carbazole	Ave	0.8905	0.9358	0.0100	10.5	10.0	5.1	20.0
Di-n-butyl phthalate	Ave	1.150	1.200	0.0100	10.4	10.0	4.4	20.0
Fluoranthene	Ave	1.127	1.187	0.6000	10.5	10.0	5.3	20.0
Benzidine	Ave	0.3835	0.3461		18.0	20.0	-9.8	20.0
Pyrene	Ave	0.9084	0.9484	0.6000	10.4	10.0	4.4	20.0
Butyl benzyl phthalate	Ave	0.4213	0.4241	0.0100	10.1	10.0	0.7	20.0
3,3'-Dichlorobenzidine	Ave	0.3343	0.3448	0.0100	20.6	20.0	3.1	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6219	0.6430	0.0100	10.3	10.0	3.4	20.0
Benzo[a]anthracene	Ave	0.9544	0.9619	0.8000	10.1	10.0	0.8	20.0
Chrysene	Ave	0.8877	0.9086	0.7000	10.2	10.0	2.3	20.0
Di-n-octyl phthalate	Ave	1.146	1.186	0.0100	10.4	10.0	3.5	20.0
Benzo[b]fluoranthene	Ave	0.9860	0.9927	0.7000	10.1	10.0	0.7	20.0
Benzo[k]fluoranthene	Ave	1.043	1.071	0.7000	10.3	10.0	2.7	20.0
Benzo[a]pyrene	Ave	0.9794	0.9793	0.7000	10.0	10.0	-0.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.118	1.120	0.5000	10.0	10.0	0.2	20.0
Dibenzo(a,h)anthracene	Ave	0.9450	0.9744	0.4000	10.3	10.0	3.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107326/2 Calibration Date: 10/28/2013 09:16

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31028002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[g,h,i]perylene	Ave	0.9348	0.9270	0.5000	9.92	10.0	-0.8	20.0
2-Fluorophenol (Surr)	Ave	1.184	1.178		9.95	10.0	-0.5	20.0
Phenol-d5 (Surr)	Ave	1.541	1.509		9.80	10.0	-2.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4252	0.4055		9.54	10.0	-4.6	20.0
2-Fluorobiphenyl (Surr)	Ave	1.147	1.157		10.1	10.0	0.9	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1488	0.1558		10.5	10.0	4.7	20.0
Terphenyl-d14 (Surr)	Ave	0.6276	0.6123		9.76	10.0	-2.4	20.0

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Sample No.: STD6 240-106341/10 Date Analyzed: 10/21/2013 18:37

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31021010.D Heated Purge: (Y/N) N

Calibration ID: 18104

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		173931	6.47	749561	7.58	451624	9.09
UPPER LIMIT		347862	6.97	1499122	8.08	903248	9.59
LOWER LIMIT		86966	5.97	374781	7.08	225812	8.59
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-106341/11		196418	6.47	826636	7.58	506602	9.09
CCV 240-107326/2 CCVIS		134366	6.36	533133	7.47	311157	8.97

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Sample No.: STD6 240-106341/10 Date Analyzed: 10/21/2013 18:37

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31021010.D Heated Purge: (Y/N) N

Calibration ID: 18104

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		728251	10.36	1006144	13.21	875605	15.52
UPPER LIMIT		1456502	10.86	2012288	13.71	1751210	16.02
LOWER LIMIT		364126	9.86	503072	12.71	437803	15.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-106341/11		835760	10.36	1126720	13.21	989147	15.52
CCV 240-107326/2 CCVIS		521981	10.23	666564	13.00	618379	15.26

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Sample No.: CCV 240-107326/2 Date Analyzed: 10/28/2013 09:16

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31028002.D Heated Purge: (Y/N) N

Calibration ID: 18104

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		134366	6.36	533133	7.47	311157	8.97
UPPER LIMIT		268732	6.86	1066266	7.97	622314	9.47
LOWER LIMIT		67183	5.86	266567	6.97	155579	8.47
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-106706/21-A		105060	6.36	431634	7.47	265863	8.97
LCS 240-106706/22-A		103217	6.36	420845	7.47	266593	8.97
240-30485-4	MSA-MW50D-102113	103251	6.36	398947	7.47	256425	8.97
240-30485-2	MSA-MW51I-102113	94442	6.36	392519	7.47	241677	8.97
240-30485-3	MSA-MW51D-102113	101047	6.36	418361	7.47	259332	8.97
240-30485-1	MSA-MW51S-102113	102226	6.36	420146	7.47	255398	8.97
240-30485-5	MSA-MW44S-102113	109263	6.36	430804	7.47	257111	8.97
240-30485-7	MSA-DUP01-102113	102777	6.36	424531	7.47	265703	8.97

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Sample No.: CCV 240-107326/2 Date Analyzed: 10/28/2013 09:16

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31028002.D Heated Purge: (Y/N) N

Calibration ID: 18104

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		521981	10.23	666564	13.00	618379	15.26
UPPER LIMIT		1043962	10.73	1333128	13.50	1236758	15.76
LOWER LIMIT		260991	9.73	333282	12.50	309190	14.76
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-106706/21-A		500009	10.23	573992	13.00	519127	15.26
LCS 240-106706/22-A		461182	10.23	572295	13.01	517254	15.26
240-30485-4	MSA-MW50D-102113	461932	10.23	546217	13.01	497320	15.26
240-30485-2	MSA-MW51I-102113	448912	10.23	533960	13.00	491049	15.26
240-30485-3	MSA-MW51D-102113	466499	10.23	564552	13.01	511629	15.26
240-30485-1	MSA-MW51S-102113	482083	10.23	572892	13.01	519535	15.26
240-30485-5	MSA-MW44S-102113	523192	10.23	614193	13.00	569372	15.26
240-30485-7	MSA-DUP01-102113	495533	10.23	599214	13.00	550374	15.26

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: MB 240-107778/7

Matrix: Water Date Extracted: 10/30/2013 18:45

Lab File ID:(1) YF103007.D Lab File ID:(2)

Date Analyzed:(1) 10/30/2013 18:45 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-107778/8	10/30/2013 19:24	
MSA-MW51D-102113	240-30485-3	10/31/2013 01:19	
MSA-MW50D-102113	240-30485-4	10/31/2013 01:58	
MSA-MW44S-102113	240-30485-5	10/31/2013 02:37	
MSA-DUP01-102113	240-30485-7	10/31/2013 03:16	

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30485-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107778/7

Matrix: Water | Lab File ID: YF103007.D

Analysis Method: 8015C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2013 18:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107778 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	61.4	J	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	77		40-133

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF103008.D

Lab ID: LCS 240-107778/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	858	107	67-132	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: MB 240-108135/5

Matrix: Water Date Extracted: 11/01/2013 17:56

Lab File ID:(1) Lab File ID:(2) O1110105.D

Date Analyzed:(1) Date Analyzed:(2) 11/01/2013 17:56

Instrument ID:(1) Instrument ID:(2) O

GC Column:(1) ID: GC Column:(2) RTX-VRX ID: 0.45(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-108135/6		11/01/2013 18:31
MSA-MW51I-102113	240-30485-2		11/01/2013 19:40
MSA-MW51I-102113 MS	240-30485-2 MS		11/01/2013 20:15
MSA-MW51I-102113 MSD	240-30485-2 MSD		11/01/2013 20:50

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-108135/5

Matrix: Water Lab File ID: O1110105.D

Analysis Method: 8015C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/01/2013 17:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108135 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	100	U	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	97		40-133

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O1110106.D

Lab ID: LCS 240-108135/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	791	99	67-132	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 01110109.D

Lab ID: 240-30485-2 MS Client ID: MSA-MW51I-102113 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	64 J	777	89	63-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 01110110.D

Lab ID: 240-30485-2 MSD Client ID: MSA-MW51I-102113 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	784	90	1	11	63-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: MB 240-108231/5

Matrix: Water Date Extracted: 11/04/2013 11:21

Lab File ID:(1) YF110405.D Lab File ID:(2)

Date Analyzed:(1) 11/04/2013 11:21 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-108231/6	11/04/2013 11:59	
MSA-MW51S-102113	240-30485-1	11/04/2013 17:03	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-108231/5

Matrix: Water Lab File ID: YF110405.D

Analysis Method: 8015C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/04/2013 11:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 108231 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	100	U	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	84		40-133

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF110406.D

Lab ID: LCS 240-108231/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	820	103	67-132	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm) GC Column (2):

Client Sample ID	Lab Sample ID	TFT2 #	TFT1 #
MSA-MW51S-102113	240-30485-1		98
MSA-MW51I-102113	240-30485-2	105	
MSA-MW51D-102113	240-30485-3		80
MSA-MW50D-102113	240-30485-4		75
MSA-MW44S-102113	240-30485-5		77
MSA-DUP01-102113	240-30485-7		76
	MB 240-107778/7		77
	MB 240-108135/5	97	
	MB 240-108231/5		84
	LCS 240-107778/8		95
	LCS 240-108135/6	124	
	LCS 240-108231/6		104
MSA-MW51I-102113 MS	240-30485-2 MS	119	
MSA-MW51I-102113 MSD	240-30485-2 MSD	118	

	QC LIMITS
TFT = Trifluorotoluene (Surr)	40-133

Column to be used to flag recovery values

FORM II 8015C

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Sample No.: CCVRT 240-108135/4 Date Analyzed: 11/01/2013 17:22

Instrument ID: O GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): O1110104.D Heated Purge: (Y/N) N

Calibration ID: 17913

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				8.97		
UPPER LIMIT				9.07		
LOWER LIMIT				8.87		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-108135/4		11/01/2013 17:22	O1110104.D	8.97		
MB 240-108135/5		11/01/2013 17:56	O1110105.D	8.95		
LCS 240-108135/6		11/01/2013 18:31	O1110106.D	8.97		
240-30485-2	MSA-MW51I-102113	11/01/2013 19:40	O1110108.D	8.97		
240-30485-2 MS	MSA-MW51I-102113 MS	11/01/2013 20:15	O1110109.D	8.97		
240-30485-2 MSD	MSA-MW51I-102113 MSD	11/01/2013 20:50	O1110110.D	8.97		
CCV 240-108135/14		11/01/2013 23:08	O1110114.D	8.97		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Sample No.: CCVRT 240-107778/4 Date Analyzed: 10/30/2013 16:48

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF103004.D Heated Purge: (Y/N) N

Calibration ID: 18125

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.69		
UPPER LIMIT				9.79		
LOWER LIMIT				9.59		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-107778/4		10/30/2013 16:48	YF103004.D	9.69		
MB 240-107778/7		10/30/2013 18:45	YF103007.D	9.69		
LCS 240-107778/8		10/30/2013 19:24	YF103008.D	9.69		
240-30485-3	MSA-MW51D-102113	10/31/2013 01:19	YF103017.D	9.68		
240-30485-4	MSA-MW50D-102113	10/31/2013 01:58	YF103018.D	9.68		
240-30485-5	MSA-MW44S-102113	10/31/2013 02:37	YF103019.D	9.69		
240-30485-7	MSA-DUP01-102113	10/31/2013 03:16	YF103020.D	9.69		
CCV 240-107778/22		10/31/2013 04:34	YF103022.D	9.69		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 104297

SDG No.:

Instrument ID: O GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2013 21:14 Calibration End Date: 10/05/2013 00:12 Calibration ID: 17913

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-104297/5	O1100405.D
Level 2	STD2 240-104297/6	O1100406.D
Level 3	STD3 240-104297/7	O1100407.D
Level 4	STD4 240-104297/8	O1100408.D
Level 5	STD5 240-104297/9	O1100409.D
Level 6	STD6 240-104297/10	O1100410.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.317	11.317	11.317	11.317	11.317	11.317					4.218 - 18.417	11.317
C6-C12	13.020	13.020	13.020	13.020	13.020	13.020					4.218 - 21.821	13.020
Trifluorotoluene (Surr)	8.962	8.965	8.971	8.979	8.973	8.977					8.729 - 9.229	8.971

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 104297

SDG No.:

Instrument ID: O GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2013 21:14 Calibration End Date: 10/05/2013 00:12 Calibration ID: 17913

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-104297/5	O1100405.D
Level 2	STD2 240-104297/6	O1100406.D
Level 3	STD3 240-104297/7	O1100407.D
Level 4	STD4 240-104297/8	O1100408.D
Level 5	STD5 240-104297/9	O1100409.D
Level 6	STD6 240-104297/10	O1100410.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	204865 169175	184558 167977	170983	166859	Ave		177402.745				8.4		20.0			
C6-C12	221691 180943	196131 179608	181618	177813	Ave		189634.063				9.0		20.0			
Trifluorotoluene (Surr)	217029 194634	204111 176168	204453	203720	Ave		200019.188				6.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 106463

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 18:36 Calibration End Date: 10/21/2013 21:50 Calibration ID: 18125

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-106463/5	YF102105.D
Level 2	STD2 240-106463/6	YF102106.D
Level 3	STD3 240-106463/7	YF102107.D
Level 4	STD4 240-106463/8	YF102108.D
Level 5	STD5 240-106463/9	YF102109.D
Level 6	STD6 240-106463/10	YF102110.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.834	11.834	11.834	11.834	11.834	11.834					4.778 - 18.891	11.834
C6-C12	13.468	13.468	13.468	13.468	13.468	13.468					4.778 - 22.158	13.468
Trifluorotoluene (Surr)	9.686	9.690	9.687	9.687	9.688	9.688					9.433 - 9.933	9.688

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 106463

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 18:36 Calibration End Date: 10/21/2013 21:50 Calibration ID: 18125

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-106463/5	YF102105.D
Level 2	STD2 240-106463/6	YF102106.D
Level 3	STD3 240-106463/7	YF102107.D
Level 4	STD4 240-106463/8	YF102108.D
Level 5	STD5 240-106463/9	YF102109.D
Level 6	STD6 240-106463/10	YF102110.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	194795 176385	194018 177265	180898	174214	Ave		182929.254				5.0		20.0			
C6-C12	224978 191921	214054 193541	197511	189281	Ave		201880.855				7.1		20.0			
Trifluorotoluene (Surr)	179024 179946	176878 171141	187179	179420	Ave		178931.133				2.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: ICV 240-104297/11 Calibration Date: 10/05/2013 00:47

Instrument ID: O Calib Start Date: 10/04/2013 21:14

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:12

Lab File ID: O1100411.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	177403	150362		678	800	-15.2	20.0
C6-C12	Ave	189634	166002		700	800	-12.5	20.0
Trifluorotoluene (Surr)	Ave	200019	227675		11.4	10.0	13.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: ICV 240-104297/11 Calibration Date: 10/05/2013 00:47

Instrument ID: O Calib Start Date: 10/04/2013 21:14

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:12

Lab File ID: O1100411.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.32	4.22	18.42
C6-C12	13.02	4.22	21.82
Trifluorotoluene (Surr)	8.98	8.72	9.22

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCVRT 240-108135/4 Calibration Date: 11/01/2013 17:22

Instrument ID: O Calib Start Date: 10/04/2013 21:14

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:12

Lab File ID: O1110104.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	177403	184397		832	800	3.9	20.0
C6-C12	Ave	189634	196538		829	800	3.6	20.0
Trifluorotoluene (Surr)	Ave	200019	244172		12.2	10.0	22.1*	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCVRT 240-108135/4 Calibration Date: 11/01/2013 17:22

Instrument ID: O Calib Start Date: 10/04/2013 21:14

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:12

Lab File ID: O1110104.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.30	4.19	18.42
C6-C12	12.92	4.19	21.66
Trifluorotoluene (Surr)	8.97	8.72	9.22

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-108135/14 Calibration Date: 11/01/2013 23:08

Instrument ID: O Calib Start Date: 10/04/2013 21:14

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:12

Lab File ID: O1110114.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	177403	164636		742	800	-7.2	20.0
C6-C12	Ave	189634	175489		740	800	-7.5	20.0
Trifluorotoluene (Surr)	Ave	200019	220528		11.0	10.0	10.3	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-108135/14 Calibration Date: 11/01/2013 23:08

Instrument ID: O Calib Start Date: 10/04/2013 21:14

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/05/2013 00:12

Lab File ID: O1110114.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.30	4.19	18.42
C6-C12	12.92	4.19	21.66
Trifluorotoluene (Surr)	8.97	8.72	9.22

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: ICV 240-106463/11 Calibration Date: 10/21/2013 22:30

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF102111.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	182929	177284		775	800	-3.1	20.0
C6-C12	Ave	201881	201010		797	800	-0.4	20.0
Trifluorotoluene (Surr)	Ave	178931	189230		10.6	10.0	5.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: ICV 240-106463/11 Calibration Date: 10/21/2013 22:30

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF102111.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.83	4.78	18.89
C6-C12	13.47	4.78	22.16
Trifluorotoluene (Surr)	9.69	9.44	9.94

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCVRT 240-107778/4 Calibration Date: 10/30/2013 16:48

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF103004.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	182929	182010		796	800	-0.5	20.0
C6-C12	Ave	201881	198670		787	800	-1.6	20.0
Trifluorotoluene (Surr)	Ave	178931	160248		8.96	10.0	-10.4	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCVRT 240-107778/4 Calibration Date: 10/30/2013 16:48

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF103004.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.84	4.80	18.88
C6-C12	13.38	4.80	21.97
Trifluorotoluene (Surr)	9.69	9.44	9.94

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107778/22 Calibration Date: 10/31/2013 04:34

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF103022.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	182929	166197		727	800	-9.1	20.0
C6-C12	Ave	201881	179863		713	800	-10.9	20.0
Trifluorotoluene (Surr)	Ave	178931	149037		8.33	10.0	-16.7	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107778/22 Calibration Date: 10/31/2013 04:34

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF103022.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.84	4.80	18.88
C6-C12	13.38	4.80	21.97
Trifluorotoluene (Surr)	9.69	9.44	9.94

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCVRT 240-108231/4 Calibration Date: 11/04/2013 10:43

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF110404.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	182929	182175		797	800	-0.4	20.0
C6-C12	Ave	201881	198689		787	800	-1.6	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCVRT 240-108231/4 Calibration Date: 11/04/2013 10:43

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF110404.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.89	4.76	19.02
C6-C12	13.38	4.76	22.00

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-108231/13 Calibration Date: 11/04/2013 16:25

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF110413.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	182929	173075		757	800	-5.4	20.0
C6-C12	Ave	201881	187703		744	800	-7.0	20.0
Trifluorotoluene (Surr)	Ave	178931	165299		9.24	10.0	-7.6	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-108231/13 Calibration Date: 11/04/2013 16:25

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF110413.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.89	4.76	19.02
C6-C12	13.38	4.76	22.00
Trifluorotoluene (Surr)	9.69	9.44	9.94

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-108231/17 Calibration Date: 11/04/2013 18:58

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF110417.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	182929	167185		731	800	-8.6	20.0
C6-C12	Ave	201881	180751		716	800	-10.5	20.0
Trifluorotoluene (Surr)	Ave	178931	162124		9.06	10.0	-9.4	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-108231/17 Calibration Date: 11/04/2013 18:58

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF110417.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.89	4.76	19.02
C6-C12	13.38	4.76	22.00
Trifluorotoluene (Surr)	9.69	9.44	9.94

FORM IV

DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: MB 240-107075/11-A

Matrix: Water Date Extracted: 10/25/2013 08:18

Lab File ID:(1) P5F28008.D Lab File ID:(2)

Date Analyzed:(1) 10/28/2013 17:20 Date Analyzed:(2)

Instrument ID:(1) A2HP5F Instrument ID:(2)

GC Column:(1) ID: GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-107075/12-A	10/28/2013 17:50	
MSA-MW51S-102113	240-30485-1	10/28/2013 20:22	
MSA-MW51I-102113	240-30485-2	10/28/2013 20:52	
MSA-MW51D-102113	240-30485-3	10/28/2013 21:23	
MSA-MW50D-102113	240-30485-4	10/28/2013 21:53	
MSA-MW44S-102113	240-30485-5	10/28/2013 22:53	
MSA-DUP01-102113	240-30485-7	10/28/2013 23:24	

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-107075/11-A

Matrix: Water Lab File ID: P5F28008.D

Analysis Method: 8015C Date Collected:

Extraction Method: 3520C Date Extracted: 10/25/2013 08:18

Sample wt/vol: 1000(mL) Date Analyzed: 10/28/2013 17:20

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 107373 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	500	U	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	49		20-120

FORM III

DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P5F28009.D

Lab ID: LCS 240-107075/12-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Diesel	2500	2280	91	40-124	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II

DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ID:

Client Sample ID	Lab Sample ID	C91 #
MSA-MW51S-102113	240-30485-1	69
MSA-MW51I-102113	240-30485-2	61
MSA-MW51D-102113	240-30485-3	46
MSA-MW50D-102113	240-30485-4	50
MSA-MW44S-102113	240-30485-5	53
MSA-DUP01-102113	240-30485-7	69
	MB 240-107075/11-A	49
	LCS 240-107075/12-A	63

	QC LIMITS
C9 = n-Nonane	20-120

Column to be used to flag recovery values

FORM II 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Sample No.: CCV 240-107373/4 Date Analyzed: 10/28/2013 14:06

Instrument ID: A2HP5F GC Column: ID: ()

Lab File ID (Standard): P5F28004.D Heated Purge: (Y/N) N

Calibration ID: 18060

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				4.48		
UPPER LIMIT				4.58		
LOWER LIMIT				4.38		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-107373/4 CCVRT		10/28/2013 14:06	P5F28004.D	4.48		
CCV 240-107373/7		10/28/2013 15:57	P5F28007.D	4.48		
MB 240-107075/11-A		10/28/2013 17:20	P5F28008.D	4.48		
LCS 240-107075/12-A		10/28/2013 17:50	P5F28009.D	4.47		
240-30485-1	MSA-MW51S-102113	10/28/2013 20:22	P5F28014.D	4.48		
240-30485-2	MSA-MW51I-102113	10/28/2013 20:52	P5F28015.D	4.48		
240-30485-3	MSA-MW51D-102113	10/28/2013 21:23	P5F28016.D	4.48		
240-30485-4	MSA-MW50D-102113	10/28/2013 21:53	P5F28017.D	4.48		
CCV 240-107373/18		10/28/2013 22:23	P5F28018.D	4.48		
240-30485-5	MSA-MW44S-102113	10/28/2013 22:53	P5F28019.D	4.48		
240-30485-7	MSA-DUP01-102113	10/28/2013 23:24	P5F28020.D	4.48		
CCV 240-107373/21		10/28/2013 23:54	P5F28021.D	4.48		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VI

DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 105429

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 17:36 Calibration End Date: 10/14/2013 19:38 Calibration ID: 18060

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-105429/4	P5F01404.D
Level 2	STD2 240-105429/5	P5F01405.D
Level 3	STD3 240-105429/6	P5F01406.D
Level 4	STD4 240-105429/7	P5F01407.D
Level 5	STD5 240-105429/8	P5F01408.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel Range Organics [C10 - C28]	9.462	9.462	9.462	9.462	9.462						5.334 - 13.590	9.462
n-Nonane	4.409	4.409	4.418	4.422	4.418						4.339 - 4.479	4.415

FORM VI

DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA

EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30485-1 Analy Batch No.: 105429

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 17:36 Calibration End Date: 10/14/2013 19:38 Calibration ID: 18060

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-105429/4	P5F01404.D
Level 2	STD2 240-105429/5	P5F01405.D
Level 3	STD3 240-105429/6	P5F01406.D
Level 4	STD4 240-105429/7	P5F01407.D
Level 5	STD5 240-105429/8	P5F01408.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	283286 200088	211930	264597	257900	Ave		243560.362				15.0		20.0			
n-Nonane	263491 212916	205591	276378	273515	Ave		246378.022				14.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: ICV 240-105429/9 Calibration Date: 10/14/2013 20:08

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F01409.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	243560	205641		423	501	-15.6	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: ICV 240-105429/9 Calibration Date: 10/14/2013 20:08

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F01409.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.46	5.33	13.59

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107373/4 Calibration Date: 10/28/2013 14:06

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F28004.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	243560	260329		534	500	6.9	20.0
n-Nonane	Ave	246378	269845		54.8	50.0	9.5	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107373/4 Calibration Date: 10/28/2013 14:06

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F28004.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.51	5.40	13.62
n-Nonane	4.48	4.41	4.55

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107373/7 Calibration Date: 10/28/2013 15:57

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F28007.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	243560	266445		547	500	9.4	20.0
n-Nonane	Ave	246378	275613		55.9	50.0	11.9	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107373/7 Calibration Date: 10/28/2013 15:57

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F28007.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.51	5.40	13.62
n-Nonane	4.48	4.41	4.55

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107373/18 Calibration Date: 10/28/2013 22:23

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F28018.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	243560	278908		573	500	14.5	20.0
n-Nonane	Ave	246378	284594		57.8	50.0	15.5	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107373/18 Calibration Date: 10/28/2013 22:23

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F28018.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.51	5.40	13.62
n-Nonane	4.48	4.41	4.55

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107373/21 Calibration Date: 10/28/2013 23:54

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F28021.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	243560	280598		576	500	15.2	20.0
n-Nonane	Ave	246378	290921		59.0	50.0	18.1	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: CCV 240-107373/21 Calibration Date: 10/28/2013 23:54

Instrument ID: A2HP5F Calib Start Date: 10/14/2013 17:36

GC Column: ID: Calib End Date: 10/14/2013 19:38

Lab File ID: P5F28021.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.51	5.40	13.62
n-Nonane	4.48	4.41	4.55

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C MDL Date: 01/01/2011 08:42

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Calcium	317.933	5000	130
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Iron	271.441	200	81
Lead	220.353	10	1.9
Magnesium	279.078	5000	34
Manganese	257.610	15	0.41
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Potassium	766.491	5000	72
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
SiO2, Silica	251.6	1070	14
Sodium	330.232	5000	590
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C XMDL Date: 01/01/2011 08:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Calcium	317.933	5000	130
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Iron	271.441	200	81
Lead	220.353	10	1.9
Magnesium	279.078	5000	34
Manganese	257.610	15	0.41
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Potassium	766.491	5000	72
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
SiO2, Silica	251.6	1070	14
Sodium	330.232	5000	590
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C MDL Date: 01/01/2011 08:42

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C XMDL Date: 01/01/2011 08:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-30485-1

SDG No.:

Instrument ID: I9 Date: 10/21/2013 15:10

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Silver		2000	6010C
Arsenic		5000	6010C
Beryllium		4000	6010C
Cadmium		2000	6010C
Barium		25000	6010C
Copper		30000	6010C
Chromium		20000	6010C
Nickel		30000	6010C
Lead		15000	6010C
Antimony		10000	6010C
Cobalt		10000	6010C
Selenium		10000	6010C
Thallium		10000	6010C
Zinc		10000	6010C
Molybdenum		10000	6010C
Vanadium		5000	6010C
Sodium		500000	6010C
Potassium		500000	6010C
SiO2, Silica		428000	6010C
Calcium		500000	6010C
Iron		500000	6010C
Magnesium		500000	6010C
Manganese		15000	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-30485-1

SDG No.:

Instrument ID: H1 Date: 04/01/2011 10:45

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		50	7470A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-106929/1-A	10/24/2013 15:15	106929		50	50
LCS 240-106929/2-A	10/24/2013 15:15	106929		50	50
240-30254-H-2-E MS	10/24/2013 15:15	106929		50	50
240-30254-H-2-F DU	10/24/2013 15:15	106929		50	50
240-30485-5	10/24/2013 15:15	106929		50	50
240-30485-7	10/24/2013 15:15	106929		50	50
240-30485-5	10/24/2013 15:15	106929		50	50
240-30485-7	10/24/2013 15:15	106929		50	50

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-106929/1-A

Instrument Code: H1 Batch No.: 107332

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

FORM III-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-30254-H-2-E MS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.982		0.20	U	1.00	98	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

6-IN
DUPLICATES
METALS

Client ID: Lab ID: 240-30254-H-2-F DU

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

% Solids for Sample: % Solids for Duplicate:

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.20	0.20	U	0.20	U	NC		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-106929/2-A

Lab Name: TestAmerica Canton Job No.: 240-30485-1

Sample Matrix: Water LCS Source: MTHGCALW_00492

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.61		92	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-107851/1-A	10/31/2013 15:25	107851		50	50
LCS 240-107851/2-A	10/31/2013 15:25	107851		50	50
240-30670-D-1-E DU	10/31/2013 15:25	107851		50	50
240-30670-D-1-F MS	10/31/2013 15:25	107851		50	50
240-30485-1	10/31/2013 15:25	107851		50	50
240-30485-1	10/31/2013 15:25	107851		50	50
240-30485-2	10/31/2013 15:25	107851		50	50
240-30485-2	10/31/2013 15:25	107851		50	50
240-30485-3	10/31/2013 15:25	107851		50	50
240-30485-3	10/31/2013 15:25	107851		50	50
240-30485-4	10/31/2013 15:25	107851		50	50
240-30485-4	10/31/2013 15:25	107851		50	50

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-107851/1-A

Instrument Code: H1 Batch No.: 108226

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

FORM III-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-30670-D-1-F MS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.00		0.20	U	1.00	100	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

6-IN
DUPLICATES
METALS

Client ID: _____ Lab ID: 240-30670-D-1-E DU

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.: _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.20	0.20	U	0.20	U	NC		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-107851/2-A

Lab Name: TestAmerica Canton Job No.: 240-30485-1

Sample Matrix: Water LCS Source: MTHGCALW_00497

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.52		90	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-106927/1-A	10/24/2013 09:37	106927		50	50
LCS 240-106927/2-A	10/24/2013 09:37	106927		50	50
240-30254-H-2-B MS	10/24/2013 09:37	106927		50	50
240-30254-H-2-C DU	10/24/2013 09:37	106927		50	50
240-30485-5	10/24/2013 09:37	106927		50	50
240-30485-7	10/24/2013 09:37	106927		50	50
240-30485-5	10/24/2013 09:37	106927		50	50
240-30485-7	10/24/2013 09:37	106927		50	50

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-106927/1-A

Instrument Code: I9 Batch No.: 107816

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	10	U		6010C
7440-38-2	Arsenic	15	U		6010C
7440-41-7	Beryllium	5.0	U		6010C
7440-43-9	Cadmium	5.0	U		6010C
7440-39-3	Barium	0.877	J		6010C
7440-50-8	Copper	25	U		6010C
7440-47-3	Chromium	10	U		6010C
7440-02-0	Nickel	40	U		6010C
7439-92-1	Lead	10	U		6010C
7440-36-0	Antimony	20	U		6010C
7440-48-4	Cobalt	10	U		6010C
7782-49-2	Selenium	20	U		6010C
7440-28-0	Thallium	20	U		6010C
7440-66-6	Zinc	14.9	J		6010C
7439-98-7	Molybdenum	40	U		6010C
7440-62-2	Vanadium	0.774	J		6010C
7440-23-5	Sodium	5000	U		6010C
7440-09-7	Potassium	5000	U		6010C
14808-60-7	SiO2, Silica	1100	U		6010C
7440-70-2	Calcium	185	J		6010C
7439-89-6	Iron	200	U		6010C
7439-95-4	Magnesium	36.8	J		6010C
7439-96-5	Manganese	15	U		6010C

FORM III-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-30254-H-2-B MS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	53.2		10	U	50.0	106	75-125		6010C
Arsenic	2080		3.4	J	2000	104	75-125		6010C
Beryllium	49.5		5.0	U	50.0	99	75-125		6010C
Cadmium	54.0		0.84	J	50.0	106	75-125		6010C
Barium	2070		41	J	2000	101	75-125		6010C
Copper	253		25	U	250	101	75-125		6010C
Chromium	202		5.3	J	200	99	75-125		6010C
Nickel	499		40	U	500	100	75-125		6010C
Lead	483		10	U	500	97	75-125		6010C
Antimony	527		20	U	500	105	75-125		6010C
Cobalt	492		10	U	500	98	75-125		6010C
Selenium	2170		20	U	2000	109	75-125		6010C
Thallium	1970		20	U	2000	99	75-125		6010C
Zinc	503		6.3	J	500	99	75-125		6010C
Molybdenum	980		1.8	J	1000	98	75-125		6010C
Vanadium	520		10	U	500	104	75-125		6010C
Sodium	54800		4000	J	50000	102	75-125		6010C
Potassium	53800		2700	J	50000	102	75-125		6010C
SiO2, Silica	11100		8600		2140	116	75-125	4	6010C
Calcium	131000		82000		50000	98	75-125		6010C
Iron	1180		180	J	1000	100	75-125		6010C
Magnesium	61600		12000		50000	100	75-125		6010C
Manganese	710		210		500	100	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

6-IN
DUPLICATES
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-30254-H-2-C DU

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.: _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Silver	10	10	U	10	U	NC		6010C
Arsenic	15	3.4	J	4.13	J	21		6010C
Beryllium	5.0	5.0	U	5.0	U	NC		6010C
Cadmium	5.0	0.84	J	0.813	J	3		6010C
Barium	200	41	J	40.4	J	0.7		6010C
Copper	25	25	U	25	U	NC		6010C
Chromium	10	5.3	J	5.53	J	5		6010C
Nickel	40	40	U	40	U	NC		6010C
Lead	10	10	U	10	U	NC		6010C
Antimony	20	20	U	20	U	NC		6010C
Cobalt	10	10	U	10	U	NC		6010C
Selenium	20	20	U	20	U	NC		6010C
Thallium	20	20	U	20	U	NC		6010C
Zinc	50	6.3	J	8.18	J	26		6010C
Molybdenum	40	1.8	J	1.83	J	0.8		6010C
Vanadium	10	10	U	2.51	J	NC		6010C
Sodium	5000	4000	J	3960	J	0.5		6010C
Potassium	5000	2700	J	2670	J	1		6010C
SiO2, Silica	1100	8600		8790		2		6010C
Calcium	5000	82000		81800		0.5		6010C
Iron	200	180	J	179	J	0.6		6010C
Magnesium	5000	12000		11400		0.8		6010C
Manganese	15	210		209		0.2		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-106927/2-A

Lab Name: TestAmerica Canton Job No.: 240-30485-1

Sample Matrix: Water LCS Source: MTAGSPIKEW_00034

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	50.0	51.2		102	80	120		6010C
Arsenic	2000	1980		99	80	120		6010C
Beryllium	50.0	47.7		95	80	120		6010C
Cadmium	50.0	51.7		103	80	120		6010C
Barium	2000	1950		98	80	120		6010C
Copper	250	244		98	80	120		6010C
Chromium	200	193		96	80	120		6010C
Nickel	500	480		96	80	120		6010C
Lead	500	470		94	80	120		6010C
Antimony	500	506		101	80	120		6010C
Cobalt	500	473		95	80	120		6010C
Selenium	2000	2110		105	80	120		6010C
Thallium	2000	1900		95	80	120		6010C
Zinc	500	500		100	80	120		6010C
Molybdenum	1000	938		94	80	120		6010C
Vanadium	500	507		101	80	120		6010C
Sodium	50000	49000		98	80	120		6010C
Potassium	50000	49300		99	80	120		6010C
SiO2, Silica	2140	2110		99	80	120		6010C
Calcium	50000	48600		97	80	120		6010C
Iron	1000	964		96	80	120		6010C
Magnesium	50000	48900		98	80	120		6010C
Manganese	500	488		98	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-30254-H-2-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-30485-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	10	U	50	U	NC		6010C
Arsenic	3.4	J	75	U	NC		6010C
Beryllium	5.0	U	25	U	NC		6010C
Cadmium	0.84	J	25	U	NC		6010C
Barium	41	J	39.5	J	3.1		6010C
Copper	25	U	130	U	NC		6010C
Chromium	5.3	J	50	U	NC		6010C
Nickel	40	U	200	U	NC		6010C
Lead	10	U	50	U	NC		6010C
Antimony	20	U	100	U	NC		6010C
Cobalt	10	U	50	U	NC		6010C
Selenium	20	U	100	U	NC		6010C
Thallium	20	U	100	U	NC		6010C
Zinc	6.3	J	250	U	NC		6010C
Molybdenum	1.8	J	200	U	NC		6010C
Vanadium	10	U	29.4	J	NC		6010C
Sodium	4000	J	4170	J	NC		6010C
Potassium	2700	J	2810	J	NC		6010C
SiO2, Silica	8600		8480		1.4		6010C
Calcium	82000		81600		0.81		6010C
Iron	180	J	1000	U	NC		6010C
Magnesium	12000		11400	J	1.2		6010C
Manganese	210		209		0.10		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-107845/1-A	10/31/2013 08:28	107845		50	50
LCS 240-107845/2-A	10/31/2013 08:28	107845		50	50
240-30670-D-1-B DU	10/31/2013 08:28	107845		50	50
240-30670-D-1-C MS	10/31/2013 08:28	107845		50	50
240-30485-1	10/31/2013 08:28	107845		50	50
240-30485-1	10/31/2013 08:28	107845		50	50
240-30485-2	10/31/2013 08:28	107845		50	50
240-30485-2	10/31/2013 08:28	107845		50	50
240-30485-3	10/31/2013 08:28	107845		50	50
240-30485-3	10/31/2013 08:28	107845		50	50
240-30485-4	10/31/2013 08:28	107845		50	50
240-30485-4	10/31/2013 08:28	107845		50	50

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-107845/1-A

Instrument Code: I9 Batch No.: 108547

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	10	U		6010C
7440-38-2	Arsenic	15	U		6010C
7440-41-7	Beryllium	5.0	U		6010C
7440-43-9	Cadmium	5.0	U		6010C
7440-39-3	Barium	1.01	J		6010C
7440-50-8	Copper	25	U		6010C
7440-47-3	Chromium	10	U		6010C
7440-02-0	Nickel	40	U		6010C
7439-92-1	Lead	10	U		6010C
7440-36-0	Antimony	20	U		6010C
7440-48-4	Cobalt	10	U		6010C
7782-49-2	Selenium	20	U		6010C
7440-28-0	Thallium	20	U		6010C
7440-66-6	Zinc	7.86	J		6010C
7439-98-7	Molybdenum	40	U		6010C
7440-62-2	Vanadium	10	U		6010C
7440-23-5	Sodium	5000	U		6010C
7440-09-7	Potassium	5000	U		6010C
14808-60-7	SiO2, Silica	1100	U		6010C
7440-70-2	Calcium	313	J		6010C
7439-89-6	Iron	200	U		6010C
7439-95-4	Magnesium	34.0	J		6010C
7439-96-5	Manganese	15	U		6010C

FORM III-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-30670-D-1-C MS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	52.6		10	U	50.0	105	75-125		6010C
Arsenic	2150		16		2000	107	75-125		6010C
Beryllium	48.6		5.0	U	50.0	97	75-125		6010C
Cadmium	51.8		5.0	U	50.0	104	75-125		6010C
Barium	2160		200		2000	98	75-125		6010C
Copper	250		25	U	250	100	75-125		6010C
Chromium	199		10	U	200	99	75-125		6010C
Nickel	519		4.3	J	500	103	75-125		6010C
Lead	482		10	U	500	96	75-125		6010C
Antimony	529		20	U	500	106	75-125		6010C
Cobalt	509		10	U	500	102	75-125		6010C
Selenium	2130		20	U	2000	107	75-125		6010C
Thallium	2020		20	U	2000	101	75-125		6010C
Zinc	524		5.3	J	500	104	75-125		6010C
Molybdenum	1000		2.9	J	1000	100	75-125		6010C
Vanadium	498		1.3	J	500	99	75-125		6010C
Sodium	186000		140000		50000	89	75-125		6010C
Potassium	55900		4600	J	50000	103	75-125		6010C
SiO2, Silica	22800		21000		2140	85	75-125	4	6010C
Calcium	166000		120000		50000	85	75-125		6010C
Iron	7170		6500		1000	67	75-125	4	6010C
Magnesium	94300		48000		50000	93	75-125		6010C
Manganese	753		260		500	98	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

6-IN
DUPLICATES
METALS - TOTAL RECOVERABLE

Client ID: Lab ID: 240-30670-D-1-B DU

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

% Solids for Sample: % Solids for Duplicate:

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Silver	10	10	U	10	U	NC		6010C
Arsenic	15	16		14.6	J	8		6010C
Beryllium	5.0	5.0	U	5.0	U	NC		6010C
Cadmium	5.0	5.0	U	5.0	U	NC		6010C
Barium	200	200		186	J	5		6010C
Copper	25	25	U	25	U	NC		6010C
Chromium	10	10	U	10	U	NC		6010C
Nickel	40	4.3	J	3.96	J	8		6010C
Lead	10	10	U	10	U	NC		6010C
Antimony	20	20	U	20	U	NC		6010C
Cobalt	10	10	U	10	U	NC		6010C
Selenium	20	20	U	20	U	NC		6010C
Thallium	20	20	U	20	U	NC		6010C
Zinc	50	5.3	J	7.90	J	40		6010C
Molybdenum	40	2.9	J	2.40	J	20		6010C
Vanadium	10	1.3	J	4.07	J	104		6010C
Sodium	5000	140000		135000		5		6010C
Potassium	5000	4600	J	4390	J	5		6010C
SiO2, Silica	1100	21000		20100		5		6010C
Calcium	5000	120000		118000		5		6010C
Iron	200	6500		6200		5		6010C
Magnesium	5000	48000		45600		5		6010C
Manganese	15	260		252		5		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-107845/2-A

Lab Name: TestAmerica Canton Job No.: 240-30485-1

Sample Matrix: Water LCS Source: MTAGSPIKEW_00035

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	50.0	49.2		98	80	120		6010C
Arsenic	2000	1990		100	80	120		6010C
Beryllium	50.0	46.8		94	80	120		6010C
Cadmium	50.0	49.3		99	80	120		6010C
Barium	2000	1890		94	80	120		6010C
Copper	250	239		96	80	120		6010C
Chromium	200	193		97	80	120		6010C
Nickel	500	493		99	80	120		6010C
Lead	500	475		95	80	120		6010C
Antimony	500	498		100	80	120		6010C
Cobalt	500	482		96	80	120		6010C
Selenium	2000	2020		101	80	120		6010C
Thallium	2000	1960		98	80	120		6010C
Zinc	500	507		101	80	120		6010C
Molybdenum	1000	957		96	80	120		6010C
Vanadium	500	472		94	80	120		6010C
Sodium	50000	46900		94	80	120		6010C
Potassium	50000	46800		94	80	120		6010C
SiO2, Silica	2140	2180		102	80	120		6010C
Calcium	50000	47000		94	80	120		6010C
Iron	1000	975		98	80	120		6010C
Magnesium	50000	47200		94	80	120		6010C
Manganese	500	483		97	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-30670-D-1-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-30485-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	10	U	50	U	NC		6010C
Arsenic	16		75	U	NC		6010C
Beryllium	5.0	U	25	U	NC		6010C
Cadmium	5.0	U	25	U	NC		6010C
Barium	200		196	J	0.12		6010C
Copper	25	U	130	U	NC		6010C
Chromium	10	U	50	U	NC		6010C
Nickel	4.3	J	200	U	NC		6010C
Lead	10	U	50	U	NC		6010C
Antimony	20	U	100	U	NC		6010C
Cobalt	10	U	50	U	NC		6010C
Selenium	20	U	100	U	NC		6010C
Thallium	20	U	100	U	NC		6010C
Zinc	5.3	J	250	U	NC		6010C
Molybdenum	2.9	J	200	U	NC		6010C
Vanadium	1.3	J	50	U	NC		6010C
Sodium	140000		139000		2.1		6010C
Potassium	4600	J	4440	J	3.9		6010C
SiO2, Silica	21000		20700		1.7		6010C
Calcium	120000		124000		0.25		6010C
Iron	6500		6560		0.90		6010C
Magnesium	48000		48400		0.64		6010C
Manganese	260		267		1.1		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 10/25/2013 17:36 End Date: 10/25/2013 20:59

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-107236/1-A			17:36	X																				
IC 240-107236/1-A			17:38	X																				
IC 240-107236/2-A			17:39	X																				
IC 240-107236/2-A			17:41	X																				
IC 240-107236/3-A			17:43	X																				
IC 240-107236/3-A			17:45	X																				
IC 240-107236/4-A			17:46	X																				
IC 240-107236/4-A			17:48	X																				
IC 240-107236/5-A			17:49	X																				
IC 240-107236/5-A			17:51	X																				
IC 240-107236/6-A			17:52	X																				
IC 240-107236/6-A			17:54	X																				
IC 240-107236/7-A			17:56	X																				
IC 240-107236/7-A			17:57	X																				
ICV 240-107236/8-A	1		18:12	X																				
ICB 240-107236/9-A	1		18:14	X																				
CRA 240-107236/10-A	1		18:16	X																				
CCVL 240-107236/11-A	1		18:46	X																				
CCB 240-107236/13-A			18:48																					
ZZZZZZ			18:49																					
ZZZZZZ			18:51																					
ZZZZZZ			18:52																					
ZZZZZZ			18:54																					
ZZZZZZ			18:55																					
ZZZZZZ			18:57																					
ZZZZZZ			18:59																					
ZZZZZZ			19:00																					
ZZZZZZ			19:02																					
ZZZZZZ			19:04																					
CCV 240-107236/12-A			19:05																					
CCB 240-107236/13-A			19:06																					
ZZZZZZ			19:08																					
ZZZZZZ			19:10																					
ZZZZZZ			19:11																					
ZZZZZZ			19:12																					
ZZZZZZ			19:14																					
ZZZZZZ			19:16																					
ZZZZZZ			19:18																					
ZZZZZZ			19:19																					
ZZZZZZ			19:21																					
ZZZZZZ			19:22																					
ZZZZZZ			19:24																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 10/25/2013 17:36 End Date: 10/25/2013 20:59

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
CCV 240-107236/12-A			19:25	
CCB 240-107236/13-A			19:27	
ZZZZZZ			19:28	
ZZZZZZ			19:31	
ZZZZZZ			19:32	
ZZZZZZ			19:34	
ZZZZZZ			19:36	
ZZZZZZ			19:37	
ZZZZZZ			19:39	
ZZZZZZ			19:41	
ZZZZZZ			19:43	
ZZZZZZ			19:44	
CCV 240-107236/12-A	1		19:46	X
CCB 240-107236/13-A	1		19:47	X
ZZZZZZ			19:49	
MB 240-106929/1-A	1	T	19:51	X
LCS 240-106929/2-A	1	T	19:52	X
ZZZZZZ			19:54	
240-30254-H-2-E MS	1	T	19:55	X
240-30254-H-2-F DU	1	T	19:56	X
ZZZZZZ			19:58	
ZZZZZZ			20:00	
ZZZZZZ			20:01	
ZZZZZZ			20:03	
CCV 240-107236/12-A	1		20:05	X
CCB 240-107236/13-A	1		20:06	X
ZZZZZZ			20:09	
ZZZZZZ			20:10	
ZZZZZZ			20:12	
240-30485-5	1	D	20:14	X
240-30485-7	1	D	20:15	X
ZZZZZZ			20:17	
ZZZZZZ			20:19	
ZZZZZZ			20:21	
ZZZZZZ			20:22	
ZZZZZZ			20:24	
CCV 240-107236/12-A	1		20:25	X
CCB 240-107236/13-A	1		20:27	X
ZZZZZZ			20:28	
ZZZZZZ			20:30	
ZZZZZZ			20:32	
240-30485-5	1	T	20:34	X

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 10/25/2013 17:36 End Date: 10/25/2013 20:59

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
240-30485-7	1	T	20:35	X																				
ZZZZZZ			20:37																					
ZZZZZZ			20:39																					
ZZZZZZ			20:40																					
ZZZZZZ			20:43																					
ZZZZZZ			20:45																					
CCV 240-107236/12-A	1		20:46	X																				
CCB 240-107236/13-A	1		20:48	X																				
ZZZZZZ			20:49																					
ZZZZZZ			20:52																					
ZZZZZZ			20:53																					
ZZZZZZ			20:55																					
ZZZZZZ			20:56																					
CCV 240-107236/12-A			20:58																					
CCB 240-107236/13-A			20:59																					

Prep Types
D = Dissolved
T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00493

Analyte	ICV 240-107236/8-A 10/25/2013 18:12				CCVL 240-107236/11-A 10/25/2013 18:46				CCV 240-107236/12-A 10/25/2013 19:46			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.16		5.00	103	9.86		10.0	99	9.68		10.0	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00493

Analyte	CCV 240-107236/12-A 10/25/2013 20:05				CCV 240-107236/12-A 10/25/2013 20:25				CCV 240-107236/12-A 10/25/2013 20:46			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	9.67		10.0	97	9.52		10.0	95	9.53		10.0	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Method: 7470A Instrument ID: H1

Lab Sample ID: CRA 240-107236/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00493

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.189	J	95	50-150

Lab Sample ID: CRA 240-108232/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00498

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.176	J	88	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-107236/9-A 10/25/2013 18:14		CCB 240-107236/13-A 10/25/2013 19:47		CCB 240-107236/13-A 10/25/2013 20:06		CCB 240-107236/13-A 10/25/2013 20:27	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-107236/13-A 10/25/2013 20:48							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 11/01/2013 13:30 End Date: 11/01/2013 16:59

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-108232/1-A			13:30	X																				
IC 240-108232/1-A			13:31	X																				
IC 240-108232/2-A			13:33	X																				
IC 240-108232/2-A			13:34	X																				
IC 240-108232/3-A			13:36	X																				
IC 240-108232/3-A			13:38	X																				
IC 240-108232/4-A			13:39	X																				
IC 240-108232/4-A			13:41	X																				
IC 240-108232/5-A			13:43	X																				
IC 240-108232/5-A			13:44	X																				
IC 240-108232/6-A			13:46	X																				
IC 240-108232/6-A			13:47	X																				
IC 240-108232/7-A			13:49	X																				
IC 240-108232/7-A			13:50	X																				
ICV 240-108232/8-A	1		13:52	X																				
ICB 240-108232/9-A	1		13:54	X																				
CRA 240-108232/10-A	1		13:55	X																				
CCVL 240-108232/11-A	1		13:57	X																				
CCB 240-108232/12-A			13:58																					
ZZZZZZ			14:00																					
ZZZZZZ			14:02																					
ZZZZZZ			14:03																					
ZZZZZZ			14:05																					
ZZZZZZ			14:07																					
ZZZZZZ			14:08																					
ZZZZZZ			14:10																					
ZZZZZZ			14:12																					
ZZZZZZ			14:13																					
ZZZZZZ			14:14																					
CCV 240-108232/13-A			14:16																					
CCB 240-108232/12-A			14:17																					
ZZZZZZ			14:19																					
ZZZZZZ			14:21																					
ZZZZZZ			14:22																					
ZZZZZZ			14:24																					
ZZZZZZ			14:26																					
ZZZZZZ			14:27																					
ZZZZZZ			14:30																					
ZZZZZZ			14:31																					
ZZZZZZ			14:33																					
ZZZZZZ			14:35																					
CCV 240-108232/13-A			14:36																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 11/01/2013 13:30 End Date: 11/01/2013 16:59

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
CCB 240-108232/12-A			14:38																				
ZZZZZZ			14:39																				
ZZZZZZ			14:41																				
ZZZZZZ			14:42																				
ZZZZZZ			14:44																				
ZZZZZZ			14:46																				
ZZZZZZ			14:47																				
ZZZZZZ			14:49																				
ZZZZZZ			14:50																				
ZZZZZZ			14:52																				
ZZZZZZ			14:54																				
CCV 240-108232/13-A			14:56																				
CCB 240-108232/12-A			14:57																				
ZZZZZZ			14:59																				
ZZZZZZ			15:00																				
ZZZZZZ			15:03																				
ZZZZZZ			15:04																				
ZZZZZZ			15:06																				
ZZZZZZ			15:07																				
ZZZZZZ			15:08																				
ZZZZZZ			15:11																				
ZZZZZZ			15:13																				
ZZZZZZ			15:15																				
CCV 240-108232/13-A			15:16																				
CCB 240-108232/12-A			15:18																				
ZZZZZZ			15:20																				
ZZZZZZ			15:22																				
ZZZZZZ			15:24																				
ZZZZZZ			15:26																				
CCV 240-108232/13-A			15:27																				
CCB 240-108232/12-A			15:29																				
ZZZZZZ			15:31																				
ZZZZZZ			15:32																				
ZZZZZZ			15:34																				
ZZZZZZ			15:35																				
ZZZZZZ			15:37																				
ZZZZZZ			15:38																				
ZZZZZZ			15:39																				
ZZZZZZ			15:41																				
ZZZZZZ			15:43																				
ZZZZZZ			15:44																				
CCV 240-108232/13-A			15:46																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 11/01/2013 13:30 End Date: 11/01/2013 16:59

Lab Sample ID	D/F	Type	Time	Analytes
				Hg
CCB 240-108232/12-A			15:47	
ZZZZZZ			15:49	
ZZZZZZ			15:50	
ZZZZZZ			15:52	
ZZZZZZ			15:53	
ZZZZZZ			15:56	
ZZZZZZ			15:57	
ZZZZZZ			15:59	
ZZZZZZ			16:01	
ZZZZZZ			16:02	
ZZZZZZ			16:04	
CCV 240-108232/13-A	1		16:05	X
CCB 240-108232/12-A	1		16:07	X
ZZZZZZ			16:09	
MB 240-107851/1-A	1	T	16:11	X
LCS 240-107851/2-A	1	T	16:12	X
ZZZZZZ			16:14	
240-30670-D-1-E DU	1	T	16:15	X
240-30670-D-1-F MS	1	T	16:17	X
240-30485-1	1	T	16:18	X
240-30485-1	1	D	16:20	X
240-30485-2	1	T	16:21	X
240-30485-2	1	D	16:23	X
CCV 240-108232/13-A	1		16:25	X
CCB 240-108232/12-A	1		16:28	X
240-30485-3	1	T	16:29	X
240-30485-3	1	D	16:31	X
240-30485-4	1	T	16:32	X
240-30485-4	1	D	16:35	X
ZZZZZZ			16:36	
ZZZZZZ			16:38	
ZZZZZZ			16:39	
ZZZZZZ			16:40	
ZZZZZZ			16:42	
ZZZZZZ			16:43	
CCV 240-108232/13-A	1		16:46	X
CCB 240-108232/12-A	1		16:48	X
ZZZZZZ			16:49	
ZZZZZZ			16:51	
ZZZZZZ			16:52	
ZZZZZZ			16:54	
ZZZZZZ			16:55	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 11/01/2013 13:30 End Date: 11/01/2013 16:59

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
CRA 240-108232/10-A			16:56																				
CCV 240-108232/13-A			16:58																				
CCB 240-108232/12-A			16:59																				

Prep Types

D = Dissolved

T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00498

Analyte	ICV 240-108232/8-A 11/01/2013 13:52				CCVL 240-108232/11-A 11/01/2013 13:57				CCV 240-108232/13-A 11/01/2013 16:05			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.03		5.00	101	10.2		10.0	102	10.0		10.0	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00498

Analyte	CCV 240-108232/13-A 11/01/2013 16:25				CCV 240-108232/13-A 11/01/2013 16:46							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	10.0		10.0	100	9.94		10.0	99				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-108232/9-A 11/01/2013 13:54		CCB 240-108232/12-A 11/01/2013 16:07		CCB 240-108232/12-A 11/01/2013 16:28		CCB 240-108232/12-A 11/01/2013 16:48	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L

OK

Analyte	RL	ICB 240-108547/5 11/05/2013 06:59		CCB 240-108547/19 11/05/2013 07:56		CCB 240-108547/31 11/05/2013 08:44		CCB 240-108547/67 11/05/2013 11:11	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	20	U	20	U	2.31	J
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	200	U	200	U
Beryllium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Calcium	5000	5000	U	5000	U	5000	U	5000	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Iron	200	200	U	200	U	200	U	200	U
Lead	10	10	U	10	U	10	U	10	U
Magnesium	5000	5000	U	5000	U	5000	U	5000	U
Manganese	15	15	U	15	U	15	U	0.724	J
Molybdenum	40	40	U	40	U	40	U	40	U
Nickel	40	40	U	40	U	40	U	40	U
Potassium	5000	5000	U	5000	U	5000	U	5000	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
SiO2, Silica	1100	32.8	J	22.7	J	26.2	J	15.6	J
Sodium	5000	5000	U	5000	U	5000	U	5000	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	10	U	10	U	10	U	0.981	J
Zinc	50	50	U	50	U	50	U	50	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-108547/79 11/05/2013 12:01		CCB 240-108547/91 11/05/2013 12:50					
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	20	U				
Arsenic	15	15	U	15	U				
Barium	200	1.05	J	200	U				
Beryllium	5.0	5.0	U	5.0	U				
Cadmium	5.0	5.0	U	5.0	U				
Calcium	5000	5000	U	5000	U				
Chromium	10	10	U	10	U				
Cobalt	10	10	U	10	U				
Copper	25	25	U	25	U				
Iron	200	200	U	200	U				
Lead	10	10	U	10	U				
Magnesium	5000	5000	U	5000	U				
Manganese	15	0.672	J	15	U				
Molybdenum	40	40	U	40	U				
Nickel	40	40	U	22.5	J				
Potassium	5000	5000	U	5000	U				
Selenium	20	20	U	20	U				
Silver	10	10	U	10	U				
SiO2, Silica	1100	28.5	J	28.9	J				
Sodium	5000	5000	U	5000	U				
Thallium	20	20	U	20	U				
Vanadium	10	10	U	10	U				
Zinc	50	50	U	9.39	J				

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: ICSA 240-108547/8 Instrument ID: I9

Lab File ID: I9110513A.asc ICS Source: MTTRICSAW_00020

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-2.14**	
Arsenic		**-0.523**	
Barium		**0.187**	
Beryllium		**-0.158**	
Cadmium		**0.204**	
Calcium	**500000**	**488710**	**98**
Chromium		**2.93**	
Cobalt		**-1.24**	
Copper		**0.190**	
Iron	**200000**	**194820**	**97**
Lead		**1.03**	
Magnesium	**500000**	**510940**	**102**
Manganese		**2.71**	
Molybdenum		**-3.15**	
Nickel		**5.69**	
Potassium		**20.6**	
Selenium		**-4.48**	
Silver		**-0.253**	
Sodium		**48.0**	
Thallium		**-4.45**	
Vanadium		**1.64**	
Zinc		**11.8**	
Aluminum	*500000*	*507210*	*101*
Boron		*3.31*	
Lithium		*-11.6*	
Silicon		*7.70*	
Strontium		*8.41*	
Tin		*1.69*	
Titanium		*-0.180*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Lab Sample ID: ICSAB 240-108547/9 Instrument ID: I9

Lab File ID: I9110513A.asc ICS Source: MTICPICSABW_00002

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**1000**	**1017**	**102**
Arsenic	**1000**	**1014**	**101**
Barium	**500**	**503**	**101**
Beryllium	**500**	**493**	**99**
Cadmium	**1000**	**1034**	**103**
Calcium	**500000**	**484280**	**97**
Chromium	**500**	**492**	**98**
Cobalt	**500**	**513**	**103**
Copper	**500**	**524**	**105**
Iron	**200000**	**194810**	**97**
Lead	**1000**	**902**	**90**
Magnesium	**500000**	**505550**	**101**
Manganese	**500**	**491**	**98**
Molybdenum	**1000**	**962**	**96**
Nickel	**1000**	**1023**	**102**
Potassium	**10000**	**10606**	**106**
Selenium	**1000**	**1002**	**100**
Silver	**1000**	**1097**	**110**
Sodium	**10000**	**10580**	**106**
Thallium	**1000**	**981**	**98**
Vanadium	**500**	**488**	**98**
Zinc	**1000**	**1045**	**104**
Aluminum	*500000*	*506390*	*101*
Boron	*500*	*502*	*100*
Lithium	*500*	*542*	*108*
Silicon	*10000*	*10034*	*100*
Strontium	*1500*	*1475*	*98*
Tin	*500*	*529*	*106*
Titanium	*500*	*501*	*100*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: STEVE

Method: 310.1 MDL Date: 07/12/2013 09:18

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Alkalinity		5	1.9

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: STEVE

Method: 310.1 XMDL Date: 07/12/2013 09:19

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Alkalinity		5	1.9

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 160.1 MDL Date: 01/28/2010 09:50

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Dissolved Solids		10	7.4

9-IN

CALIBRATION BLANK DETECTION LIMITS

GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 160.1 XMDL Date: 01/28/2010 09:51

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Dissolved Solids		10	7.4

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: GARFUNKEL

Method: 300.0 MDL Date: 01/27/2010 17:40

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Chloride		1	0.1
Nitrate as N		0.1	0.023
Nitrite as N		0.1	0.012
Orthophosphate as P		0.5	0.044
Sulfate		1	0.12

9-IN

CALIBRATION BLANK DETECTION LIMITS

GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: GARFUNKEL

Method: 300.0 XMDL Date: 01/27/2010 17:40

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Chloride		1	0.1
Nitrate as N		0.1	0.023
Nitrite as N		0.1	0.012
Orthophosphate as P		0.5	0.044
Sulfate		1	0.12

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: VERONICA

Method: 300.0 MDL Date: 01/27/2010 17:40

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Chloride		1	0.1
Orthophosphate as P		0.5	0.044
Sulfate		1	0.12

9-IN

CALIBRATION BLANK DETECTION LIMITS

GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: VERONICA

Method: 300.0 XMDL Date: 01/27/2010 17:40

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Chloride		1	0.1
Orthophosphate as P		0.5	0.044
Sulfate		1	0.12

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: DAVE

Method: 350.3 MDL Date: 07/18/2013 13:57

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Ammonia (as N)		0.2	0.025

9-IN

CALIBRATION BLANK DETECTION LIMITS

GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: DAVE

Method: 350.3 XMDL Date: 07/18/2013 13:58

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia (as N)		0.2	0.025

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: SPARKY

Method: 9060 MDL Date: 01/27/2010 15:20

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Dissolved Organic Carbon		1	0.24

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30485-1

SDG Number:

Matrix: Water Instrument ID: SPARKY

Method: 9060 XMDL Date: 01/27/2010 15:20

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon		1	0.24

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 107127	Date: 10/25/2013 10:28						
160.1	MB 240-107127/1	Total Dissolved Solids	10	U	mg/L	10	1
Batch ID: 106647	Date: 10/22/2013 13:13						
300.0	MB 240-106647/3	Nitrite as N	0.10	U	mg/L	0.10	1
300.0	MB 240-106647/3	Nitrate as N	0.10	U	mg/L	0.10	1
300.0	MB 240-106647/3	Orthophosphate as P	0.50	U ^	mg/L	0.50	1
Batch ID: 106648	Date: 10/22/2013 13:13						
300.0	MB 240-106648/3	Chloride	1.0	U	mg/L	1.0	1
300.0	MB 240-106648/3	Sulfate	1.0	U	mg/L	1.0	1
Batch ID: 107029	Date: 10/24/2013 16:54						
300.0	MB 240-107029/3	Chloride	1.0	U	mg/L	1.0	1
300.0	MB 240-107029/3	Sulfate	1.0	U	mg/L	1.0	1
Batch ID: 107030	Date: 10/24/2013 16:54						
300.0	MB 240-107030/3	Orthophosphate as P	0.50	U	mg/L	0.50	1
Batch ID: 108521	Date: 11/05/2013 17:41						
300.0	MB 240-108521/3	Chloride	1.0	U	mg/L	1.0	1
300.0	MB 240-108521/3	Sulfate	1.0	U	mg/L	1.0	1
Batch ID: 108521	Date: 11/06/2013 03:26						
300.0	MB 240-108521/109	Chloride	1.0	U	mg/L	1.0	1
300.0	MB 240-108521/109	Sulfate	1.0	U	mg/L	1.0	1
Batch ID: 108016	Date: 10/31/2013 15:15						
310.1	MB 240-108016/5	Alkalinity	5.0	U	mg/L	5.0	1
Batch ID: 107230	Date: 10/25/2013 06:17						
350.3	MB 240-107230/7	Ammonia (as N)	0.0617	J	mg/L	0.20	1
Batch ID: 107649	Date: 10/28/2013 13:35						
9060	MB 240-107649/3	Dissolved Organic Carbon	1.0	U	mg/L	1.0	1

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 107127	Date: 10/25/2013 10:28										
						LCS Source: WCWIBBYSOLIDS_00007					
160.1	LCS 240-107127/2	Total Dissolved Solids	296		mg/L	295	100	88-110			
Batch ID: 106647	Date: 10/22/2013 13:30										
						LCS Source: WCICLCS_00236					
300.0	LCS 240-106647/4	Nitrite as N	2.56		mg/L	2.50	103	90-110			
300.0	LCS 240-106647/4	Nitrate as N	2.59		mg/L	2.50	104	90-110			
300.0	LCS 240-106647/4	Orthophosphate as P	2.30		mg/L	2.50	92	90-110			^
Batch ID: 106648	Date: 10/22/2013 13:30										
						LCS Source: WCICLCS_00236					
300.0	LCS 240-106648/4	Chloride	52.5		mg/L	50.0	105	90-110			
300.0	LCS 240-106648/4	Sulfate	51.6		mg/L	50.0	103	90-110			
Batch ID: 107029	Date: 10/24/2013 17:14										
						LCS Source: WCICLCS_00234					
300.0	LCS 240-107029/4	Chloride	50.6		mg/L	50.0	101	90-110			
300.0	LCS 240-107029/4	Sulfate	51.2		mg/L	50.0	102	90-110			
Batch ID: 107030	Date: 10/24/2013 17:14										
						LCS Source: WCICLCS_00234					
300.0	LCS 240-107030/4	Orthophosphate as P	2.40		mg/L	2.50	96	90-110			
Batch ID: 108521	Date: 11/05/2013 18:01										
						LCS Source: WCICLCS_00241					
300.0	LCS 240-108521/4	Chloride	48.7		mg/L	50.0	97	90-110			
300.0	LCS 240-108521/4	Sulfate	51.3		mg/L	50.0	103	90-110			
Batch ID: 108521	Date: 11/06/2013 03:46										
						LCS Source: WCICLCS_00241					
300.0	LCS 240-108521/110	Chloride	48.9		mg/L	50.0	98	90-110			
300.0	LCS 240-108521/110	Sulfate	51.5		mg/L	50.0	103	90-110			
Batch ID: 108016	Date: 10/31/2013 15:09										
						LCS Source: WCPHENOMINER_00005					
310.1	LCS 240-108016/4	Alkalinity	72.7		mg/L	73.0	100	90-127			
Batch ID: 107230	Date: 10/25/2013 06:17										
						LCS Source: WCWIBBY NH3_00003					
350.3	LCS 240-107230/8	Ammonia (as N)	9.81		mg/L	10.1	97	85-114			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 107649		Date: 10/28/2013 13:46									
						LCS Source:	WC LCS_00016				
9060	LCS 240-107649/4	Dissolved Organic Carbon	42.6		mg/L	40.8	104	88-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 106647	Date: 10/22/2013 16:09										
300.0	240-30485-1	Nitrite as N	0.10	U	mg/L						
300.0	240-30485-1 MS	Nitrite as N	2.92		mg/L	2.50	117	80-120			
300.0	240-30485-1	Nitrate as N	0.10	U	mg/L						
300.0	240-30485-1 MS	Nitrate as N	2.52		mg/L	2.50	101	80-120			
300.0	240-30485-1	Orthophosphate as P	0.087	J	mg/L						^
300.0	240-30485-1 MS	Orthophosphate as P	1.13		mg/L	2.50	42	80-120			F ^
Batch ID: 106648	Date: 10/22/2013 16:09										
300.0	240-30485-1	Chloride	140		mg/L						
300.0	240-30485-1 MS	Chloride	192		mg/L	50.0	110	80-120			
300.0	240-30485-1	Sulfate	980		mg/L						E
300.0	240-30485-1 MS	Sulfate	1010		mg/L	50.0	58	80-120			E 4
Batch ID: 107029	Date: 10/24/2013 17:53										
300.0	240-30485-1	Chloride	120		mg/L						
300.0	240-30485-1 MS	Chloride	185		mg/L	50.0	125	80-120			F
Batch ID: 107030	Date: 10/24/2013 17:53										
300.0	240-30485-1	Orthophosphate as P	0.19	J	mg/L						H
300.0	240-30485-1 MS	Orthophosphate as P	0.134	J	mg/L	2.50	-2	80-120			F
Batch ID: 108521	Date: 11/06/2013 00:11										
300.0	240-30281-J-1	Chloride	32		mg/L						
300.0	240-30281-J-1 MS	Chloride	116		mg/L	50.0	167	80-120			F
300.0	240-30281-J-1	Sulfate	420		mg/L						
300.0	240-30281-J-1 MS	Sulfate	472		mg/L	50.0	114	80-120			4
Batch ID: 108016	Date: 10/31/2013 15:56										
310.1	240-30451-J-3	Alkalinity	190		mg/L						
310.1	240-30451-J-3 MS	Alkalinity	639		mg/L	500	90	10-160			
Batch ID: 107230	Date: 10/25/2013 07:04										
350.3	240-30333-H-10	Ammonia (as N)	0.21		mg/L						B
350.3	240-30333-H-10 MS	Ammonia (as N)	2.79		mg/L	2.50	103	75-125			
Batch ID: 107649	Date: 10/28/2013 14:38										
9060	240-30622-M-4	Dissolved Organic Carbon	4.3		mg/L						
9060	240-30622-M-4 MS	Dissolved Organic Carbon	29.3		mg/L	25.0	100	72-136			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN

MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 106647	Date: 10/22/2013 16:27										
300.0	240-30485-1 MSD	Nitrite as N	3.02		mg/L	2.50	121	80-120	3	20	F
300.0	240-30485-1 MSD	Nitrate as N	2.56		mg/L	2.50	102	80-120	2	20	
300.0	240-30485-1 MSD	Orthophosphate as P	1.16		mg/L	2.50	43	80-120	2	20	F ^
Batch ID: 106648	Date: 10/22/2013 16:27										
300.0	240-30485-1 MSD	Chloride	197		mg/L	50.0	120	80-120	3	20	
300.0	240-30485-1 MSD	Sulfate	1030		mg/L	50.0	90	80-120	2	20	E 4
Batch ID: 107029	Date: 10/24/2013 18:12										
300.0	240-30485-1 MSD	Chloride	178		mg/L	50.0	112	80-120	4	20	
Batch ID: 107030	Date: 10/24/2013 18:12										
300.0	240-30485-1 MSD	Orthophosphate as P	1.42		mg/L	2.50	49	80-120	166	20	F
Batch ID: 108521	Date: 11/06/2013 00:31										
300.0	240-30281-J-1 MSD	Chloride	113		mg/L	50.0	161	80-120	3	20	F
300.0	240-30281-J-1 MSD	Sulfate	471		mg/L	50.0	111	80-120	0	20	4
Batch ID: 108016	Date: 10/31/2013 16:15										
310.1	240-30451-J-3 MSD	Alkalinity	660		mg/L	500	95	10-160	3	24	
Batch ID: 107230	Date: 10/25/2013 07:07										
350.3	240-30333-H-1 0 MSD	Ammonia (as N)	2.84		mg/L	2.50	105	75-125	2	20	
Batch ID: 107649	Date: 10/28/2013 14:49										
9060	240-30622-M-4 MSD	Dissolved Organic Carbon	29.8		mg/L	25.0	102	72-136	2	20	

MS OK

RA

Not our sample

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 107127	Date: 10/25/2013 10:28							
160.1		240-30590-I-12	Total Dissolved Solids	410	mg/L			
160.1		240-30590-I-12 DU	Total Dissolved Solids	402	mg/L	1	20	
Batch ID: 108016	Date: 10/31/2013 17:33							
310.1		240-30398-G-13	Alkalinity	300	mg/L			
310.1		240-30398-G-13 DU	Alkalinity	309	mg/L	4	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: STEVE Method: 310.1

Start Date: 10/31/2013 14:41 End Date: 10/31/2013 20:06

Lab Sample ID	D / F	Type	Time	Analytes																			
				Alk																			
RINSE 240-108016/1			14:41																				
RINSE 240-108016/2			14:46																				
ZZZZZZ			15:01																				
LCS 240-108016/4	1	T	15:09	X																			
MB 240-108016/5	1	T	15:15	X																			
ZZZZZZ			15:18																				
ZZZZZZ			15:29																				
ZZZZZZ			15:38																				
240-30451-J-3 MS	1	T	15:56	X																			
240-30451-J-3 MSD	1	T	16:15	X																			
240-30485-1	1	T	16:21	X																			
240-30485-2	1	T	16:28	X																			
240-30485-3	1	T	16:34	X																			
ZZZZZZ			16:45																				
ZZZZZZ			16:57																				
ZZZZZZ			17:07																				
ZZZZZZ			17:10																				
ZZZZZZ			17:21																				
240-30398-G-13 DU	1	T	17:33	X																			
ZZZZZZ			17:51																				
ZZZZZZ			18:00																				
ZZZZZZ			18:21																				
ZZZZZZ			18:30																				
ZZZZZZ			18:42																				
ZZZZZZ			18:54																				
ZZZZZZ			19:05																				
ZZZZZZ			19:17																				
ZZZZZZ			19:20																				
ZZZZZZ			19:31																				
ZZZZZZ			19:42																				
ZZZZZZ			19:54																				
ZZZZZZ			20:02																				
ZZZZZZ			20:06																				

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: NOEQUIP Method: 160.1

Start Date: 10/25/2013 10:28 End Date: 10/25/2013 10:28

Lab Sample ID	D / F	Type	Time	Analytes																				
				TDS																				
MB 240-107127/1	1	T	10:28	X																				
LCS 240-107127/2	1	T	10:28	X																				
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
240-30590-I-12 DU	1	T	10:28	X																				
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
240-30485-2	1	T	10:28	X																				
240-30485-1	1	T	10:28	X																				
240-30485-3	1	T	10:28	X																				
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					
ZZZZZZ			10:28																					

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: GARFUNKEL Method: 300.0

Start Date: 10/21/2013 11:42 End Date: 10/21/2013 14:53

Lab Sample ID	D / F	Type	Time	Analytes																			
STD1 240-106386/1 IC			11:42																				
STD2 240-106386/2 IC			11:59																				
STD3 240-106386/3 IC			12:17																				
STD4 240-106386/4 IC			12:34																				
STD5 240-106386/5 ICRT			12:52																				
STD6 240-106386/6 IC			13:09																				
STD7 240-106386/7 IC			13:26																				
STD8 240-106386/8 IC			13:44																				
STD9 240-106386/9 IC			14:01																				
ZZZZZZ			14:19																				
ICV 240-106386/11	1		14:36																				
ICB 240-106386/12			14:53																				

Prep Types

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: DAVE Method: 350.3

Start Date: 10/25/2013 05:54 End Date: 10/25/2013 17:15

Lab Sample ID	D / F	Type	Time	Analytes																				
				NH3																				
IC 240-107230/1			05:54	X																				
IC 240-107230/2			05:54	X																				
IC 240-107230/3			05:54	X																				
IC 240-107230/4			05:54	X																				
ICV 240-107230/5	10		05:54	X																				
ICB 240-107230/6	1		06:17	X																				
MB 240-107230/7	1	T	06:17	X																				
LCS 240-107230/8	10	T	06:17	X																				
ZZZZZZ			06:28																					
240-30485-1	1	T	06:35	X																				
240-30485-2	1	T	06:39	X																				
240-30485-3	2	T	06:45	X																				
ZZZZZZ			06:57																					
ZZZZZZ			07:00																					
240-30333-H-10 MS	1	T	07:04	X																				
240-30333-H-10 MSD	1	T	07:07	X																				
CCV 240-107230/17	1		07:08	X																				
CCB 240-107230/18	1		07:39	X																				
ZZZZZZ			07:59																					
ZZZZZZ			07:59																					
ZZZZZZ			07:59																					
ZZZZZZ			08:01																					
ZZZZZZ			08:05																					
ZZZZZZ			08:18																					
ZZZZZZ			08:21																					
ZZZZZZ			09:31																					
ZZZZZZ			10:40																					
ZZZZZZ			11:09																					
CCV 240-107230/29			11:46																					
CCB 240-107230/30			13:34																					
ZZZZZZ			14:04																					
ZZZZZZ			14:51																					
ZZZZZZ			16:44																					
ZZZZZZ			17:03																					
CCV 240-107230/35			17:06																					
CCB 240-107230/36			17:15																					

Prep Types
T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: JMB Batch Start Date: 10/25/2013

Reporting Units: mg/L Analytical Batch No.: 107230

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
5	ICV	05:54	Ammonia (as N)	10.4	10.1	103	90-110		WCWIBBY NH3_00003
6	ICB	06:17	Ammonia (as N)	0.0700				J	
17	CCV	07:08	Ammonia (as N)	2.66	2.50	106	90-110		WCNH31000_00025
18	CCB	07:39	Ammonia (as N)	0.0522				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: SPARKY Method: 9060

Start Date: 10/28/2013 13:13 End Date: 10/28/2013 22:26

Lab Sample ID	D / F	Type	Time	Analytes																				
				DOC																				
CCV 240-107649/1	1		13:13	X																				
CCB 240-107649/2	1		13:24	X																				
MB 240-107649/3	1	D	13:35	X																				
LCS 240-107649/4	1	D	13:46	X																				
ZZZZZZ			13:56																					
240-30622-M-4 MS	2	D	14:38	X																				
240-30622-M-4 MSD	2	D	14:49	X																				
ZZZZZZ			14:59																					
ZZZZZZ			15:41																					
ZZZZZZ			16:22																					
ZZZZZZ			17:03																					
ZZZZZZ			17:45																					
CCV 240-107649/13	1		18:26	X																				
CCB 240-107649/14	1		18:37	X																				
240-30485-1	1	D	18:48	X																				
240-30485-2	1	D	19:29	X																				
240-30485-3	1	D	20:10	X																				
ZZZZZZ			20:52																					
ZZZZZZ			21:33																					
CCV 240-107649/20	1		22:15	X																				
CCB 240-107649/21	1		22:26	X																				

Prep Types

D = Dissolved

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: TPH Batch Start Date: 10/28/2013

Reporting Units: mg/L Analytical Batch No.: 107649

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	13:13	Dissolved Organic Carbon	26.0	25.0	104	90-110		WC TOC CCV_00162
2	CCB	13:24	Dissolved Organic Carbon	1.0				U	
13	CCV	18:26	Dissolved Organic Carbon	25.8	25.0	103	90-110		WC TOC CCV_00162
14	CCB	18:37	Dissolved Organic Carbon	1.0				U	
20	CCV	22:15	Dissolved Organic Carbon	26.4	25.0	105	90-110		WC TOC CCV_00162
21	CCB	22:26	Dissolved Organic Carbon	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: VERONICA Method: 300.0

Start Date: 07/06/2013 06:16 End Date: 07/06/2013 09:37

Lab Sample ID	D / F	Type	Time	Analytes																			
STD1 240-92701/1 IC			06:16																				
STD2 240-92701/2 IC			06:36																				
STD3 240-92701/3 IC			06:56																				
STD4 240-92701/4 IC			07:16																				
STD5 240-92701/5 ICRT			07:36																				
STD6 240-92701/6 IC			07:56																				
STD7 240-92701/7 IC			08:16																				
STD8 240-92701/8 IC			08:37																				
STD9 240-92701/9 IC			08:57																				
ICV 240-92701/10	1		09:17																				
ICB 240-92701/11			09:37																				

Prep Types

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: LKG Batch Start Date: 07/06/2013

Reporting Units: mg/L Analytical Batch No.: 92701

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
10	ICV	09:17	Chloride	49.5	50.0	99	90-110		WCICLCS_00201
			Sulfate	49.8	50.0	100	90-110		WCICLCS_00201

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: GARFUNKEL Method: 300.0

Start Date: 10/21/2013 11:42 End Date: 10/21/2013 14:53

Lab Sample ID	D / F	Type	Time	Analytes																		
STD1 240-106387/1 IC			11:42																			
STD2 240-106387/2 IC			11:59																			
STD3 240-106387/3 IC			12:17																			
STD4 240-106387/4 IC			12:34																			
STD5 240-106387/5 ICRT			12:52																			
STD6 240-106387/6 IC			13:09																			
STD7 240-106387/7 IC			13:26																			
STD8 240-106387/8 IC			13:44																			
STD9 240-106387/9 IC			14:01																			
ZZZZZZ			14:19																			
ICV 240-106387/11	1		14:36																			
ICB 240-106387/12			14:53																			

Prep Types

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: KMG Batch Start Date: 10/21/2013

Reporting Units: mg/L Analytical Batch No.: 106386

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
11	ICV	14:36	Chloride	51.9	50.0	104	90-110		WCICLCS_00235
			Sulfate	50.8	50.0	102	90-110		WCICLCS_00235

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: GARFUNKEL Method: 300.0

Start Date: 10/22/2013 12:38 End Date: 10/22/2013 18:29

Lab Sample ID	D/F	Type	Time	Analytes																			
				N-No2	NO3	Orthop																	
CCV 240-106647/1	1		12:38	X	X	X																	
CCB 240-106647/2	1		12:56	X	X	X																	
MB 240-106647/3	1	T	13:13	X	X	X																	
LCS 240-106647/4	1	T	13:30	X	X	X																	
240-30485-1	1	T	15:52	X	X	X																	
240-30485-1 MS	1	T	16:09	X	X	X																	
240-30485-1 MSD	1	T	16:27	X	X	X																	
240-30485-2	1	T	16:44	X	X	X																	
240-30485-3	1	T	17:02	X	X	X																	
CCV 240-106647/13	1		18:11	X	X	X																	
CCB 240-106647/14	1		18:29	X	X	X																	

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: GARFUNKEL Method: 300.0

Start Date: 10/22/2013 12:38 End Date: 10/23/2013 00:51

Lab Sample ID	D/F	Type	Time	Analytes																					
				Cl-	SO4																				
CCV 240-106648/1	1		12:38	X	X																				
CCB 240-106648/2	1		12:56	X	X																				
MB 240-106648/3	1	T	13:13	X	X																				
LCS 240-106648/4	1	T	13:30	X	X																				
240-30485-1	1	T	15:52	X																					
240-30485-1 MS	1	T	16:09	X	X																				
240-30485-1 MSD	1	T	16:27	X	X																				
ZZZZZZ			16:44																						
240-30485-3	1	T	17:02	X	X																				
ZZZZZZ			17:19																						
ZZZZZZ			17:36																						
ZZZZZZ			17:54																						
CCV 240-106648/13	1		18:11	X	X																				
CCB 240-106648/14	1		18:29	X	X																				
ZZZZZZ			18:46																						
ZZZZZZ			19:03																						
ZZZZZZ			19:21																						
ZZZZZZ			19:38																						
ZZZZZZ			19:56																						
ZZZZZZ			20:13																						
ZZZZZZ			20:30																						
ZZZZZZ			20:48																						
ZZZZZZ			21:05																						
ZZZZZZ			21:23																						
CCV 240-106648/25			21:40																						
CCB 240-106648/26			21:57																						
ZZZZZZ			22:15																						
ZZZZZZ			22:32																						
ZZZZZZ			22:50																						
ZZZZZZ			23:07																						
ZZZZZZ			23:24																						
ZZZZZZ			23:42																						
ZZZZZZ			23:59																						
ZZZZZZ			00:16																						
ZZZZZZ			00:34																						
CCV 240-106648/36			00:51																						

Prep Types

T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: KMG Batch Start Date: 10/22/2013

Reporting Units: mg/L Analytical Batch No.: 106648

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	12:38	Chloride	51.9	50.0	104	90-110		WCICCCV_00338
			Sulfate	51.4	50.0	103	90-110		WCICCCV_00338
2	CCB	12:56	Chloride	1.0				U	
			Sulfate	1.0				U	
13	CCV	18:11	Chloride	51.4	50.0	103	90-110		WCICCCV_00338
			Sulfate	49.9	50.0	100	90-110		WCICCCV_00338
14	CCB	18:29	Chloride	1.0				U	
			Sulfate	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: VERONICA Method: 300.0

Start Date: 10/24/2013 16:15 End Date: 10/25/2013 03:18

Lab Sample ID	D / F	Type	Time	Analytes																				
				CL-	SO4																			
CCV 240-107029/1	1		16:15	X	X																			
CCB 240-107029/2	1		16:35	X	X																			
MB 240-107029/3	1	T	16:54	X	X																			
LCS 240-107029/4	1	T	17:14	X	X																			
ZZZZZZ			17:33																					
240-30485-1 MS	1	T	17:53	X																				
240-30485-1 MSD	1	T	18:12	X																				
ZZZZZZ			18:32																					
ZZZZZZ			18:51																					
ZZZZZZ			19:11																					
ZZZZZZ			19:30																					
ZZZZZZ			19:50																					
CCV 240-107029/13	1		20:09	X	X																			
CCB 240-107029/14	1		20:29	X	X																			
ZZZZZZ			20:48																					
ZZZZZZ			21:08																					
ZZZZZZ			21:27																					
ZZZZZZ			21:47																					
ZZZZZZ			22:06																					
ZZZZZZ			22:26																					
ZZZZZZ			22:45																					
ZZZZZZ			23:05																					
ZZZZZZ			23:24																					
ZZZZZZ			23:44																					
CCV 240-107029/25			00:03																					
CCB 240-107029/26			00:23																					
ZZZZZZ			00:42																					
ZZZZZZ			01:02																					
ZZZZZZ			01:21																					
ZZZZZZ			01:41																					
ZZZZZZ			02:00																					
ZZZZZZ			02:20																					
ZZZZZZ			02:39																					
CCV 240-107029/34			02:59																					
CCB 240-107029/35			03:18																					

Prep Types
T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: LKG Batch Start Date: 10/24/2013

Reporting Units: mg/L Analytical Batch No.: 107029

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	16:15	Chloride	49.5	50.0	99	90-110		WCICCCV_00337
			Sulfate	50.5	50.0	101	90-110		WCICCCV_00337
2	CCB	16:35	Chloride	1.0				U	
			Sulfate	1.0				U	
13	CCV	20:09	Chloride	49.4	50.0	99	90-110		WCICCCV_00337
			Sulfate	50.2	50.0	100	90-110		WCICCCV_00337
14	CCB	20:29	Chloride	1.0				U	
			Sulfate	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: VERONICA Method: 300.0

Start Date: 11/05/2013 17:02 End Date: 11/06/2013 14:15

Lab Sample ID	D / F	Type	Time	Analytes																					
				CL-	SO4																				
CCV 240-108521/1	1		17:02	X	X																				
CCB 240-108521/2	1		17:22	X	X																				
MB 240-108521/3	1	T	17:41	X	X																				
LCS 240-108521/4	1	T	18:01	X	X																				
ZZZZZZ			18:20																						
ZZZZZZ			18:40																						
ZZZZZZ			18:59																						
ZZZZZZ			19:38																						
ZZZZZZ			19:58																						
ZZZZZZ			20:17																						
ZZZZZZ			20:37																						
CCV 240-108521/89	1		20:56	X	X																				
CCB 240-108521/90	1		21:16	X	X																				
ZZZZZZ			21:35																						
ZZZZZZ			21:55																						
ZZZZZZ			22:14																						
ZZZZZZ			22:34																						
ZZZZZZ			22:53																						
ZZZZZZ			23:13																						
ZZZZZZ			23:32																						
ZZZZZZ			23:52																						
240-30281-J-1 MS	10	T	00:11	X	X																				
240-30281-J-1 MSD	10	T	00:31	X	X																				
CCV 240-108521/101	1		00:50	X	X																				
CCB 240-108521/102	1		01:10	X	X																				
ZZZZZZ			01:29																						
ZZZZZZ			01:49																						
ZZZZZZ			02:08																						
ZZZZZZ			02:28																						
ZZZZZZ			02:47																						
240-30485-1	10	T	03:07		X																				
MB 240-108521/109	1	T	03:26	X	X																				
LCS 240-108521/110	1	T	03:46	X	X																				
CCV 240-108521/111	1		04:05	X	X																				
CCB 240-108521/112	1		04:25	X	X																				
240-30485-2	10	T	04:44	X	X																				
ZZZZZZ			05:04																						
ZZZZZZ			05:23																						
ZZZZZZ			05:43																						
ZZZZZZ			06:02																						
ZZZZZZ			06:22																						
ZZZZZZ			06:41																						

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: VERONICA Method: 300.0

Start Date: 11/05/2013 17:02 End Date: 11/06/2013 14:15

Lab Sample ID	D / F	Type	Time	Analytes																				
				CL-	SO4																			
ZZZZZZ			07:01																					
ZZZZZZ			07:20																					
ZZZZZZ			07:40																					
CCV 240-108521/123	1		07:59	X	X																			
CCB 240-108521/124	1		08:19	X	X																			
ZZZZZZ			08:38																					
ZZZZZZ			08:58																					
ZZZZZZ			09:17																					
ZZZZZZ			09:37																					
ZZZZZZ			10:01																					
ZZZZZZ			10:21																					
ZZZZZZ			10:40																					
ZZZZZZ			11:00																					
ZZZZZZ			11:19																					
ZZZZZZ			11:39																					
CCV 240-108521/135			11:58																					
CCB 240-108521/136			12:18																					
ZZZZZZ			12:37																					
ZZZZZZ			12:57																					
ZZZZZZ			13:16																					
ZZZZZZ			13:36																					
CCV 240-108521/141			13:55																					
CCB 240-108521/142			14:15																					

Prep Types
T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: JMB Batch Start Date: 11/05/2013

Reporting Units: mg/L Analytical Batch No.: 108521

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	17:02	Chloride	47.8	50.0	96	90-110		WCICCCV_00346
			Sulfate	48.7	50.0	97	90-110		WCICCCV_00346
2	CCB	17:22	Chloride	1.0				U	
			Sulfate	1.0				U	
89	CCV	20:56	Chloride	48.0	50.0	96	90-110		WCICCCV_00346
			Sulfate	48.8	50.0	98	90-110		WCICCCV_00346
90	CCB	21:16	Chloride	1.0				U	
			Sulfate	1.0				U	
101	CCV	00:50	Chloride	48.1	50.0	96	90-110		WCICCCV_00346
			Sulfate	49.0	50.0	98	90-110		WCICCCV_00346
102	CCB	01:10	Chloride	1.0				U	
			Sulfate	1.0				U	
111	CCV	04:05	Chloride	48.1	50.0	96	90-110		WCICCCV_00346
			Sulfate	48.9	50.0	98	90-110		WCICCCV_00346
112	CCB	04:25	Chloride	1.0				U	
			Sulfate	1.0				U	
123	CCV	07:59	Chloride	48.2	50.0	96	90-110		WCICCCV_00346
			Sulfate	49.2	50.0	98	90-110		WCICCCV_00346
124	CCB	08:19	Chloride	1.0				U	
			Sulfate	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: VERONICA Method: 300.0

Start Date: 07/06/2013 06:16 End Date: 07/06/2013 09:37

Lab Sample ID	D / F	Type	Time	Analytes																			
STD1 240-92702/1 IC			06:16																				
STD2 240-92702/2 IC			06:36																				
STD3 240-92702/3 IC			06:56																				
STD4 240-92702/4 IC			07:16																				
STD5 240-92702/5 ICRT			07:36																				
STD6 240-92702/6 IC			07:56																				
STD7 240-92702/7 IC			08:16																				
STD8 240-92702/8 IC			08:37																				
STD9 240-92702/9 IC			08:57																				
ICV 240-92702/10	1		09:17																				
ICB 240-92702/11			09:37																				

Prep Types

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: LKG Batch Start Date: 07/06/2013

Reporting Units: mg/L Analytical Batch No.: 92702

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
10	ICV	09:17	Nitrite as N	2.35	2.50	94	90-110		WCICLCS_00201
			Nitrate as N	2.56	2.50	102	90-110		WCICLCS_00201
			Orthophosphate as P	2.37	2.50	95	90-110		WCICLCS_00201

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: KMG Batch Start Date: 10/21/2013

Reporting Units: mg/L Analytical Batch No.: 106387

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
11	ICV	14:36	Nitrite as N	2.45	2.50	98	90-110		WCICLCS_00235
			Nitrate as N	2.51	2.50	100	90-110		WCICLCS_00235
			Orthophosphate as P	2.33	2.50	93	90-110		WCICLCS_00235

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: KMG Batch Start Date: 10/22/2013

Reporting Units: mg/L Analytical Batch No.: 106647

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	12:38	Nitrite as N	2.55	2.50	102	90-110		WCICCCV_00338
			Nitrate as N	2.52	2.50	101	90-110		WCICCCV_00338
			Orthophosphate as P	2.28	2.50	91	90-110		WCICCCV_00338
2	CCB	12:56	Nitrite as N	0.10				U	
			Nitrate as N	0.10				U	
			Orthophosphate as P	0.50				U	
13	CCV	18:11	Nitrite as N	2.41	2.50	96	90-110		WCICCCV_00338
			Nitrate as N	2.32	2.50	93	90-110		WCICCCV_00338
			Orthophosphate as P	2.05	2.50	82	90-110		WCICCCV_00338
14	CCB	18:29	Nitrite as N	0.10				U	
			Nitrate as N	0.10				U	
			Orthophosphate as P	0.50				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Instrument ID: VERONICA Method: 300.0

Start Date: 10/24/2013 16:15 End Date: 10/24/2013 20:29

Lab Sample ID	D/F	Type	Time	Analytes: Ortho p																			
CCV 240-107030/1	1		16:15	X																			
CCB 240-107030/2	1		16:35	X																			
MB 240-107030/3	1	T	16:54	X																			
LCS 240-107030/4	1	T	17:14	X																			
240-30485-1 RA	1	T	17:33	X																			
240-30485-1 MS	1	T	17:53	X																			
240-30485-1 MSD	1	T	18:12	X																			
240-30485-2 RA	1	T	18:32	X																			
240-30485-3 RA	1	T	18:51	X																			
CCV 240-107030/13	1		20:09	X																			
CCB 240-107030/14	1		20:29	X																			

Prep Types

T = Total/NA

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-30485-1

SDG No.:

Analyst: LKG Batch Start Date: 10/24/2013

Reporting Units: mg/L Analytical Batch No.: 107030

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	16:15	Orthophosphate as P	2.53	2.50	101	90-110		WCICCCV_00337
2	CCB	16:35	Orthophosphate as P	0.50				U	
13	CCV	20:09	Orthophosphate as P	2.32	2.50	93	90-110		WCICCCV_00337
14	CCB	20:29	Orthophosphate as P	0.150				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Phone (330) 497-9396 Fax (330) 497-0772

10461

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: McFadden, John	Carrier Tracking No(s):	COC No: 240-21496.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.mcfadden@testamericainc.com		Page: Page 1 of 1
Company: Pace Analytical Energy Services, LLC				Job #: 240-30485-1
Address: 220 William Pitt Way,	Due Date Requested: 11/11/2013			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone:	PO #:			
Email:	WO #:			
Project Name: LM MSA Dump Road Area Source Characteriz	Project #: 24008960			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT/ Methane & Ethane (AM 20GAX protocol)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
1 MSA-MW51S-102113 (240-30485-1)	10/21/13	10:55 Eastern		Water			X	2	
2 MSA-MW51I-102113 (240-30485-2)	10/21/13	12:35 Eastern		Water			X	2	
3 MSA-MW51D-102113 (240-30485-3)	10/21/13	13:55 Eastern		Water			X	2	

Page 2387 of 2396

Possible Hazard Identification
Unconfirmed 2°C

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10-22-13 · 1830	IDL-NC	[signature]	10/23/13 1030	MC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Microseeps
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

November 6, 2013

John McFadden
Test America
4101 Shuffel Drive NW
North Canton, OH 44720
USA

RE: **240-30485-1**

Microseeps Workorder: 10461

Dear John McFadden:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, October 23, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Robbin Robl 11/06/2013
rrobl@microseeps.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email info@microseeps.com.

Total Number of Pages 12

CERTIFICATE OF ANALYSIS

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Microseeps
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	NELAP: State of Florida, Department of Health, Bureau of Laboratories
Accreditation ID:	E87832
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: State of Louisiana, Department of Environmental Quality
Accreditation ID:	04104
Scope:	Solid and Chemical Materials; Non-Potable Water
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, Microseeps is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

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Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 10461 240-30485-1

Lab ID	Sample ID	Matrix	Date Collected	Date Received
104610001	MSA-MW51S-102113(240-30485-1)	Water	10/21/2013 10:55	10/23/2013 10:30
104610002	MSA-MW51I-102113(240-30485-2)	Water	10/21/2013 12:35	10/23/2013 10:30
104610003	MSA-MW51D-102113(240-30485-3)	Water	10/21/2013 13:55	10/23/2013 10:30

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Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS QUALIFIERS

Workorder: 10461 240-30485-1

DEFINITIONS/QUALIFIERS

Disclaimer : The Pennsylvania Department of Environmental Protection (PADEP) has decided to no longer recognize analyses that do not produce data for primary compliance, for NELAP accreditation. The methods affected by this decision are AM20GAx, AM21G, SW846 7199 and AM4.02. The laboratory shall continue to administer the NELAP/TNI standard requirements in the performance of these methods.

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).

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Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 10461 240-30485-1

QC Batch: DISG/3360 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 104610001, 104610002, 104610003

METHOD BLANK: 23784

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	0.10 U	0.10	
Ethane	ug/l	0.025 U	0.025	

LABORATORY CONTROL SAMPLE & LCSD: 23785 23786

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	670	650	90	87	80-120	3.4	20	
Ethane	ug/l	38	35	35	92	92	80-120	0	20	

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Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 10461 240-30485-1

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
104610001	MSA-MW51S-102113(240-30485-1)			AM20GAX	DISG/3360
104610002	MSA-MW51I-102113(240-30485-2)			AM20GAX	DISG/3360
104610003	MSA-MW51D-102113(240-30485-3)			AM20GAX	DISG/3360

CERTIFICATE OF ANALYSIS

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Microseeps Project Number: 10461

Date: 10.23.13 Time of Receipt 1100 Receiver: LY

Client TA Canton

REASON FOR NON-CONFORMANCE:

Requested Methane & Ethane
Samples were preserved w/ HCl, in vials with clear septa.

ACTION TAKEN:

Client name: John McFadden Date: 10/23/13 Time: 1.43

Client is Aware. o.k. to Proceed.

Customer Service Initials: C-T. Date: 10/23/13

Cooler Receipt Form

Client Name: TA Canton Project: 240-30485-1 Lab Work Order: 10461

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 9784 4686 1580

Custody Seal on Cooler/Box Present: (Yes) No Seals Intact: (Yes) No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None Ice Intact: (Yes) Melted

Cooler Temperature: 3°C Radiation Screened: Yes (No) Chain of Custody Present: (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC		✓		
Containers intact	✓			
Were samples in separate bags			✓	
Sample container labels match COC Sample name/date and time collected	✓			
Sufficient volume provided	✓			
Microseeps containers used		✓		
Are containers properly preserved for the requested testing? (as labeled)		✓		
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	If yes, see pH form.
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments:_____

Cooler contents examined/received by: LY Date: 10/23/13

Project Manager Review: C.T. Date: 10/23/13

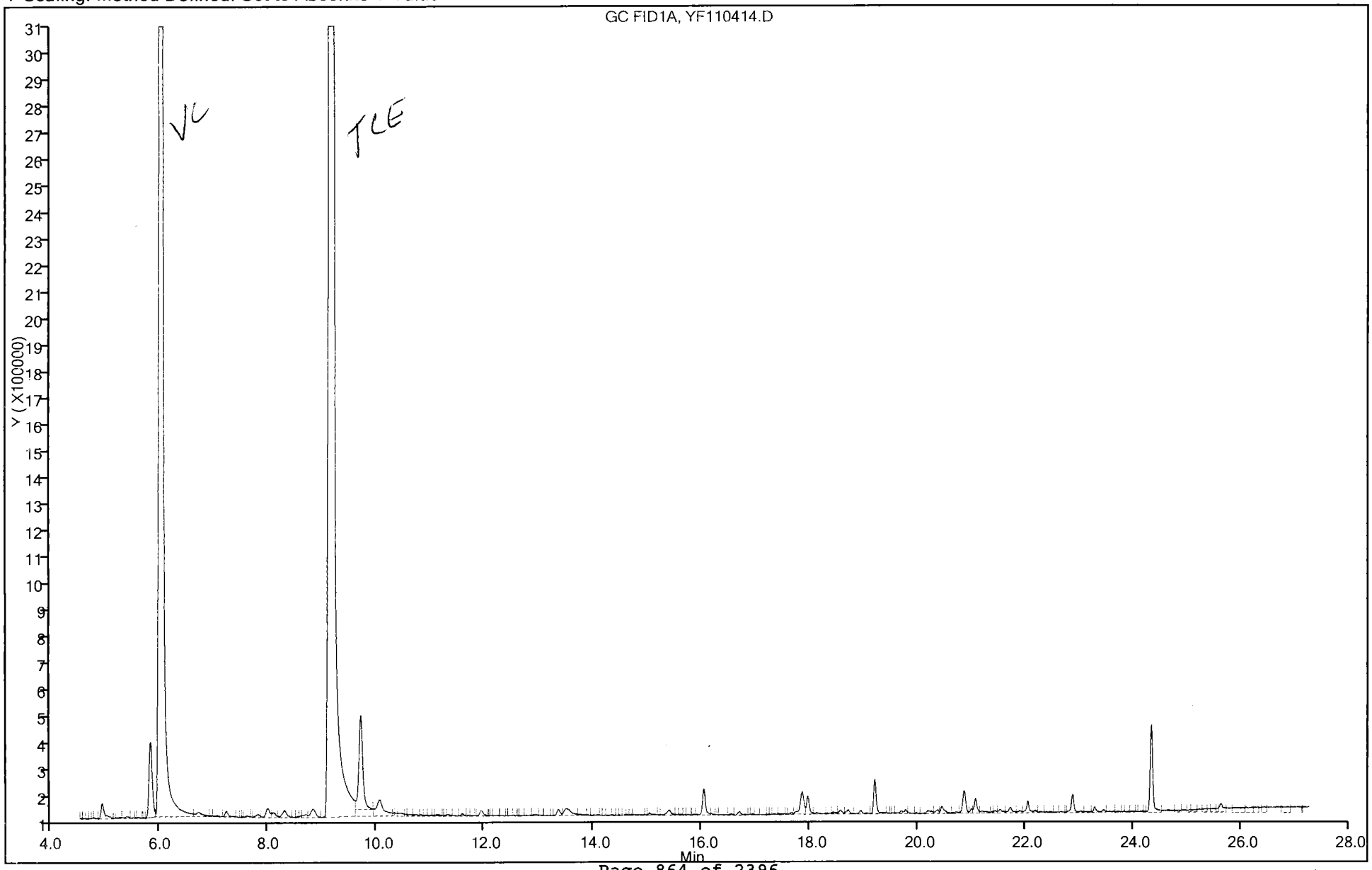
Report Date: 05-Nov-2013 08:45:39 Chrom Revision: 2.1 30-Oct-2013 08:26:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\YPID\20131104-25256.b\YF110414.D

Injection Date:	04-Nov-2013 17:03:57	Instrument ID:	YPID	Operator ID:	402582
Lims ID:	240-30485-A-1	Lab Sample ID:	240-30485-1	Worklist Smp#:	14
Client ID:	MSA-MW51S-102113				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	1
Method:	Y80158021	Limit Group:	GCV 8015C GRO ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **December 12, 2013**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION- VOCs, SVOC, TPH, TOTAL AND DISSOLVED METALS**
LOCKHEED-MATRIN STATE AIRPORT
DUMP ROAD SOURCE AREAS
SDG 240-30533-1

SAMPLES: 3/Aqueous/
MSA-MW43S-102213 MSA-MW43S-102413
TB-102213

Overview

The sample set for Lockheed MSA, SDG 240-30533-1, consists of two (2) aqueous environmental samples and one trip blank.

All samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOC), total petroleum hydrocarbons (TPH), and select metals. The samples were collected by Tetra Tech October 22nd and 24th, 2013 and analyzed by TestAmerica. VOC analyses were conducted using method 8260B. SVOC analyses were conducted using method 8270D. TPH analyses were conducted using method 8015C. TPH analyses were conducted using method 8015C. Metals analyses were conducted using method 6010C. Mercury analyses were conducted using method 7470.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, GC/MS tuning, MS tuning, initial and continuing calibration verification results, laboratory method / preparation blank results, ICP interference results, ICP internal standard recoveries, ICP serial dilution, surrogate standard recoveries, laboratory control sample recoveries, matrix spike recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems-

- The initial calibration analyzed on 10/6/13 on instrument A3UX11 had a relative response factor < 0.05 for tert-butyl alcohol and vinyl acetate. Samples MSA-MW43S-102213 and TB-102213 were affected. All tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR).

- The continuing calibration analyzed on 10/31/13 on instrument A3UX11 had a relative response factor < 0.05 for tert-butyl alcohol, vinyl acetate, bromomethane, and chloroethane. Samples MSA-MW43S-102213 and TB-102213 were affected. All tert-butyl alcohol, vinyl acetate, bromomethane, and chloroethane results were qualified as rejected (UR).

Minor Problems-

- The following contaminants were detected in preparation and calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Chloroform [1]	0.65 ug/L	3.2 ug/L
TPH (C6-C10) [2]	61.4 ug/L	307 ug/L
Zinc [3]	6.6 ug/L	33 ug/L
Vanadium [3]	3.0 ug/L	15 ug/L
Antimony [4]	3.7 ug/L	18.5 ug/L
Lead [4]	2.0 ug/L	10 ug/L

[1] Maximum concentration found in the trip blank affecting sample MSA-MW43S-102213.
[2] Maximum concentration found in preparation blank affecting sample MSA-MW43S-102213.
[3] Maximum concentration found in preparation blank affecting sample MSA-MW43S-102213.
[4] Maximum concentration found in calibration blank affecting sample MSA-MW43S-102213.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Detected TPH (C6-C10), antimony, vanadium and zinc results less than the blank action level were qualified (B) for blank contamination.

- TICs were qualified as presumptively present "NJ".

Notes

Non-detected results were reported at the MDL.

The LCS had a percent recovery less than the lower control limit for chloroethane. Samples MSA-MW43S-102213 and TB-102213 were affected. No validation action was warranted as sample results were rejected for calibration RRF non-compliances.

The continuing calibration analyzed on 10/31/13 had a percent difference > 20% for carbon disulfide, dichlorofluoromethane, and vinyl acetate and had percent recoveries > 50% for bromomethane and chloroethane. Samples MSA-MW43S-102213 and TB-102213 were affected. No validation action was warranted as sample results were either rejected or non-detect.

The CRDL standard analyzed in 11/7/13 had a percent recovery >110% for antimony, vanadium, arsenic and lead. Sample MSA-MW43S-102213 was affected. No validation action was warranted as sample results were either non-detected or qualified for blank contamination.

Sample MSA-MW43S-102413 was collected 2 days after the initial sampling because the well went dry during collection.

Executive Summary

Laboratory Performance: Calibration RRF non-compliances resulted in the rejection of tert-butyl alcohol, vinyl acetate, bromomethane, and chloroethane results. Preparation and calibration blank contamination resulted in the qualification of antimony, vanadium and zinc as non-detected.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993) and U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994).

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	MSA-MW43S-102213			TB-102213		
SDG: 240-30533-1	LAB_ID	240-30533-1			240-30533-2		
FRACTION: OV	SAMP_DATE	10/22/2013			10/22/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.43	J	P	0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U	
2-BUTANONE		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U	
ACETONE		1.1	U		1.1	U	
BENZENE		0.33	J	P	0.13	U	
BROMOBENZENE		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U	
BROMOMETHANE		0.41	UR	C	0.41	UR	C
CARBON DISULFIDE		0.13	U		0.13	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW43S-102213			TB-102213		
SDG: 240-30533-1	LAB_ID	240-30533-1			240-30533-2		
FRACTION: OV	SAMP_DATE	10/22/2013			10/22/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON TETRACHLORIDE		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U	
CHLOROETHANE		0.29	UR	C	0.29	UR	C
CHLOROFORM		0.16	U		0.65	J	P
CHLOROMETHANE		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.85	J	P	0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U	
TRICHLOROETHENE		0.17	U		0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.69	J	P	0.22	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW43S-102413
SDG: 240-30533-1	LAB_ID	240-30652-1
FRACTION: OS	SAMP_DATE	10/24/2013
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1-BIPHENYL	0.14	U	
1,4-DIOXANE	0.51	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	0.42	U	
2,4,5-TRICHLOROPHENOL	0.31	U	
2,4,6-TRICHLOROPHENOL	0.25	U	
2,4-DICHLOROPHENOL	0.2	U	
2,4-DIMETHYLPHENOL	0.26	U	
2,4-DINITROPHENOL	0.33	U	
2,4-DINITROTOLUENE	0.26	U	
2,6-DINITROTOLUENE	0.83	U	
2-CHLORONAPHTHALENE	0.1	U	
2-CHLOROPHENOL	0.3	U	
2-METHYLNAPHTHALENE	0.094	U	
2-METHYLPHENOL	0.18	U	
2-NITROANILINE	0.22	U	
2-NITROPHENOL	0.29	U	
3&4-METHYLPHENOL	0.83	U	
3,3'-DICHLOROBENZIDINE	0.39	U	
3-NITROANILINE	0.29	U	
4,6-DINITRO-2-METHYLPHENOL	2.5	U	
4-BROMOPHENYL PHENYL ETHER	0.23	U	
4-CHLORO-3-METHYLPHENOL	0.22	U	
4-CHLOROANILINE	0.22	U	
4-CHLOROPHENYL PHENYL ETHER	0.31	U	
4-NITROANILINE	0.23	U	
4-NITROPHENOL	0.3	U	
ACENAPHTHENE	0.046	U	
ACENAPHTHYLENE	0.05	U	
ACETOPHENONE	0.38	J	P
ANTHRACENE	0.092	U	
ATRAZINE	0.35	U	
BENZALDEHYDE	0.41	U	
BENZO(A)ANTHRACENE	0.031	U	
BENZO(A)PYRENE	0.054	U	
BENZO(B)FLUORANTHENE	0.041	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW43S-102213		
SDG: 240-30533-1	LAB_ID	240-30533-1		
FRACTION: TICOV	SAMP_DATE	10/22/2013		
MEDIA: WATER	QC_TYPE	TIC		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1-HEXANOL, 2-ETHYL-		1.6	NJ	Z1
ACETIC ACID, (TRIMETHYLSILYL)-		1.1	NJ	Z1

PROJ_NO: 04882	NSAMPLE	MSA-MW43S-102413		
SDG: 240-30533-1	LAB_ID	240-30652-1		
FRACTION: OS	SAMP_DATE	10/24/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		0.048	U	
BENZO(K)FLUORANTHENE		0.047	U	
BIS(2-CHLOROETHOXY)METHANE		0.33	U	
BIS(2-CHLOROETHYL)ETHER		0.1	U	
BIS(2-ETHYLHEXYL)PHTHALATE		0.54	J	P
BUTYL BENZYL PHTHALATE		0.27	U	
CAPROLACTAM		0.21	U	
CARBAZOLE		0.29	U	
CHRYSENE		0.052	U	
DIBENZO(A,H)ANTHRACENE		0.046	U	
DIBENZOFURAN		0.021	U	
DIETHYL PHTHALATE		0.62	U	
DIMETHYL PHTHALATE		0.3	U	
DI-N-BUTYL PHTHALATE		1	J	P
DI-N-OCTYL PHTHALATE		0.24	U	
FLUORANTHENE		0.046	U	
FLUORENE		0.042	U	
HEXACHLOROBENZENE		0.089	U	
HEXACHLOROBUTADIENE		0.28	U	
HEXACHLOROCYCLOPENTADIENE		0.25	U	
HEXACHLOROETHANE		0.2	U	
INDENO(1,2,3-CD)PYRENE		0.045	U	
ISOPHORONE		0.28	U	
NAPHTHALENE		0.065	U	
NITROBENZENE		0.042	U	
N-NITROSODIMETHYLAMINE		0.32	U	
N-NITROSO-DI-N-PROPYLAMINE		0.25	U	
N-NITROSODIPHENYLAMINE		0.32	U	
PENTACHLOROPHENOL		0.28	U	
PHENANTHRENE		0.064	U	
PHENOL		0.62	U	
PYRENE		0.044	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW43S-102213			MSA-MW43S-102413		
SDG: 240-30533-1	LAB_ID	240-30533-1			240-30652-1		
FRACTION: PET	SAMP_DATE	10/22/2013			10/24/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		39	B	A			
TPH (C10-C32)					2300		

PROJ_NO: 04882	NSAMPLE	MSA-MW43S-102213		
SDG: 240-30533-1	LAB_ID	240-30533-1		
FRACTION: M	SAMP_DATE	10/22/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
ANTIMONY		3	B	A
ARSENIC		3.2	U	
BARIUM		96	J	P
BERYLLIUM		0.46	U	
CADMIUM		0.66	U	
CHROMIUM		2.2	U	
COBALT		1.7	U	
COPPER		4.5	U	
LEAD		1.9	U	
MERCURY		0.12	U	
MOLYBDENUM		1.3	U	
NICKEL		3.2	U	
SELENIUM		4.1	U	
SILVER		2.2	U	
THALLIUM		4.7	U	
VANADIUM		4.5	B	A
ZINC		9.9	B	A

PROJ_NO: 04882	NSAMPLE	MSA-MW43S-102213
SDG: 240-30533-1	LAB_ID	240-30533-1
FRACTION: MF	SAMP_DATE	10/22/2013
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
ANTIMONY	1.8	U	
ARSENIC	3.2	U	
BARIUM	77	J	P
BERYLLIUM	0.46	U	
CADMIUM	0.66	U	
CHROMIUM	2.2	U	
COBALT	1.8	J	P
COPPER	4.5	U	
LEAD	1.9	U	
MERCURY	0.12	U	
MOLYBDENUM	1.3	U	
NICKEL	4.5	J	P
SELENIUM	4.1	U	
SILVER	2.2	U	
THALLIUM	4.7	U	
VANADIUM	5.8	B	A
ZINC	7.5	B	A

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: MSA-MW43S-102213 | Lab Sample ID: 240-30533-1

Matrix: Water | Lab File ID: UXJ5055.D

Analysis Method: 8260B | Date Collected: 10/22/2013 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2013 20:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107886 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.43	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	0.33	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U *	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: MSA-MW43S-102213 | Lab Sample ID: 240-30533-1

Matrix: Water | Lab File ID: UXJ5055.D

Analysis Method: 8260B | Date Collected: 10/22/2013 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2013 20:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107886 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.85	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.69	J	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: MSA-MW43S-102213 | Lab Sample ID: 240-30533-1

Matrix: Water | Lab File ID: UXJ5055.D

Analysis Method: 8260B | Date Collected: 10/22/2013 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2013 20:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107886 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		63-129
460-00-4	4-Bromofluorobenzene (Surr)	96		66-117
2037-26-5	Toluene-d8 (Surr)	95		74-115
1868-53-7	Dibromofluoromethane (Surr)	102		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Client Sample ID: MSA-MW43S-102213 Lab Sample ID: 240-30533-1

Matrix: Water Lab File ID: UXJ5055.D

Analysis Method: 8260B Date Collected: 10/22/2013 11:00

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2013 20:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107886 Units: ug/L

Number TICs Found: 2 TIC Result Total: 2.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q
2345-38-2	Acetic acid, (trimethylsilyl)-	4.39	1.1	T J N
104-76-7	1-Hexanol, 2-ethyl-	10.59	1.6	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: TB-102213 | Lab Sample ID: 240-30533-2

Matrix: Water | Lab File ID: UXJ5056.D

Analysis Method: 8260B | Date Collected: 10/22/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2013 20:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107886 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U *	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: TB-102213 | Lab Sample ID: 240-30533-2

Matrix: Water | Lab File ID: UXJ5056.D

Analysis Method: 8260B | Date Collected: 10/22/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2013 20:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107886 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.65	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Client Sample ID: TB-102213 Lab Sample ID: 240-30533-2

Matrix: Water Lab File ID: UXJ5056.D

Analysis Method: 8260B Date Collected: 10/22/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2013 20:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107886 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	91		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Client Sample ID: TB-102213 Lab Sample ID: 240-30533-2

Matrix: Water Lab File ID: UXJ5056.D

Analysis Method: 8260B Date Collected: 10/22/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2013 20:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107886 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: MSA-MW43S-102413 | Lab Sample ID: 240-30652-1

Matrix: Water | Lab File ID: 31031027.D

Analysis Method: 8270D | Date Collected: 10/24/2013 12:45

Extract. Method: 3520C | Date Extracted: 10/29/2013 08:08

Sample wt/vol: 960(mL) | Date Analyzed: 10/31/2013 21:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107883 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.0	U	1.0	0.14
123-91-1	1,4-Dioxane	1.0	U	1.0	0.51
88-06-2	2,4,6-Trichlorophenol	5.2	U	5.2	0.25
95-95-4	2,4,5-Trichlorophenol	5.2	U	5.2	0.31
120-83-2	2,4-Dichlorophenol	2.1	U	2.1	0.20
105-67-9	2,4-Dimethylphenol	2.1	U	2.1	0.26
51-28-5	2,4-Dinitrophenol	5.2	U	5.2	0.33
121-14-2	2,4-Dinitrotoluene	5.2	U	5.2	0.26
91-58-7	2-Chloronaphthalene	1.0	U	1.0	0.10
95-57-8	2-Chlorophenol	1.0	U	1.0	0.30
91-57-6	2-Methylnaphthalene	0.21	U	0.21	0.094
95-48-7	2-Methylphenol	1.0	U	1.0	0.18
88-74-4	2-Nitroaniline	2.1	U	2.1	0.22
88-75-5	2-Nitrophenol	2.1	U	2.1	0.29
15831-10-4	3 & 4 Methylphenol	2.1	U	2.1	0.83
91-94-1	3,3'-Dichlorobenzidine	5.2	U	5.2	0.39
99-09-2	3-Nitroaniline	2.1	U	2.1	0.29
534-52-1	4,6-Dinitro-2-methylphenol	5.2	U	5.2	2.5
101-55-3	4-Bromophenyl phenyl ether	2.1	U	2.1	0.23
59-50-7	4-Chloro-3-methylphenol	2.1	U	2.1	0.22
106-47-8	4-Chloroaniline	2.1	U	2.1	0.22
7005-72-3	4-Chlorophenyl phenyl ether	2.1	U	2.1	0.31
100-01-6	4-Nitroaniline	2.1	U	2.1	0.23
83-32-9	Acenaphthene	0.21	U	0.21	0.046
208-96-8	Acenaphthylene	0.21	U	0.21	0.050
98-86-2	Acetophenone	0.38	J	1.0	0.35
120-12-7	Anthracene	0.21	U	0.21	0.092
1912-24-9	Atrazine	1.0	U	1.0	0.35
100-52-7	Benzaldehyde	1.0	U	1.0	0.41
56-55-3	Benzo[a]anthracene	0.21	U	0.21	0.031
50-32-8	Benzo[a]pyrene	0.21	U	0.21	0.054
205-99-2	Benzo[b]fluoranthene	0.21	U	0.21	0.041
191-24-2	Benzo[g,h,i]perylene	0.21	U	0.21	0.048
207-08-9	Benzo[k]fluoranthene	0.21	U	0.21	0.047

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: MSA-MW43S-102413 | Lab Sample ID: 240-30652-1

Matrix: Water | Lab File ID: 31031027.D

Analysis Method: 8270D | Date Collected: 10/24/2013 12:45

Extract. Method: 3520C | Date Extracted: 10/29/2013 08:08

Sample wt/vol: 960(mL) | Date Analyzed: 10/31/2013 21:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107883 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.0	U	1.0	0.33
111-44-4	Bis(2-chloroethyl)ether	1.0	U	1.0	0.10
117-81-7	Bis(2-ethylhexyl) phthalate	0.54	J	2.1	0.23
85-68-7	Butyl benzyl phthalate	2.1	U	2.1	0.27
105-60-2	Caprolactam	5.2	U	5.2	0.21
86-74-8	Carbazole	1.0	U	1.0	0.29
218-01-9	Chrysene	0.21	U	0.21	0.052
84-74-2	Di-n-butyl phthalate	1.0	J	2.1	0.70
117-84-0	Di-n-octyl phthalate	2.1	U	2.1	0.24
53-70-3	Dibenzo(a,h)anthracene	0.21	U	0.21	0.046
132-64-9	Dibenzofuran	1.0	U	1.0	0.021
84-66-2	Diethyl phthalate	2.1	U	2.1	0.62
131-11-3	Dimethyl phthalate	2.1	U	2.1	0.30
206-44-0	Fluoranthene	0.21	U	0.21	0.046
86-73-7	Fluorene	0.21	U	0.21	0.042
118-74-1	Hexachlorobenzene	0.21	U	0.21	0.089
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.28
77-47-4	Hexachlorocyclopentadiene	10	U	10	0.25
67-72-1	Hexachloroethane	1.0	U	1.0	0.20
193-39-5	Indeno[1,2,3-cd]pyrene	0.21	U	0.21	0.045
78-59-1	Isophorone	1.0	U	1.0	0.28
621-64-7	N-Nitrosodi-n-propylamine	1.0	U	1.0	0.25
62-75-9	N-Nitrosodimethylamine	1.0	U	1.0	0.32
86-30-6	N-Nitrosodiphenylamine	1.0	U	1.0	0.32
91-20-3	Naphthalene	0.21	U	0.21	0.065
98-95-3	Nitrobenzene	1.0	U	1.0	0.042
87-86-5	Pentachlorophenol	5.2	U	5.2	0.28
85-01-8	Phenanthrene	0.21	U	0.21	0.064
108-95-2	Phenol	1.0	U	1.0	0.62
129-00-0	Pyrene	0.21	U	0.21	0.044
108-60-1	2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.42
606-20-2	2,6-Dinitrotoluene	5.2	U	5.2	0.83
100-02-7	4-Nitrophenol	5.2	U	5.2	0.30

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: MSA-MW43S-102413 | Lab Sample ID: 240-30652-1

Matrix: Water | Lab File ID: 31031027.D

Analysis Method: 8270D | Date Collected: 10/24/2013 12:45

Extract. Method: 3520C | Date Extracted: 10/29/2013 08:08

Sample wt/vol: 960(mL) | Date Analyzed: 10/31/2013 21:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107883 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	58		24-110
4165-62-2	Phenol-d5 (Surr)	70		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	62		21-110
367-12-4	2-Fluorophenol (Surr)	62		10-110
321-60-8	2-Fluorobiphenyl (Surr)	58		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	78		21-110

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: MSA-MW43S-102213 | Lab Sample ID: 240-30533-1

Matrix: Water | Lab File ID: YF103021.D

Analysis Method: 8015C | Date Collected: 10/22/2013 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2013 03:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107778 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	39	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	77		40-133

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Client Sample ID: MSA-MW43S-102413 Lab Sample ID: 240-30652-1

Matrix: Water Lab File ID: P6F10129.D

Analysis Method: 8015C Date Collected: 10/24/2013 12:45

Extraction Method: 3520C Date Extracted: 10/30/2013 09:00

Sample wt/vol: 940(mL) Date Analyzed: 11/02/2013 05:12

Con. Extract Vol.: 5.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 108118 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	2300		530	250

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	88		40-160

Client: Tetra Tech, Inc. Job Number: 240-30533-1

Client Sample ID: **MSA-MW43S-102213**

Lab Sample ID: 240-30533-1 Date Sampled: 10/22/2013 1100
Client Matrix: Water Date Received: 10/23/2013 0930

6010C Metals (ICP)-Total Recoverable

Analysis Method:	6010C	Analysis Batch:	240-108923	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-108583	Lab File ID:	I9110713A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/07/2013 0927			Final Weight/Volume:	50 mL
Prep Date:	11/06/2013 0827				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	5.0	U	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	96	J	0.67	200
Copper	25	U	4.5	25
Chromium	10	U	2.2	10
Nickel	40	U	3.2	40
Lead	10	U	1.9	10
Antimony	3.0	J B	1.8	20
Cobalt	10	U	1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	9.9	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	4.5	J B	0.64	10

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	240-108923	Instrument ID:	I9
Prep Method:	3005A	Prep Batch:	240-108583	Lab File ID:	I9110713A.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/07/2013 0940			Final Weight/Volume:	50 mL
Prep Date:	11/06/2013 0827				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10	U	2.2	10
Arsenic	15	U	3.2	15
Beryllium	5.0	U	0.46	5.0
Cadmium	5.0	U	0.66	5.0
Barium	77	J	0.67	200
Copper	25	U	4.5	25
Chromium	10	U	2.2	10
Nickel	4.5	J	3.2	40
Lead	10	U	1.9	10
Antimony	20	U	1.8	20
Cobalt	1.8	J	1.7	10
Selenium	20	U	4.1	20
Thallium	20	U	4.7	20
Zinc	7.5	J B	5.0	50
Molybdenum	40	U	1.3	40
Vanadium	5.8	J B	0.64	10

7470A Mercury (CVAA)

Client: Tetra Tech, Inc.

Job Number: 240-30533-1

Client Sample ID: **MSA-MW43S-102213**

Lab Sample ID: 240-30533-1
Client Matrix: Water

Date Sampled: 10/22/2013 1100
Date Received: 10/23/2013 0930

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	240-108862	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-108588	Lab File ID:	110713A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/07/2013 1303			Final Weight/Volume:	50 mL
Prep Date:	11/06/2013 1520				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-108862	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-108588	Lab File ID:	110713A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/07/2013 1308			Final Weight/Volume:	50 mL
Prep Date:	11/06/2013 1520				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

APPENDIX C

SUPPORT DOCUMENTATION

Chain of Custody Record

11.7

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: Tetra Tech	Project Manager: Tony Afanasyeff	Date: 10/22/13	Chain of Custody Number: 015334
Address: 20251 Century Blvd. Ste. 200	Telephone Number (Area Code)/Fax Number: 301-273-8230	Lab Number:	Page 1 of 1
City: Germantown	State: MD Zip Code: 20874	Site Contact: Tony Afanasyeff	Lab Contact: Pat Oneura
Project Name and Location (State): Dump Road GW 2013	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 112IC04882			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOCs	Semivolatiles	GRO	DRO	Total Metals	Dissolved Metals	Special Instructions/ Conditions of Receipt
MSA-MW435-102213	10/22/13	1100		X			X		X	X			3	X	2	X	1	1	~~11 total bottles~~
TB-102213	10/22/13			X															7 total bottles
																			Well dry, will take SVOCs 1-4 dioxane and DRO later in the week

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [X] 14 Days [ ] 21 Days [ ] Other _____

QC Requirements (Specify)

1. Relinquished By: Josh Mullis	Tetra Tech	Date: 10/22/13	Time: 1300	1. Received By:		Date: 10/22/13	Time: 1300
2. Relinquished By:		Date: 10/22/13	Time: 1515	2. Received By:		Date: 10/23/13	Time: 9:30
3. Relinquished By:		Date:	Time:	3. Received By:		Date:	Time:

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2-9

TAL-4142 (0408)

Client: Tetra Tech	Project Manager: Tony Apanavage	Date: 10/24/13	Chain of Custody Number: 015225
Address: 20251 Century Blvd Ste. 200	Telephone Number (Area Code)/Fax Number: 301-233-8230	Lab Number:	Page 1 of 1
City: Germantown; State: MD; Zip Code: 20874	Site Contact: Tony Apanavage; Lab Contact: Pat Omeara		
Project Name and Location (State): Dump Road GW 2013	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 112IC04882			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): SVOCs + 1-4 dioxane	DRO	Special Instructions/ Conditions of Receipt
MSA-MW435-102413	10/24/13	1245		X				X							1		Only ONE amber per analysis due to limited volume of well water. Two bottles TOTAL

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Josh Mullis [signature]	10/24/13	1406	1. Received By: [signature]	10/24/13	1407
2. Relinquished By: [signature]	10/24/13	1700	2. Received By: [signature]	10/25/13	920
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: Dump Road GW 2013

Report Number: 240-30533-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 10/23/2013 and 10/25/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 2.9 and 4.7 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples MSA-MW43S-102213 (240-30533-1) and TB-102213 (240-30533-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/31/2013.

The laboratory control sample (LCS) for batch 107886 recovered outside control limits for the following analyte(s): Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

No MS/MSD in batch 107886 due to an incorrect sample dilution.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Sample MSA-MW43S-102413 (240-30652-1) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 10/29/2013 and analyzed on 10/31/2013.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 107492.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)
Sample MSA-MW43S-102213 (240-30533-1) was analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 10/31/2013.

Total Petroleum Hydrocarbons (C6-C10) was detected in method blank MB 240-107778/7 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

An MS/MSD was analyzed with batch 107778, but could not be reported becuase it exceeded the calibration range of the instrument.

No other difficulties were encountered during the gasoline analysis. All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)
Sample MSA-MW43S-102413 (240-30652-1) was analyzed for diesel range organics (DRO) in accordance with EPA-SW-846 Method 8015C - DRO. The samples were prepared on 10/30/2013 and analyzed on 11/02/2013.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 107680, 8015.

No other difficulties were encountered during the DRO analysis. All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP)
Sample MSA-MW43S-102213 (240-30533-1) was analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 11/06/2013 and analyzed on 11/07/2013.

No difficulties were encountered during the metals analysis. All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICP)
Sample MSA-MW43S-102213 (240-30533-1) was analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 11/06/2013 and analyzed on 11/07/2013.

Antimony, Vanadium and Zinc were detected in method blank MB 240-108583/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Sample MSA-MW43S-102213 (240-30533-1) was analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 11/06/2013 and analyzed on 11/07/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

TOTAL MERCURY
Sample MSA-MW43S-102213 (240-30533-1) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 11/06/2013 and analyzed on 11/07/2013.

No other difficulties were encountered during the mercury analysis. All other quality control parameters were within the acceptance limits.

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 30533
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: [signature]
Cooler Received on 10/23/13 Opened on 10/23/13
FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____
TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   IR GUN# A (CF +2 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN# 4 (CF +1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C ☐ See Multiple Cooler Form Corrected
   IR GUN# 5 (CF +2 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN# 8 (CF -0 °C) 4.7 Observed Cooler Temp. 4.7 °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC385663
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

15. SAMPLE CONDITION
Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION
Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

Ref: SOP NC-SC-0005, Sample Receiving
C:\Users\livengoodc\AppData\Local\Microsoft\Windows\Temporary Internet Files\OLKD16\WI-NC-099D-102313 Cooler Receipt Form.doc rls

TestAmerica Canton Sample Receipt Form/Narrative Login # : 30052
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by:

Cooler Received on 10/25/13 Opened on 10/25/13

FedEx: 1st Grd ~~Exp~~ UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box ~~Client Cooler~~ Box Other _____

Packing material used: Bubble Wrap Foam ~~Plastic Bag~~ None Other _____

COOLANT: ~~Wet Ice~~ Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF +2 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 4	(CF +1 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	☐ See Multiple
IR GUN# 5	(CF +2 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	Cooler Form
IR GUN# 8	(CF -0 °C) 2.9	Observed Cooler Temp. 2.9 °C	Corrected

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 ~~Yes~~ No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No ~~NA~~
   -Were custody seals on the bottle(s)? ~~Yes~~ ~~No~~
3. Shippers' packing slip attached to the cooler(s)? ~~Yes~~ No
4. Did custody papers accompany the sample(s)? ~~Yes~~ No
5. Were the custody papers relinquished & signed in the appropriate place? ~~Yes~~ No
6. Did all bottles arrive in good condition (Unbroken)? ~~Yes~~ No
7. Could all bottle labels be reconciled with the COC? ~~Yes~~ No
8. Were correct bottle(s) used for the test(s) indicated? ~~Yes~~ No
9. Sufficient quantity received to perform indicated analyses? ~~Yes~~ No
10. Were sample(s) at the correct pH upon receipt? Yes No ~~NA~~ pH Strip Lot# HC385663
11. Were VOAs on the COC? Yes ~~No~~
12. Were air bubbles >6 mm in any VOA vials? Yes No ~~NA~~
13. Was a trip blank present in the cooler(s)? Yes ~~No~~

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
MSA-MW43S-102213	240-30533-F-1	Plastic 500ml - with Nitric Acid	<2		
MSA-MW43S-102213	240-30533-G-1	Plastic 250ml - w/nitric - dis	<2		

HOLDTIME

SDG 240-30533-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MSA-MW43S-102213	240-30533-1	NM	10/22/2013	11/06/2013	11/07/2013	15	1	16
M	UG/L	MSA-MW43S-102213	240-30533-1	NM	10/22/2013	11/06/2013	11/07/2013	15	1	16
HGF	UG/L	MSA-MW43S-102213	240-30533-1	NM	10/22/2013	11/06/2013	11/07/2013	15	1	16
MF	UG/L	MSA-MW43S-102213	240-30533-1	NM	10/22/2013	11/06/2013	11/07/2013	15	1	16
OS	UG/L	MSA-MW43S-102413	240-30652-1	NM	10/24/2013	10/29/2013	10/31/2013	5	2	7
OV	UG/L	TB-102213	240-30533-2	TB	10/22/2013	10/31/2013	10/31/2013	9	0	9
OV	UG/L	MSA-MW43S-102213	240-30533-1	NM	10/22/2013	10/31/2013	10/31/2013	9	0	9
DRO	UG/L	MSA-MW43S-102413	240-30652-1	NM	10/24/2013	10/30/2013	11/02/2013	6	3	9
GRO	UG/L	MSA-MW43S-102213	240-30533-1	NM	10/22/2013	10/31/2013	10/31/2013	9	0	9
TPH	UG/L	MSA-MW43S-102413	240-30652-1	NM	10/24/2013	10/30/2013	11/02/2013	6	3	9
TPH	UG/L	MSA-MW43S-102213	240-30533-1	NM	10/22/2013	10/31/2013	10/31/2013	9	0	9
OV	UG/L	MSA-MW43S-102213	240-30533-1	NM	10/22/2013	10/31/2013	10/31/2013	9	0	9

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab File ID: UXJ5036.D Lab Sample ID: MB 240-107886/5

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX11 Date Analyzed: 10/31/2013 12:59

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-107886/4	UXJ5032.D	10/31/2013 11:26
MSA-MW43S-102213	240-30533-1	UXJ5055.D	10/31/2013 20:27
TB-102213	240-30533-2	UXJ5056.D	10/31/2013 20:51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107886/5

Matrix: Water | Lab File ID: UXJ5036.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2013 12:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107886 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107886/5

Matrix: Water | Lab File ID: UXJ5036.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2013 12:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 107886 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-107886/5

Matrix: Water Lab File ID: UXJ5036.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2013 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107886 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-107886/5

Matrix: Water Lab File ID: UXJ5036.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2013 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107886 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ5032.D

Lab ID: LCS 240-107886/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.4	104	72-116	
1,1,1-Trichloroethane	10.0	9.08	91	74-118	
1,1,2,2-Tetrachloroethane	10.0	10.0	100	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.31	93	74-151	
1,1-Dichloroethane	10.0	9.38	94	82-115	
1,1-Dichloroethene	10.0	8.43	84	78-131	
1,1-Dichloropropene	10.0	9.44	94	83-114	
1,2,3-Trichlorobenzene	10.0	9.54	95	54-126	
1,2,3-Trichloropropane	10.0	9.52	95	73-129	
1,2,4-Trichlorobenzene	10.0	8.51	85	48-135	
1,2,4-Trimethylbenzene	10.0	9.76	98	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.3	103	42-136	
1,2-Dichlorobenzene	10.0	9.84	98	81-110	
1,2-Dichloroethane	10.0	9.48	95	71-127	
1,2-Dichloropropane	10.0	9.55	96	81-115	
1,3-Dichlorobenzene	10.0	9.37	94	80-110	
1,3-Dichloropropane	10.0	9.77	98	79-116	
1,4-Dichlorobenzene	10.0	9.91	99	82-110	
2,2-Dichloropropane	10.0	9.24	92	50-129	
2-Chloroethyl vinyl ether	12.0	10.4	86	52-131	
2-Chlorotoluene	10.0	10.1	101	76-116	
2-Hexanone	20.0	21.2	106	55-133	
Bromobenzene	10.0	10.5	105	76-115	
Bromochloromethane	10.0	9.89	99	77-120	
4-Chlorotoluene	10.0	10.3	103	77-115	
p-Isopropyltoluene	10.0	9.57	96	74-120	
Acetone	20.0	19.2	96	43-136	
Benzene	10.0	9.32	93	83-112	
Bromoform	10.0	9.02	90	40-131	
Bromomethane	10.0	3.93	39	11-185	
Carbon disulfide	10.0	8.80	88	62-142	
Carbon tetrachloride	10.0	10.5	105	66-128	
Chlorobenzene	10.0	9.23	92	85-110	
Chloroethane	10.0	2.38	24	25-153	*
Chloroform	10.0	9.68	97	79-117	
Chloromethane	10.0	7.71	77	44-126	
cis-1,2-Dichloroethene	10.0	9.21	92	80-113	
cis-1,3-Dichloropropene	10.0	9.04	90	61-115	
Hexachlorobutadiene	10.0	9.06	91	36-134	
Dibromomethane	10.0	8.76	88	81-120	
Bromodichloromethane	10.0	9.08	91	72-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ5032.D

Lab ID: LCS 240-107886/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	6.53	65	19-129	
Ethylbenzene	10.0	9.59	96	83-112	
1,2-Dibromoethane	10.0	9.53	95	79-113	
Naphthalene	10.0	8.71	87	32-141	
m-Xylene & p-Xylene	10.0	9.84	98	83-113	
n-Butylbenzene	10.0	8.37	84	66-125	
Isopropylbenzene	10.0	10.1	101	75-114	
n-Propylbenzene	10.0	9.98	100	74-121	
2-Butanone	20.0	18.9	95	60-126	
4-Methyl-2-pentanone	20.0	18.0	90	63-128	
sec-Butylbenzene	10.0	9.55	95	70-117	
Methyl tert-butyl ether	10.0	9.05	90	52-144	
Methylene Chloride	10.0	8.04	80	66-131	
o-Xylene	10.0	10.2	102	83-113	
Styrene	10.0	9.71	97	79-114	
tert-Butylbenzene	10.0	10.5	105	71-115	
Tetrachloroethene	10.0	10.6	106	79-114	
Toluene	10.0	9.76	98	84-111	
trans-1,2-Dichloroethene	10.0	8.93	89	83-117	
trans-1,3-Dichloropropene	10.0	9.63	96	58-117	
Trichloroethene	10.0	9.98	100	76-117	
Trichlorofluoromethane	10.0	7.41	74	49-157	
Vinyl acetate	16.0	13.9	87	46-161	
Vinyl chloride	10.0	7.64	76	53-127	
tert-Butyl alcohol	100	97.8	98	70-130	
Xylenes, Total	20.0	20.0	100	83-112	
Dibromochloromethane	10.0	9.28	93	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MSA-MW43S-102213	240-30533-1	102	91	95	96
TB-102213	240-30533-2	95	94	92	91
	MB 240-107886/5	93	87	91	86
	LCS 240-107886/4	89	87	94	95

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab File ID: BFB225B.D BFB Injection Date: 10/06/2013

Instrument ID: A3UX11 BFB Injection Time: 11:31

Analysis Batch No.: 104363

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	45.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.6	(0.6)1
174	50.0 - 120.00 % of mass 95	90.3	
175	5.0 - 9.0 % of mass 174	6.5	(7.2)1
176	95.0 - 101.0 % of mass 174	87.6	(97.1)1
177	5.0 - 9.0 % of mass 176	5.1	(5.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-104363/2	UXJ4428.D	10/06/2013	11:56
	STD8260 240-104363/3	UXJ4429.D	10/06/2013	12:20
	STD8260 240-104363/4	UXJ4430.D	10/06/2013	12:42
	STD8260 240-104363/5	UXJ4431.D	10/06/2013	13:06
	STD8260 240-104363/6	UXJ4432.D	10/06/2013	13:29
	STD8260 240-104363/7	UXJ4433.D	10/06/2013	13:53
	STD6 240-104363/8	UXJ4434.D	10/06/2013	14:15
	STD5 240-104363/9	UXJ4435.D	10/06/2013	14:38
	STD4 240-104363/10	UXJ4436.D	10/06/2013	15:02
	STD3 240-104363/11	UXJ4437.D	10/06/2013	15:26
	STD2 240-104363/12	UXJ4438.D	10/06/2013	15:49
	STD1 240-104363/13	UXJ4439.D	10/06/2013	16:13
	ICV 240-104363/14	UXJ4440.D	10/06/2013	16:36

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 104363

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/06/2013 11:56 Calibration End Date: 10/06/2013 13:53 Calibration ID: 17932

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-104363/7	UXJ4433.D
Level 2	STD8260 240-104363/6	UXJ4432.D
Level 3	STD8260 240-104363/5	UXJ4431.D
Level 4	STD8260 240-104363/4	UXJ4430.D
Level 5	STD8260 240-104363/3	UXJ4429.D
Level 6	STD8260 240-104363/2	UXJ4428.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1706 0.2047	0.1924	0.1882	0.1737	0.2068	Ave		0.1894				8.0		15.0			
Chloromethane	0.1995 0.2119	0.2052	0.2033	0.1977	0.2224	Ave		0.2067			0.1000	4.4		15.0			
Vinyl chloride	0.2192 0.2221	0.2225	0.2086	0.1970	0.2215	Ave		0.2151				4.8		15.0			
Bromomethane	0.1218 0.1049	0.0759	0.0978	0.0858	0.1043	Lin1	-0.012	0.1023							0.9920		0.9900
Chloroethane	0.1098 0.1110	0.1028	0.0961	0.0896	0.1141	Ave		0.1039				9.2		15.0			
Dichlorofluoromethane	0.2242 0.2453	0.1897	0.2286	0.2047	0.2432	Ave		0.2226				9.8		15.0			
Trichlorofluoromethane	0.2652 0.2624	0.2506	0.2274	0.2181	0.2648	Ave		0.2481				8.3		15.0			
Ethyl ether	0.2637 0.2258	0.2303	0.2302	0.2183	0.2446	Ave		0.2355				6.9		15.0			
Acrolein	0.0067 0.0087	0.0105	0.0085	0.0092	0.0095	Ave		0.0089				14.0		15.0			
1,1-Dichloroethene	0.2339 0.2372	0.2199	0.2293	0.2292	0.2430	Ave		0.2321				3.4		15.0			
Acetone	0.0900 0.0547	0.0813	0.0662	0.0522	0.0585	Lin1	0.0841	0.0540							0.9960		0.9900
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1589 0.1329	0.1307	0.1130	0.1195	0.1364	Ave		0.1319				12.0		15.0			
Iodomethane	0.3940 0.3582	0.3442	0.3554	0.3525	0.3650	Ave		0.3615				4.8		15.0			
Carbon disulfide	0.7485 0.6557	0.6080	0.6572	0.5947	0.6829	Ave		0.6578				8.4		15.0			
3-Chloro-1-propene	0.1889 0.2327	0.1973	0.1961	0.2201	0.2497	Ave		0.2141				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 104363

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/06/2013 11:56 Calibration End Date: 10/06/2013 13:53 Calibration ID: 17932

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methyl acetate	0.1800 0.1585	0.1636	0.1611	0.1455	0.1769	Ave		0.1643				7.7		15.0			
Methylene Chloride	0.7490 0.2856	0.4617	0.3654	0.2997	0.3042	Lin1	0.4380	0.2740							0.9980		0.9900
tert-Butyl alcohol	0.0144 0.0117	0.0132	0.0147	0.0138	0.0140	Ave		0.0136				8.1		15.0			
Acrylonitrile	0.0829 0.0824	0.0801	0.0877	0.0792	0.0921	Ave		0.0841				5.9		15.0			
Methyl tert-butyl ether	0.7962 0.7636	0.7212	0.7755	0.7508	0.8083	Ave		0.7693				4.1		15.0			
trans-1,2-Dichloroethene	0.3585 0.3353	0.3230	0.3089	0.3301	0.3414	Ave		0.3329				5.1		15.0			
Hexane	0.0638 0.0747	0.0660	0.0715	0.0657	0.0683	Ave		0.0683				6.0		15.0			
1,1-Dichloroethane	0.5997 0.5589	0.5103	0.5319	0.5423	0.5858	Ave		0.5548			0.1000	6.1		15.0			
Vinyl acetate	0.0602 0.0460	0.0363	0.0418	0.0433	0.0467	Lin1	0.0009	0.0454							0.9960		0.9900
cis-1,2-Dichloroethene	0.3990 0.3441	0.3085	0.3440	0.3390	0.3514	Ave		0.3476				8.4		15.0			
2-Butanone	0.1050 0.0805	0.0829	0.0941	0.0878	0.0884	Ave		0.0898				9.8		15.0			
2,2-Dichloropropane	0.3337 0.3056	0.2851	0.2883	0.3076	0.3230	Ave		0.3072				6.2		15.0			
Bromochloromethane	0.1948 0.1606	0.1492	0.1757	0.1663	0.1701	Ave		0.1695				9.1		15.0			
Tetrahydrofuran	0.0717 0.0515	0.0499	0.0507	0.0563	0.0595	Ave		0.0566				15.0		15.0			
Chloroform	0.5518 0.5062	0.4927	0.5050	0.4942	0.5189	Ave		0.5114				4.3		15.0			
1,1,1-Trichloroethane	0.3925 0.3769	0.3558	0.3826	0.3704	0.4084	Ave		0.3811				4.8		15.0			
Cyclohexane	0.4502 0.4015	0.3966	0.3841	0.3898	0.4170	Ave		0.4065				5.9		15.0			
1,1-Dichloropropene	0.4204 0.4040	0.3772	0.3767	0.3886	0.4196	Ave		0.3978				5.0		15.0			
Carbon tetrachloride	0.3563 0.3427	0.3150	0.3179	0.3251	0.3553	Ave		0.3354				5.5		15.0			
Isobutyl alcohol	0.0092 0.0063	0.0086	0.0073	0.0070	0.0075	Ave		0.0077				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 104363

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/06/2013 11:56 Calibration End Date: 10/06/2013 13:53 Calibration ID: 17932

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Benzene	1.4073 1.3646	1.2208	1.2762	1.2585	1.3614	Ave		1.3148				5.6		15.0			
1,2-Dichloroethane	0.3552 0.3497	0.3395	0.3391	0.3615	0.3679	Ave		0.3522				3.3		15.0			
n-Heptane	0.0619 0.0709	0.0977	0.0536	0.0588	0.0696	Qua	0.0016	0.0625	0.0002						0.9980		0.9900
Trichloroethene	0.3362 0.3614	0.3152	0.3315	0.3371	0.3674	Ave		0.3415				5.7		15.0			
Methylcyclohexane	0.3872 0.4223	0.4427	0.3511	0.3557	0.4027	Ave		0.3936				9.2		15.0			
1,2-Dichloropropane	0.3846 0.3197	0.2768	0.3173	0.3174	0.3318	Ave		0.3246				11.0		15.0			
Dibromomethane	0.1751 0.1540	0.1422	0.1626	0.1500	0.1661	Ave		0.1583				7.5		15.0			
1,4-Dioxane	0.0016 0.0015	0.0022	0.0018	0.0017	0.0020	Ave		0.0018				15.0		15.0			
Bromodichloromethane	0.4467 0.3765	0.3140	0.3795	0.3631	0.3885	Ave		0.3780				11.0		15.0			
2-Chloroethyl vinyl ether	0.1639 0.1683	0.1493	0.1703	0.1665	0.1787	Ave		0.1661				5.8		15.0			
cis-1,3-Dichloropropene	0.4489 0.4962	0.4134	0.4506	0.4627	0.4941	Ave		0.4610				6.8		15.0			
4-Methyl-2-pentanone	0.2022 0.1629	0.1745	0.1811	0.1679	0.1795	Ave		0.1780				7.7		15.0			
Toluene	2.2017 2.3600	1.9048	2.0423	2.1596	2.2421	Ave		2.1518				7.4		15.0			
trans-1,3-Dichloropropene	0.5589 0.6332	0.4553	0.5384	0.5757	0.6017	Ave		0.5605				11.0		15.0			
Ethyl methacrylate	0.5276 0.5142	0.4052	0.4757	0.5022	0.5009	Ave		0.4876				9.0		15.0			
1,1,2-Trichloroethane	0.3841 0.3750	0.3448	0.3724	0.3602	0.3950	Ave		0.3719				4.8		15.0			
1,3-Dichloropropane	0.7066 0.6971	0.6500	0.6417	0.6593	0.6961	Ave		0.6751				4.1		15.0			
Tetrachloroethene	0.4001 0.4129	0.3616	0.3789	0.3877	0.4038	Ave		0.3908				4.8		15.0			
2-Hexanone	0.1626 0.1590	0.1556	0.1593	0.1607	0.1782	Ave		0.1626				4.9		15.0			
Dibromochloromethane	0.3565 0.4129	0.3787	0.3746	0.3847	0.3930	Ave		0.3834				4.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 104363

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/06/2013 11:56 Calibration End Date: 10/06/2013 13:53 Calibration ID: 17932

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dibromoethane	0.3897 0.3475	0.3106	0.3375	0.3346	0.3523	Ave		0.3454				7.6		15.0			
Chlorobenzene	1.3455 1.2047	1.0999	1.1646	1.1841	1.2037	Ave		1.2004			0.3000	6.7		15.0			
1,1,1,2-Tetrachloroethane	0.3595 0.3914	0.3261	0.3904	0.4039	0.4107	Ave		0.3803				8.4		15.0			
Ethylbenzene	0.6537 0.6627	0.5908	0.6320	0.6413	0.6523	Ave		0.6388				4.0		15.0			
m-Xylene & p-Xylene	0.7417 0.7619	0.6477	0.7052	0.7362	0.7674	Ave		0.7267				6.1		15.0			
o-Xylene	0.6606 0.6798	0.5651	0.6403	0.6595	0.6894	Ave		0.6491				6.9		15.0			
Styrene	1.0759 1.1101	0.9093	0.9545	1.0959	1.1091	Ave		1.0425				8.4		15.0			
Bromoform	0.1650 0.1738	0.1414	0.1555	0.1725	0.1750	Ave		0.1639			0.1000	8.1		15.0			
Isopropylbenzene	1.5753 1.4956	1.3029	1.3284	1.4370	1.4939	Ave		1.4389				7.3		15.0			
1,1,2,2-Tetrachloroethane	0.6736 0.6243	0.7592	0.7014	0.7536	0.6850	Ave		0.6995			0.3000	7.3		15.0			
Bromobenzene	1.0832 0.9077	0.9285	0.9012	0.9619	0.9718	Ave		0.9590				7.0		15.0			
1,2,3-Trichloropropane	0.1948 0.2124	0.2528	0.2248	0.2414	0.2159	Ave		0.2237				9.4		15.0			
trans-1,4-Dichloro-2-butene	0.1733 0.1558	0.2172	0.1579	0.1765	0.1811	Ave		0.1770				13.0		15.0			
n-Propylbenzene	1.0659 0.9413	1.0266	0.9762	0.9922	0.9759	Ave		0.9964				4.4		15.0			
2-Chlorotoluene	0.8724 0.8133	0.8266	0.7959	0.8615	0.8275	Ave		0.8329				3.5		15.0			
1,3,5-Trimethylbenzene	2.4665 2.4255	2.2175	2.2341	2.5549	2.5083	Ave		2.4011				5.9		15.0			
4-Chlorotoluene	0.8015 0.8590	0.9738	0.8132	0.8572	0.8757	Ave		0.8634				7.1		15.0			
tert-Butylbenzene	2.1586 2.2346	1.8988	2.0744	2.1083	2.2538	Ave		2.1214				6.1		15.0			
1,2,4-Trimethylbenzene	2.5881 2.6098	2.4963	2.4550	2.5732	2.5784	Ave		2.5501				2.4		15.0			
sec-Butylbenzene	2.8124 2.9140	2.6000	2.5893	2.8807	2.9861	Ave		2.7971				6.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 104363

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/06/2013 11:56 Calibration End Date: 10/06/2013 13:53 Calibration ID: 17932

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,3-Dichlorobenzene	1.7009 1.6167	1.6176	1.5612	1.6321	1.6446	Ave		1.6289				2.8		15.0			
p-Isopropyltoluene	2.4600 2.6015	2.2656	2.2784	2.5487	2.5544	Ave		2.4514				6.0		15.0			
1,4-Dichlorobenzene	1.7534 1.6598	1.5928	1.7122	1.7631	1.7459	Ave		1.7045				3.9		15.0			
n-Butylbenzene	2.1858 2.1414	1.9264	1.9191	2.0891	2.1672	Ave		2.0715				5.8		15.0			
1,2-Dichlorobenzene	1.6835 1.5875	1.5407	1.6205	1.6182	1.6943	Ave		1.6241				3.6		15.0			
1,2-Dibromo-3-Chloropropane	0.0781 0.1345	0.1246	0.1336	0.1516	0.1633	Lin1	-0.051	0.1470							0.9900		0.9900
1,2,4-Trichlorobenzene	1.0437 0.9636	1.0110	0.9589	1.0949	1.0592	Ave		1.0219				5.3		15.0			
Hexachlorobutadiene	0.5932 0.3768	0.4402	0.4451	0.4443	0.4305	Lin1	0.1995	0.3927							0.9950		0.9900
Naphthalene	2.7267 2.0666	2.4330	2.1690	2.4695	2.4876	Ave		2.3921				10.0		15.0			
1,2,3-Trichlorobenzene	1.0482 0.7717	0.8914	0.9127	0.9452	0.9814	Ave		0.9251				10.0		15.0			
Dibromofluoromethane (Surr)	0.3153 0.2847	0.2618	0.2692	0.2859	0.2906	Ave		0.2846				6.6		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3497 0.2885	0.2744	0.2777	0.3041	0.3050	Ave		0.2999				9.2		15.0			
Toluene-d8 (Surr)	1.9833 2.0448	1.6609	1.7598	1.8100	1.9241	Ave		1.8638				7.8		15.0			
4-Bromofluorobenzene (Surr)	0.3834 0.3639	0.3185	0.3605	0.3499	0.3641	Ave		0.3567				6.1		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 104363

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/06/2013 14:15 Calibration End Date: 10/06/2013 16:13 Calibration ID: 17934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-104363/13	UXJ4439.D
Level 2	STD2 240-104363/12	UXJ4438.D
Level 3	STD3 240-104363/11	UXJ4437.D
Level 4	STD4 240-104363/10	UXJ4436.D
Level 5	STD5 240-104363/9	UXJ4435.D
Level 6	STD6 240-104363/8	UXJ4434.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acetonitrile	0.0234 0.0221	0.0218	0.0241	0.0203	0.0227	Ave		0.0224				6.0		15.0			
Diisopropyl ether	0.2954 0.2818	0.2955	0.2946	0.2869	0.2910	Ave		0.2909				1.9		15.0			
2-Chloro-1,3-butadiene	0.4079 0.4175	0.4450	0.4142	0.4166	0.4449	Ave		0.4244				3.8		15.0			
Ethyl-t-butyl ether (ETBE)	0.8508 0.8567	0.9427	0.8368	0.7949	0.8455	Ave		0.8546				5.7		15.0			
Ethyl acetate	0.1918 0.1625	0.1610	0.1651	0.1577	0.1673	Ave		0.1676				7.4		15.0			
Propionitrile	0.0216 0.0274	0.0285	0.0266	0.0257	0.0277	Ave		0.0262				9.5		15.0			
Methacrylonitrile	0.1366 0.1478	0.1422	0.1358	0.1351	0.1443	Ave		0.1403				3.7		15.0			
Tert-amyl-methyl ether (TAME)	0.8074 0.8106	0.7795	0.7990	0.7349	0.7945	Ave		0.7876				3.6		15.0			
n-Butanol	0.0060 0.0051	0.0049	0.0052	0.0053	0.0059	Ave		0.0054				8.2		15.0			
Ethyl acrylate	0.2447 0.2851	0.2710	0.2825	0.2622	0.2876	Ave		0.2722				6.1		15.0			
Methyl methacrylate	0.1646 0.2004	0.2115	0.1811	0.1880	0.2058	Ave		0.1919				9.1		15.0			
2-Nitropropane	0.0510 0.0487	0.0399	0.0423	0.0411	0.0494	Ave		0.0454				11.0		15.0			
Cyclohexanone	0.0130 0.0130	0.0228	0.0153	0.0139	0.0173	Qua	-0.099	0.0197	0						0.9900		0.9900
Pentachloroethane	0.0760 0.1137	0.0859	0.0783	0.0856	0.1035	Lin1	-0.115	0.1084							0.9900		0.9900
1,2,3-Trimethylbenzene	2.3473 2.7599	2.4009	2.4016	2.4386	2.6292	Ave		2.4962				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 104363

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/06/2013 14:15 Calibration End Date: 10/06/2013 16:13 Calibration ID: 17934

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Benzyl chloride	0.2174 0.3073	0.2036	0.2123	0.2324	0.2902	Lin1	-0.168	0.2963							0.9900		0.9900
1,3,5-Trichlorobenzene	1.1352 1.1084	1.0953	1.0692	1.0520	1.1824	Ave		1.1071				4.2		15.0			
2-Methylnaphthalene	1.2463 1.2589	1.2456	1.1606	1.2030	1.4385	Ave		1.2588				7.6		15.0			
n-Butyl acetate	0.1909 0.2248	0.2097	0.2061	0.1979	0.2329	Ave		0.2104				7.6		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab File ID: BFB247B.D BFB Injection Date: 10/31/2013

Instrument ID: A3UX11 BFB Injection Time: 10:36

Analysis Batch No.: 107886

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.1	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	94.5	
175	5.0 - 9.0 % of mass 174	7.8	(8.2)1
176	95.0 - 101.0 % of mass 174	92.2	(97.5)1
177	5.0 - 9.0 % of mass 176	6.7	(7.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	LCS 240-107886/4	UXJ5032.D	10/31/2013	11:26
	CCVIS 240-107886/2	UXJ5033.D	10/31/2013	11:48
	CCV 240-107886/3	UXJ5034.D	10/31/2013	12:12
	MB 240-107886/5	UXJ5036.D	10/31/2013	12:59
MSA-MW43S-102213	240-30533-1	UXJ5055.D	10/31/2013	20:27
TB-102213	240-30533-2	UXJ5056.D	10/31/2013	20:51

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCVIS 240-107886/2 Calibration Date: 10/31/2013 11:48

Instrument ID: A3UX11 Calib Start Date: 10/06/2013 11:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/06/2013 13:53

Lab File ID: UXJ5033.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1894	0.1873		1.00	0.0100	-1.1	50.0
Chloromethane	Ave	0.2067	0.2121	0.1000	1.00	0.0100	2.6	50.0
Vinyl chloride	Ave	0.2151	0.2155		1.00	0.0100	0.2	20.0
Bromomethane	Lin1		0.0475		1.00	0.0100	-52.3*	50.0
Chloroethane	Ave	0.1039	0.0395		1.00	0.0100	-62.0*	50.0
Dichlorofluoromethane	Ave	0.2226	0.1708		2.00	0.0100	-23.3	50.0
Trichlorofluoromethane	Ave	0.2481	0.2213		1.00	0.0100	-10.8	50.0
Ethyl ether	Ave	0.2355	0.2219		2.00	0.0100	-5.8	50.0
Acrolein	Ave	0.0089	0.0139		20.0	0.0500	56.8*	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1319	0.1167		1.00	0.0100	-11.5	50.0
1,1-Dichloroethene	Ave	0.2321	0.2070		1.00	0.0100	-10.8	20.0
Acetone	Lin1		0.0623		10.0	0.0200	7.5	50.0
Iodomethane	Ave	0.3615	0.2889		1.00	0.0100	-20.1	50.0
Carbon disulfide	Ave	0.6578	0.4311		1.00	0.0100	-34.5	50.0
3-Chloro-1-propene	Ave	0.2141	0.1959		2.00	0.0100	-8.5	50.0
Methyl acetate	Ave	0.1643	0.1671		10.0	0.0500	1.7	50.0
Methylene Chloride	Lin1		0.2775		1.00	0.0100	-14.7	50.0
tert-Butyl alcohol	Ave	0.0136	0.0149		50.0	0.100	9.0	50.0
Acrylonitrile	Ave	0.0841	0.0854		20.0	0.100	1.6	50.0
Methyl tert-butyl ether	Ave	0.7693	0.7514		1.00	0.0100	-2.3	50.0
trans-1,2-Dichloroethene	Ave	0.3329	0.3019		1.00	0.0100	-9.3	50.0
Hexane	Ave	0.0683	0.0640		1.00	0.0100	-6.3	20.0
1,1-Dichloroethane	Ave	0.5548	0.5365	0.1000	1.00	0.0100	-3.3	50.0
Vinyl acetate	Lin1		0.0329		2.00	0.00960	-27.7	50.0
2-Butanone	Ave	0.0898	0.0887		10.0	0.0200	-1.2	50.0
2,2-Dichloropropane	Ave	0.3072	0.3083		1.00	0.0100	0.4	50.0
cis-1,2-Dichloroethene	Ave	0.3476	0.3295		1.00	0.0100	-5.2	50.0
Bromochloromethane	Ave	0.1695	0.1778		1.00	0.0100	4.9	50.0
Chloroform	Ave	0.5114	0.5284		1.00	0.0100	3.3	20.0
Tetrahydrofuran	Ave	0.0566	0.0590		5.00	0.0200	4.2	50.0
1,1,1-Trichloroethane	Ave	0.3811	0.4042		1.00	0.0100	6.1	50.0
Cyclohexane	Ave	0.4065	0.3648		1.00	0.0100	-10.3	50.0
1,1-Dichloropropene	Ave	0.3978	0.4004		1.00	0.0100	0.7	50.0
Carbon tetrachloride	Ave	0.3354	0.3587		1.00	0.0100	6.9	50.0
Isobutyl alcohol	Ave	0.0077	0.0078		50.0	0.250	1.9	50.0
1,2-Dichloroethane	Ave	0.3522	0.3577		1.00	0.0100	1.6	50.0
Benzene	Ave	1.315	1.301		1.00	0.0100	-1.1	50.0
n-Heptane	Qua		0.0506		1.00	0.0100	-21.4	50.0
Trichloroethene	Ave	0.3415	0.3476		1.00	0.0100	1.8	50.0
Methylcyclohexane	Ave	0.3936	0.3881		1.00	0.0100	-1.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCVIS 240-107886/2 Calibration Date: 10/31/2013 11:48

Instrument ID: A3UX11 Calib Start Date: 10/06/2013 11:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/06/2013 13:53

Lab File ID: UXJ5033.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.3246	0.3373		1.00	0.0100	3.9	20.0
Dibromomethane	Ave	0.1583	0.1764		1.00	0.0100	11.4	50.0
1,4-Dioxane	Ave	0.0018	0.0016		50.0	0.200	-9.8	50.0
Bromodichloromethane	Ave	0.3780	0.3642		1.00	0.0100	-3.7	50.0
2-Chloroethyl vinyl ether	Ave	0.1661	0.1670		10.0	0.0200	0.5	50.0
cis-1,3-Dichloropropene	Ave	0.4610	0.4620		1.00	0.0100	0.2	50.0
4-Methyl-2-pentanone	Ave	0.1780	0.1834		10.0	0.0200	3.0	50.0
Toluene	Ave	2.152	2.191		1.00	0.0100	1.8	20.0
trans-1,3-Dichloropropene	Ave	0.5605	0.5442		1.00	0.0100	-2.9	50.0
Ethyl methacrylate	Ave	0.4876	0.5169		1.00	0.0100	6.0	50.0
1,1,2-Trichloroethane	Ave	0.3719	0.3792		1.00	0.0100	2.0	50.0
1,3-Dichloropropane	Ave	0.6751	0.7171		1.00	0.0100	6.2	50.0
Tetrachloroethene	Ave	0.3908	0.4413		1.00	0.0100	12.9	50.0
2-Hexanone	Ave	0.1626	0.1787		10.0	0.0200	9.9	50.0
Dibromochloromethane	Ave	0.3834	0.3628		1.00	0.0100	-5.4	50.0
1,2-Dibromoethane	Ave	0.3454	0.3444		1.00	0.0100	-0.3	50.0
Chlorobenzene	Ave	1.200	1.249	0.3000	1.00	0.0100	4.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3803	0.4382		1.00	0.0100	15.2	50.0
Ethylbenzene	Ave	0.6388	0.7025		1.00	0.0100	10.0	20.0
m-Xylene & p-Xylene	Ave	0.7267	0.7994		2.00	0.0100	10.0	50.0
o-Xylene	Ave	0.6491	0.7455		1.00	0.0100	14.8	50.0
Styrene	Ave	1.042	1.147		1.00	0.0100	10.1	50.0
Bromoform	Ave	0.1639	0.1530	0.1000	1.00	0.0100	-6.7	50.0
Isopropylbenzene	Ave	1.439	1.600		1.00	0.0100	11.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6995	0.7046	0.3000	1.00	0.0100	0.7	50.0
Bromobenzene	Ave	0.9590	0.9765		1.00	0.0100	1.8	50.0
1,2,3-Trichloropropane	Ave	0.2237	0.2215		1.00	0.0100	-1.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1770	0.1247		1.00	0.0100	-29.5	50.0
n-Propylbenzene	Ave	0.996	0.9883		1.00	0.0100	-0.8	50.0
2-Chlorotoluene	Ave	0.8329	0.8879		1.00	0.0100	6.6	50.0
1,3,5-Trimethylbenzene	Ave	2.401	2.441		1.00	0.0100	1.7	50.0
4-Chlorotoluene	Ave	0.8634	0.8540		1.00	0.0100	-1.1	50.0
tert-Butylbenzene	Ave	2.121	2.054		1.00	0.0100	-3.2	50.0
1,2,4-Trimethylbenzene	Ave	2.550	2.512		1.00	0.0100	-1.5	50.0
sec-Butylbenzene	Ave	2.797	2.925		1.00	0.0100	4.6	50.0
1,3-Dichlorobenzene	Ave	1.629	1.558		1.00	0.0100	-4.3	50.0
p-Isopropyltoluene	Ave	2.451	2.326		1.00	0.0100	-5.1	50.0
1,4-Dichlorobenzene	Ave	1.705	1.742		1.00	0.0100	2.2	50.0
n-Butylbenzene	Ave	2.072	1.877		1.00	0.0100	-9.4	50.0
1,2-Dichlorobenzene	Ave	1.624	1.675		1.00	0.0100	3.2	50.0
1,2-Dibromo-3-Chloropropane	Lin1		0.1553		2.00	0.0100	9.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCVIS 240-107886/2 Calibration Date: 10/31/2013 11:48

Instrument ID: A3UX11 Calib Start Date: 10/06/2013 11:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/06/2013 13:53

Lab File ID: UXJ5033.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Ave	1.022	1.017		1.00	0.0100	-0.5	50.0
Hexachlorobutadiene	Lin1		0.3988		1.00	0.0100	-3.5	50.0
Naphthalene	Ave	2.392	2.191		1.00	0.0100	-8.4	50.0
1,2,3-Trichlorobenzene	Ave	0.9251	0.8877		1.00	0.0100	-4.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2846	0.2499		0.00732	0.00834	-12.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2999	0.3024		0.00841	0.00834	0.8	50.0
Toluene-d8 (Surr)	Ave	1.864	1.721		0.00770	0.00834	-7.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3567	0.3436		0.00803	0.00834	-3.7	50.0

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Sample No.: STD8260 240-104363/4 Date Analyzed: 10/06/2013 12:42

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ4430.D Heated Purge: (Y/N) N

Calibration ID: 17932

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1450887	5.47	895035	8.15	314712	10.40
UPPER LIMIT		2901774	5.97	1790070	8.65	629424	10.90
LOWER LIMIT		725444	4.97	447518	7.65	157356	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-104363/14		1265534	5.47	822350	8.15	289711	10.40
CCVIS 240-107886/2		1149396	5.47	739639	8.15	299101	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Sample No.: CCVIS 240-107886/2 Date Analyzed: 10/31/2013 11:48

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ5033.D Heated Purge: (Y/N) N

Calibration ID: 17934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1149396	5.47	739639	8.15	299101	10.40
UPPER LIMIT		2298792	5.97	1479278	8.65	598202	10.90
LOWER LIMIT		574698	4.97	369820	7.65	149551	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-107886/3		1143929	5.47	682295	8.15	241509	10.40
MB 240-107886/5		1029651	5.47	651811	8.15	245382	10.40
240-30533-1	MSA-MW43S-102213	956508	5.47	583517	8.15	204141	10.40
240-30533-2	TB-102213	977963	5.47	589771	8.15	205088	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab File ID: 31031003.D Lab Sample ID: MB 240-107492/21-A

Matrix: Water Date Extracted: 10/29/2013 08:08

Instrument ID: A4HP7 Date Analyzed: 10/31/2013 11:16

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
MSA-MW43S-102413	240-30652-1	31031027.D	10/31/2013 21:35
	LCS 240-107492/22-A	31104005.D	11/04/2013 11:44

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107492/21-A

Matrix: Water | Lab File ID: 31031003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/29/2013 08:08

Sample wt/vol: 1000(mL) | Date Analyzed: 10/31/2013 11:16

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107883 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.0	U	1.0	0.13
123-91-1	1,4-Dioxane	1.0	U	1.0	0.49
88-06-2	2,4,6-Trichlorophenol	5.0	U	5.0	0.24
95-95-4	2,4,5-Trichlorophenol	5.0	U	5.0	0.30
120-83-2	2,4-Dichlorophenol	2.0	U	2.0	0.19
105-67-9	2,4-Dimethylphenol	2.0	U	2.0	0.25
51-28-5	2,4-Dinitrophenol	5.0	U	5.0	0.32
121-14-2	2,4-Dinitrotoluene	5.0	U	5.0	0.25
91-58-7	2-Chloronaphthalene	1.0	U	1.0	0.10
95-57-8	2-Chlorophenol	1.0	U	1.0	0.29
91-57-6	2-Methylnaphthalene	0.20	U	0.20	0.090
95-48-7	2-Methylphenol	1.0	U	1.0	0.17
88-74-4	2-Nitroaniline	2.0	U	2.0	0.21
88-75-5	2-Nitrophenol	2.0	U	2.0	0.28
15831-10-4	3 & 4 Methylphenol	2.0	U	2.0	0.80
91-94-1	3,3'-Dichlorobenzidine	5.0	U	5.0	0.37
99-09-2	3-Nitroaniline	2.0	U	2.0	0.28
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	5.0	2.4
101-55-3	4-Bromophenyl phenyl ether	2.0	U	2.0	0.22
59-50-7	4-Chloro-3-methylphenol	2.0	U	2.0	0.21
106-47-8	4-Chloroaniline	2.0	U	2.0	0.21
7005-72-3	4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30
100-01-6	4-Nitroaniline	2.0	U	2.0	0.22
83-32-9	Acenaphthene	0.20	U	0.20	0.044
208-96-8	Acenaphthylene	0.20	U	0.20	0.048
98-86-2	Acetophenone	1.0	U	1.0	0.34
120-12-7	Anthracene	0.20	U	0.20	0.088
1912-24-9	Atrazine	1.0	U	1.0	0.34
100-52-7	Benzaldehyde	1.0	U	1.0	0.39
56-55-3	Benzo[a]anthracene	0.20	U	0.20	0.030
50-32-8	Benzo[a]pyrene	0.20	U	0.20	0.051
205-99-2	Benzo[b]fluoranthene	0.20	U	0.20	0.039
191-24-2	Benzo[g,h,i]perylene	0.20	U	0.20	0.046
207-08-9	Benzo[k]fluoranthene	0.20	U	0.20	0.045

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107492/21-A

Matrix: Water | Lab File ID: 31031003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/29/2013 08:08

Sample wt/vol: 1000(mL) | Date Analyzed: 10/31/2013 11:16

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107883 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.0	U	1.0	0.32
111-44-4	Bis(2-chloroethyl)ether	1.0	U	1.0	0.10
117-81-7	Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.22
85-68-7	Butyl benzyl phthalate	2.0	U	2.0	0.26
105-60-2	Caprolactam	5.0	U	5.0	0.20
86-74-8	Carbazole	1.0	U	1.0	0.28
218-01-9	Chrysene	0.20	U	0.20	0.050
84-74-2	Di-n-butyl phthalate	2.0	U	2.0	0.67
117-84-0	Di-n-octyl phthalate	2.0	U	2.0	0.23
53-70-3	Dibenzo(a,h)anthracene	0.20	U	0.20	0.045
132-64-9	Dibenzofuran	1.0	U	1.0	0.020
84-66-2	Diethyl phthalate	2.0	U	2.0	0.60
131-11-3	Dimethyl phthalate	2.0	U	2.0	0.29
206-44-0	Fluoranthene	0.20	U	0.20	0.045
86-73-7	Fluorene	0.20	U	0.20	0.041
118-74-1	Hexachlorobenzene	0.20	U	0.20	0.085
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.27
77-47-4	Hexachlorocyclopentadiene	10	U	10	0.24
67-72-1	Hexachloroethane	1.0	U	1.0	0.19
193-39-5	Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.043
78-59-1	Isophorone	1.0	U	1.0	0.27
621-64-7	N-Nitrosodi-n-propylamine	1.0	U	1.0	0.24
62-75-9	N-Nitrosodimethylamine	1.0	U	1.0	0.31
86-30-6	N-Nitrosodiphenylamine	1.0	U	1.0	0.31
91-20-3	Naphthalene	0.20	U	0.20	0.063
98-95-3	Nitrobenzene	1.0	U	1.0	0.040
87-86-5	Pentachlorophenol	5.0	U	5.0	0.27
85-01-8	Phenanthrene	0.20	U	0.20	0.062
108-95-2	Phenol	1.0	U	1.0	0.60
129-00-0	Pyrene	0.20	U	0.20	0.042
108-60-1	2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.40
606-20-2	2,6-Dinitrotoluene	5.0	U	5.0	0.80
100-02-7	4-Nitrophenol	5.0	U	5.0	0.29

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107492/21-A

Matrix: Water | Lab File ID: 31031003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/29/2013 08:08

Sample wt/vol: 1000(mL) | Date Analyzed: 10/31/2013 11:16

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 107883 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	88		24-110
4165-62-2	Phenol-d5 (Surr)	73		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	63		21-110
367-12-4	2-Fluorophenol (Surr)	69		10-110
321-60-8	2-Fluorobiphenyl (Surr)	63		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	70		21-110

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 31104005.D

Lab ID: LCS 240-107492/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	20.0	14.2	71	43-110	
1,4-Dioxane	20.0	11.0	55	27-110	
2,4,6-Trichlorophenol	20.0	15.2	76	45-110	
2,4,5-Trichlorophenol	20.0	15.8	79	48-110	
2,4-Dichlorophenol	20.0	15.2	76	41-110	
2,4-Dimethylphenol	20.0	11.7	58	32-110	
2,4-Dinitrophenol	40.0	26.4	66	10-110	
2,4-Dinitrotoluene	20.0	16.2	81	53-110	
2-Chloronaphthalene	20.0	13.9	70	43-110	
2-Chlorophenol	20.0	14.8	74	29-110	
2-Methylnaphthalene	20.0	13.6	68	45-110	
2-Methylphenol	20.0	14.5	72	42-110	
2-Nitroaniline	20.0	16.8	84	54-110	
2-Nitrophenol	20.0	15.3	76	40-110	
3 & 4 Methylphenol	20.0	14.9	75	44-110	
3,3'-Dichlorobenzidine	40.0	31.6	79	22-110	
3-Nitroaniline	20.0	15.1	75	53-110	
4,6-Dinitro-2-methylphenol	40.0	26.9	67	31-110	
4-Bromophenyl phenyl ether	20.0	15.8	79	45-110	
4-Chloro-3-methylphenol	20.0	15.3	77	52-110	
4-Chloroaniline	20.0	13.6	68	44-110	
4-Chlorophenyl phenyl ether	20.0	15.4	77	47-110	
4-Nitroaniline	20.0	16.1	80	54-110	
Acenaphthene	20.0	14.6	73	47-110	
Acenaphthylene	20.0	13.5	67	49-110	
Acetophenone	20.0	15.0	75	46-110	
Anthracene	20.0	14.7	74	52-110	
Atrazine	40.0	29.6	74	66-126	
Benzaldehyde	40.0	30.5	76	38-110	
Benzo[a]anthracene	20.0	15.2	76	52-110	
Benzo[a]pyrene	20.0	14.7	74	44-110	
Benzo[b]fluoranthene	20.0	16.1	81	48-110	
Benzo[g,h,i]perylene	20.0	15.1	76	50-110	
Benzo[k]fluoranthene	20.0	15.2	76	49-110	
Bis(2-chloroethoxy)methane	20.0	14.9	75	43-110	
Bis(2-chloroethyl)ether	20.0	14.4	72	40-110	
Bis(2-ethylhexyl) phthalate	20.0	15.7	78	39-116	
Butyl benzyl phthalate	20.0	15.7	78	55-110	
Caprolactam	40.0	36.2	91	45-111	
Carbazole	20.0	14.8	74	55-110	
Chrysene	20.0	15.2	76	55-110	
Di-n-butyl phthalate	20.0	17.6	88	57-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 31104005.D

Lab ID: LCS 240-107492/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	20.0	15.6	78	40-110	
Dibenzo(a,h)anthracene	20.0	16.0	80	49-110	
Dibenzofuran	20.0	14.5	73	51-110	
Diethyl phthalate	20.0	16.3	81	58-110	
Dimethyl phthalate	20.0	16.4	82	57-110	
Fluoranthene	20.0	16.1	80	54-110	
Fluorene	20.0	14.7	73	52-110	
Hexachlorobenzene	20.0	16.4	82	50-110	
Hexachlorobutadiene	20.0	11.6	58	33-110	
Hexachlorocyclopentadiene	20.0	0.761 J	4	4-110	
Hexachloroethane	20.0	11.7	58	35-110	
Indeno[1,2,3-cd]pyrene	20.0	15.3	77	50-110	
Isophorone	20.0	14.2	71	49-110	
N-Nitrosodi-n-propylamine	20.0	15.2	76	47-110	
N-Nitrosodimethylamine	20.0	13.4	67	40-110	
N-Nitrosodiphenylamine	40.0	32.0	80	50-110	
Naphthalene	20.0	13.3	66	44-110	
Nitrobenzene	20.0	15.7	78	42-110	
Pentachlorophenol	40.0	23.3	58	18-110	
Phenanthrene	20.0	14.8	74	53-110	
Phenol	20.0	15.0	75	33-110	
Pyrene	20.0	15.7	79	52-110	
2,2'-oxybis[1-chloropropane]	20.0	14.6	73	37-110	
2,6-Dinitrotoluene	20.0	16.1	80	54-110	
4-Nitrophenol	40.0	33.8	84	33-112	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MSA-MW43S-102413	240-30652-1	62	70	62	58	78	58
	MB 240-107492/21-A	69	73	63	63	70	88
	LCS 240-107492/22-A	74	76	74	76	92	92

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-110
PHL = Phenol-d5 (Surr)	21-110
NBZ = Nitrobenzene-d5 (Surr)	21-110
FBP = 2-Fluorobiphenyl (Surr)	20-110
TBP = 2,4,6-Tribromophenol (Surr)	21-110
TPH = Terphenyl-d14 (Surr)	24-110

Column to be used to flag recovery values

FORM II 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab File ID: 31021001.D DFTPP Injection Date: 10/21/2013

Instrument ID: A4HP7 DFTPP Injection Time: 14:48

Analysis Batch No.: 106341

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	41.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	46.6	
70	Less than 2.0% of mass 69	0.3	(0.7)1
127	25.0 - 75.0% of mass 198	50.3	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.3	
275	10.0- 30.0% of mass 198	27.4	
365	Greater than 0.75% of mass 198	3.2	
441	Present, but less than mass 443	9.5	
442	40.0 - 110.0% of mass 198	61.3	
443	15.0 - 24.0% of mass 442	12.2	(20.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-106341/2	31021002.D	10/21/2013	15:11
	STD4 240-106341/3	31021003.D	10/21/2013	15:37
	STD3 240-106341/4	31021004.D	10/21/2013	16:03
	STD2 240-106341/5	31021005.D	10/21/2013	16:29
	STD1 240-106341/6	31021006.D	10/21/2013	16:54
	STD9 240-106341/7	31021007.D	10/21/2013	17:20
	STD8 240-106341/8	31021008.D	10/21/2013	17:46
	STD7 240-106341/9	31021009.D	10/21/2013	18:12
	STD6 240-106341/10	31021010.D	10/21/2013	18:37
	ICV 240-106341/11	31021011.D	10/21/2013	19:03

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-106341/6	31021006.D
Level 2	STD2 240-106341/5	31021005.D
Level 3	STD3 240-106341/4	31021004.D
Level 4	STD4 240-106341/3	31021003.D
Level 5	STD5 240-106341/2	31021002.D
Level 6	STD6 240-106341/10	31021010.D
Level 7	STD7 240-106341/9	31021009.D
Level 8	STD8 240-106341/8	31021008.D
Level 9	STD9 240-106341/7	31021007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5108	0.5510 0.4571	0.5028 0.4815	0.4783 0.4944	0.5117	Ave		0.4985				5.6		20.0			
N-Nitrosodimethylamine	0.7869	0.6560 0.7747	0.6526 0.7737	0.7126 0.7880	0.6639	Ave		0.7261				8.5		20.0			
Pyridine	1.3613	1.2783 1.2478	1.2113 1.3741	1.3268 1.2991	1.3296	Ave		1.3035				4.3		20.0			
Benzaldehyde	1.2354 1.2301	1.1874 1.2141	1.2463 1.1927	1.2223 1.1549	1.2110	Ave		1.2105			0.0100	2.3		20.0			
Phenol	1.6513	1.5783 1.6093	1.7397 1.5932	1.5695 1.6099	1.5718	Ave		1.6154			0.8000	3.5		20.0			
Aniline	2.1142	1.9597 2.0467	2.0428 2.0696	1.9776 2.0792	2.0320	Ave		2.0402				2.5		20.0			
Bis(2-chloroethyl)ether	1.3159	1.3419 1.3156	1.3217 1.3119	1.3002 1.2992	1.2495	Ave		1.3070			0.7000	2.0		20.0			
2-Chlorophenol	1.2614	1.0929 1.2361	1.1871 1.2518	1.2114 1.2578	1.2254	Ave		1.2155			0.8000	4.6		20.0			
1,3-Dichlorobenzene	1.3482	1.2793 1.3322	1.3280 1.3712	1.3208 1.3766	1.3005	Ave		1.3321				2.5		20.0			
1,4-Dichlorobenzene	1.3686	1.3151 1.3684	1.3635 1.4048	1.3621 1.3968	1.4006	Ave		1.3725				2.1		20.0			
Benzyl alcohol	0.8714	0.8997 0.8475	0.8585 0.8740	0.8325 0.8553	0.8229	Ave		0.8577				2.8		20.0			
1,2-Dichlorobenzene	1.3099	1.2428 1.2793	1.2616 1.3242	1.2571 1.3290	1.2881	Ave		1.2865				2.5		20.0			
2-Methylphenol	1.2032	1.0619 1.2057	1.1665 1.1941	1.1563 1.1966	1.1736	Ave		1.1698			0.7000	4.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,2'-oxybis[1-chloropropane]	1.3679	1.4117 1.3414	1.3367 1.3314	1.3484 1.3263	1.3129	Ave		1.3471				2.3		20.0			
Indene	2.3252	2.2034 2.3674	2.2250 2.3928	2.1874 2.4447	2.2482	Ave		2.2993				4.2		20.0			
3 & 4 Methylphenol	1.2721	1.1475 1.2572	1.2429 1.2623	1.2242 1.2936	1.2278	Ave		1.2409				3.6		20.0			
N-Nitrosodi-n-propylamine	1.0783	0.9950 1.0453	1.0354 1.0643	1.0312 1.0721	1.0101	Ave		1.0415			0.5000	2.8		20.0			
Acetophenone	2.0271	1.9458 1.9833	1.9828 2.0164	1.9751 2.0322	1.9440	Ave		1.9883			0.0100	1.7		20.0			
Hexachloroethane	0.6038	0.5063 0.5955	0.5463 0.6026	0.5793 0.6063	0.5827	Ave		0.5778			0.3000	6.0		20.0			
Nitrobenzene	0.3892	0.3590 0.4130	0.4052 0.4014	0.3910 0.4000	0.3716	Ave		0.3913			0.2000	4.6		20.0			
Isophorone	0.6593	0.6133 0.6915	0.6470 0.6700	0.6454 0.6809	0.6228	Ave		0.6538			0.4000	4.2		20.0			
2,4-Dimethylphenol	0.3409	0.3511 0.3587	0.3437 0.3541	0.3528 0.3540	0.3353	Ave		0.3488			0.2000	2.3		20.0			
2-Nitrophenol	0.1643	0.1247 0.1767	0.1533 0.1757	0.1532 0.1784	0.1519	Ave		0.1598			0.1000	11.0		20.0			
Benzoic acid	0.1664	+++++ 0.1900	0.0867 0.1948	0.1111 0.1938	0.1308	Lin1	-0.305	0.1959							0.9940		0.9900
Bis(2-chloroethoxy)methane	0.3696	0.3415 0.3765	0.3586 0.3737	0.3615 0.3817	0.3514	Ave		0.3643			0.3000	3.7		20.0			
2,4-Dichlorophenol	0.2482	0.2434 0.2636	0.2447 0.2636	0.2508 0.2646	0.2514	Ave		0.2538			0.2000	3.5		20.0			
1,2,4-Trichlorobenzene	0.2813	0.2866 0.3039	0.2813 0.2994	0.2836 0.3076	0.2817	Ave		0.2907				3.8		20.0			
Naphthalene	1.0051 0.8975	0.8657 0.9544	0.8773 0.9781	0.9085 0.9761	0.8835	Ave		0.9274			0.7000	5.6		20.0			
4-Chloroaniline	0.4156	0.4091 0.4051	0.4039 0.4052	0.4098 0.4088	0.3858	Ave		0.4054			0.0100	2.2		20.0			
Hexachlorobutadiene	0.1933	0.1691 0.1971	0.1863 0.1941	0.1990 0.2018	0.1821	Ave		0.1904			0.0100	5.7		20.0			
Caprolactam	0.0850	0.0819 0.0818	0.0944 0.0791	0.0896 0.0793	0.0917	Ave		0.0853			0.0100	6.9		20.0			
4-Chloro-3-methylphenol	0.3153	0.2904 0.3331	0.3107 0.3327	0.3162 0.3361	0.3074	Ave		0.3177			0.2000	4.9		20.0			
2-Methylnaphthalene	0.6344 0.6149	0.5663 0.6395	0.6216 0.6447	0.6228 0.6702	0.5791	Ave		0.6215			0.4000	5.2		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.5681 0.5773	0.5232 0.6046	0.5576 0.6007	0.5815 0.6214	0.5425	Ave		0.5752				5.4		20.0			
Hexachlorocyclopentadiene	0.3620	0.3191 0.3859	0.3319 0.3897	0.3260 0.4115	0.3543	Ave		0.3601			0.0500	9.3		20.0			
1,2,4,5-Tetrachlorobenzene	0.5034	0.5159 0.5238	0.4799 0.5203	0.4912 0.5446	0.5031	Ave		0.5103			0.0100	4.0		20.0			
2,4,6-Trichlorophenol	0.3179	0.2803 0.3325	0.3269 0.3336	0.3021 0.3504	0.3064	Ave		0.3188			0.2000	6.9		20.0			
2,4,5-Trichlorophenol	0.3374	0.2724 0.3492	0.3273 0.3471	0.3170 0.3584	0.3335	Ave		0.3303			0.2000	8.1		20.0			
1,1'-Biphenyl	1.2992 1.2803	1.2251 1.3398	1.2753 1.3418	1.2483 1.4062	1.2443	Ave		1.2956			0.0100	4.5		20.0			
2-Chloronaphthalene	1.0067 0.9649	0.9516 1.0056	0.9709 1.0054	0.9620 1.0454	0.9461	Ave		0.9843			0.8000	3.4		20.0			
2-Nitroaniline	0.3892	0.3112 0.3829	0.3444 0.3776	0.3524 0.3840	0.3482	Ave		0.3612			0.0100	7.5		20.0			
Dimethyl phthalate	1.1509	1.1101 1.1519	1.1344 1.1221	1.1241 1.1832	1.1163	Ave		1.1366			0.0100	2.1		20.0			
1,3-Dinitrobenzene	0.1872	0.1403 0.1865	0.1664 0.1891	0.1615 0.1958	0.1749	Ave		0.1752				11.0		20.0			
2,6-Dinitrotoluene	0.2611	0.2159 0.2601	0.2520 0.2555	0.2428 0.2641	0.2415	Ave		0.2491				6.3		20.0			
Acenaphthylene	1.6339 1.5169	1.3808 1.5885	1.5093 1.6037	1.5111 1.6860	1.4715	Ave		1.5446			0.9000	6.0		20.0			
3-Nitroaniline	0.2564	0.2196 0.2601	0.2684 0.2665	0.2624 0.2769	0.2673	Ave		0.2597			0.0100	6.7		20.0			
2,4-Dinitrophenol	0.1776	+++++ 0.1910	0.1214 0.1963	0.1231 0.2115	0.1531	Lin1	-0.257	0.2037			0.0100				0.9950		0.9900
Acenaphthene	1.0073 1.0240	0.9435 1.0696	1.0212 1.0903	0.9803 1.1475	0.9906	Ave		1.0305			0.9000	6.1		20.0			
4-Nitrophenol	0.2684	0.2209 0.2760	0.2406 0.2715	0.2398 0.2876	0.2421	Ave		0.2559				9.0		20.0			
2,4-Dinitrotoluene	0.3452	0.3049 0.3426	0.3565 0.3488	0.3366 0.3635	0.3370	Ave		0.3419			0.2000	5.1		20.0			
Dibenzofuran	1.5411 1.3758	1.3837 1.4617	1.4104 1.4384	1.3860 1.5200	1.3399	Ave		1.4286			0.8000	4.8		20.0			
2,3,4,6-Tetrachlorophenol	0.2790	0.2645 0.2901	0.3022 0.2890	0.2738 0.3125	0.2811	Ave		0.2865			0.0100	5.4		20.0			
Diethyl phthalate	1.1064	1.1335 1.1660	1.1661 1.1751	1.1473 1.2438	1.1382	Ave		1.1595			0.0100	3.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chlorophenyl phenyl ether	0.6099	0.5855 0.6358	0.6126 0.6183	0.5770 0.6457	0.5797	Ave		0.6081			0.4000	4.2		20.0			
4-Nitroaniline	0.2697	0.2098 0.2882	0.2544 0.2892	0.2630 0.3097	0.2436	Ave		0.2659			0.0100	12.0		20.0			
Fluorene	1.4828 1.1969	1.0813 1.2299	1.1972 1.2151	1.1462 1.2675	1.1211	Ave		1.2153			0.9000	9.5		20.0			
4,6-Dinitro-2-methylphenol	0.1461	0.0720 0.1570	0.1031 0.1632	0.1117 0.1617	0.1247	Lin1	-0.124	0.1606			0.0100				0.9960		0.9900
N-Nitrosodiphenylamine	0.4978	0.4266 0.5196	0.4501 0.5271	0.4664 0.5303	0.4772	Ave		0.4869			0.0100	7.8		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.8892	0.7234 0.8843	0.7535 0.8411	0.7807 0.8175	0.8051	Ave		0.8108				7.5		20.0			
Azobenzene	0.8892	0.7169 0.8848	0.7513 0.8411	0.7807 0.8175	0.8051	Ave		0.8108				7.5		20.0			
4-Bromophenyl phenyl ether	0.2062	0.1837 0.2018	0.1937 0.2036	0.2031 0.2017	0.1980	Ave		0.1990			0.1000	3.6		20.0			
Hexachlorobenzene	0.2134 0.2064	0.1725 0.2085	0.1975 0.2075	0.2058 0.2073	0.1978	Ave		0.2018			0.1000	6.0		20.0			
Atrazine	0.2119	0.1789 0.2077	0.1855 0.2076	0.1781 0.2055	0.1860	Ave		0.1952			0.0100	7.3		20.0			
Pentachlorophenol	0.1445	0.0890 0.1549	0.1108 0.1650	0.1156 0.1646	0.1290	Lin1	-0.109	0.1612			0.0500				0.9960		0.9900
Phenanthrene	1.0926 0.9572	0.9018 0.9812	0.9099 1.0281	0.9154 1.0351	0.9153	Ave		0.9707			0.7000	7.0		20.0			
Anthracene	1.0129 0.9843	0.9260 1.0341	0.9469 1.0562	0.9777 1.0759	0.9563	Ave		0.9967			0.7000	5.2		20.0			
Carbazole	0.9151	0.7257 0.9824	0.8156 0.9987	0.8403 1.0111	0.8348	Ave		0.8905			0.0100	12.0		20.0			
Di-n-butyl phthalate	1.2334	0.9662 1.2864	1.0311 1.3272	1.0268 1.2612	1.0683	Ave		1.1501			0.0100	12.0		20.0			
Fluoranthene	1.1297 1.1777	0.9129 1.2538	0.9950 1.2955	1.0287 1.3107	1.0406	Ave		1.1272			0.6000	13.0		20.0			
Benzidine	0.4070	0.4067 0.3792	0.3831 0.3618	0.4086 0.3454	0.3762	Ave		0.3835				6.0		20.0			
Pyrene	0.9187 0.8790	0.8505 0.9491	0.8789 0.9638	0.8968 0.9831	0.8560	Ave		0.9084			0.6000	5.3		20.0			
Butyl benzyl phthalate	0.4198	0.3906 0.4339	0.4181 0.4339	0.4204 0.4362	0.4173	Ave		0.4213			0.0100	3.5		20.0			
3,3'-Dichlorobenzidine	0.3331	0.2844 0.3549	0.3132 0.3678	0.3197 0.3807	0.3209	Ave		0.3343			0.0100	9.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 106341

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 15:11 Calibration End Date: 10/21/2013 18:37 Calibration ID: 18104

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Bis(2-ethylhexyl) phthalate		0.5493	0.6287	0.6055	0.6147	Ave		0.6219			0.0100	5.9		20.0			
	0.6135	0.6451	0.6481	0.6703													
Benzo[a]anthracene	1.0467	0.8813	0.9602	0.9481	0.9219	Ave		0.9544			0.8000	4.8		20.0			
	0.9256	0.9666	0.9631	0.9763													
Chrysene	0.9181	0.8280	0.8938	0.8994	0.8575	Ave		0.8877			0.7000	3.4		20.0			
	0.8721	0.8943	0.9009	0.9252													
Di-n-octyl phthalate		0.9324	1.0653	1.0939	1.1248	Ave		1.1457			0.0100	10.0		20.0			
	1.1818	1.2197	1.2442	1.3038													
Benzo[b]fluoranthene	0.9887	0.8540	0.9348	1.0086	0.9437	Ave		0.9860			0.7000	6.8		20.0			
	0.9911	1.0403	1.0343	1.0781													
Benzo[k]fluoranthene	1.0157	0.9570	1.0076	1.0081	1.0126	Ave		1.0434			0.7000	5.8		20.0			
	1.0399	1.0805	1.1313	1.1378													
Benzo[a]pyrene	1.0418	0.8867	0.9421	0.9637	0.9240	Ave		0.9794			0.7000	5.8		20.0			
	0.9695	1.0129	1.0234	1.0503													
Indeno[1,2,3-cd]pyrene	1.1852	1.0009	1.0792	1.1247	1.0744	Ave		1.1180			0.5000	5.2		20.0			
	1.1195	1.1552	1.1595	1.1638													
Dibenzo(a,h)anthracene	0.9362	0.8406	0.8831	0.9270	0.9154	Ave		0.9450			0.4000	6.6		20.0			
	0.9611	0.9932	1.0160	1.0320													
Benzo[g,h,i]perylene	1.0405	0.8780	0.9099	0.9260	0.9016	Ave		0.9348			0.5000	4.8		20.0			
	0.9338	0.9425	0.9404	0.9404													
2-Fluorophenol (Surr)		1.1572	1.1978	1.2337	1.2204	Ave		1.1839				2.6		20.0			
	1.1744	1.1664	1.1706	1.1505													
Phenol-d5 (Surr)		1.3915	1.6151	1.5401	1.5519	Ave		1.5409				4.2		20.0			
	1.5745	1.5486	1.5596	1.5459													
Nitrobenzene-d5 (Surr)	0.4347	0.4275	0.4220	0.4175	0.4003	Ave		0.4252				2.7		20.0			
	0.4285	0.4399	0.4293	0.4273													
2-Fluorobiphenyl (Surr)	1.2468	1.0932	1.1165	1.0951	1.0814	Ave		1.1471				5.1		20.0			
	1.1375	1.1628	1.1658	1.2245													
2,4,6-Tribromophenol (Surr)		0.1437	0.1624	0.1428	0.1475	Ave		0.1488				4.8		20.0			
	0.1407	0.1504	0.1473	0.1551													
Terphenyl-d14 (Surr)	0.8792	0.5854	0.6016	0.5831	0.5607	Ave		0.6276				15.0		20.0			
	0.5822	0.6116	0.6166	0.6282													

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab File ID: 31031001.D DFTPP Injection Date: 10/31/2013

Instrument ID: A4HP7 DFTPP Injection Time: 10:28

Analysis Batch No.: 107883

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	42.6	
68	Less than 2.0% of mass 69	0.3	(0.6)1
69	Mass 69 relative abundance	45.7	
70	Less than 2.0% of mass 69	0.3	(0.7)1
127	25.0 - 75.0% of mass 198	48.2	
197	Less than 1.0% of mass 198	0.6	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.2	
275	10.0- 30.0% of mass 198	27.2	
365	Greater than 0.75% of mass 198	3.2	
441	Present, but less than mass 443	10.8	
442	40.0 - 110.0% of mass 198	66.3	
443	15.0 - 24.0% of mass 442	13.0	(19.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-107883/2	31031002.D	10/31/2013	10:50
	MB 240-107492/21-A	31031003.D	10/31/2013	11:16
MSA-MW43S-102413	240-30652-1	31031027.D	10/31/2013	21:35

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCV 240-107883/2 Calibration Date: 10/31/2013 10:50

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31031002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4985	0.4594		9.22	10.0	-7.8	20.0
N-Nitrosodimethylamine	Ave	0.7261	0.6598		9.09	10.0	-9.1	20.0
Pyridine	Ave	1.304	1.172		8.99	10.0	-10.1	20.0
Benzaldehyde	Ave	1.210	1.096	0.0100	18.1	20.0	-9.4	20.0
Phenol	Ave	1.615	1.528	0.8000	9.46	10.0	-5.4	20.0
Aniline	Ave	2.040	1.894		9.28	10.0	-7.2	20.0
Bis(2-chloroethyl)ether	Ave	1.307	1.246	0.7000	9.54	10.0	-4.6	20.0
2-Chlorophenol	Ave	1.215	1.193	0.8000	9.81	10.0	-1.9	20.0
1,3-Dichlorobenzene	Ave	1.332	1.323		9.93	10.0	-0.7	20.0
1,4-Dichlorobenzene	Ave	1.372	1.356		9.88	10.0	-1.2	20.0
Benzyl alcohol	Ave	0.8577	0.7934		9.25	10.0	-7.5	20.0
1,2-Dichlorobenzene	Ave	1.287	1.270		9.87	10.0	-1.3	20.0
2-Methylphenol	Ave	1.170	1.144	0.7000	9.78	10.0	-2.2	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.347	1.239		9.20	10.0	-8.0	20.0
Indene	Ave	2.299	2.231		19.4	20.0	-3.0	20.0
3 & 4 Methylphenol	Ave	1.241	1.178		9.49	10.0	-5.1	20.0
N-Nitrosodi-n-propylamine	Ave	1.041	0.9523	0.5000	9.14	10.0	-8.6	20.0
Acetophenone	Ave	1.988	1.898	0.0100	9.54	10.0	-4.6	20.0
Hexachloroethane	Ave	0.5778	0.5722	0.3000	9.90	10.0	-1.0	20.0
Nitrobenzene	Ave	0.3913	0.3877	0.2000	9.91	10.0	-0.9	20.0
Isophorone	Ave	0.6538	0.6431	0.4000	9.84	10.0	-1.6	20.0
2-Nitrophenol	Ave	0.1598	0.1686	0.1000	10.6	10.0	5.5	20.0
2,4-Dimethylphenol	Ave	0.3488	0.3519	0.2000	10.1	10.0	0.9	20.0
Benzoic acid	Lin1		0.1645		18.3	20.0	-8.3	20.0
Bis(2-chloroethoxy)methane	Ave	0.3643	0.3511	0.3000	9.64	10.0	-3.6	20.0
2,4-Dichlorophenol	Ave	0.2538	0.2628	0.2000	10.4	10.0	3.6	20.0
1,2,4-Trichlorobenzene	Ave	0.2907	0.3023		10.4	10.0	4.0	20.0
Naphthalene	Ave	0.9274	0.9121	0.7000	9.84	10.0	-1.6	20.0
4-Chloroaniline	Ave	0.4054	0.3917	0.0100	9.66	10.0	-3.4	20.0
Hexachlorobutadiene	Ave	0.1904	0.1973	0.0100	10.4	10.0	3.6	20.0
Caprolactam	Ave	0.0853	0.0761	0.0100	17.8	20.0	-10.8	20.0
4-Chloro-3-methylphenol	Ave	0.3177	0.3135	0.2000	9.87	10.0	-1.3	20.0
2-Methylnaphthalene	Ave	0.6215	0.6261	0.4000	10.1	10.0	0.7	20.0
1-Methylnaphthalene	Ave	0.5752	0.5708		9.92	10.0	-0.8	20.0
Hexachlorocyclopentadiene	Ave	0.3601	0.3535	0.0500	9.82	10.0	-1.8	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5103	0.5160	0.0100	10.1	10.0	1.1	20.0
2,4,6-Trichlorophenol	Ave	0.3188	0.3165	0.2000	9.93	10.0	-0.7	20.0
2,4,5-Trichlorophenol	Ave	0.3303	0.3373	0.2000	10.2	10.0	2.1	20.0
1,1'-Biphenyl	Ave	1.296	1.276	0.0100	9.85	10.0	-1.5	20.0
2-Chloronaphthalene	Ave	0.9843	0.9777	0.8000	9.93	10.0	-0.7	20.0
2-Nitroaniline	Ave	0.3612	0.3752	0.0100	10.4	10.0	3.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCV 240-107883/2 Calibration Date: 10/31/2013 10:50

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31031002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.137	1.179	0.0100	10.4	10.0	3.7	20.0
1,3-Dinitrobenzene	Ave	0.1752	0.1935		11.0	10.0	10.4	20.0
2,6-Dinitrotoluene	Ave	0.2491	0.2689		10.8	10.0	7.9	20.0
Acenaphthylene	Ave	1.545	1.533	0.9000	9.92	10.0	-0.8	20.0
3-Nitroaniline	Ave	0.2597	0.2550	0.0100	9.82	10.0	-1.8	20.0
2,4-Dinitrophenol	Lin1		0.1920	0.0100	20.1	20.0	0.6	20.0
Acenaphthene	Ave	1.030	1.027	0.9000	9.97	10.0	-0.3	20.0
4-Nitrophenol	Ave	0.2559	0.2461		19.2	20.0	-3.8	20.0
2,4-Dinitrotoluene	Ave	0.3419	0.3383	0.2000	9.90	10.0	-1.0	20.0
Dibenzofuran	Ave	1.429	1.399	0.8000	9.79	10.0	-2.1	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2865	0.2927	0.0100	10.2	10.0	2.2	20.0
Diethyl phthalate	Ave	1.160	1.106	0.0100	9.54	10.0	-4.6	20.0
4-Chlorophenyl phenyl ether	Ave	0.6081	0.6134	0.4000	10.1	10.0	0.9	20.0
4-Nitroaniline	Ave	0.2659	0.2694	0.0100	10.1	10.0	1.3	20.0
Fluorene	Ave	1.215	1.189	0.9000	9.78	10.0	-2.2	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1496	0.0100	19.4	20.0	-3.0	20.0
N-Nitrosodiphenylamine	Ave	0.4869	0.5268	0.0100	21.6	20.0	8.2	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8108	0.8506		10.5	10.0	4.9	20.0
4-Bromophenyl phenyl ether	Ave	0.1990	0.2211	0.1000	11.1	10.0	11.1	20.0
Hexachlorobenzene	Ave	0.2018	0.2255	0.1000	11.2	10.0	11.7	20.0
Atrazine	Ave	0.1952	0.2094	0.0100	21.5	20.0	7.3	20.0
Pentachlorophenol	Lin1		0.1412	0.0500	18.2	20.0	-9.0	20.0
Phenanthrene	Ave	0.9707	0.9419	0.7000	9.70	10.0	-3.0	20.0
Anthracene	Ave	0.997	0.9922	0.7000	9.95	10.0	-0.5	20.0
Carbazole	Ave	0.8905	0.8939	0.0100	10.0	10.0	0.4	20.0
Di-n-butyl phthalate	Ave	1.150	1.256	0.0100	10.9	10.0	9.2	20.0
Fluoranthene	Ave	1.127	1.234	0.6000	10.9	10.0	9.5	20.0
Benzidine	Ave	0.3835	0.3157		16.5	20.0	-17.7	20.0
Pyrene	Ave	0.9084	0.9143	0.6000	10.1	10.0	0.6	20.0
Butyl benzyl phthalate	Ave	0.4213	0.4181	0.0100	9.93	10.0	-0.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6219	0.6064	0.0100	9.75	10.0	-2.5	20.0
3,3'-Dichlorobenzidine	Ave	0.3343	0.3345	0.0100	20.0	20.0	0.0	20.0
Benzo[a]anthracene	Ave	0.9544	0.9530	0.8000	9.99	10.0	-0.1	20.0
Chrysene	Ave	0.8877	0.8848	0.7000	9.97	10.0	-0.3	20.0
Di-n-octyl phthalate	Ave	1.146	1.184	0.0100	10.3	10.0	3.3	20.0
Benzo[b]fluoranthene	Ave	0.9860	1.023	0.7000	10.4	10.0	3.8	20.0
Benzo[k]fluoranthene	Ave	1.043	1.060	0.7000	10.2	10.0	1.6	20.0
Benzo[a]pyrene	Ave	0.9794	0.9914	0.7000	10.1	10.0	1.2	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.118	1.132	0.5000	10.1	10.0	1.3	20.0
Dibenzo(a,h)anthracene	Ave	0.9450	0.9787	0.4000	10.4	10.0	3.6	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCV 240-107883/2 Calibration Date: 10/31/2013 10:50

Instrument ID: A4HP7 Calib Start Date: 10/21/2013 15:11

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 10/21/2013 18:37

Lab File ID: 31031002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[g,h,i]perylene	Ave	0.9348	0.9363	0.5000	10.0	10.0	0.2	20.0
2-Fluorophenol (Surr)	Ave	1.184	1.148		9.70	10.0	-3.0	20.0
Phenol-d5 (Surr)	Ave	1.541	1.441		9.35	10.0	-6.5	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4252	0.4245		9.98	10.0	-0.2	20.0
2-Fluorobiphenyl (Surr)	Ave	1.147	1.124		9.80	10.0	-2.0	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1488	0.1541		10.4	10.0	3.6	20.0
Terphenyl-d14 (Surr)	Ave	0.6276	0.6015		9.58	10.0	-4.2	20.0

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Sample No.: STD6 240-106341/10 Date Analyzed: 10/21/2013 18:37

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31021010.D Heated Purge: (Y/N) N

Calibration ID: 18104

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		173931	6.47	749561	7.58	451624	9.09
UPPER LIMIT		347862	6.97	1499122	8.08	903248	9.59
LOWER LIMIT		86966	5.97	374781	7.08	225812	8.59
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-106341/11		196418	6.47	826636	7.58	506602	9.09
CCV 240-107883/2 CCVIS		141287	6.43	561318	7.54	342612	9.04
CCV 240-108259/2 CCVIS		123622	6.40	512924	7.50	306147	9.00

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Sample No.: STD6 240-106341/10 Date Analyzed: 10/21/2013 18:37

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31021010.D Heated Purge: (Y/N) N

Calibration ID: 18104

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		728251	10.36	1006144	13.21	875605	15.52
UPPER LIMIT		1456502	10.86	2012288	13.71	1751210	16.02
LOWER LIMIT		364126	9.86	503072	12.71	437803	15.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-106341/11		835760	10.36	1126720	13.21	989147	15.52
CCV 240-107883/2 CCVIS		547314	10.30	761018	13.11	683170	15.39
CCV 240-108259/2 CCVIS		502109	10.26	673014	13.04	609999	15.31

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Sample No.: CCV 240-107883/2 Date Analyzed: 10/31/2013 10:50

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31031002.D Heated Purge: (Y/N) N

Calibration ID: 18104

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		141287	6.43	561318	7.54	342612	9.04
UPPER LIMIT		282574	6.93	1122636	8.04	685224	9.54
LOWER LIMIT		70644	5.93	280659	7.04	171306	8.54
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-107492/21-A		110116	6.43	465371	7.54	292027	9.04
240-30652-1	MSA-MW43S-102413	123740	6.43	497062	7.54	352103	9.04

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Sample No.: CCV 240-107883/2 Date Analyzed: 10/31/2013 10:50

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 31031002.D Heated Purge: (Y/N) N

Calibration ID: 18104

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		547314	10.30	761018	13.11	683170	15.39
UPPER LIMIT		1094628	10.80	1522036	13.61	1366340	15.89
LOWER LIMIT		273657	9.80	380509	12.61	341585	14.89
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-107492/21-A		545159	10.30	645391	13.11	595478	15.38
240-30652-1	MSA-MW43S-102413	585011	10.30	724434	13.11	655330	15.40

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: MB 240-107778/7

Matrix: Water Date Extracted: 10/30/2013 18:45

Lab File ID:(1) YF103007.D Lab File ID:(2)

Date Analyzed:(1) 10/30/2013 18:45 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-107778/8	10/30/2013 19:24	
MSA-MW43S-102213	240-30533-1	10/31/2013 03:55	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-107778/7

Matrix: Water Lab File ID: YF103007.D

Analysis Method: 8015C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/30/2013 18:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 107778 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	61.4	J	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	77		40-133

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF103008.D

Lab ID: LCS 240-107778/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	858	107	67-132	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
MSA-MW43S-102213	240-30533-1	77
	MB 240-107778/7	77
	LCS 240-107778/8	95

	QC LIMITS
TFT = Trifluorotoluene (Surr)	40-133

Column to be used to flag recovery values

FORM II 8015C

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Sample No.: CCVRT 240-107778/4 Date Analyzed: 10/30/2013 16:48

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF103004.D Heated Purge: (Y/N) N

Calibration ID: 18125

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.69		
UPPER LIMIT				9.79		
LOWER LIMIT				9.59		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-107778/4		10/30/2013 16:48	YF103004.D	9.69		
MB 240-107778/7		10/30/2013 18:45	YF103007.D	9.69		
LCS 240-107778/8		10/30/2013 19:24	YF103008.D	9.69		
240-30533-1	MSA-MW43S-102213	10/31/2013 03:55	YF103021.D	9.69		
CCV 240-107778/22		10/31/2013 04:34	YF103022.D	9.69		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 106463

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 18:36 Calibration End Date: 10/21/2013 21:50 Calibration ID: 18125

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-106463/5	YF102105.D
Level 2	STD2 240-106463/6	YF102106.D
Level 3	STD3 240-106463/7	YF102107.D
Level 4	STD4 240-106463/8	YF102108.D
Level 5	STD5 240-106463/9	YF102109.D
Level 6	STD6 240-106463/10	YF102110.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.834	11.834	11.834	11.834	11.834	11.834					4.778 - 18.891	11.834
C6-C12	13.468	13.468	13.468	13.468	13.468	13.468					4.778 - 22.158	13.468
Trifluorotoluene (Surr)	9.686	9.690	9.687	9.687	9.688	9.688					9.433 - 9.933	9.688

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 106463

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/21/2013 18:36 Calibration End Date: 10/21/2013 21:50 Calibration ID: 18125

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-106463/5	YF102105.D
Level 2	STD2 240-106463/6	YF102106.D
Level 3	STD3 240-106463/7	YF102107.D
Level 4	STD4 240-106463/8	YF102108.D
Level 5	STD5 240-106463/9	YF102109.D
Level 6	STD6 240-106463/10	YF102110.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	194795 176385	194018 177265	180898	174214	Ave		182929.254				5.0		20.0			
C6-C12	224978 191921	214054 193541	197511	189281	Ave		201880.855				7.1		20.0			
Trifluorotoluene (Surr)	179024 179946	176878 171141	187179	179420	Ave		178931.133				2.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: ICV 240-106463/11 Calibration Date: 10/21/2013 22:30

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF102111.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	182929	177284		775	800	-3.1	20.0
C6-C12	Ave	201881	201010		797	800	-0.4	20.0
Trifluorotoluene (Surr)	Ave	178931	189230		10.6	10.0	5.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: ICV 240-106463/11 Calibration Date: 10/21/2013 22:30

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF102111.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.83	4.78	18.89
C6-C12	13.47	4.78	22.16
Trifluorotoluene (Surr)	9.69	9.44	9.94

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCVRT 240-107778/4 Calibration Date: 10/30/2013 16:48

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF103004.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	182929	182010		796	800	-0.5	20.0
C6-C12	Ave	201881	198670		787	800	-1.6	20.0
Trifluorotoluene (Surr)	Ave	178931	160248		8.96	10.0	-10.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCVRT 240-107778/4 Calibration Date: 10/30/2013 16:48

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF103004.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.84	4.80	18.88
C6-C12	13.38	4.80	21.97
Trifluorotoluene (Surr)	9.69	9.44	9.94

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCV 240-107778/22 Calibration Date: 10/31/2013 04:34

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF103022.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	182929	166197		727	800	-9.1	20.0
C6-C12	Ave	201881	179863		713	800	-10.9	20.0
Trifluorotoluene (Surr)	Ave	178931	149037		8.33	10.0	-16.7	20.0

FORM VII

GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCV 240-107778/22 Calibration Date: 10/31/2013 04:34

Instrument ID: YPID Calib Start Date: 10/21/2013 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 10/21/2013 21:50

Lab File ID: YF103022.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Total Petroleum Hydrocarbons (C6-C10)	11.84	4.80	18.88
C6-C12	13.38	4.80	21.97
Trifluorotoluene (Surr)	9.69	9.44	9.94

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: MB 240-107680/16-A

Matrix: Water Date Extracted: 10/30/2013 09:00

Lab File ID:(1) P6F10640.D Lab File ID:(2)

Date Analyzed:(1) 11/07/2013 17:38 Date Analyzed:(2)

Instrument ID:(1) A2HP6F Instrument ID:(2)

GC Column:(1) RTX-5 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-107680/17-A	11/01/2013 20:50	
MSA-MW43S-102413	240-30652-1	11/02/2013 05:12	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-30533-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-107680/16-A

Matrix: Water | Lab File ID: P6F10640.D

Analysis Method: 8015C | Date Collected:

Extraction Method: 3520C | Date Extracted: 10/30/2013 09:00

Sample wt/vol: 1000(mL) | Date Analyzed: 11/07/2013 17:38

Con. Extract Vol.: 5.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 108728 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	500	U	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	101		40-160

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P6F10113.D

Lab ID: LCS 240-107680/17-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Diesel	2500	2160	86	40-124	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-5 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	OTPH1 #
MSA-MW43S-102413	240-30652-1	88
	MB 240-107680/16-A	101
	LCS 240-107680/17-A	87

	QC LIMITS
OTPH = o-Terphenyl (Surr)	40-160

Column to be used to flag recovery values

FORM II 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Sample No.: STD3 240-108118/8 Date Analyzed: 11/01/2013 18:13

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm)

Lab File ID (Standard): P6F10108.D Heated Purge: (Y/N) N

Calibration ID: 18623

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9	OTPH	
				RT #	RT #	
INITIAL CALIBRATION SURROGATE				4.38		
UPPER LIMIT				4.48		
LOWER LIMIT				4.28		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD3 240-108118/8 ICRT		11/01/2013 18:13	P6F10108.D	4.38		
LCS 240-107680/17-A		11/01/2013 20:50	P6F10113.D		10.03	
CCV 240-108118/22		11/02/2013 01:33	P6F10122.D	4.38	10.03	
240-30652-1	MSA-MW43S-102413	11/02/2013 05:12	P6F10129.D		10.03	
CCV 240-108118/30		11/02/2013 05:44	P6F10130.D	4.38	10.03	

C9 = n-Nonane
OTPH = o-Terphenyl

C9 RT Limit = ± 0.1 minutes of surrogate RT
OTPH RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Sample No.: CCV 240-108728/6 Date Analyzed: 11/07/2013 00:01

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm)

Lab File ID (Standard): P6F10606.D Heated Purge: (Y/N) N

Calibration ID: 18623

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9	OTPH	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				4.37	10.03	
UPPER LIMIT				4.47	10.13	
LOWER LIMIT				4.27	9.93	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-108728/6 CCVRT		11/07/2013 00:01	P6F10606.D	4.37	10.03	
CCV 240-108728/28		11/07/2013 11:26	P6F10628.D	4.38	10.03	
CCV 240-108728/39		11/07/2013 17:07	P6F10639.D	4.38	10.03	
MB 240-107680/16-A		11/07/2013 17:38	P6F10640.D		10.03	
CCV 240-108728/48		11/07/2013 21:43	P6F10648.D	4.38	10.03	

C9 = n-Nonane
OTPH = o-Terphenyl

C9 RT Limit = ± 0.1 minutes of surrogate RT
OTPH RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 108118

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/01/2013 17:11 Calibration End Date: 11/01/2013 19:16 Calibration ID: 18623

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-108118/6	P6F10106.D
Level 2	STD2 240-108118/7	P6F10107.D
Level 3	STD3 240-108118/8	P6F10108.D
Level 4	STD4 240-108118/9	P6F10109.D
Level 5	STD5 240-108118/10	P6F10110.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel Range Organics [C10 - C28]	9.549	9.549	9.549	9.549	9.549						5.343 - 13.756	9.549
n-Nonane	4.378	4.378	4.378	4.379	4.381						4.328 - 4.428	4.379
o-Terphenyl (Surr)	10.029	10.030	10.031	10.032	10.033						9.929 - 10.129	10.031

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-30533-1 Analy Batch No.: 108118

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/01/2013 17:11 Calibration End Date: 11/01/2013 19:16 Calibration ID: 18623

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-108118/6	P6F10106.D
Level 2	STD2 240-108118/7	P6F10107.D
Level 3	STD3 240-108118/8	P6F10108.D
Level 4	STD4 240-108118/9	P6F10109.D
Level 5	STD5 240-108118/10	P6F10110.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10 - C28]	233162 211285	223663	216076	209732	Ave		218783.576				4.4		20.0			
n-Nonane	225493 237967	235434	237644	231062	Ave		233519.787				2.3		20.0			
o-Terphenyl (Surr)	212977 233986	220928	225778	226601	Ave		224053.981				3.5		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCV 240-108118/22 Calibration Date: 11/02/2013 01:33

Instrument ID: A2HP6F Calib Start Date: 11/01/2013 17:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 11/01/2013 19:16

Lab File ID: P6F10122.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	218784	242656		555	500	10.9	20.0
n-Nonane	Ave	233520	276451		59.2	50.0	18.4	20.0
o-Terphenyl (Surr)	Ave	224054	265797		47.5	40.0	18.6	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCV 240-108118/22 Calibration Date: 11/02/2013 01:33

Instrument ID: A2HP6F Calib Start Date: 11/01/2013 17:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 11/01/2013 19:16

Lab File ID: P6F10122.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.55	5.34	13.76
n-Nonane	4.38	4.33	4.43
o-Terphenyl (Surr)	10.03	9.93	10.13

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCV 240-108118/30 Calibration Date: 11/02/2013 05:44

Instrument ID: A2HP6F Calib Start Date: 11/01/2013 17:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 11/01/2013 19:16

Lab File ID: P6F10130.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	218784	259641		593	500	18.7	20.0
n-Nonane	Ave	233520	285333		61.1	50.0	22.2*	20.0
o-Terphenyl (Surr)	Ave	224054	277049		49.5	40.0	23.7*	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: CCV 240-108118/30 Calibration Date: 11/02/2013 05:44

Instrument ID: A2HP6F Calib Start Date: 11/01/2013 17:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 11/01/2013 19:16

Lab File ID: P6F10130.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.55	5.34	13.76
n-Nonane	4.38	4.33	4.43
o-Terphenyl (Surr)	10.03	9.93	10.13

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-30533-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C MDL Date: 01/01/2011 08:42

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-30533-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C XMDL Date: 01/01/2011 08:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30533-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C MDL Date: 01/01/2011 08:42

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30533-1

SDG Number:

Matrix: Water Instrument ID: I9

Method: 6010C XMDL Date: 01/01/2011 08:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-30533-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-30533-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30533-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-30533-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

FORM IX - IN

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-30533-1

SDG No.:

Instrument ID: I9 Date: 10/21/2013 15:10

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Silver		2000	6010C
Arsenic		5000	6010C
Beryllium		4000	6010C
Cadmium		2000	6010C
Barium		25000	6010C
Copper		30000	6010C
Chromium		20000	6010C
Nickel		30000	6010C
Lead		15000	6010C
Antimony		10000	6010C
Cobalt		10000	6010C
Selenium		10000	6010C
Thallium		10000	6010C
Zinc		10000	6010C
Molybdenum		10000	6010C
Vanadium		5000	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-30533-1

SDG No.:

Instrument ID: H1 Date: 04/01/2011 10:45

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		50	7470A

FORM XI - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-108588/1-A	11/06/2013 15:20	108588		50	50
LCS 240-108588/2-A	11/06/2013 15:20	108588		50	50
240-30764-D-5-E DU	11/06/2013 15:20	108588		50	50
240-30764-D-5-F MS	11/06/2013 15:20	108588		50	50
240-30533-1	11/06/2013 15:20	108588		50	50
240-30533-1	11/06/2013 15:20	108588		50	50

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-108588/1-A

Instrument Code: H1 Batch No.: 108862

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

FORM III-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Not our Sample

Client ID: _____ Lab ID: 240-30764-D-5-F MS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR C		Sample Result (SR) C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.442		0.20	U	1.00	44	69-134	F	7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

6-IN
DUPLICATES
METALS

Client ID: _____ Lab ID: 240-30764-D-5-E DU

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.: _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.20	0.20	U	0.20	U	NC		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-108588/2-A

Lab Name: TestAmerica Canton Job No.: 240-30533-1

Sample Matrix: Water LCS Source: MTHGCALW_00501

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.89		98	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-108583/1-A	11/06/2013 08:27	108583		50	50
LCS 240-108583/2-A	11/06/2013 08:27	108583		50	50
240-30764-D-5-B DU	11/06/2013 08:27	108583		50	50
240-30764-D-5-C MS	11/06/2013 08:27	108583		50	50
240-30533-1	11/06/2013 08:27	108583		50	50
240-30533-1	11/06/2013 08:27	108583		50	50

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-108583/1-A

Instrument Code: I9 Batch No.: 108923

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	10	U		6010C
7440-38-2	Arsenic	15	U		6010C
7440-41-7	Beryllium	5.0	U		6010C
7440-43-9	Cadmium	5.0	U		6010C
7440-39-3	Barium	200	U		6010C
7440-50-8	Copper	25	U		6010C
7440-47-3	Chromium	10	U		6010C
7440-02-0	Nickel	40	U		6010C
7439-92-1	Lead	10	U		6010C
7440-36-0	Antimony	2.54	J		6010C
7440-48-4	Cobalt	10	U		6010C
7782-49-2	Selenium	20	U		6010C
7440-28-0	Thallium	20	U		6010C
7440-66-6	Zinc	6.59	J		6010C
7439-98-7	Molybdenum	40	U		6010C
7440-62-2	Vanadium	3.02	J		6010C

FORM III-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-30764-D-5-C MS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	49.5		10	U	50.0	99	75-125		6010C
Arsenic	1910		9.0	J	2000	95	75-125		6010C
Beryllium	46.0		5.0	U	50.0	92	75-125		6010C
Cadmium	50.0		5.0	U	50.0	100	75-125		6010C
Barium	2070		180	J	2000	94	75-125		6010C
Copper	243		4.8	J	250	95	75-125		6010C
Chromium	191		9.4	J	200	91	75-125		6010C
Nickel	487		14	J	500	95	75-125		6010C
Lead	437		2.7	J	500	87	75-125		6010C
Antimony	481		2.0	J	500	96	75-125		6010C
Cobalt	472		3.1	J	500	94	75-125		6010C
Selenium	1870		20	U	2000	94	75-125		6010C
Thallium	1860		20	U	2000	93	75-125		6010C
Zinc	518		28	J	500	98	75-125		6010C
Molybdenum	889		3.6	J	1000	89	75-125		6010C
Vanadium	506		12		500	99	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

6-IN
DUPLICATES
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-30764-D-5-B DU

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.: _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Silver	10	10	U	10	U	NC		6010C
Arsenic	15	9.0	J	8.50	J	5		6010C
Beryllium	5.0	5.0	U	5.0	U	NC		6010C
Cadmium	5.0	5.0	U	5.0	U	NC		6010C
Barium	200	180	J	176	J	0.7		6010C
Copper	25	4.8	J	5.34	J	10		6010C
Chromium	10	9.4	J	9.68	J	3		6010C
Nickel	40	14	J	13.4	J	1		6010C
Lead	10	2.7	J	2.90	J	8		6010C
Antimony	20	2.0	J	20	U	NC		6010C
Cobalt	10	3.1	J	3.13	J	2		6010C
Selenium	20	20	U	20	U	NC		6010C
Thallium	20	20	U	20	U	NC		6010C
Zinc	50	28	J	22.0	J	25		6010C
Molybdenum	40	3.6	J	3.30	J	9		6010C
Vanadium	10	12		17.5		36		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-108583/2-A

Lab Name: TestAmerica Canton Job No.: 240-30533-1

Sample Matrix: Water LCS Source: MTAGSPIKEW_00035

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	50.0	50.0		100	80	120		6010C
Arsenic	2000	1950		97	80	120		6010C
Beryllium	50.0	46.7		93	80	120		6010C
Cadmium	50.0	50.8		102	80	120		6010C
Barium	2000	1910		96	80	120		6010C
Copper	250	241		96	80	120		6010C
Chromium	200	188		94	80	120		6010C
Nickel	500	477		95	80	120		6010C
Lead	500	459		92	80	120		6010C
Antimony	500	491		98	80	120		6010C
Cobalt	500	471		94	80	120		6010C
Selenium	2000	1930		96	80	120		6010C
Thallium	2000	1890		95	80	120		6010C
Zinc	500	490		98	80	120		6010C
Molybdenum	1000	917		92	80	120		6010C
Vanadium	500	502		100	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-30764-D-5-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-30533-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	10	U	50	U	NC		6010C
Arsenic	9.0	J	75	U	NC		6010C
Beryllium	5.0	U	25	U	NC		6010C
Cadmium	5.0	U	25	U	NC		6010C
Barium	180	J	176	J	0.41		6010C
Copper	4.8	J	130	U	NC		6010C
Chromium	9.4	J	50	U	NC		6010C
Nickel	14	J	200	U	NC		6010C
Lead	2.7	J	50	U	NC		6010C
Antimony	2.0	J	100	U	NC		6010C
Cobalt	3.1	J	50	U	NC		6010C
Selenium	20	U	100	U	NC		6010C
Thallium	20	U	100	U	NC		6010C
Zinc	28	J	29.1	J	NC		6010C
Molybdenum	3.6	J	200	U	NC		6010C
Vanadium	12		22.0	J	NC		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 11/07/2013 08:10 End Date: 11/07/2013 14:09

Lab Sample ID	D/F	Type	Time	Analytes
				Hg
IC 240-108560/1-A			08:10	X
IC 240-108560/1-A			08:11	X
IC 240-108560/2-A			08:12	X
IC 240-108560/2-A			08:15	X
IC 240-108560/3-A			08:17	X
IC 240-108560/3-A			08:19	X
IC 240-108560/4-A			08:20	X
IC 240-108560/4-A			08:22	X
IC 240-108560/5-A			08:23	X
IC 240-108560/5-A			08:24	X
IC 240-108560/6-A			08:26	X
IC 240-108560/6-A			08:27	X
IC 240-108560/7-A			08:29	X
IC 240-108560/7-A			08:31	X
ICV 240-108560/8-A	1		08:38	X
ICB 240-108560/9-A	1		08:39	X
CRA 240-108560/10-A	1		08:41	X
CCVL 240-108560/11-A	1		11:46	X
CCB 240-108560/12-A			11:48	
ZZZZZZ			11:49	
ZZZZZZ			11:50	
ZZZZZZ			11:52	
ZZZZZZ			11:53	
ZZZZZZ			11:55	
ZZZZZZ			11:56	
ZZZZZZ			11:58	
ZZZZZZ			11:59	
ZZZZZZ			12:01	
ZZZZZZ			12:03	
CCV 240-108560/13-A			12:05	
CCB 240-108560/12-A			12:08	
ZZZZZZ			12:09	
ZZZZZZ			12:10	
ZZZZZZ			12:12	
ZZZZZZ			12:13	
ZZZZZZ			12:14	
ZZZZZZ			12:16	
ZZZZZZ			12:18	
ZZZZZZ			12:19	
ZZZZZZ			12:21	
ZZZZZZ			12:23	
CCV 240-108560/13-A			12:25	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 11/07/2013 08:10 End Date: 11/07/2013 14:09

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
CCB 240-108560/12-A			12:26	
ZZZZZZ			12:28	
ZZZZZZ			12:30	
ZZZZZZ			12:32	
ZZZZZZ			12:34	
ZZZZZZ			12:35	
ZZZZZZ			12:36	
ZZZZZZ			12:38	
ZZZZZZ			12:40	
ZZZZZZ			12:42	
ZZZZZZ			12:43	
CCV 240-108560/13-A	1		12:44	X
CCB 240-108560/12-A	1		12:46	X
ZZZZZZ			12:48	
ZZZZZZ			12:50	
ZZZZZZ			12:51	
ZZZZZZ			12:53	
ZZZZZZ			12:54	
MB 240-108588/1-A	1	T	12:55	X
LCS 240-108588/2-A	1	T	12:57	X
ZZZZZZ			12:59	
240-30764-D-5-E DU	1	T	13:00	X
240-30764-D-5-F MS	1	T	13:02	X
240-30533-1	1	T	13:03	X
CCV 240-108560/13-A	1		13:05	X
CCB 240-108560/12-A	1		13:06	X
240-30533-1	1	D	13:08	X
ZZZZZZ			13:10	
ZZZZZZ			13:11	
ZZZZZZ			13:12	
ZZZZZZ			13:14	
ZZZZZZ			13:16	
ZZZZZZ			13:17	
ZZZZZZ			13:18	
ZZZZZZ			13:20	
ZZZZZZ			13:22	
CCV 240-108560/13-A	1		13:23	X
CCB 240-108560/12-A	1		13:24	X
ZZZZZZ			13:26	
ZZZZZZ			13:28	
ZZZZZZ			13:29	
ZZZZZZ			13:30	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 11/07/2013 08:10 End Date: 11/07/2013 14:09

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			13:32																					
ZZZZZZ			13:34																					
ZZZZZZ			13:35																					
ZZZZZZ			13:36																					
ZZZZZZ			13:38																					
ZZZZZZ			13:40																					
CCV 240-108560/13-A			13:42																					
CCB 240-108560/12-A			13:44																					
ZZZZZZ			13:45																					
ZZZZZZ			13:46																					
ZZZZZZ			13:48																					
ZZZZZZ			13:49																					
ZZZZZZ			13:51																					
ZZZZZZ			13:52																					
ZZZZZZ			13:54																					
ZZZZZZ			13:55																					
ZZZZZZ			13:57																					
ZZZZZZ			13:58																					
CCV 240-108560/13-A			14:00																					
CCB 240-108560/12-A			14:01																					
ZZZZZZ			14:04																					
CRA 240-108560/10-A			14:06																					
CCV 240-108560/13-A			14:07																					
CCB 240-108560/12-A			14:09																					

Prep Types
D = Dissolved
T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00501

Analyte	ICV 240-108560/8-A 11/07/2013 08:38				CCVL 240-108560/11-A 11/07/2013 11:46				CCV 240-108560/13-A 11/07/2013 12:44			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.17		5.00	103	10.2		10.0	102	10.2		10.0	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00501

Analyte	CCV 240-108560/13-A 11/07/2013 13:05				CCV 240-108560/13-A 11/07/2013 13:23							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	10.1		10.0	101	10.0		10.0	100				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Method: 7470A Instrument ID: H1

Lab Sample ID: CRA 240-108560/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00501

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.182	J	91	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-108560/9-A 11/07/2013 08:39		CCB 240-108560/12-A 11/07/2013 12:46		CCB 240-108560/12-A 11/07/2013 13:06		CCB 240-108560/12-A 11/07/2013 13:24	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/07/2013 07:33 End Date: 11/08/2013 01:53

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ICIS 240-108923/1	1		07:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-108923/2 IC			07:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-108923/3 IC			07:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-108923/4	1		07:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICB 240-108923/5	1		07:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-108923/6			07:53																				
ZZZZZZ			07:57																				
ICSA 240-108923/8	1		08:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-108923/9	1		08:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-108923/10			08:09																				
CCB 240-108923/11			08:13																				
ZZZZZZ			08:17																				
ZZZZZZ			08:21																				
ZZZZZZ			08:26																				
ZZZZZZ			08:30																				
ZZZZZZ			08:34																				
ZZZZZZ			08:38																				
CCV 240-108923/18	1		08:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-108923/19	1		08:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-108923/20	1		08:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			08:55																				
ZZZZZZ			08:59																				
MB 240-108583/1-A	1	R	09:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-108583/2-A	1	R	09:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			09:11																				
240-30764-D-5-A SD ^5	5	R	09:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30764-D-5-B DU	1	R	09:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30764-D-5-C MS	1	R	09:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30533-1	1	R	09:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-108923/30	1		09:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-108923/31	1		09:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-30533-1	1	D	09:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			09:44																				
ZZZZZZ			09:48																				
ZZZZZZ			09:52																				
ZZZZZZ			09:56																				
ZZZZZZ			10:00																				
ZZZZZZ			10:04																				
ZZZZZZ			10:08																				
ZZZZZZ			10:12																				
ZZZZZZ			10:16																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/07/2013 07:33 End Date: 11/08/2013 01:53

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCV 240-108923/42	1		10:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-108923/43	1		10:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			10:29																				
ZZZZZZ			10:33																				
ZZZZZZ			10:37																				
ZZZZZZ			10:41																				
ZZZZZZ			10:45																				
ZZZZZZ			10:49																				
CRI 240-108923/50	1		10:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				
ICSA 240-108923/51			10:57																				
ICSAB 240-108923/52			11:01																				
CRI 240-108923/53	1		11:05															X					
CCV 240-108923/54			11:09																				
CCB 240-108923/55			11:13																				
ZZZZZZ			11:17																				
ZZZZZZ			11:22																				
ZZZZZZ			11:25																				
ZZZZZZ			11:29																				
ZZZZZZ			11:33																				
ZZZZZZ			11:37																				
ZZZZZZ			11:41																				
ZZZZZZ			11:45																				
ZZZZZZ			11:49																				
ZZZZZZ			11:53																				
CCV 240-108923/66			11:57																				
CCB 240-108923/67			12:01																				
ZZZZZZ			12:05																				
ZZZZZZ			12:10																				
ZZZZZZ			12:14																				
ZZZZZZ			12:18																				
ZZZZZZ			12:22																				
ZZZZZZ			12:26																				
ZZZZZZ			12:30																				
ZZZZZZ			12:34																				
ZZZZZZ			12:38																				
ZZZZZZ			12:43																				
CCV 240-108923/78			12:47																				
CCB 240-108923/79			12:51																				
ZZZZZZ			12:55																				
ZZZZZZ			12:59																				
ZZZZZZ			13:03																				
ZZZZZZ			13:08																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/07/2013 07:33 End Date: 11/08/2013 01:53

Lab Sample ID	D/F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			13:12																				
ZZZZZZ			13:16																				
ZZZZZZ			13:20																				
ZZZZZZ			13:24																				
ZZZZZZ			13:28																				
ZZZZZZ			13:31																				
CCV 240-108923/90			13:35																				
CCB 240-108923/91			13:39																				
ZZZZZZ			13:43																				
ZZZZZZ			13:51																				
ZZZZZZ			13:55																				
ZZZZZZ			14:05																				
ZZZZZZ			14:09																				
ZZZZZZ			14:14																				
ZZZZZZ			14:19																				
ZZZZZZ			14:23																				
CCV 240-108923/100			14:28																				
CCB 240-108923/101			14:32																				
CCV 240-108923/102			14:36																				
CCB 240-108923/103			14:40																				
ZZZZZZ			14:44																				
ZZZZZZ			14:49																				
ZZZZZZ			14:55																				
ZZZZZZ			14:59																				
ZZZZZZ			15:03																				
ZZZZZZ			15:07																				
ZZZZZZ			15:11																				
ZZZZZZ			15:15																				
ZZZZZZ			15:19																				
ZZZZZZ			15:23																				
CCV 240-108923/114			15:27																				
CCB 240-108923/115			15:31																				
ZZZZZZ			15:35																				
ZZZZZZ			15:39																				
ZZZZZZ			15:43																				
ZZZZZZ			15:47																				
ZZZZZZ			15:51																				
ZZZZZZ			15:55																				
ZZZZZZ			15:58																				
ZZZZZZ			16:02																				
ZZZZZZ			16:06																				
ZZZZZZ			16:10																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/07/2013 07:33 End Date: 11/08/2013 01:53

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCV 240-108923/126			16:15																					
CCB 240-108923/127			16:18																					
ZZZZZZ			16:23																					
ZZZZZZ			16:27																					
ZZZZZZ			16:31																					
ZZZZZZ			16:35																					
ZZZZZZ			16:39																					
ZZZZZZ			16:43																					
ZZZZZZ			16:47																					
ZZZZZZ			16:52																					
ZZZZZZ			16:56																					
ZZZZZZ			17:00																					
CCV 240-108923/138			17:04																					
CCB 240-108923/139			17:08																					
ZZZZZZ			17:12																					
ZZZZZZ			17:16																					
ZZZZZZ			17:20																					
ZZZZZZ			17:24																					
ZZZZZZ			17:28																					
ZZZZZZ			17:32																					
ZZZZZZ			17:36																					
ZZZZZZ			17:40																					
ZZZZZZ			17:44																					
ZZZZZZ			17:48																					
CCV 240-108923/150			17:52																					
CCB 240-108923/151			17:56																					
ZZZZZZ			18:00																					
ZZZZZZ			18:04																					
ZZZZZZ			18:08																					
ZZZZZZ			18:12																					
ZZZZZZ			18:16																					
ZZZZZZ			18:20																					
ZZZZZZ			18:25																					
ZZZZZZ			18:29																					
ZZZZZZ			18:33																					
ZZZZZZ			18:37																					
CCV 240-108923/162			18:41																					
CCB 240-108923/163			18:45																					
ZZZZZZ			18:49																					
ZZZZZZ			18:53																					
ZZZZZZ			18:57																					
ZZZZZZ			19:01																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/07/2013 07:33 End Date: 11/08/2013 01:53

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			19:05																				
ZZZZZZ			19:09																				
ZZZZZZ			19:13																				
ZZZZZZ			19:18																				
ZZZZZZ			19:22																				
ZZZZZZ			19:26																				
CCV 240-108923/174			19:30																				
CCB 240-108923/175			19:34																				
ZZZZZZ			19:38																				
ZZZZZZ			19:42																				
ZZZZZZ			19:46																				
ZZZZZZ			19:50																				
ZZZZZZ			19:55																				
ZZZZZZ			19:59																				
ZZZZZZ			20:03																				
ZZZZZZ			20:07																				
ZZZZZZ			20:11																				
ZZZZZZ			20:15																				
CCV 240-108923/186			20:19																				
CCB 240-108923/187			20:23																				
ZZZZZZ			20:27																				
ZZZZZZ			20:31																				
ZZZZZZ			20:35																				
ZZZZZZ			20:39																				
ZZZZZZ			20:43																				
ZZZZZZ			20:47																				
ZZZZZZ			20:51																				
ZZZZZZ			20:55																				
ZZZZZZ			20:59																				
ZZZZZZ			21:03																				
CCV 240-108923/198			21:07																				
CCB 240-108923/199			21:11																				
ZZZZZZ			21:15																				
ZZZZZZ			21:19																				
ZZZZZZ			21:24																				
ZZZZZZ			21:28																				
ZZZZZZ			21:32																				
ZZZZZZ			21:36																				
ZZZZZZ			21:40																				
ZZZZZZ			21:44																				
ZZZZZZ			21:48																				
ZZZZZZ			21:52																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/07/2013 07:33 End Date: 11/08/2013 01:53

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CCV 240-108923/210			21:56																					
CCB 240-108923/211			22:00																					
ZZZZZZ			22:05																					
ZZZZZZ			22:09																					
ZZZZZZ			22:13																					
ZZZZZZ			22:17																					
ZZZZZZ			22:21																					
ZZZZZZ			22:25																					
ZZZZZZ			22:29																					
ZZZZZZ			22:33																					
ZZZZZZ			22:37																					
ZZZZZZ			22:41																					
CCV 240-108923/222			22:45																					
CCB 240-108923/223			22:49																					
ZZZZZZ			22:53																					
ZZZZZZ			22:57																					
ZZZZZZ			23:01																					
ZZZZZZ			23:05																					
ZZZZZZ			23:09																					
ZZZZZZ			23:13																					
ZZZZZZ			23:18																					
ZZZZZZ			23:22																					
ZZZZZZ			23:26																					
ZZZZZZ			23:30																					
CCV 240-108923/234			23:34																					
CCB 240-108923/235			23:38																					
ZZZZZZ			23:42																					
ZZZZZZ			23:46																					
ZZZZZZ			23:50																					
ZZZZZZ			23:54																					
ZZZZZZ			23:59																					
ZZZZZZ			00:03																					
ZZZZZZ			00:07																					
ZZZZZZ			00:11																					
ZZZZZZ			00:15																					
ZZZZZZ			00:19																					
CCV 240-108923/246			00:23																					
CCB 240-108923/247			00:27																					
ZZZZZZ			00:31																					
ZZZZZZ			00:36																					
ZZZZZZ			00:40																					
ZZZZZZ			00:44																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 11/07/2013 07:33 End Date: 11/08/2013 01:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			00:48																				
ZZZZZZ			00:52																				
ZZZZZZ			00:56																				
ZZZZZZ			01:00																				
ZZZZZZ			01:04																				
ZZZZZZ			01:09																				
CCV 240-108923/258			01:13																				
CCB 240-108923/259			01:17																				
ZZZZZZ			01:21																				
ZZZZZZ			01:25																				
ZZZZZZ			01:29																				
ZZZZZZ			01:33																				
ZZZZZZ			01:37																				
ZZZZZZ			01:42																				
ZZZZZZ			01:45																				
CCV 240-108923/267			01:49																				
CCB 240-108923/268			01:53																				

Prep Types
D = Dissolved
R = Total Recoverable

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

ICV Source: MT6500ICV_00013 Concentration Units: ug/L

CCV Source: MTICPCCV_00011

Analyte	ICV 240-108923/4 11/07/2013 07:45				CCV 240-108923/18 11/07/2013 08:42				CCV 240-108923/30 11/07/2013 09:32			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	382		375	102	524		500	105	494		500	99
Arsenic	386		375	103	518		500	104	489		500	98
Barium	1510		1500	100	2070		2000	104	1970		2000	98
Beryllium	1520		1500	101	2060		2000	103	1960		2000	98
Cadmium	380		375	101	526		500	105	501		500	100
Chromium	1510		1500	101	2030		2000	101	1920		2000	96
Cobalt	1500		1500	100	2100		2000	105	1970		2000	99
Copper	1510		1500	100	2070		2000	104	1970		2000	99
Lead	373		375	99	494		500	99	469		500	94
Molybdenum	1500		1500	100	2020		2000	101	1910		2000	96
Nickel	1530		1500	102	2090		2000	104	1960		2000	98
Selenium	380		375	101	512		500	102	478		500	96
Silver	766		750	102	1060		1000	106	1010		1000	101
Thallium	755		750	101	1030		1000	103	969		1000	97
Vanadium	1530		1500	102	2170		2000	108	2070		2000	104
Zinc	1530		1500	102	2120		2000	106	1990		2000	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

ICV Source: MT6500ICV_00013 Concentration Units: ug/L

CCV Source: MTICPCCV_00011

Analyte	CCV 240-108923/42 11/07/2013 10:21											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	495		500	99								
Arsenic	495		500	99								
Barium	1960		2000	98								
Beryllium	1950		2000	97								
Cadmium	502		500	100								
Chromium	1950		2000	98								
Cobalt	1990		2000	100								
Copper	1970		2000	99								
Lead	479		500	96								
Molybdenum	1950		2000	97								
Nickel	1990		2000	100								
Selenium	496		500	99								
Silver	1000		1000	100								
Thallium	979		1000	98								
Vanadium	2010		2000	101								
Zinc	2010		2000	101								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-108923/20 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	10.5		105	70-130
Arsenic	15.0	15.0		100	70-130
Beryllium	5.00	5.18		104	70-130
Cadmium	5.00	5.18		104	70-130
Barium	200	205		102	70-130
Copper	20.0	20.4	J	102	70-130
Chromium	10.0	10.1		101	70-130
Nickel	40.0	39.5	J	99	70-130
Lead	10.0	10.4		104	70-130
Antimony	20.0	22.4		112	70-130
Cobalt	10.0	9.85	J	99	70-130
Selenium	20.0	19.6	J	98	70-130
Thallium	20.0	19.6	J	98	70-130
Zinc	50.0	49.1	J	98	70-130
Molybdenum	40.0	39.8	J	99	70-130
Vanadium	10.0	13.0		130	70-130

Lab Sample ID: CRI 240-108923/50 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	10.4		104	70-130
Arsenic	15.0	18.3		122	70-130
Beryllium	5.00	4.95	J	99	70-130
Cadmium	5.00	5.15		103	70-130
Barium	200	202		101	70-130
Copper	20.0	20.5	J	103	70-130
Chromium	10.0	10.3		103	70-130
Nickel	40.0	40.1		100	70-130
Lead	10.0	11.5		115	70-130
Antimony	20.0	21.0		105	70-130
Cobalt	10.0	9.82	J	98	70-130
Selenium	20.0	19.0	J	95	70-130
Thallium	20.0	20.0		100	70-130
Zinc	50.0	49.5	J	99	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-108923/50 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Molybdenum	40.0	40.7		102	70-130

Lab Sample ID: CRI 240-108923/53 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00017

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	10.0	12.1		121	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-108923/5 11/07/2013 07:49		CCB 240-108923/19 11/07/2013 08:46		CCB 240-108923/31 11/07/2013 09:35		CCB 240-108923/43 11/07/2013 10:24	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	2.46	J	3.06	J	3.71	J	20	U
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	200	U	200	U
Beryllium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Lead	10	10	U	10	U	10	U	2.01	J
Molybdenum	40	40	U	40	U	40	U	40	U
Nickel	40	40	U	40	U	40	U	40	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	2.06	J	1.26	J	1.33	J	10	U
Zinc	50	50	U	50	U	50	U	50	U

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: ICSA 240-108923/8 Instrument ID: I9

Lab File ID: I9110713A.asc ICS Source: MTTRICSAW_00020

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-3.06**	
Arsenic		**4.91**	
Barium		**-0.357**	
Beryllium		**-0.124**	
Cadmium		**0.276**	
Chromium		**2.93**	
Cobalt		**-1.11**	
Copper		**-0.388**	
Lead		**-0.777**	
Molybdenum		**-2.72**	
Nickel		**4.76**	
Selenium		**-3.22**	
Silver		**-0.0701**	
Thallium		**-6.07**	
Vanadium		**4.96**	
Zinc		**10.6**	
Aluminum	*500000*	*504200*	*101*
Boron		*2.40*	
Calcium	*500000*	*491210*	*98*
Iron	*200000*	*196730*	*98*
Lithium		*-8.35*	
Magnesium	*500000*	*506520*	*101*
Manganese		*2.55*	
Potassium		*-30.6*	
Silicon		*-27.8*	
Sodium		*33.6*	
Strontium		*6.73*	
Tin		*3.50*	
Titanium		*-0.220*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-30533-1

SDG No.:

Lab Sample ID: ICSAB 240-108923/9 Instrument ID: I9

Lab File ID: I9110713A.asc ICS Source: MTICPICSABW_00002

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**1000**	**1008**	**101**
Arsenic	**1000**	**1018**	**102**
Barium	**500**	**505**	**101**
Beryllium	**500**	**488**	**98**
Cadmium	**1000**	**1030**	**103**
Chromium	**500**	**491**	**98**
Cobalt	**500**	**513**	**103**
Copper	**500**	**526**	**105**
Lead	**1000**	**895**	**90**
Molybdenum	**1000**	**952**	**95**
Nickel	**1000**	**1024**	**102**
Selenium	**1000**	**1000**	**100**
Silver	**1000**	**1098**	**110**
Thallium	**1000**	**977**	**98**
Vanadium	**500**	**488**	**98**
Zinc	**1000**	**1042**	**104**
Aluminum	*500000*	*503440*	*101*
Boron	*500*	*500*	*100*
Calcium	*500000*	*487940*	*98*
Iron	*200000*	*195280*	*98*
Lithium	*500*	*531*	*106*
Magnesium	*500000*	*502200*	*100*
Manganese	*500*	*491*	*98*
Potassium	*10000*	*10483*	*105*
Silicon	*10000*	*9993*	*100*
Sodium	*10000*	*10467*	*105*
Strontium	*1500*	*1469*	*98*
Tin	*500*	*531*	*106*
Titanium	*500*	*501*	*100*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**November 18, 2013**
FROM:	**MEGAN CARSON**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- HEXAVALENT CHROMIUM**
LOCKHEED-MARTIN STATE AIRPORT (MSA)
SDGs R1307835 AND R1307863

SAMPLES:

6/Aqueous/SDG R1307835

MSA-MW47D-101713	MSA-MW47I-101713
MSA-MW48I-101713	MSA-MW49D-101614
MSA-MW49I-101614	MSA-MW49S-101713

4/Aqueous/SDG R1307863

MSA-MW48D-101813	MSA-MW48S-101813
MSA-MW50I-101813	MSA-MW50S-101813

Overview

The sample sets for Lockheed MSA, SDGs R1307835 and R1307863 consists of six (6) aqueous environmental sample and SDG R1307863 consists of four (6) aqueous environmental sample. These SDGs contained no field duplicate pairs.

All samples were analyzed for hexavalent chromium. The samples were collected by Tetra Tech on October 17th and 18th, 2013 and analyzed by ALS Environmental. Hexavalent chromium analyses were conducted using EPA method 218.6.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, initial and continuing calibration verification results, laboratory method / preparation blank results, laboratory control sample recoveries, matrix spike recoveries, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems-

- Samples MSA-MW48D-101813, MSA-MW48S-101813, MSA-MW50I-101813, and MSA-MW50S-101813 were analyzed 3 days beyond the 24 hour holding time. The non-detected results were qualified as rejected (UR).

Minor Problems-

- The following contaminant was detected a calibration blank (affecting sample MSA-MW48I-101713) at the following maximum concentration:

Analyte	Maximum Concentration	Action Level
Hexavalent Chromium	0.044 ug/L	0.22 ug/L

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive hexavalent chromium result was qualified as non-detect (B).

- Samples MSA-MW47D-101713, MSA-MW47I-101713, MSA-MW49I-101614, and MSA-MW49S-101713 were analyzed a few hours beyond the 24 hour holding time. Positive results were qualified as estimated (J).

Notes

The continuing calibration analyzed on 10/18/13 at 14:25 had a percent recovery > 110% for hexavalent chromium. Sample MSA-MW48I-101713 was affected. No validation action was warranted as the sample result was previously qualified for blank contamination.

The lab filtered the samples upon receipt and preserved them to a pH between 9.3 and 9.7.

Non-detected results were reported to the method detection limit (MDL).

Executive Summary

Laboratory Performance: Holding time non-compliances resulted in the rejection and qualification of sample results. The continuing calibration blank resulted in the qualification of sample results.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993).

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results

Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	MSA-MW47D-101713			MSA-MW47I-101713			MSA-MW48I-101713			MSA-MW49D-101614		
SDG: R1307835	LAB_ID	R1307835-002			R1307835-001			R1307835-003			R1307835-006		
FRACTION: MISC	SAMP_DATE	10/17/2013			10/17/2013			10/17/2013			10/17/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.015	J	HP	0.021	J	HP	0.035	B	A	0.02	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW49I-101614			MSA-MW49S-101713		
SDG: R1307835	LAB_ID	R1307835-005			R1307835-004		
FRACTION: MISC	SAMP_DATE	10/17/2013			10/17/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.045	J	H	0.02	J	HP

PROJ_NO: 04882	NSAMPLE	MSA-MW48D-101813			MSA-MW48S-101813			MSA-MW50I-101813			MSA-MW50S-101813		
SDG: R1307863	LAB_ID	R1307863-002			R1307863-001			R1307863-004			R1307863-003		
FRACTION: MISC	SAMP_DATE	10/18/2013			10/18/2013			10/18/2013			10/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.02	UR	H	0.02	UR	H	0.02	UR	H	0.02	UR	H

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307835
Project:	MSA 2013 Dump Road GW/112IC04882	**Date Collected:**	10/17/13 1030
Sample Matrix:	Water	**Date Received:**	10/18/13
Sample Name:	MSA-MW47D-101713		
Lab Code:	R1307835-002	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.015	J	µg/L	0.020	0.010	1	NA	10/18/13 12:09	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307835
Project:	MSA 2013 Dump Road GW/112IC04882	**Date Collected:**	10/17/13 0905
Sample Matrix:	Water	**Date Received:**	10/18/13
Sample Name:	MSA-MW47I-101713		
Lab Code:	R1307835-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.021**	J	µg/L	0.040	0.020	2	NA	10/18/13 12:53	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307835
Project:	MSA 2013 Dump Road GW/112IC04882	**Date Collected:**	10/17/13 1430
Sample Matrix:	Water	**Date Received:**	10/18/13
Sample Name:	MSA-MW48I-101713		
Lab Code:	R1307835-003	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.035**	J	µg/L	0.040	0.020	2	NA	10/18/13 13:38	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307835
Project:	MSA 2013 Dump Road GW/112IC04882	**Date Collected:**	10/17/13 1330
Sample Matrix:	Water	**Date Received:**	10/18/13
Sample Name:	MSA-MW49D-101614		
Lab Code:	R1307835-006	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.040	U	µg/L	0.040	0.020	2	NA	10/18/13 13:11	

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/112IC04882
Sample Matrix: Water

Service Request: R1307835
Date Collected: 10/17/13 1200
Date Received: 10/18/13

Sample Name: MSA-MW49I-101614
Lab Code: R1307835-005

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.045**		µg/L	0.020	0.010	1	NA	10/18/13 12:27	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307835
Project:	MSA 2013 Dump Road GW/112IC04882	**Date Collected:**	10/17/13 1200
Sample Matrix:	Water	**Date Received:**	10/18/13
Sample Name:	MSA-MW49I-101614		
Lab Code:	R1307835-005	**Basis:**	NA
Run Type:	Reanalysis		

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.040	U	µg/L	0.040	0.020	2	NA	10/22/13 13:32	

Not used

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307835
Project:	MSA 2013 Dump Road GW/112IC04882	**Date Collected:**	10/17/13 1100
Sample Matrix:	Water	**Date Received:**	10/18/13
Sample Name:	MSA-MW49S-101713		
Lab Code:	R1307835-004	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.024**	J	µg/L	0.040	0.020	2	NA	10/18/13 13:02	

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/112IC04882
Sample Matrix: Water

Service Request: R1307863
Date Collected: 10/18/13 1245
Date Received: 10/19/13

Sample Name: MSA-MW48D-101813
Lab Code: R1307863-002

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.040	U	µg/L	0.040	0.020	2	NA	10/22/13 13:50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307863
Project:	MSA 2013 Dump Road GW/112IC04882	**Date Collected:**	10/18/13 1240
Sample Matrix:	Water	**Date Received:**	10/19/13
Sample Name:	MSA-MW48S-101813		
Lab Code:	R1307863-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.040	U	µg/L	0.040	0.020	2	NA	10/22/13 13:41	

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/1121C04882
Sample Matrix: Water

Service Request: R1307863
Date Collected: 10/18/13 1445
Date Received: 10/19/13

Sample Name: MSA-MW50I-101813
Lab Code: R1307863-004

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.040	U	µg/L	0.040	0.020	2	NA	10/22/13 14:47	

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/112IC04882
Sample Matrix: Water

Service Request: R1307863
Date Collected: 10/18/13 1230
Date Received: 10/19/13

Sample Name: MSA-MW50S-101813
Lab Code: R1307863-003

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.040	U	µg/L	0.040	0.020	2	NA	10/22/13 14:39	

APPENDIX C

SUPPORT DOCUMENTATION

Rochester

1565 Jefferson Road, Building 300, Suite 360
Rochester, NY 14623
Phone: +1 585 288 5380 Fax: +1 585 288 8475

Chain of Custody Record

ALS Environmental

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 10/17/2013	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact:	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below 1 DAY			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: ~~MSA Surface Water Sampling~~ Dump Road Gr	☐ 1 week			Sampler:
Site: ~~MSA Frog Marter Creek~~ Dump Road MSA	☐ 2 days			
P O #	☒ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Hexavalent Chromium
MSA-MW47I-101713	10/17/13	0905	GW	Water	1	N	x
MSA-MW47D-101713	10/17/13	1030	GW	Water	1	N	x
~~MSA-MW48S-101713~~	~~10/17/13~~	X	GW	Water	1	N	x
MSA-MW48I-101713	10/17/13	1430	GW	Water	2	N	x
MSA-MW49S-101713	10/17/13	1100	GW	Water	3	N	x
MSA-MW49I-101614	10/17/13	1200	GW	Water	4	N	x
MSA-MW49D-101614	10/17/13	1330	GW	Water	5	N	x

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Samples must be analyzed within 24 hours of sample time.

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Tetra Tech	10/17/13 1530		ALS	10/18/13 0805
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

R1307835 5
Tetra Tech NUS,Inc.
MSA 2013 Dump Road GW

CASE NARRATIVE

Client:	Tetra Tech NUS, Inc.	**Service Request No.:**	R1307835
Project:	MSA Dump Road Ground Water	**Project Number:**	112IC04882
Sample Matrix:	Water	**Date Received:**	10/17/13

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Water samples were collected on 10/16/13 and received at ALS in good condition at a cooler temperature of 2.7 °C as noted on the cooler receipt and preservation check form. The samples were immediately preserved to a pH of 9.3 – 9.7 and stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the CLP Batching sheets for a cross-reference between Client ID and ALS Job # and analyses requested. All samples were lab filtered.

Hexavalent Chromium Analysis – 218.6

Four water samples were analyzed for Dissolved CR+6 by EPA method 218.6, low level. Values detected between the MDL and PQL have been flagged with a "J" as estimated.

Note: All samples were analyzed several hours outside of the client requested 24 hours holding time from sampling time due to a laboratory error. Samples were analyzed the same day as sample receipt and within the method specified holding time.

All the initial and continuing calibration criteria of 95 – 105 % were met.

The Blank Spike (LCS) recovery was within QC limits.

The Laboratory Blank associated with these samples was free of contamination except CCB2 and CCB3. Sample MSA-MW49I was re-analyzed due to a positive hit above the MRL. Both results were reported.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Cooler Receipt and Preservation Check Form

Project/Client Tetra Tech Folder Number _____

Cooler received on 10/18 by: JFS **COURIER:** ALS UPS ~~FEDEX~~ VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	~~YES~~	NO
2.	Were custody papers properly filled out (ink, signed, etc.)?	~~YES~~	NO
3.	Did all bottles arrive in good condition (unbroken)?	~~YES~~	NO
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO ~~N/A~~
5.	Were **Ice** or **Ice packs** present?	~~YES~~	NO
6.	Where did the bottles originate?	~~ALS/ROC~~, CLIENT	

7.	Soil VOA samples received as:	Bulk Jar	Encore	TerraCore	Lab5035set	~~N/A~~
8.	Temperature of cooler(s) upon receipt:	1.0				
	Is the temperature within 0° - 6° C?:	~~Y~~ N	Y N	Y N	Y N	Y N

If No, Explain Below Date/Time Temperatures Taken: 10/18/13 0811

Thermometer ID: IR ~~GUN#3~~ / IR GUN#4 Reading From: ~~Temp Blank~~ / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples: _____

All Samples held in storage location 2002 by JFS on 10/18 at 0811

5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: _____

Cooler Breakdown: Date: 10/18/13 Time: 1252 by: JFS

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	~~YES~~	NO
2.	Did all bottle labels and tags agree with custody papers?	~~YES~~	NO
3.	Were correct containers used for the tests indicated?	~~YES~~	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		~~N/A~~

Explain any discrepancies: _____

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: client

Other Comments:

PC Secondary Review: 10/18/13

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 364234 **Method/Testcode:** 218.6 LL/Cr6 D LL

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1313091-01	Chromium, Hexavalent, Dissolved	CCV		Water	0.49 ppb	10 mL	0.486 ppb	1					10/18/13 10:28:00	N	IV
RQ1313091-04	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/18/13 11:05:00	N	IV
RQ1313091-07	Chromium, Hexavalent, Dissolved	MB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/18/13 11:05:00	N	IV
RQ1313091-08	Chromium, Hexavalent, Dissolved	LCS		Water	0.21 ppb	10 mL	0.213 µg/L	1	0.010	0.020	107		10/18/13 11:47:00	N	IV
R1307835-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 ppb	10 mL	0.015 µg/L J	1	0.010	0.020			10/18/13 12:09:00	N	IV
R1307835-005.R01	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.045 µg/L	1	0.010	0.020			10/18/13 12:27:00	N	IV
R1307835-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 ppb	10 mL	0.021 µg/L J	2	0.020	0.040			10/18/13 12:53:00	N	IV
R1307835-004	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 ppb	10 mL	0.024 µg/L J	2	0.020	0.040			10/18/13 13:02:00	N	IV
R1307835-006	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/18/13 13:11:00	N	IV
RQ1313091-02	Chromium, Hexavalent, Dissolved	CCV		Water	0.52 ppb	10 mL	0.519 ppb	1					10/18/13 13:20:00	N	IV
RQ1313091-05	Chromium, Hexavalent, Dissolved	CCB		Water	0.04 ppb	10 mL	0.044 µg/L	1	0.010	0.020			10/18/13 13:29:00	N	IV
R1307835-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 ppb	10 mL	0.035 µg/L J	2	0.020	0.040			10/18/13 13:38:00	N	IV
RQ1313091-03	Chromium, Hexavalent, Dissolved	CCV		Water	0.56 ppb	10 mL	0.562 ppb	1					10/18/13 14:25:00	N	IV
RQ1313091-06	Chromium, Hexavalent, Dissolved	CCB		Water	0.05 ppb	10 mL	0.053 µg/L	1	0.010	0.020			10/18/13 14:58:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307835
Project:	MSA 2013 Dump Road GW/112IC04882	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1307835-MB1	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/18/13 11:05	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307835
Project:	MSA 2013 Dump Road GW/112IC04882	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1307835-MB2	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/22/13 11:42	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/1121C04882
Sample Matrix: Water

Service Request: R1307835
Date Analyzed: 10/18/13

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1307835-LCS1 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.213	0.200	107	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/112IC04882
Sample Matrix: Water

Service Request: R1307835
Date Analyzed: 10/22/13

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1307835-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.207	0.200	104	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

10-18-13 IC#8 218.6LL Analyst: CWoods Pipets: Phineas FERB

Injection Number	Injection Name	Type	Level	Processing Method	Inject Time	Dilution	Comment
1	STANDARD 1	Calibration Standard	01	8-092513LL	25/09/13 12:10	1.0	218.6 LL
2	STANDARD 2	Calibration Standard	02	8-092513LL	25/09/13 12:21	1.0	218.6 LL
3	STANDARD 3	Calibration Standard	03	8-092513LL	25/09/13 12:30	1.0	218.6 LL
4	STANDARD 4	Calibration Standard	04	8-092513LL	25/09/13 12:39	1.0	218.6 LL
5	STANDARD 5	Calibration Standard	05	8-092513LL	25/09/13 12:48	1.0	218.6 LL
6	STANDARD 6	Calibration Standard	06	8-092513LL	25/09/13 12:56	1.0	218.6 LL
7	STANDARD 7	Calibration Standard	07	8-092513LL	25/09/13 13:05	1.0	218.6 LL
8	CCV	Unknown		8-092513LL	18/10/13 10:28	1.0	218.6 LL
9	CCB	Unknown		8-092513LL	18/10/13 11:05	1.0	218.6 LL
10	LCS	Unknown		8-092513LL	18/10/13 11:47	1.0	218.6 LL
11	R1307835-001	Unknown		8-092513LL	18/10/13 12:01	1.0	218.6 LL
12	R1307835-002	Unknown		8-092513LL	18/10/13 12:09	1.0	218.6 LL
13	R1307835-004	Unknown		8-092513LL	18/10/13 12:18	1.0	218.6 LL
14	R1307835-005	Unknown		8-092513LL	18/10/13 12:27	1.0	218.6 LL
15	R1307835-006	Unknown		8-092513LL	18/10/13 12:36	1.0	218.6 LL
16	R1307835-003	Unknown		8-092513LL	18/10/13 12:45	1.0	218.6 LL
17	R1307835-001	Unknown		8-092513LL	18/10/13 12:53	2.0	218.6 LL
18	R1307835-004	Unknown		8-092513LL	18/10/13 13:02	2.0	218.6 LL
19	R1307835-006	Unknown		8-092513LL	18/10/13 13:11	2.0	218.6 LL
20	CCV	Unknown		8-092513LL	18/10/13 13:20	1.0	218.6 LL
21	CCB	Unknown		8-092513LL	18/10/13 13:29	1.0	218.6 LL
22	R1307835-003	Unknown		8-092513LL	18/10/13 13:38	2.0	218.6 LL
23	R1307835-003 MS	Unknown		8-092513LL	18/10/13 13:46	2.0	218.6 LL
24	R1307835-003 MSD	Unknown		8-092513LL	18/10/13 13:55	2.0	218.6 LL
25	CCV	Unknown		8-092513LL	18/10/13 14:25	1.0	218.6 LL
26	CCB	Unknown		8-092513LL	18/10/13 14:58	1.0	218.6 LL

<R1835>
1 copy

Reviewed & Approved
By: CK
Date: 10/21/13

000025

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc. **Service Request:** R1307835
Project: MSA 2013 Dump Road GW/112IC04882

Continuing Calibration Verification (CCV) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL **Units:** ppb

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery		Acceptance Limits
CCV1	364234	RQ1313091-01	10/18/13 10:28	0.500	0.486	97		95 - 105
CCV2	364234	RQ1313091-02	10/18/13 13:20	0.500	0.519	104		95 - 105
CCV3	364234	RQ1313091-03	10/18/13 14:25	0.500	0.562	112	*	95 - 105
CCV4	364521	RQ1313193-05	10/22/13 11:33	0.500	0.522	104		95 - 105
CCV5	364521	RQ1313193-06	10/22/13 14:01	0.500	0.486	97		95 - 105
CCV6	364521	RQ1313193-07	10/22/13 15:59	0.500	0.491	98		95 - 105

Client: Tetra Tech NUS, Inc. **Service Request:** R1307835
Project: MSA 2013 Dump Road GW/112IC04882

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL **Units:** µg/L

	Analysis Lot	Lab Code	Date Analyzed	MDL	MRL	Result	Q
CCB1	364234	RQ1313091-04	10/18/13 11:05	0.010	0.020	0.020	U
CCB2	364234	RQ1313091-05	10/18/13 13:29	0.010	0.020	**0.044**	
CCB3	364234	RQ1313091-06	10/18/13 14:58	0.010	0.020	**0.053**	
CCB4	364521	RQ1313193-08	10/22/13 11:42	0.010	0.020	0.020	U
CCB5	364521	RQ1313193-09	10/22/13 14:27	0.010	0.020	0.020	U
CCB6	364521	RQ1313193-10	10/22/13 16:09	0.010	0.020	0.020	U

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
—	FILTER BLANK	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	—	Yes No Field	millex ROPA59136	—	6.521	9.103	10/16/13 @ 0910	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
10/17/13	MW46S 7782-001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/16/13 1110	Yes No Field	millex HV ROPA59136	—	6.57	9.44	CMW 10/17/13 1035	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW47S 7782-004	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/16/13 1445	Yes No Field		—	6.58	9.42	CMW 10/17/13 1037	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW46I 7782-002	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/16/13 1205	Yes No Field		—	6.09	9.39	CMW 10/17/13 1039	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW46D 7782-003	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/16/13 1320	Yes No Field		—	6.87	9.51	CMW 10/17/13 1040	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
—	Filter Blank	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	—	Yes No Field		—	6.63	9.59	CMW 10/17/13 1042	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
10-18-13	MSA-MW47I -101713 7835-001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	101713 09:05	Yes No Field	Millex HV ROPA59136	—	5.992	9.339	KE 10-18-13 8:44	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MSA MW47D- 101713 7835-002	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10-17-13 10:30	Yes No Field		—	6.639	9.400	KE 10-18-13 8:46	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
10-18-13	MSA 7835-003 MW48I - 101713	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10-17-13 14:30	(Yes) No Field	Millex RDA59136	—	5423	9.361	KE 10-18-13 8:50	Buffer	WC1122210C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA 7835-004 MW49S - 101713	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10-17-13 11:00	(Yes) No Field		—	5.033	9.413	KE 10-18-13 8:52	Buffer	WC1122210C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA 7835-005 MW49I - 101614	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10-17-13 12:00	(Yes) No Field		—	4.182	9.341	KE 10-18-13 8.42	Buffer	WC1122210C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA 7835-006 MW49D - 101614	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10-17-13 13:30	(Yes) No Field		—	4.145	9.401	KE 10-18-13 8.56	Buffer	WC1122210C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
—	Filter Blank	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	—	(Yes) No Field		—	7.710	9.390	KE 10-18-13 9:00	Buffer	WC1122210C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
10/19/13 0840	Filter Blank	7199 ~~218.6 RL~~ 218.6 LL 218.7	(Water) Drinking Water	10/18/13	(Yes) No Field	Millex RDA59136	—	7.30	9.31	DW 10/19/13 0914	Buffer	WC1122210C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA-MW48S	7199 ~~218.6 RL~~ 218.6 LL 218.7	~~Water~~ Drinking Water	10/18/13 1240	(Yes) No Field		—	6.65	9.32	DW 10/19/13 1105	Buffer	WC1122210C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA-MW30S	7199 ~~218.6 RL~~ 218.6 LL 218.7	~~Water~~ Drinking Water	10/18/13 1230	(Yes) No Field		—	6.11	9.36	DW 10/19/13	Buffer	WC1122210C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

HOLDTIME

SDG R1307782

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-MW48S-101813	R1307863-001	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW435-102213	R1307933-001	NM	10/22/2013	10/24/2013	10/24/2013	2	0	2
CR6	UG/L	MSA-MW44S-102113	R1307888-005	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW46D-101613	R1307782-003	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW46I-101613	R1307782-002	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW46S-101613	R1307782-001	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW47D-101713	R1307835-002	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW47I-101713	R1307835-001	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW47S-101613	R1307782-004	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-DUP01-102113	R1307888-006	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW48I-101713	R1307835-003	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW51S-102113	R1307888-001	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW49D-101614	R1307835-006	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW49I-101614	R1307835-005	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW49S-101713	R1307835-004	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-MW50D-102113	R1307888-004	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW50I-101813	R1307863-004	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW50S-101813	R1307863-003	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW51D-102113	R1307888-003	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW51I-102113	R1307888-002	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW48D-101813	R1307863-002	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech	Client Project Manager: Tony Apanavage	Site Contact: Josh Mullis	Lab Contact:	COC No: 59311
Address: 20251 Century Blvd Ste. 200	Telephone: 301-233-8230	Telephone: 410-271-5641	Telephone:	1 of 1 COCs
City/State/Zip: Germantown, MD, 20874	Email: tony.apanavage@tetratech.com	Analysis Turnaround Time (In BUS days)		For lab use only
Phone: (301) 528-3021		TAT if different from below _____ ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☒ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: Dump Road GW	Method of Shipment/Carrier: Fed ex			
Project Number: 112IC04882	Shipping/Tracking No:			Job/SDG No:
PO#				

Analyses: Hex Chrom

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	Hex Chrom	Sample Specific Notes / Special Instructions:
MSA-MW48S-101813	10/18/13	1240		X									X				X	
MSA-MW48D-101813	10/18/13	1245		X									X				X	
MSA-MW50S-101813	10/18/13	1230		X									X				X	
MSA-MW50I-101813	10/18/13	1445		X									X				X	

R1307863 5
Tetra Tech NUS, Inc.
MSA 2013 Dump Road SW

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: 24 hour TAT

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	10/18/13 1600			
			Received in Laboratory by: [signature]	Company: ALS	Date/Time: ~~10/18~~ 10/19/13/0840

DW 10/19/13

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TAL 0018- 1 (04/10)

CASE NARRATIVE

Client:	Tetra Tech NUS, Inc.	**Service Request No.:**	R1307863
Project:	MSA Dump Road Ground Water	**Project Number:**	112IC04882
Sample Matrix:	Water	**Date Received:**	10/19/13

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Water samples were collected on 10/18/13 and received at ALS in good condition at a cooler temperature of 1.9 °C as noted on the cooler receipt and preservation check form. The samples were immediately preserved to a pH of 9.3 – 9.7 and stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the CLP Batching sheets for a cross-reference between Client ID and ALS Job # and analyses requested. All samples were lab filtered.

Hexavalent Chromium Analysis – 218.6

Four water samples were analyzed for Dissolved CR+6 by EPA method 218.6, low level. Values detected between the MDL and PQL have been flagged with a "J" as estimated.

Note: All samples were unable to be analyzed within the client requested 24 hours holding time from sampling time due to arrival on Saturday and there was no prior communication. Samples were analyzed as soon as possible after a properly trained analytst was notified.

All the initial and continuing calibration criteria of 95 – 105 % were met.

The Blank Spike (LCS) recovery was within QC limits.

The Laboratory Blank associated with these samples was free of contamination.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Cooler Receipt and Preservation Check Form

Project/Client Tetra Tech Folder Number R13-1863

Cooler received on 10/19/13 by: dh COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	(YES)	NO
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO (N/A)
5.	Were (Ice) or **Ice packs** present?	(YES)	NO
6.	Where did the bottles originate?		(ALS/ROC), CLIENT
7.	Soil VOA samples received as:	Bulk Jar	Encore / TerraCore / Lab5035set / (N/A)
8.	Temperature of cooler(s) upon receipt:	1.1°	

Is the temperature within 0° - 6° C?:	(Y)	N	Y	N	Y	N	Y	N	Y N
If No, Explain Below Date/Time Temperatures Taken:	10/19/13 0840								

Thermometer ID: IR ~~GUN#3~~ / IR GUN#4 Reading From: Temp Blank / ~~Sample Bottle~~

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location Room by dh on 10/19/13 at 0840

5035 samples placed in storage location ____ by ____ on ____ at ____

PC Secondary Review:

Cooler Breakdown: Date: 10/21/13 Time: 1255 by: (AD)

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: ____

Bottle lot numbers: 072913-2Amb 072413-2Amb

Other Comments:

PC Secondary Review: MK 10/21/13

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 364521 **Method/Testcode:** 218.6 LL/Cr6 D LL

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1313193-05	Chromium, Hexavalent, Dissolved	CCV		Water	0.52 ppb	10 mL	0.522 ppb	1					10/22/13 11:33:00	N	IV
RQ1313193-08	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 11:42:00	N	IV
RQ1313193-11	Chromium, Hexavalent, Dissolved	MB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 11:42:00	N	IV
RQ1313193-12	Chromium, Hexavalent, Dissolved	LCS		Water	0.21 ppb	10 mL	0.207 µg/L	1	0.010	0.020	104		10/22/13 11:50:00	N	IV
R1307888-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 12:27:00	N	IV
R1307888-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 12:35:00	N	IV
R1307888-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 12:44:00	N	IV
R1307888-004	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 12:53:00	N	IV
R1307888-005	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 13:02:00	N	IV
R1307888-006	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 13:11:00	N	IV
R1307835-005	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/22/13 13:32:00	N	IV
R1307863-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/22/13 13:41:00	N	IV
R1307863-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/22/13 13:50:00	N	IV
RQ1313193-06	Chromium, Hexavalent, Dissolved	CCV		Water	0.49 ppb	10 mL	0.486 ppb	1					10/22/13 14:01:00	N	IV
RQ1313193-09	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 14:27:00	N	IV
R1307863-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/22/13 14:39:00	N	IV
R1307863-004	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/22/13 14:47:00	N	IV
RQ1313193-01	Chromium, Hexavalent, Dissolved	MS	R1307888-005	Water	0.18 ppb	10 mL	0.179 µg/L	1	0.010	0.020	89*		10/22/13 15:25:00	N	IV
RQ1313193-02	Chromium, Hexavalent, Dissolved	DMS	R1307888-005	Water	0.16 ppb	10 mL	0.163 µg/L	1	0.010	0.020	81*	9	10/22/13 15:33:00	N	IV
RQ1313193-03	Chromium, Hexavalent, Dissolved	MS	R1307888-006	Water	0.18 ppb	10 mL	0.182 µg/L	1	0.010	0.020	91		10/22/13 15:42:00	N	IV
RQ1313193-04	Chromium, Hexavalent, Dissolved	DMS	R1307888-006	Water	0.20 ppb	10 mL	0.196 µg/L	1	0.010	0.020	98	7	10/22/13 15:50:00	N	IV
RQ1313193-07	Chromium, Hexavalent, Dissolved	CCV		Water	0.49 ppb	10 mL	0.491 ppb	1					10/22/13 15:59:00	N	IV
RQ1313193-10	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 16:09:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307863
Project:	MSA 2013 Dump Road GW/112IC04882	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1307863-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/22/13 11:42	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/112IC04882
Sample Matrix: Water

Service Request: R1307863
Date Analyzed: 10/22/13

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1307863-LCS Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.207	0.200	104	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

10-22-13 IC#8 - 218.6 LL Analyst: Cwood

Injection Number	Injection Name	Type	Level	Processing Method	Inject Time	Dilution	Comment
1	STANDARD 1	Calibration Standard	01	8-092513LL	22/10/13 10:26	1.0	218.6 LL
2	STANDARD 2	Calibration Standard	02	8-092513LL	22/10/13 10:34	1.0	218.6 LL
3	STANDARD 3	Calibration Standard	03	8-092513LL	22/10/13 10:43	1.0	218.6 LL
4	STANDARD 4	Calibration Standard	04	8-092513LL	22/10/13 10:52	1.0	218.6 LL
5	STANDARD 5	Calibration Standard	05	8-092513LL	22/10/13 11:01	1.0	218.6 LL
6	STANDARD 6	Calibration Standard	06	8-092513LL	22/10/13 11:09	1.0	218.6 LL
7	STANDARD 7	Calibration Standard	07	8-092513LL	22/10/13 11:18	1.0	218.6 LL
8	ICV	Unknown		8-092513LL	22/10/13 11:33	1.0	218.6 LL
9	ICB	Unknown		8-092513LL	22/10/13 11:42	1.0	218.6 LL
10	LCS	Unknown		8-092513LL	22/10/13 11:50	1.0	218.6 LL
11	R1307888-001	Unknown		8-092513LL	22/10/13 12:27	1.0	218.6 LL
12	R1307888-002	Unknown		8-092513LL	22/10/13 12:35	1.0	218.6 LL
13	R1307888-003	Unknown		8-092513LL	22/10/13 12:44	1.0	218.6 LL
14	R1307888-004	Unknown		8-092513LL	22/10/13 12:53	1.0	218.6 LL
15	R1307888-005	Unknown		8-092513LL	22/10/13 13:02	1.0	218.6 LL
16	R1307888-006	Unknown		8-092513LL	22/10/13 13:11	1.0	218.6 LL
17	R1307835-005	Unknown		8-092513LL	22/10/13 13:32	2.0	218.6 LL
18	R1307863-001	Unknown		8-092513LL	22/10/13 13:41	2.0	218.6 LL
19	R1307863-002	Unknown		8-092513LL	22/10/13 13:50	2.0	218.6 LL
20	CCV	Unknown		8-092513LL	22/10/13 14:01	1.0	218.6 LL
21	CCB	Unknown		8-092513LL	22/10/13 14:27	1.0	218.6 LL
22	R1307863-003	Unknown		8-092513LL	22/10/13 14:39	2.0	218.6 LL
23	R1307863-004	Unknown		8-092513LL	22/10/13 14:47	2.0	218.6 LL
24	R1307888-005 MS	Unknown		8-092513LL	22/10/13 15:25	1.0	218.6 LL
25	R1307888-005 MSD	Unknown		8-092513LL	22/10/13 15:33	1.0	218.6 LL
26	R1307888-006 MS	Unknown		8-092513LL	22/10/13 15:42	1.0	218.6 LL
27	R1307888-006 MSD	Unknown		8-092513LL	22/10/13 15:50	1.0	218.6 LL
28	CCV	Unknown		8-092513LL	22/10/13 15:59	1.0	218.6 LL
29	CCB	Unknown		8-092513LL	22/10/13 16:09	1.0	218.6 LL

07003

R7888
R7835
R7863
3 copies

Reviewed & Approved
By: CK
Date: 10/23/13

Client: Tetra Tech NUS, Inc. **Service Request:** R1307863
Project: MSA 2013 Dump Road GW/112IC04882

Continuing Calibration Verification (CCV) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL **Units:** ppb

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	364521	RQ1313193-05	10/22/13 11:33	0.500	0.522	104	95 - 105
CCV2	364521	RQ1313193-06	10/22/13 14:01	0.500	0.486	97	95 - 105
CCV3	364521	RQ1313193-07	10/22/13 15:59	0.500	0.491	98	95 - 105

Client: Tetra Tech NUS, Inc. **Service Request:** R1307863

Project: MSA 2013 Dump Road GW/112IC04882

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL **Units:** µg/L

	Analysis Lot	Lab Code	Date Analyzed	MDL	MRL	Result	Q
CCB1	364521	RQ1313193-08	10/22/13 11:42	0.010	0.020	0.020	U
CCB2	364521	RQ1313193-09	10/22/13 14:27	0.010	0.020	0.020	U
CCB3	364521	RQ1313193-10	10/22/13 16:09	0.010	0.020	0.020	U

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
10-18-13	MSA T835-003 MW48I - 101713	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10-17-13 14:30	Yes No Field	Millex RDPA59136	—	5.423	9.361	KE 10-18-13 8:50	Buffer	WC1122201
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA T835-004 MW49S - 101713	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10-17-13 11:00	Yes No Field		—	5.033	9.413	KE 10-18-13 8:52	Buffer	WC1122201
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA T835-005 MW49I - 101614	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10-17-13 12:00	Yes No Field		—	4.182	9.341	KE 10-18-13 8:42	Buffer	WC1122201
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA T835-006 MW49D - 101614	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10-17-13 13:30	Yes No Field		—	4.145	9.401	KE 10-18-13 8:56	Buffer	WC1122201
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
—	Filter Blank	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	—	Yes No Field		—	7.710	9.390	KE 10-18-13 9:00	Buffer	WC1122201
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
10/19/13 0840	Filter Blank	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/18/13	Yes No Field	Millex RDPA59136	—	7.30	9.31	DW 10/19/13 0914	Buffer	WC1122201
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	T863-001 MSA-MW49S	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/18/13 1240	Yes No Field		—	6.65	9.32	DW 10/19/13 1105	Buffer	WC1122201
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	T863-003 MSA-MW50S	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/18/13 1230	Yes No Field		—	6.11	9.36	DW 10/19/13	Buffer	WC1122201
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
10/19/13 0840	7863-002 MSA-MW48D	7199 ~~218.6 RL~~ 218.6 LL 218.7	Water Drinking Water	10/18/13 1245	Yes No Field	miller ROPA 54136	–	6.16	9.30	DPW 10/19/13 1119	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	7863-004 MW-50I	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/18/13 1445	Yes No Field		–	6.30	9.31	DPW 10/19/13 1121	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
10/22/13 0750	FILTER BLANK	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	–	Yes No Field	miley	–	5.932	9.31	[illegible] 10/22/13 0828	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW51D 7888-003	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/21/13 1355	Yes No Field		–	6.343	9.368	[illegible] 10/22/13 0833	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW51I 7888-002	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/21/13 1235	Yes No Field		–	5.903	9.425	[illegible] 10/22/13 0835	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW44S 7888-005	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/21/13 1330	Yes No Field		–	6.788	9.419	[illegible] 10/22/13 0837	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW50D 7888-004	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/21/13 1150	Yes No Field		–	6.150	9.450	[illegible] 10/22/13 0839	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW51S 7888-001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/21/13 1145	Yes No Field		–	5.812	9.445	[illegible] 10/22/13 0841	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

HOLDTIME

SDG R1307782

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-MW48S-101813	R1307863-001	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW435-102213	R1307933-001	NM	10/22/2013	10/24/2013	10/24/2013	2	0	2
CR6	UG/L	MSA-MW44S-102113	R1307888-005	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW46D-101613	R1307782-003	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW46I-101613	R1307782-002	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW46S-101613	R1307782-001	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW47D-101713	R1307835-002	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW47I-101713	R1307835-001	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW47S-101613	R1307782-004	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-DUP01-102113	R1307888-006	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW48I-101713	R1307835-003	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW51S-102113	R1307888-001	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW49D-101614	R1307835-006	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW49I-101614	R1307835-005	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW49S-101713	R1307835-004	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-MW50D-102113	R1307888-004	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW50I-101813	R1307863-004	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW50S-101813	R1307863-003	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW51D-102113	R1307888-003	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW51I-102113	R1307888-002	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW48D-101813	R1307863-002	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **November 18, 2013**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- HEXAVALENT CHROMIUM**
LOCKHEED-MARTIN STATE AIRPORT (MSA)
SDGs R1307933 AND R1307888

SAMPLES: 1/Aqueous/SDG R1307933
MSA-MW43S-102213

6/Aqueous/SDG R1307888

MSA-DUP01-102113	MSA-MW44S-102113
MSA-MW50D-102113	MSA-MW51D-102113
MSA-MW51I-102113	MSA-MW51S-102113

Overview

The sample sets for Lockheed MSA, SDGs R1307933 and R1307888 consists of one (1) aqueous environmental sample and SDG R1307888 consists of six (6) aqueous environmental samples. SDG R1307888 contained one field duplicate pair: MSA-DUP01-102113/ MSA-MW44S-102113.

All samples were analyzed for hexavalent chromium. The samples were collected by Tetra Tech on October 21st and 22nd, 2013 and analyzed by ALS Environmental. Hexavalent chromium analyses were conducted using EPA method 218.6.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, initial and continuing calibration verification results, laboratory method / preparation blank results, laboratory control sample recoveries, matrix spike recoveries, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems-

- None.

Minor Problems-

- Samples MSA-MW50D-102113 and MSA-MW51S-102113 were analyzed a few hours beyond the 24 hour holding time. The non-detected results were qualified as biased low (UL).
- The matrix spike for sample MSA-MW43S-102213 had a percent recovery <90% for hexavalent chromium. The non-detect result for sample MSA-MW43S-102213 was qualified as biased low (UL).
- The matrix spike duplicate for sample MSA-MW44S-102113 had a percent recovery <90% for

biased low (UL). No other validation action was warranted as the other MS/MSD in the preparation batch was within QC limits.

Notes

Sample MSA-MW43S-102213 was mistakenly identified as MSA-MW435-102213 by the lab. The validator corrected the Form 1 to match the COC.

It was noted by the lab the COC for SDG R1307888 was labeled as site Frog Mortar Creek but the bottles were labeled Dump Road. These samples were collected at the Dump Road site.

The lab filtered the samples upon receipt and preserved them to a pH between 9.3 and 9.7.

Non-detected results were reported to the method detection limit (MDL).

Executive Summary

Laboratory Performance: Holding time non-compliances resulted in the qualification of sample results.

Other Factors Affecting Data Quality: Matrix spike non-compliances results in the qualification of samples results.

The data for these analyses were reviewed with reference to the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993).

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	MSA-MW43S-102213		
SDG: R1307933	LAB_ID	R1307933-001		
FRACTION: MISC	SAMP_DATE	10/22/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.01	UL	D

PROJ_NO: 04882	NSAMPLE	MSA-DUP01-102113			MSA-MW44S-102113			MSA-MW50D-102113			MSA-MW51D-102113		
SDG: R1307888	LAB_ID	R1307888-006			R1307888-005			R1307888-004			R1307888-003		
FRACTION: MISC	SAMP_DATE	10/21/2013			10/21/2013			10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.01	U		0.01	UL	D	0.01	UL	H	0.01	U	

PROJ_NO: 04882	NSAMPLE	MSA-MW51I-102113			MSA-MW51S-102113		
SDG: R1307888	LAB_ID	R1307888-002			R1307888-001		
FRACTION: MISC	SAMP_DATE	10/21/2013			10/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.01	U		0.01	UL	H

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/112IC04882
Sample Matrix: Water 43S mmc
Sample Name: MSA-MW~~435~~-102213 11/18/13
Lab Code: R1307933-001

Service Request: R1307933
Date Collected: 10/22/13 1120
Date Received: 10/23/13

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/24/13 11:10	

Client: Tetra Tech NUS, Inc.
Project: MSA Dump Rd. GW/112IC04882
Sample Matrix: Water

Service Request: R1307888
Date Collected: 10/21/13
Date Received: 10/22/13

Sample Name: MSA-DUP01-102113
Lab Code: R1307888-006

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/22/13 13:11	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307888
Project:	MSA Dump Rd. GW/112IC04882	**Date Collected:**	10/21/13 1330
Sample Matrix:	Water	**Date Received:**	10/22/13
Sample Name:	MSA-MW44S-102113		
Lab Code:	R1307888-005	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/22/13 13:02	

Client: Tetra Tech NUS, Inc.
Project: MSA Dump Rd. GW/112IC04882
Sample Matrix: Water

Service Request: R1307888
Date Collected: 10/21/13 1150
Date Received: 10/22/13

Sample Name: MSA-MW50D-102113
Lab Code: R1307888-004

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/22/13 12:53	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307888
Project:	MSA Dump Rd. GW/112IC04882	**Date Collected:**	10/21/13 1355
Sample Matrix:	Water	**Date Received:**	10/22/13
Sample Name:	MSA-MW51D-102113		
Lab Code:	R1307888-003	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/22/13 12:44	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307888
Project:	MSA Dump Rd. GW/112IC04882	**Date Collected:**	10/21/13 1235
Sample Matrix:	Water	**Date Received:**	10/22/13
Sample Name:	MSA-MW511-102113		
Lab Code:	R1307888-002	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/22/13 12:35	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307888
Project:	MSA Dump Rd. GW/1121C04882	**Date Collected:**	10/21/13 1145
Sample Matrix:	Water	**Date Received:**	10/22/13
Sample Name:	MSA-MW51S-102113		
Lab Code:	R1307888-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/22/13 12:27	

APPENDIX C

SUPPORT DOCUMENTATION

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech	Client Project Manager: Tony Aganavage	Site Contact: Tony Aganavage	Lab Contact: A	COC No:
Address: 20251 Century Blvd. Ste. 200	Telephone: 301-233-8230	Telephone: 301-233-8230	Telephone:	1 of 1 COCs
City/State/Zip: Germantown, MD, 20874	Email: tony.aganavage@tetratech.com	Analysis Turnaround Time (In BUS days)	Analyses	For lab use only
Phone: 301-528-3021		TAT if different from below _____ ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☒ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: Dump Road GW 2013	Method of Shipment/Carrier: Fed ex			Job/SDG No:
Project Number: 112IC04882	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Hex chrom	Sample Specific Notes / Special Instructions:
MSA-MW435-102213	10/22/13	1120		X									K		K		X	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer
☐ Return to Client ☒ Disposal By Lab ☐ Arcl

R1307933 5
Tetra Tech NUS,Inc.
MSA 2013 Dump Road GW

Special Instructions/QC Requirements & Comments:
Must be analyzed within 24 hours

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
1	Tetra Tech	10/22/13 1400		ALS	10/23/13 0820
Relinquished by: 2	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: 3	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-0018 (1008)

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CASE NARRATIVE

Client:	Tetra Tech NUS, Inc.	**Service Request No.:**	R1307933
Project:	MSA Dump Road GW	**Project Number:**	112IC04882
Sample Matrix:	Water	**Date Received:**	10/23/13

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Water samples were collected on 10/22/13 and received at ALS in good condition at a cooler temperature of 1.3 °C as noted on the cooler receipt and preservation check form. The samples were immediately preserved to a pH of 9.3 – 9.7 and stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the CLP Batching sheets for a cross-reference between Client ID and ALS Job # and analyses requested. All samples were lab filtered.

Hexavalent Chromium Analysis – 218.6

One water sample was analyzed for Dissolved CR+6 by EPA method 218.6, low level. Values detected between the MDL and PQL have been flagged with a "J" as estimated.

Note: All samples were analyzed within 24 hours of sample receipt and within the method specified holding time.

All the initial and continuing calibration criteria of 95 – 105 % were met.

The Blank Spike (LCS) recovery was within QC limits.

A Matrix Spike/Matrix Spike duplicate was analyzed on sample MSA-MW435. The matrix spike recoveries for MSA-MW435 were outside the 90 – 110 % QC limits and have been flagged with an "*". The RPDs were all with QC limits.

The Laboratory Blank associated with these samples was free of contamination.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Cooler Receipt and Preservation Check Form

Project/Client Tetra Tech Folder Number _____.

Cooler received on 10/23 by: JFS **COURIER:** ALS UPS ~~FEDEX~~ VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	YES	NO
2.	Were custody papers properly filled out (ink, signed, etc.)?	YES	NO
3.	Did all bottles arrive in good condition (unbroken)?	YES	NO
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO (N/A)
5.	Were **Ice** or **Ice packs** present?	YES	NO
6.	Where did the bottles originate?	ALS/ROC,	CLIENT

7.	Soil VOA samples received as:	Bulk Jar	Encore	TerraCore	Lab5035set	(N/A)
8.	Temperature of cooler(s) upon receipt:	1.3				
	Is the temperature within 0° - 6° C?:	(Y) N	Y N	Y N	Y N	Y N

If No, Explain Below Date/Time Temperatures Taken: 10/23/13 0827

Thermometer ID: IR ~~GUN#3~~ / IR GUN#4 Reading From: ~~Temp Blank~~ / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples: _____

All Samples held in storage location R002 by JFS on 10/23 at 0827
5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: _____

Cooler Breakdown: Date : 10/22/13 Time: 0924 by: JFS

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	YES	NO
2.	Did all bottle labels and tags agree with custody papers?	YES	NO
3.	Were correct containers used for the tests indicated?	YES	NO
4.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated (N/A)

Explain any discrepancies: _____

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 052013 - 2T
Other Comments:

PC Secondary Review: MD 10/23/13

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
10/22/13 0750	7888-006 DUP01	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10/21/13 —	(Yes) No Field	miller	—	6.860	9.395	(A) 10/22/13 0843	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	11X1122OC
10/23/13	FILTER BLANK	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	—	(Yes) No Field	miller	—	6.107	9.482	(A) 10/23/13 0900	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	11X1122OC
↓	MW435 7933-001	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10/22/13 1120	(Yes) No Field	↓	—	6.583	9.416	(A) 10/23/13 0908	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	11X1122OC
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 364926 **Method/Testcode:** 218.6 LL/Cr6 D LL

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1313313-01	Chromium, Hexavalent, Dissolved	CCV		Water	0.49 ppb	10 mL	0.493 ppb	1					10/24/13 10:39:00	N	IV
RQ1313313-03	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/24/13 10:50:00	N	IV
RQ1313313-05	Chromium, Hexavalent, Dissolved	MB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/24/13 10:50:00	N	IV
RQ1313313-06	Chromium, Hexavalent, Dissolved	LCS		Water	0.21 ppb	10 mL	0.211 µg/L	1	0.010	0.020	105		10/24/13 10:59:00	N	IV
R1307933-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/24/13 11:10:00	N	IV
RQ1313313-07	Chromium, Hexavalent, Dissolved	MS	R1307933-001	Water	0.17 ppb	10 mL	0.175 µg/L	1	0.010	0.020	87*		10/24/13 11:18:00	N	IV
RQ1313313-08	Chromium, Hexavalent, Dissolved	DMS	R1307933-001	Water	0.16 ppb	10 mL	0.161 µg/L	1	0.010	0.020	81*	8	10/24/13 11:27:00	N	IV
RQ1313313-02	Chromium, Hexavalent, Dissolved	CCV		Water	0.52 ppb	10 mL	0.515 ppb	1					10/24/13 12:31:00	N	IV
RQ1313313-04	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/24/13 12:54:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/112IC04882
Sample Matrix: Water

Service Request: R1307933
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: R1307933-MB

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/24/13 10:50	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/112IC04882
Sample Matrix: Water

Service Request: R1307933
Date Collected: 10/22/13
Date Received: 10/23/13
Date Analyzed: 10/24/13

Matrix Spike Summary
General Chemistry Parameters

S mmc 11/18/13

Sample Name: MSA-MW435-102213
Lab Code: R1307933-001

Units: µg/L
Basis: NA

Analytical Method: 218.6 LL

Analyte Name	Sample Result	MSA-MW435-102213MS Matrix Spike R1307933-001MS Result	Spike Amount	% Rec	MSA-MW435-102213DMS Duplicate Matrix Spike R1307933-001DMS Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chromium, Hexavalent, Dissolved	ND	0.175	0.200	87 *	0.161	0.200	81 *	90 - 110	8	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00013

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/112IC04882
Sample Matrix: Water

Service Request: R1307933
Date Analyzed: 10/24/13

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1307933-LCS Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.211	0.200	105	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

10-24-13 IC#8 218.6LL Analyst: CWoods Pipets: Barney Keels

Injection Number	Injection Name	Type	Level	Processing Method	Inject Time	Dilution	Comment
1	STANDARD 1	Calibration Standard	01	8-092513LL	22/10/13 10:26	1.0	218.6 LL
2	STANDARD 2	Calibration Standard	02	8-092513LL	22/10/13 10:34	1.0	218.6 LL
3	STANDARD 3	Calibration Standard	03	8-092513LL	22/10/13 10:43	1.0	218.6 LL
4	STANDARD 4	Calibration Standard	04	8-092513LL	22/10/13 10:52	1.0	218.6 LL
5	STANDARD 5	Calibration Standard	05	8-092513LL	22/10/13 11:01	1.0	218.6 LL
6	STANDARD 6	Calibration Standard	06	8-092513LL	22/10/13 11:09	1.0	218.6 LL
7	STANDARD 7	Calibration Standard	07	8-092513LL	22/10/13 11:18	1.0	218.6 LL
8	CCV	Unknown		8-092513LL	24/10/13 10:39	1.0	218.6 LL
9	CCB	Unknown		8-092513LL	24/10/13 10:50	1.0	218.6 LL
10	LCS	Unknown		8-092513LL	24/10/13 10:59	1.0	218.6 LL
11	R1307933-001	Unknown		8-092513LL	24/10/13 11:10	1.0	218.6 LL
12	R1307933-001 MS	Unknown		8-092513LL	24/10/13 11:18	1.0	218.6 LL
13	R1307933-001 MSD	Unknown		8-092513LL	24/10/13 11:27	1.0	218.6 LL
14	CCV	Unknown		8-092513LL	24/10/13 12:31	1.0	218.6 LL
15	CCB	Unknown		8-092513LL	24/10/13 12:54	1.0	218.6 LL

R7933

1 copy

Reviewed & Approved

By: CW

Date: 10/24/13

Client: Tetra Tech NUS, Inc.
Project: MSA 2013 Dump Road GW/112IC04882

Service Request: R1307933

Continuing Calibration Verification (CCV) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL

Units: ppb

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	364926	RQ1313313-01	10/24/13 10:39	0.500	0.493	99	95 - 105
CCV2	364926	RQ1313313-02	10/24/13 12:31	0.500	0.515	103	95 - 105

Client: Tetra Tech NUS, Inc. **Service Request:** R1307933

Project: MSA 2013 Dump Road GW/112IC04882

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL **Units:** µg/L

	Analysis Lot	Lab Code	Date Analyzed	MDL	MRL	Result	Q
CCB1	364926	RQ1313313-03	10/24/13 10:50	0.010	0.020	0.020	U
CCB2	364926	RQ1313313-04	10/24/13 12:54	0.010	0.020	0.020	U

HOLDTIME

SDG R1307782

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-MW48S-101813	R1307863-001	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW435-102213	R1307933-001	NM	10/22/2013	10/24/2013	10/24/2013	2	0	2
CR6	UG/L	MSA-MW44S-102113	R1307888-005	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW46D-101613	R1307782-003	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW46I-101613	R1307782-002	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW46S-101613	R1307782-001	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW47D-101713	R1307835-002	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW47I-101713	R1307835-001	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW47S-101613	R1307782-004	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-DUP01-102113	R1307888-006	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW48I-101713	R1307835-003	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW51S-102113	R1307888-001	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW49D-101614	R1307835-006	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW49I-101614	R1307835-005	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW49S-101713	R1307835-004	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-MW50D-102113	R1307888-004	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW50I-101813	R1307863-004	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW50S-101813	R1307863-003	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW51D-102113	R1307888-003	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW51I-102113	R1307888-002	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW48D-101813	R1307863-002	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4

Rochester

1565 Jefferson Road, Building 300, Suite 360
Rochester, NY 14623
Phone: +1 585 288 5380 Fax: +1 585 288 8475

Chain of Custody Record

ALS Environmental

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 10/21/2013	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact:	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 1 DAY			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler:
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Hexavalent Chromium
MSA-MW51S-102113	10/21/13	1145	GW	Water	1	N	x
MSA-MW51I-102113	10/21/13	1235	GW	Water	1	N	x
MSA-MW51D-102113	10/21/13	1355	GW	Water	1	N	x
MSA-MW50D-102113	10/21/13	1150	GW	Water	1	N	x
~~MSA-MW43S-102113~~	~~10/21/13~~		GW	Water	1	N	x
MSA-MW44S-102113	10/21/13	1330	GW	Water	1	N	x
MSA-DUP01-102113	10/21/13	—	GW	water	1	N	X

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Samples must be analyzed within 24 hours of sample time.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	10/21/13 1530	[signature]	ALS	10/22/13 0750
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

R1307888 5
Tetra Tech NUS,Inc.
MSA Surface Water

CASE NARRATIVE

Client:	Tetra Tech NUS, Inc.	**Service Request No.:**	R1307888
Project:	MSA Dump Road SW	**Project Number:**	112IC04882
Sample Matrix:	Water	**Date Received:**	10/22/13

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Water samples were collected on 10/21/13 and received at ALS in good condition at a cooler temperature of 1.7 °C as noted on the cooler receipt and preservation check form. The samples were immediately preserved to a pH of 9.3 – 9.7 and stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the CLP Batching sheets for a cross-reference between Client ID and ALS Job # and analyses requested. All samples were lab filtered.

Hexavalent Chromium Analysis – 218.6

Six water samples were analyzed for Dissolved CR+6 by EPA method 218.6, low level. Values detected between the MDL and PQL have been flagged with a "J" as estimated.

Note: All samples were analyzed several hours outside of the client requested 24 hours holding time from sampling time. Samples were analyzed the same day as sample receipt and within the method specified holding time.

All the initial and continuing calibration criteria of 95 – 105 % were met.

The Blank Spike (LCS) recovery was within QC limits.

A Matrix Spike/Matrix Spike duplicate was analyzed on samples MSA-MW44S and MSA-DUP01. The matrix spike recoveries for MSA-MW44S were outside the 90 – 110 % QC limits and have been flagged with an "*". The recoveries for sample MSA DUP02 were within QC limits. The RPDs were all with QC limits.

The Laboratory Blank associated with these samples was free of contamination.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Cooler Receipt and Preservation Check Form

Project/Client Tetra Tech Folder Number R13-7888

Cooler received on 10/22/13 by: JFS **COURIER:** ALS UPS FEDEX VELOCITY CLIENT

1. Were custody seals on outside of cooler? YES NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles? YES NO N/A
5. Were **Ice** or **Ice packs** present? YES NO
6. Where did the bottles originate? ALS/ROC CLIENT
7. Soil VOA samples received as: Bulk Jar Encore TerraCore Lab5035set N/A
8. Temperature of cooler(s) upon receipt: 1.7 ____ ____ ____ ____

Is the temperature within 0° - 6° C?: Y N Y N Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 10/22/13 0754

Thermometer ID: IR GUN#3 / IR GUN#4 Reading From: Temp Blank / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location Rooz by JFS on 10/22 at 0754
5035 samples placed in storage location ____ by ____ on ____ at ____

PC Secondary Review: [redacted]

Cooler Breakdown: Date: 10/22/13 Time: 0840 by: [illegible]

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies: bottles say project site is "Dump Rd."

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: ____

Bottle lot numbers: Client covered, BDB26130D

Other Comments:

C.O.C. says MSA Frog Mortar Creek Surface Water sampling

PC Secondary Review: MKP 10/22/13

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

G:\SMODOCS\Cooler Receipt 6.doc 11/6/12

00008

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 364521 **Method/Testcode:** 218.6 LL/Cr6 D LL

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1313193-05	Chromium, Hexavalent, Dissolved	CCV		Water	0.52 ppb	10 mL	0.522 ppb	1					10/22/13 11:33:00	N	IV
RQ1313193-08	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 11:42:00	N	IV
RQ1313193-11	Chromium, Hexavalent, Dissolved	MB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 11:42:00	N	IV
RQ1313193-12	Chromium, Hexavalent, Dissolved	LCS		Water	0.21 ppb	10 mL	0.207 µg/L	1	0.010	0.020	104		10/22/13 11:50:00	N	IV
R1307888-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 12:27:00	N	IV
R1307888-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 12:35:00	N	IV
R1307888-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 12:44:00	N	IV
R1307888-004	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 12:53:00	N	IV
R1307888-005	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 13:02:00	N	IV
R1307888-006	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 13:11:00	N	IV
R1307835-005	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/22/13 13:32:00	N	IV
R1307863-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/22/13 13:41:00	N	IV
R1307863-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/22/13 13:50:00	N	IV
RQ1313193-06	Chromium, Hexavalent, Dissolved	CCV		Water	0.49 ppb	10 mL	0.486 ppb	1					10/22/13 14:01:00	N	IV
RQ1313193-09	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 14:27:00	N	IV
R1307863-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/22/13 14:39:00	N	IV
R1307863-004	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			10/22/13 14:47:00	N	IV
RQ1313193-01	Chromium, Hexavalent, Dissolved	MS	R1307888-005	Water	0.18 ppb	10 mL	0.179 µg/L	1	0.010	0.020	89*		10/22/13 15:25:00	N	IV
RQ1313193-02	Chromium, Hexavalent, Dissolved	DMS	R1307888-005	Water	0.16 ppb	10 mL	0.163 µg/L	1	0.010	0.020	81*	9	10/22/13 15:33:00	N	IV
RQ1313193-03	Chromium, Hexavalent, Dissolved	MS	R1307888-006	Water	0.18 ppb	10 mL	0.182 µg/L	1	0.010	0.020	91		10/22/13 15:42:00	N	IV
RQ1313193-04	Chromium, Hexavalent, Dissolved	DMS	R1307888-006	Water	0.20 ppb	10 mL	0.196 µg/L	1	0.010	0.020	98	7	10/22/13 15:50:00	N	IV
RQ1313193-07	Chromium, Hexavalent, Dissolved	CCV		Water	0.49 ppb	10 mL	0.491 ppb	1					10/22/13 15:59:00	N	IV
RQ1313193-10	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			10/22/13 16:09:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1307888
Project:	MSA Dump Rd. GW/112IC04882	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1307888-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.010	1	NA	10/22/13 11:42	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA Dump Rd. GW/112IC04882
Sample Matrix: Water

Service Request: R1307888
Date Collected: 10/21/13
Date Received: 10/22/13
Date Analyzed: 10/22/13

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MSA-MW44S-102113
Lab Code: R1307888-005

Units: µg/L
Basis: NA

Analytical Method: 218.6 LL

		MSA-MW44S-102113MS Matrix Spike R1307888-005MS			MSA-MW44S-102113DMS Duplicate Matrix Spike R1307888-005DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chromium, Hexavalent, Dissolved	ND	0.179	0.200	89 *	0.163	0.200	81 *	90 - 110	9	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA Dump Rd. GW/112IC04882
Sample Matrix: Water

Service Request: R1307888
Date Collected: 10/21/13
Date Received: 10/22/13
Date Analyzed: 10/22/13

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MSA-DUP01-102113
Lab Code: R1307888-006

Units: µg/L
Basis: NA

Analytical Method: 218.6 LL

Analyte Name	Sample Result	MSA-DUP01-102113MS Matrix Spike R1307888-006MS Result	Spike Amount	% Rec	MSA-DUP01-102113DMS Duplicate Matrix Spike R1307888-006DMS Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chromium, Hexavalent, Dissolved	ND	0.182	0.200	91	0.196	0.200	98	90 - 110	7	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA Dump Rd. GW/112IC04882
Sample Matrix: Water

Service Request: R1307888
Date Analyzed: 10/22/13

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1307888-LCS Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.207	0.200	104	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

10-22-13 IC#8 218.6LL Analyst: Arbode

Injection Number	Injection Name	Type	Level	Processing Method	Inject Time	Dilution	Comment
1	STANDARD 1	Calibration Standard	01	8-092513LL	22/10/13 10:26	1.0	218.6 LL
2	STANDARD 2	Calibration Standard	02	8-092513LL	22/10/13 10:34	1.0	218.6 LL
3	STANDARD 3	Calibration Standard	03	8-092513LL	22/10/13 10:43	1.0	218.6 LL
4	STANDARD 4	Calibration Standard	04	8-092513LL	22/10/13 10:52	1.0	218.6 LL
5	STANDARD 5	Calibration Standard	05	8-092513LL	22/10/13 11:01	1.0	218.6 LL
6	STANDARD 6	Calibration Standard	06	8-092513LL	22/10/13 11:09	1.0	218.6 LL
7	STANDARD 7	Calibration Standard	07	8-092513LL	22/10/13 11:18	1.0	218.6 LL
8	ICV	Unknown		8-092513LL	22/10/13 11:33	1.0	218.6 LL
9	ICB	Unknown		8-092513LL	22/10/13 11:42	1.0	218.6 LL
10	LCS	Unknown		8-092513LL	22/10/13 11:50	1.0	218.6 LL
11	R1307888-001	Unknown		8-092513LL	22/10/13 12:27	1.0	218.6 LL
12	R1307888-002	Unknown		8-092513LL	22/10/13 12:35	1.0	218.6 LL
13	R1307888-003	Unknown		8-092513LL	22/10/13 12:44	1.0	218.6 LL
14	R1307888-004	Unknown		8-092513LL	22/10/13 12:53	1.0	218.6 LL
15	R1307888-005	Unknown		8-092513LL	22/10/13 13:02	1.0	218.6 LL
16	R1307888-006	Unknown		8-092513LL	22/10/13 13:11	1.0	218.6 LL
17	R1307835-005	Unknown		8-092513LL	22/10/13 13:32	2.0	218.6 LL
18	R1307863-001	Unknown		8-092513LL	22/10/13 13:41	2.0	218.6 LL
19	R1307863-002	Unknown		8-092513LL	22/10/13 13:50	2.0	218.6 LL
20	CCV	Unknown		8-092513LL	22/10/13 14:01	1.0	218.6 LL
21	CCB	Unknown		8-092513LL	22/10/13 14:27	1.0	218.6 LL
22	R1307863-003	Unknown		8-092513LL	22/10/13 14:39	2.0	218.6 LL
23	R1307863-004	Unknown		8-092513LL	22/10/13 14:47	2.0	218.6 LL
24	R1307888-005 MS	Unknown		8-092513LL	22/10/13 15:25	1.0	218.6 LL
25	R1307888-005 MSD	Unknown		8-092513LL	22/10/13 15:33	1.0	218.6 LL
26	R1307888-006 MS	Unknown		8-092513LL	22/10/13 15:42	1.0	218.6 LL
27	R1307888-006 MSD	Unknown		8-092513LL	22/10/13 15:50	1.0	218.6 LL
28	CCV	Unknown		8-092513LL	22/10/13 15:59	1.0	218.6 LL
29	CCB	Unknown		8-092513LL	22/10/13 16:09	1.0	218.6 LL

R7888
R7835
R7863
3 copies

Reviewed & Approved
By: CK
Date: 10/23/13

00025

Client: Tetra Tech NUS, Inc. **Service Request:** R1307888
Project: MSA Dump Rd. GW/1121C04882

Continuing Calibration Verification (CCV) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL **Units:** ppb

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	364521	RQ1313193-05	10/22/13 11:33	0.500	0.522	104	95 - 105
CCV2	364521	RQ1313193-06	10/22/13 14:01	0.500	0.486	97	95 - 105
CCV3	364521	RQ1313193-07	10/22/13 15:59	0.500	0.491	98	95 - 105

Client: Tetra Tech NUS, Inc. **Service Request:** R1307888
Project: MSA Dump Rd. GW/112IC04882

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL **Units:** µg/L

	Analysis Lot	Lab Code	Date Analyzed	MDL	MRL	Result	Q
CCB1	364521	RQ1313193-08	10/22/13 11:42	0.010	0.020	0.020	U
CCB2	364521	RQ1313193-09	10/22/13 14:27	0.010	0.020	0.020	U
CCB3	364521	RQ1313193-10	10/22/13 16:09	0.010	0.020	0.020	U

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
10-18-13	MSA 7835-003 MW48I - 101713	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10-17-13 14:30	(Yes) No Field	Millex RDPA59136	—	5.423	9.361	RE 10-18-13 8:50	Buffer	WC1122220C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA 7835-004 MW49S - 101713	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10-17-13 11:00	(Yes) No Field		—	5.033	9.413	RE 10-18-13 8:52	Buffer	WC1122220C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA 7835-005 MW49I - 101614	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10-17-13 12:00	(Yes) No Field		—	4.182	9.341	RE 10-18-13 8:42	Buffer	WC1122220C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	MSA 7835-006 MW49D - 101614	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10-17-13 13:30	(Yes) No Field		—	4.145	9.401	RE 10-18-13 8:56	Buffer	WC1122220C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
—	Filter Blank	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	—	(Yes) No Field		—	7.710	9.390	RE 10-18-13 9:00	Buffer	WC1122220C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
10/19/13 0840	Filter Blank	7199 218.6 RL 218.6 LL 218.7	(Water) Drinking Water	10/18/13	(Yes) No Field	Millex RDP459136	—	7.30	9.31	DAW 10/19/13 0914	Buffer	WC1122220C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	7863-001 MSA-MW49S	7199 218.6 RL 218.6 LL 218.7	(Water) Drinking Water	10/18/13 1240	(Yes) No Field		—	6.65	9.32	DAW 10/19/13 1105	Buffer	WC1122220C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	7863-003 MSA-MW50S	7199 218.6 RL 218.6 LL 218.7	(Water) Drinking Water	10/18/13 1250	(Yes) No Field		—	6.11	9.36	DAW 10/19/13	Buffer	WC1122220C
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
10/18/13 0840	7863-002 MSA-MW48D	7199 ~~218.6 RL~~ 218.6 LL 218.7	Water Drinking Water	10/18/13 1245	Yes No Field	Miller RCPA54136	–	6.16	9.30	DPW 10/19/13 1119	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	7863-004 MW-50I	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/18/13 1445	Yes No Field		–	6.30	9.31	DPW 10/19/13 1121	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
10/22/13 0750	FILTER BLANK	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	–	Yes No Field	Miller	–	5.932	9.31	[illegible] 10/22/13 0828	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW51D 7888-003	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/21/13 1355	Yes No Field		–	6.343	9.368	[illegible] 10/22/13 0833	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW51I 7888-002	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/21/13 1235	Yes No Field		–	5.903	9.425	[illegible] 10/22/13 0835	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW44S 7888-005	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/21/13 1330	Yes No Field		–	6.788	9.419	[illegible] 10/22/13 0837	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW50D 7888-004	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/21/13 1150	Yes No Field		–	6.150	9.450	[illegible] 10/22/13 0839	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C
	MW51S 7888-001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	10/21/13 1145	Yes No Field		–	5.812	9.445	[illegible] 10/22/13 0841	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112220C

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
10/22/13 0750	7888-006 DUP01	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10/21/13 —	(Yes) No Field	miller	-	6.860	9.395	(AV) 10/22/13 0843	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	10C172220C
10/23/13	FILTER BLANK	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	—	(Yes) No Field	miller	—	6.107	9.182	(AV) 10/23/13 0900	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	10C172220C
↓	MW435	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	10/22/13 1120	(Yes) No Field	↓	—	6.583	9.416	(AV) 10/23/13 0908	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	10C172220C
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

HOLDTIME

SDG R1307782

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-MW48S-101813	R1307863-001	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW435-102213	R1307933-001	NM	10/22/2013	10/24/2013	10/24/2013	2	0	2
CR6	UG/L	MSA-MW44S-102113	R1307888-005	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW46D-101613	R1307782-003	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW46I-101613	R1307782-002	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW46S-101613	R1307782-001	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-MW47D-101713	R1307835-002	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW47I-101713	R1307835-001	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW47S-101613	R1307782-004	NM	10/16/2013	10/17/2013	10/17/2013	1	0	1
CR6	UG/L	MSA-DUP01-102113	R1307888-006	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW48I-101713	R1307835-003	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW51S-102113	R1307888-001	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW49D-101614	R1307835-006	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW49I-101614	R1307835-005	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1
CR6	UG/L	MSA-MW49S-101713	R1307835-004	NM	10/17/2013	10/18/2013	10/18/2013	1	0	1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-MW50D-102113	R1307888-004	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW50I-101813	R1307863-004	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW50S-101813	R1307863-003	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4
CR6	UG/L	MSA-MW51D-102113	R1307888-003	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW51I-102113	R1307888-002	NM	10/21/2013	10/22/2013	10/22/2013	1	0	1
CR6	UG/L	MSA-MW48D-101813	R1307863-002	NM	10/18/2013	10/22/2013	10/22/2013	4	0	4

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **NOVEMBER 7, 2013**

FROM: **EDWARD SEDLMYER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN – MARTIN STATE ARIPORT (MSA) – DUMP ROAD
SDG 240-27392-1

SAMPLES: 8/Aqueous/VOC

DR-DPT-23-20	DR-DPT-23-25	DR-DPT-23-30
DR-DPT-23-35	DR-DPT-23-40	DR-DPT-23-45
DR-DPT-23-50	TB-073013	

Overview

The sample set for Lockheed Martin – MSA, SDG 240-27392-1 consists of seven (7) aqueous environmental samples and one (1) trip blank. The samples were analyzed for volatile organic compounds (VOCs).

The samples were collected by Tetra Tech on July 30, 2013 and analyzed by Test America (North Canton). All analyses were conducted in accordance with SW-846 Method 8260B analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, internal standard recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

- The VOC initial calibration and associated continuing calibration relative response factors (RRFs) were less than the 0.05 quality control limit for tert-butyl alcohol and vinyl acetate on instrument A3UX10. The non-detected results reported for tert-butyl alcohol and vinyl acetate were rejected (UR). The positive tert-butyl alcohol results were qualified as estimated (J).

Minor

- The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for bromomethane, chloroethane, carbon tetrachloride, trans-1,3-dichloropropane, dibromochloromethane and bromoform, for instrument A3UX10 on 08/01/13 @ 12:08. No action was taken on the nondetected results for the aforementioned compounds in the affected samples DR-DPT-23-20, DR-DPT-23-25 and DR-DPT-23-30. The positive chloroethane result for sample DR-DPT-23-30 was qualified as estimated (J).

- The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for bromomethane, acetone, carbon tetrachloride, dibromochloromethane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene, for instrument A3UX10 on 08/02/13 @ 13:31. No action was taken on the nondetected results for the aforementioned compounds in the affected samples DR-DPT-23-35, DR-DPT-23-50 and TB-073013. The positive acetone result for sample TB-073013 was qualified as estimated (J).

- The following contaminants were detected in the laboratory method or trip blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Methylene chloride[1]	1.79 ug/L	17.9 ug/L
Acetone[2]	4.7 ug/L	47 ug/L

[1] Maximum concentration present in Method blank 96551/6 affecting samples DR-DPT-24-30, DR-DPT-24-35, and DR-DPT-24-45.
[2] Maximum concentration present in the trip blank affecting all samples.

An action level of 10X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive results less than the blank action level were qualified (B) as a result of laboratory blank contamination.

- Sample DR-DPT-23-50 had a pH >2.The positive and nondetected results for sample DR-DPT-23-50 were qualified estimated (J) and (UJ), respectively.

- Sample DR-DPT-23-50 had sediment in all vials. The laboratory decanted off the water from the sediment so the purge needle would not be imbedded in the sediment. Twelve milliliters of sample was decanted and diluted with 28 milliliters of ultra-pure deionized water. Because of the sample preparation process potentially losing volatile analytes employed by the laboratory to analyze the sample, the detected and nondetected results for sample DR-DPT-23-50 have been qualified as estimated (J) and (UJ), respectively.

- Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

Notes

The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for bromomethane, chloroethane, 2,2-dichloropropane, carbon tetrachloride, trans-1,3-dichoroproene, dibromochloromethane, bromoform, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene, for instrument A3UX10 on 08/05/13 @ 12:52. No action was taken on this basis because the affected sample results were nondetected for the aforementioned compounds.

The laboratory control sample (LCS) associated with batch 95820/4 had percent recoveries greater than the quality control limit for 1,1,1,2-tetrachloroethane, trans-1,3-dichloropropene, and dibromochloromethane. No action was taken on this basis because the affected sample results were nondetected for the aforementioned compounds.

The LCS associated with batch 96208/4 had a percent recovery greater than the quality control limit for dibromochloromethane. No action was taken on this basis because the affected sample results were nondetected for dibromochloromethane.

Samples DR-DPT-23-40 and DR-DPT-23-50 were diluted due to concentrations greater than the linear calibration range of the instrument. This accounts for the elevated detection limit for the nondetected compounds.

Executive Summary

Laboratory Performance: Two VOC compounds had RRF noncompliances resulting in the rejection of data. Two VOC compounds had %D noncompliances resulting in qualification of the data. Blank contamination resulted in the qualification of data.

Other Factors Affecting Data Quality: Positive results less than the reporting limit (RL) were qualified due to uncertainty near the detection limit. Preservation noncompliance resulted in the qualification of data for one sample. Sample preparation process of decanting water from sediment in sample vial resulted in the qualification of data for one sample.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Edward Sedlmyer
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-20			DR-DPT-23-25			DR-DPT-23-30			DR-DPT-23-35		
SDG: 240-27392-1	LAB_ID	240-27392-1			240-27392-2			240-27392-3			240-27392-4		
FRACTION: OV	SAMP_DATE	7/30/2013			7/30/2013			7/30/2013			7/30/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE	1.4			2			1.5			1.4		
1,1-DICHLOROETHENE	0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE	0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE	0.22	U		0.22	U		0.45	J	P	0.31	J	P
1,2-DICHLOROPROPANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE	0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE	0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
1-BUTANOL												
2,2-DICHLOROPROPANE	0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE	0.94	J	P	1.4	J	P	0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE	0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE	0.41	U		0.41	U		0.41	U		0.41	U	
2-METHYLBUTANE												
4-CHLOROTOLUENE	0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE	0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE	0.32	U		0.32	U		0.32	U		0.32	U	
ACETALDEHYDE												
ACETONE	11	B	B	19	B	B	4.4	B	B	4.2	B	B
BENZENE	0.13	U		0.14	J	P	0.13	U		0.16	J	P
BROMOBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE	0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE	0.15	U		0.15	U		0.15	U		0.15	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-35			DR-DPT-23-40			DR-DPT-23-45					
SDG: 240-27392-1	LAB_ID	240-27392-4			240-27392-5			240-27392-6					
FRACTION: OV	SAMP_DATE	7/30/2013			7/30/2013			7/30/2013					
MEDIA: WATER	QC_TYPE	TIC			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE				1.9	U		0.23	U				
1,1,1-TRICHLOROETHANE				1.8	U		0.22	U				
1,1,2,2-TETRACHLOROETHANE				1.5	U		0.18	U				
1,1,2-TRICHLOROTRIFLUOROETHANE				2.3	U		0.28	U				
1,1-DICHLOROETHANE				1.2	U		0.15	U				
1,1-DICHLOROETHENE				2.4	J	P	0.19	U				
1,1-DICHLOROPROPENE				1.1	U		0.13	U				
1,2,3-TRICHLOROBENZENE				1.4	U		0.17	U				
1,2,3-TRICHLOROPROPANE				3.6	U		0.43	U				
1,2,3-TRIMETHYLBENZENE				0.049	U		0.0059	U				
1,2,4-TRICHLOROBENZENE				1.2	U		0.15	U				
1,2,4-TRIMETHYLBENZENE				1	U		0.12	U				
1,2-DIBROMO-3-CHLOROPROPANE				5.6	U		0.67	U				
1,2-DIBROMOETHANE				2	U		0.24	U				
1,2-DICHLOROBENZENE				1.1	U		0.13	U				
1,2-DICHLOROETHANE				18			0.72	J	P			
1,2-DICHLOROPROPANE				1.5	U		0.18	U				
1,3-DICHLOROBENZENE				1.2	U		0.14	U				
1,3-DICHLOROPROPANE				1.3	U		0.16	U				
1,4-DICHLOROBENZENE				1.1	U		0.13	U				
1-BUTANOL										13	J	P
2,2-DICHLOROPROPANE				1.1	U		0.13	U				
2-BUTANONE				4.7	U		0.57	U				
2-CHLOROETHYL VINYL ETHER				8.2	U		0.99	U				
2-CHLOROTOLUENE				0.92	U		0.11	U				
2-HEXANONE				3.4	U		0.41	U				
2-METHYLBUTANE	2	NJ	Z1							1.1	NJ	Z1
4-CHLOROTOLUENE				1.5	U		0.18	U				
4-ISOPROPYLTOLUENE				1	U		0.12	U				
4-METHYL-2-PENTANONE				2.7	U		0.32	U				
ACETALDEHYDE												
ACETONE				9.2	U		2.7	B	B			
BENZENE				2.6	J	P	0.15	J	P			
BROMOBENZENE				1.1	U		0.13	U				
BROMOCHLOROMETHANE				2.4	U		0.29	U				
BROMODICHLOROMETHANE				1.2	U		0.15	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-50						TB-073013		
SDG: 240-27392-1	LAB_ID	240-27392-7						240-27392-8		
FRACTION: OV	SAMP_DATE	7/30/2013						7/30/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			TB		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.77	UJ	M				0.23	U	
1,1,1-TRICHLOROETHANE		0.73	UJ	M				0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.6	UJ	M				0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.93	UJ	M				0.28	U	
1,1-DICHLOROETHANE		0.5	UJ	M				0.15	U	
1,1-DICHLOROETHENE		0.63	UJ	M				0.19	U	
1,1-DICHLOROPROPENE		0.43	UJ	M				0.13	U	
1,2,3-TRICHLOROBENZENE		0.57	UJ	M				0.17	U	
1,2,3-TRICHLOROPROPANE		1.4	UJ	M				0.43	U	
1,2,3-TRIMETHYLBENZENE		0.02	UJ	M				0.0059	U	
1,2,4-TRICHLOROBENZENE		0.5	UJ	M				0.15	U	
1,2,4-TRIMETHYLBENZENE		0.4	UJ	M				0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		2.2	UJ	M				0.67	U	
1,2-DIBROMOETHANE		0.8	UJ	M				0.24	U	
1,2-DICHLOROBENZENE		0.43	UJ	M				0.13	U	
1,2-DICHLOROETHANE		2.5	J	MP				0.22	U	
1,2-DICHLOROPROPANE		0.6	UJ	M				0.18	U	
1,3-DICHLOROBENZENE		0.47	UJ	M				0.14	U	
1,3-DICHLOROPROPANE		0.53	UJ	M				0.16	U	
1,4-DICHLOROBENZENE		0.43	UJ	M				0.13	U	
1-BUTANOL					48	J	P			
2,2-DICHLOROPROPANE		0.43	UJ	M				0.13	U	
2-BUTANONE		17	J	MP				0.57	U	
2-CHLOROETHYL VINYL ETHER		3.3	UJ	M				0.99	U	
2-CHLOROTOLUENE		0.37	UJ	M				0.11	U	
2-HEXANONE		1.4	UJ	M				0.41	U	
2-METHYLBUTANE										
4-CHLOROTOLUENE		0.6	UJ	M				0.18	U	
4-ISOPROPYLTOLUENE		0.4	UJ	M				0.12	U	
4-METHYL-2-PENTANONE		1.1	UJ	M				0.32	U	
ACETALDEHYDE					4.3	NJ	MZ1			
ACETONE		68	B	B				4.7	J	CP
BENZENE		1.2	J	P				0.13	U	
BROMOBENZENE		0.43	UJ	M				0.13	U	
BROMOCHLOROMETHANE		0.97	UJ	M				0.29	U	
BROMODICHLOROMETHANE		0.5	UJ	M				0.15	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-20			DR-DPT-23-25			DR-DPT-23-30			DR-DPT-23-35		
SDG: 240-27392-1	LAB_ID	240-27392-1			240-27392-2			240-27392-3			240-27392-4		
FRACTION: OV	SAMP_DATE	7/30/2013			7/30/2013			7/30/2013			7/30/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
CARBON DISULFIDE		0.18	J	P	0.33	J	P	0.17	J	P	0.34	J	P
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.3	J	CP	0.37	J	P
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.23	J	P	0.32	J	P	0.74	J	P	0.55	J	P
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
CYCLOHEXANE													
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
HEXANE													
ISOBUTANOL													
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		8	J	CP	10	J	CP	8.9	J	CP	9.6	J	CP
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.28	U		0.28	U		0.28	U		0.28	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-35			DR-DPT-23-40			DR-DPT-23-45					
SDG: 240-27392-1	LAB_ID	240-27392-4			240-27392-5			240-27392-6					
FRACTION: OV	SAMP_DATE	7/30/2013			7/30/2013			7/30/2013					
MEDIA: WATER	QC_TYPE	TIC			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM					5.3	U		0.64	U				
BROMOMETHANE					3.4	U		0.41	U				
CARBON DISULFIDE					1.1	U		0.27	J	P			
CARBON TETRACHLORIDE					1.1	U		0.13	U				
CHLOROBENZENE					35			0.49	J	P			
CHLORODIBROMOMETHANE					1.5	U		0.18	U				
CHLOROETHANE					2.4	U		0.29	U				
CHLOROFORM					3.4	J	P	0.16	U				
CHLOROMETHANE					2.5	U		0.3	U				
CIS-1,2-DICHLOROETHENE					130			9.7					
CIS-1,3-DICHLOROPROPENE					1.2	U		0.14	U				
CYCLOHEXANE		0.14	J	P									
DIBROMOMETHANE					2.3	U		0.28	U				
DICHLORODIFLUOROMETHANE					2.6	U		0.31	U				
DIISOPROPYL ETHER					12	U		1.5	U				
ETHYL TERT-BUTYL ETHER					0.92	U		0.11	U				
ETHYLBENZENE					1.4	U		0.17	U				
HEXACHLOROBUTADIENE					2.5	U		0.3	U				
HEXANE		0.62	J	P									
ISOBUTANOL		8.9	J	P									
ISOPROPYLBENZENE					1.1	U		0.13	U				
M+P-XYLENES					2	U		0.24	U				
METHYL TERT-BUTYL ETHER					1.4	U		0.17	U				
METHYLENE CHLORIDE					2.7	U		0.33	U				
NAPHTHALENE					2	U		0.24	U				
N-BUTYLBENZENE					1	U		0.12	U				
N-PROPYLBENZENE					1.2	U		0.14	U				
O-XYLENE					1.2	U		0.14	U				
SEC-BUTYLBENZENE					1.1	U		0.13	U				
STYRENE					0.92	U		0.11	U				
TERT-AMYL METHYL ETHER					0.56	U		0.067	U				
TERT-BUTYLBENZENE					1.1	U		0.13	U				
TERTIARY-BUTYL ALCOHOL					32	UR	C	3.9	UR	C			
TETRACHLOROETHENE					2.4	U		0.29	U				
TOLUENE					1.1	U		0.13	U				
TOTAL XYLENES					2.3	U		0.28	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-50						TB-073013		
SDG: 240-27392-1	LAB_ID	240-27392-7						240-27392-8		
FRACTION: OV	SAMP_DATE	7/30/2013						7/30/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			TB		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		2.1	UJ	M				0.64	U	
BROMOMETHANE		1.4	UJ	M				0.41	U	
CARBON DISULFIDE		0.43	UJ	M				0.13	U	
CARBON TETRACHLORIDE		0.43	UJ	M				0.13	U	
CHLOROBENZENE		1.2	J	MP				0.15	U	
CHLORODIBROMOMETHANE		0.6	UJ	M				0.18	U	
CHLOROETHANE		0.97	UJ	M				0.29	U	
CHLOROFORM		0.53	UJ	M				0.16	U	
CHLOROMETHANE		1	UJ	M				0.3	U	
CIS-1,2-DICHLOROETHENE		5.7	J	M				0.17	U	
CIS-1,3-DICHLOROPROPENE		0.47	UJ	M				0.14	U	
CYCLOHEXANE										
DIBROMOMETHANE		0.93	UJ	M				0.28	U	
DICHLORODIFLUOROMETHANE		1	UJ	M				0.31	U	
DIISOPROPYL ETHER		5	UJ	M				1.5	U	
ETHYL TERT-BUTYL ETHER		0.37	UJ	M				0.11	U	
ETHYLBENZENE		0.57	UJ	M				0.17	U	
HEXACHLOROBUTADIENE		1	UJ	M				0.3	U	
HEXANE										
ISOBUTANOL										
ISOPROPYLBENZENE		0.43	UJ	M				0.13	U	
M+P-XYLENES		0.8	UJ	M				0.24	U	
METHYL TERT-BUTYL ETHER		0.57	UJ	M				0.17	U	
METHYLENE CHLORIDE		11	B	A				0.33	U	
NAPHTHALENE		0.8	UJ	M				0.24	U	
N-BUTYLBENZENE		0.4	UJ	M				0.12	U	
N-PROPYLBENZENE		0.47	UJ	M				0.14	U	
O-XYLENE		0.47	UJ	M				0.14	U	
SEC-BUTYLBENZENE		0.43	UJ	M				0.13	U	
STYRENE		0.37	UJ	M				0.11	U	
TERT-AMYL METHYL ETHER		0.22	UJ	M				0.067	U	
TERT-BUTYLBENZENE		0.43	UJ	M				0.13	U	
TERTIARY-BUTYL ALCOHOL		40	J	CMP				3.9	UR	C
TETRACHLOROETHENE		0.97	UJ	M				0.29	U	
TOLUENE		1.1	J	MP				0.13	U	
TOTAL XYLENES		0.93	UJ	M				0.28	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-20			DR-DPT-23-25			DR-DPT-23-30			DR-DPT-23-35		
SDG: 240-27392-1	LAB_ID	240-27392-1			240-27392-2			240-27392-3			240-27392-4		
FRACTION: OV	SAMP_DATE	7/30/2013			7/30/2013			7/30/2013			7/30/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		0.17	U		0.22	J	P	3.4			2.4		
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.22	U		0.22	U		0.29	J	P	0.69	J	P

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-35			DR-DPT-23-40			DR-DPT-23-45					
SDG: 240-27392-1	LAB_ID	240-27392-4			240-27392-5			240-27392-6					
FRACTION: OV	SAMP_DATE	7/30/2013			7/30/2013			7/30/2013					
MEDIA: WATER	QC_TYPE	TIC			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRANS-1,2-DICHLOROETHENE					1.6	U		0.19	U				
TRANS-1,3-DICHLOROPROPENE					1.6	U		0.19	U				
TRICHLOROETHENE					210			38					
TRICHLOROFLUOROMETHANE					1.7	U		0.21	U				
VINYL ACETATE					1.6	UR	C	0.19	UR	C			
VINYL CHLORIDE					80			2.2					

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-50						TB-073013		
SDG: 240-27392-1	LAB_ID	240-27392-7						240-27392-8		
FRACTION: OV	SAMP_DATE	7/30/2013						7/30/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			TB		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRANS-1,2-DICHLOROETHENE		0.63	UJ	M				0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.63	UJ	M				0.19	U	
TRICHLOROETHENE		3.2	J	MP				0.17	U	
TRICHLOROFLUOROMETHANE		0.7	UJ	M				0.21	U	
VINYL ACETATE		0.63	UR	CM				0.19	UR	C
VINYL CHLORIDE		0.73	UJ	M				0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-20			DR-DPT-23-25			DR-DPT-23-35			DR-DPT-23-45		
SDG: 240-27392-1	LAB_ID	240-27392-1			240-27392-2			240-27392-4			240-27392-6		
FRACTION: TICOV	SAMP_DATE	7/30/2013			7/30/2013			7/30/2013			7/30/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
2-PROPEN-1-OL, 2-METHYL-					1.1	NJ	Z1						
3-HEXANONE, 2,4-DIMETHYL-													
HEPTANAL					1.4	NJ	Z1						
HEXANAL, 5,5-DIMETHYL-					5.4	NJ	Z1						
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)		1.4	R	Z2							1.2	R	Z2
SILANOL, TRIMETHYL-								2.7	R	Z2			
TERT-BUTYLDIMETHYLSILANOL													

PROJ_NO: 04882	NSAMPLE	DR-DPT-23-50			TB-073013		
SDG: 240-27392-1	LAB_ID	240-27392-7			240-27392-8		
FRACTION: TICOV	SAMP_DATE	7/30/2013			7/30/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
2-PROPEN-1-OL, 2-METHYL-							
3-HEXANONE, 2,4-DIMETHYL-		12	NJ	Z1			
HEPTANAL							
HEXANAL, 5,5-DIMETHYL-							
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)							
SILANOL, TRIMETHYL-					2.5	R	Z2
TERT-BUTYLDIMETHYLSILANOL		4.4	R	Z2			

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-20 | Lab Sample ID: 240-27392-1

Matrix: Water | Lab File ID: UXX6454.D

Analysis Method: 8260B | Date Collected: 07/30/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 20:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.4		1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	11		10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.18	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-20 | Lab Sample ID: 240-27392-1

Matrix: Water | Lab File ID: UXX6454.D

Analysis Method: 8260B | Date Collected: 07/30/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 20:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.23	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	0.94	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	8.0	J	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-20 | Lab Sample ID: 240-27392-1

Matrix: Water | Lab File ID: UXX6454.D

Analysis Method: 8260B | Date Collected: 07/30/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 20:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-20 | Lab Sample ID: 240-27392-1

Matrix: Water | Lab File ID: UXX6454.D

Analysis Method: 8260B | Date Collected: 07/30/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 20:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 1.4

CAS NO.	COMPOUND NAME	RT	RESULT	Q
55644-10-5	Silanol, dimethyl(1,1,2-trimethylpropyl)	4.12	1.4	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-25 | Lab Sample ID: 240-27392-2

Matrix: Water | Lab File ID: UXX6455.D

Analysis Method: 8260B | Date Collected: 07/30/2013 13:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 20:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	2.0		1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	19		10	1.1
71-43-2	Benzene	0.14	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.33	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-25 | Lab Sample ID: 240-27392-2

Matrix: Water | Lab File ID: UXX6455.D

Analysis Method: 8260B | Date Collected: 07/30/2013 13:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 20:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.32	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	1.4	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.19
79-01-6	Trichloroethene	0.22	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	10	J	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-25 Lab Sample ID: 240-27392-2

Matrix: Water Lab File ID: UXX6455.D

Analysis Method: 8260B Date Collected: 07/30/2013 13:25

Sample wt/vol: 5(mL) Date Analyzed: 08/01/2013 20:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 95820 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	94		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-25 Lab Sample ID: 240-27392-2

Matrix: Water Lab File ID: UXX6455.D

Analysis Method: 8260B Date Collected: 07/30/2013 13:25

Sample wt/vol: 5(mL) Date Analyzed: 08/01/2013 20:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 95820 Units: ug/L

Number TICs Found: 3 TIC Result Total: 7.9

CAS NO.	COMPOUND NAME	RT	RESULT	Q
513-42-8	2-Propen-1-ol, 2-methyl-	4.10	1.1	T J N
55320-58-6	Hexanal, 5,5-dimethyl-	8.36	5.4	T J N
111-71-7	Heptanal	8.68	1.4	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-30 | Lab Sample ID: 240-27392-3

Matrix: Water | Lab File ID: UXX6456.D

Analysis Method: 8260B | Date Collected: 07/30/2013 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 20:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.5		1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.45	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	4.4	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.17	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	0.30	J	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-30 | Lab Sample ID: 240-27392-3

Matrix: Water | Lab File ID: UXX6456.D

Analysis Method: 8260B | Date Collected: 07/30/2013 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 20:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.74	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.19
79-01-6	Trichloroethene	3.4		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.29	J	1.0	0.22
75-65-0	tert-Butyl alcohol	8.9	J	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-30 | Lab Sample ID: 240-27392-3

Matrix: Water | Lab File ID: UXX6456.D

Analysis Method: 8260B | Date Collected: 07/30/2013 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 20:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
2037-26-5	Toluene-d8 (Surr)	94		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-30 | Lab Sample ID: 240-27392-3

Matrix: Water | Lab File ID: UXX6456.D

Analysis Method: 8260B | Date Collected: 07/30/2013 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 20:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-35 | Lab Sample ID: 240-27392-4

Matrix: Water | Lab File ID: UXX6481.D

Analysis Method: 8260B | Date Collected: 07/30/2013 14:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/02/2013 22:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.4		1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.31	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	4.2	J	10	1.1
71-43-2	Benzene	0.16	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.34	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	0.37	J	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-35 Lab Sample ID: 240-27392-4

Matrix: Water Lab File ID: UXX6481.D

Analysis Method: 8260B Date Collected: 07/30/2013 14:11

Sample wt/vol: 5(mL) Date Analyzed: 08/02/2013 22:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96032 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.55	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	2.4		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.69	J	1.0	0.22
75-65-0	tert-Butyl alcohol	9.6	J	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-35 | Lab Sample ID: 240-27392-4

Matrix: Water | Lab File ID: UXX6481.D

Analysis Method: 8260B | Date Collected: 07/30/2013 14:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/02/2013 22:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-35 Lab Sample ID: 240-27392-4

Matrix: Water Lab File ID: UXX6481.D

Analysis Method: 8260B Date Collected: 07/30/2013 14:11

Sample wt/vol: 5(mL) Date Analyzed: 08/02/2013 22:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96032 Units: ug/L

Number TICs Found: 5 TIC Result Total: 14.36

CAS NO.	COMPOUND NAME	RT	RESULT	Q
78-78-4	Butane, 2-methyl-	2.24	2.0	T J N
110-54-3	Hexane	3.66	0.62	J
1066-40-6	Silanol, trimethyl-	4.12	2.7	T J N
110-82-7	Cyclohexane	4.74	0.14	J
78-83-1	Isobutyl alcohol	4.83	8.9	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-40 | Lab Sample ID: 240-27392-5

Matrix: Water | Lab File ID: UXX6498.D

Analysis Method: 8260B | Date Collected: 07/30/2013 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/05/2013 17:01

Soil Aliquot Vol: | Dilution Factor: 8.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96208 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	8.3	U	8.3	1.9
71-55-6	1,1,1-Trichloroethane	8.3	U	8.3	1.8
79-34-5	1,1,2,2-Tetrachloroethane	8.3	U	8.3	1.5
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	8.3	U	8.3	2.3
75-34-3	1,1-Dichloroethane	8.3	U	8.3	1.2
75-35-4	1,1-Dichloroethene	2.4	J	8.3	1.6
563-58-6	1,1-Dichloropropene	8.3	U	8.3	1.1
87-61-6	1,2,3-Trichlorobenzene	8.3	U	8.3	1.4
96-18-4	1,2,3-Trichloropropane	8.3	U	8.3	3.6
526-73-8	1,2,3-Trimethylbenzene	42	U	42	0.049
120-82-1	1,2,4-Trichlorobenzene	8.3	U	8.3	1.2
95-63-6	1,2,4-Trimethylbenzene	8.3	U	8.3	1.0
96-12-8	1,2-Dibromo-3-Chloropropane	17	U	17	5.6
95-50-1	1,2-Dichlorobenzene	8.3	U	8.3	1.1
107-06-2	1,2-Dichloroethane	18		8.3	1.8
78-87-5	1,2-Dichloropropane	8.3	U	8.3	1.5
541-73-1	1,3-Dichlorobenzene	8.3	U	8.3	1.2
142-28-9	1,3-Dichloropropane	8.3	U	8.3	1.3
106-46-7	1,4-Dichlorobenzene	8.3	U	8.3	1.1
594-20-7	2,2-Dichloropropane	8.3	U	8.3	1.1
110-75-8	2-Chloroethyl vinyl ether	83	U	83	8.2
95-49-8	2-Chlorotoluene	8.3	U	8.3	0.92
591-78-6	2-Hexanone	83	U	83	3.4
108-86-1	Bromobenzene	8.3	U	8.3	1.1
74-97-5	Bromochloromethane	8.3	U	8.3	2.4
106-43-4	4-Chlorotoluene	8.3	U	8.3	1.5
99-87-6	p-Isopropyltoluene	8.3	U	8.3	1.0
67-64-1	Acetone	83	U	83	9.2
71-43-2	Benzene	2.6	J	8.3	1.1
75-25-2	Bromoform	8.3	U	8.3	5.3
74-83-9	Bromomethane	8.3	U	8.3	3.4
75-15-0	Carbon disulfide	8.3	U	8.3	1.1
56-23-5	Carbon tetrachloride	8.3	U	8.3	1.1
108-90-7	Chlorobenzene	35		8.3	1.2
75-00-3	Chloroethane	8.3	U	8.3	2.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-40 | Lab Sample ID: 240-27392-5

Matrix: Water | Lab File ID: UXX6498.D

Analysis Method: 8260B | Date Collected: 07/30/2013 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/05/2013 17:01

Soil Aliquot Vol: | Dilution Factor: 8.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96208 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	3.4	J	8.3	1.3
74-87-3	Chloromethane	8.3	U	8.3	2.5
156-59-2	cis-1,2-Dichloroethene	130		8.3	1.4
10061-01-5	cis-1,3-Dichloropropene	8.3	U	8.3	1.2
87-68-3	Hexachlorobutadiene	8.3	U	8.3	2.5
74-95-3	Dibromomethane	8.3	U	8.3	2.3
75-27-4	Bromodichloromethane	8.3	U	8.3	1.2
75-71-8	Dichlorodifluoromethane	8.3	U	8.3	2.6
100-41-4	Ethylbenzene	8.3	U	8.3	1.4
106-93-4	1,2-Dibromoethane	8.3	U	8.3	2.0
108-20-3	Diisopropyl ether	83	U	83	12
91-20-3	Naphthalene	8.3	U	8.3	2.0
179601-23-1	m-Xylene & p-Xylene	17	U	17	2.0
104-51-8	n-Butylbenzene	8.3	U	8.3	1.0
98-82-8	Isopropylbenzene	8.3	U	8.3	1.1
103-65-1	n-Propylbenzene	8.3	U	8.3	1.2
78-93-3	2-Butanone	83	U	83	4.7
108-10-1	4-Methyl-2-pentanone	83	U	83	2.7
135-98-8	sec-Butylbenzene	8.3	U	8.3	1.1
1634-04-4	Methyl tert-butyl ether	8.3	U	8.3	1.4
994-05-8	Tert-amyl-methyl ether (TAME)	42	U	42	0.56
75-09-2	Methylene Chloride	8.3	U	8.3	2.7
95-47-6	o-Xylene	8.3	U	8.3	1.2
100-42-5	Styrene	8.3	U	8.3	0.92
637-92-3	Ethyl-t-butyl ether (ETBE)	42	U	42	0.92
98-06-6	tert-Butylbenzene	8.3	U	8.3	1.1
127-18-4	Tetrachloroethene	8.3	U	8.3	2.4
108-88-3	Toluene	8.3	U	8.3	1.1
156-60-5	trans-1,2-Dichloroethene	8.3	U	8.3	1.6
10061-02-6	trans-1,3-Dichloropropene	8.3	U	8.3	1.6
79-01-6	Trichloroethene	210		8.3	1.4
75-69-4	Trichlorofluoromethane	8.3	U	8.3	1.7
108-05-4	Vinyl acetate	17	U	17	1.6
75-01-4	Vinyl chloride	80		8.3	1.8
75-65-0	tert-Butyl alcohol	420	U	420	32
1330-20-7	Xylenes, Total	17	U	17	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-40 | Lab Sample ID: 240-27392-5

Matrix: Water | Lab File ID: UXX6498.D

Analysis Method: 8260B | Date Collected: 07/30/2013 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/05/2013 17:01

Soil Aliquot Vol: | Dilution Factor: 8.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96208 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	8.3	U *	8.3	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	83		74-115
1868-53-7	Dibromofluoromethane (Surr)	97		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-40 | Lab Sample ID: 240-27392-5

Matrix: Water | Lab File ID: UXX6498.D

Analysis Method: 8260B | Date Collected: 07/30/2013 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/05/2013 17:01

Soil Aliquot Vol: | Dilution Factor: 8.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96208 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-45 | Lab Sample ID: 240-27392-6

Matrix: Water | Lab File ID: UXX6496.D

Analysis Method: 8260B | Date Collected: 07/30/2013 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/05/2013 15:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96208 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.72	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	2.7	J	10	1.1
71-43-2	Benzene	0.15	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.27	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	0.49	J	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-45 | Lab Sample ID: 240-27392-6

Matrix: Water | Lab File ID: UXX6496.D

Analysis Method: 8260B | Date Collected: 07/30/2013 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/05/2013 15:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96208 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	9.7		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	38		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	2.2		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-45 Lab Sample ID: 240-27392-6

Matrix: Water Lab File ID: UXX6496.D

Analysis Method: 8260B Date Collected: 07/30/2013 15:00

Sample wt/vol: 5(mL) Date Analyzed: 08/05/2013 15:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96208 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-45 Lab Sample ID: 240-27392-6

Matrix: Water Lab File ID: UXX6496.D

Analysis Method: 8260B Date Collected: 07/30/2013 15:00

Sample wt/vol: 5(mL) Date Analyzed: 08/05/2013 15:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96208 Units: ug/L

Number TICs Found: 3 TIC Result Total: 15.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
78-78-4	Butane, 2-methyl-	2.24	1.1	T J N
55644-10-5	Silanol, dimethyl(1,1,2-trimethylpropyl)	4.12	1.2	T J N
71-36-3	n-Butanol	5.41	13	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-50 | Lab Sample ID: 240-27392-7

Matrix: Water | Lab File ID: UXX6485.D

Analysis Method: 8260B | Date Collected: 07/30/2013 15:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/02/2013 23:42

Soil Aliquot Vol: | Dilution Factor: 3.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.3	U	3.3	0.77
71-55-6	1,1,1-Trichloroethane	3.3	U	3.3	0.73
79-34-5	1,1,2,2-Tetrachloroethane	3.3	U	3.3	0.60
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	3.3	U	3.3	0.93
75-34-3	1,1-Dichloroethane	3.3	U	3.3	0.50
75-35-4	1,1-Dichloroethene	3.3	U	3.3	0.63
563-58-6	1,1-Dichloropropene	3.3	U	3.3	0.43
87-61-6	1,2,3-Trichlorobenzene	3.3	U	3.3	0.57
96-18-4	1,2,3-Trichloropropane	3.3	U	3.3	1.4
526-73-8	1,2,3-Trimethylbenzene	17	U	17	0.020
120-82-1	1,2,4-Trichlorobenzene	3.3	U	3.3	0.50
95-63-6	1,2,4-Trimethylbenzene	3.3	U	3.3	0.40
96-12-8	1,2-Dibromo-3-Chloropropane	6.7	U	6.7	2.2
95-50-1	1,2-Dichlorobenzene	3.3	U	3.3	0.43
107-06-2	1,2-Dichloroethane	2.5	J	3.3	0.73
78-87-5	1,2-Dichloropropane	3.3	U	3.3	0.60
541-73-1	1,3-Dichlorobenzene	3.3	U	3.3	0.47
142-28-9	1,3-Dichloropropane	3.3	U	3.3	0.53
106-46-7	1,4-Dichlorobenzene	3.3	U	3.3	0.43
594-20-7	2,2-Dichloropropane	3.3	U	3.3	0.43
110-75-8	2-Chloroethyl vinyl ether	33	U	33	3.3
95-49-8	2-Chlorotoluene	3.3	U	3.3	0.37
591-78-6	2-Hexanone	33	U	33	1.4
108-86-1	Bromobenzene	3.3	U	3.3	0.43
74-97-5	Bromochloromethane	3.3	U	3.3	0.97
106-43-4	4-Chlorotoluene	3.3	U	3.3	0.60
99-87-6	p-Isopropyltoluene	3.3	U	3.3	0.40
67-64-1	Acetone	68		33	3.7
71-43-2	Benzene	1.2	J	3.3	0.43
75-25-2	Bromoform	3.3	U	3.3	2.1
74-83-9	Bromomethane	3.3	U	3.3	1.4
75-15-0	Carbon disulfide	3.3	U	3.3	0.43
56-23-5	Carbon tetrachloride	3.3	U	3.3	0.43
108-90-7	Chlorobenzene	1.2	J	3.3	0.50
75-00-3	Chloroethane	3.3	U	3.3	0.97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-50 | Lab Sample ID: 240-27392-7

Matrix: Water | Lab File ID: UXX6485.D

Analysis Method: 8260B | Date Collected: 07/30/2013 15:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/02/2013 23:42

Soil Aliquot Vol: | Dilution Factor: 3.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	3.3	U	3.3	0.53
74-87-3	Chloromethane	3.3	U	3.3	1.0
156-59-2	cis-1,2-Dichloroethene	5.7		3.3	0.57
10061-01-5	cis-1,3-Dichloropropene	3.3	U	3.3	0.47
87-68-3	Hexachlorobutadiene	3.3	U	3.3	1.0
74-95-3	Dibromomethane	3.3	U	3.3	0.93
75-27-4	Bromodichloromethane	3.3	U	3.3	0.50
75-71-8	Dichlorodifluoromethane	3.3	U	3.3	1.0
100-41-4	Ethylbenzene	3.3	U	3.3	0.57
106-93-4	1,2-Dibromoethane	3.3	U	3.3	0.80
108-20-3	Diisopropyl ether	33	U	33	5.0
91-20-3	Naphthalene	3.3	U	3.3	0.80
179601-23-1	m-Xylene & p-Xylene	6.7	U	6.7	0.80
104-51-8	n-Butylbenzene	3.3	U	3.3	0.40
98-82-8	Isopropylbenzene	3.3	U	3.3	0.43
103-65-1	n-Propylbenzene	3.3	U	3.3	0.47
78-93-3	2-Butanone	17	J	33	1.9
108-10-1	4-Methyl-2-pentanone	33	U	33	1.1
135-98-8	sec-Butylbenzene	3.3	U	3.3	0.43
1634-04-4	Methyl tert-butyl ether	3.3	U	3.3	0.57
994-05-8	Tert-amyl-methyl ether (TAME)	17	U	17	0.22
75-09-2	Methylene Chloride	11	B	3.3	1.1
95-47-6	o-Xylene	3.3	U	3.3	0.47
100-42-5	Styrene	3.3	U	3.3	0.37
637-92-3	Ethyl-t-butyl ether (ETBE)	17	U	17	0.37
98-06-6	tert-Butylbenzene	3.3	U	3.3	0.43
127-18-4	Tetrachloroethene	3.3	U	3.3	0.97
108-88-3	Toluene	1.1	J	3.3	0.43
156-60-5	trans-1,2-Dichloroethene	3.3	U	3.3	0.63
10061-02-6	trans-1,3-Dichloropropene	3.3	U	3.3	0.63
79-01-6	Trichloroethene	3.2	J	3.3	0.57
75-69-4	Trichlorofluoromethane	3.3	U	3.3	0.70
108-05-4	Vinyl acetate	6.7	U	6.7	0.63
75-01-4	Vinyl chloride	3.3	U	3.3	0.73
75-65-0	tert-Butyl alcohol	40	J	170	13
1330-20-7	Xylenes, Total	6.7	U	6.7	0.93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-50 | Lab Sample ID: 240-27392-7

Matrix: Water | Lab File ID: UXX6485.D

Analysis Method: 8260B | Date Collected: 07/30/2013 15:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/02/2013 23:42

Soil Aliquot Vol: | Dilution Factor: 3.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.3	U	3.3	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-50 | Lab Sample ID: 240-27392-7

Matrix: Water | Lab File ID: UXX6485.D

Analysis Method: 8260B | Date Collected: 07/30/2013 15:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/02/2013 23:42

Soil Aliquot Vol: | Dilution Factor: 3.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96032 | Units: ug/L

Number TICs Found: 4 | TIC Result Total: 68.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q
75-7-0	Acetaldehyde	1.86	4.3	T J N
18173-64-3	tert-Butyldimethylsilanol	4.11	4.4	T J N
71-36-3	n-Butanol	5.40	48	J
18641-70-8	3-Hexanone, 2,4-dimethyl-	8.36	12	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: TB-073013 Lab Sample ID: 240-27392-8

Matrix: Water Lab File ID: UXX6484.D

Analysis Method: 8260B Date Collected: 07/30/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/02/2013 23:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96032 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	4.7	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: TB-073013 Lab Sample ID: 240-27392-8

Matrix: Water Lab File ID: UXX6484.D

Analysis Method: 8260B Date Collected: 07/30/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/02/2013 23:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96032 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: TB-073013 | Lab Sample ID: 240-27392-8

Matrix: Water | Lab File ID: UXX6484.D

Analysis Method: 8260B | Date Collected: 07/30/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/02/2013 23:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: TB-073013 Lab Sample ID: 240-27392-8

Matrix: Water Lab File ID: UXX6484.D

Analysis Method: 8260B Date Collected: 07/30/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/02/2013 23:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96032 Units: ug/L

Number TICs Found: 1 TIC Result Total: 2.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	2.5	T J N

Appendix C

Support Documentation

HOLDTIME

SDG 240-27392-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-073013	240-27392-8	TB	07/30/2013	08/02/2013	08/02/2013	3	0	3
OV	UG/L	DR-DPT-23-50	240-27392-7	NM	07/30/2013	08/02/2013	08/02/2013	3	0	3
OV	UG/L	DR-DPT-23-45	240-27392-6	NM	07/30/2013	08/05/2013	08/05/2013	6	0	6
OV	UG/L	DR-DPT-23-40	240-27392-5	NM	07/30/2013	08/05/2013	08/05/2013	6	0	6
OV	UG/L	DR-DPT-23-35	240-27392-4	NM	07/30/2013	08/02/2013	08/02/2013	3	0	3
OV	UG/L	DR-DPT-23-30	240-27392-3	NM	07/30/2013	08/01/2013	08/01/2013	2	0	2
OV	UG/L	DR-DPT-23-25	240-27392-2	NM	07/30/2013	08/01/2013	08/01/2013	2	0	2
OV	UG/L	DR-DPT-23-20	240-27392-1	NM	07/30/2013	08/01/2013	08/01/2013	2	0	2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-27392-1

Job Description: Dump Road Source Areas

For:
Tetra Tech, Inc
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Approved for release.
John McFadden
Project Manager I
8/6/2013 2:34 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
08/06/2013

cc: Samantha Brenner
Ms. Kelly Carper
Vanessa Good
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Areas

Report Number: 240-27392-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT
The samples were received on 07/31/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.2 C.

The following volatile sample was received with headspace in 3 of 3 sample vials: DR-DPT-23-50 (240-27392-7).

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples DR-DPT-23-20 (240-27392-1), DR-DPT-23-25 (240-27392-2), DR-DPT-23-30 (240-27392-3), DR-DPT-23-35 (240-27392-4), DR-DPT-23-40 (240-27392-5), DR-DPT-23-45 (240-27392-6), DR-DPT-23-50 (240-27392-7)and TB-073013 (240-27392-8) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/01/2013, 08/02/2013 and 08/05/2013.

Methylene Chloride was detected in method blank MB 240-96032/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-23-40 (240-27392-5)[8.33X] and DR-DPT-23-50 (240-27392-7)[3.33X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 95820 recovered outside control limits for the following analytes: trans-1,3-Dichloropropene, Chlorodibromomethane and 1,1,1,2-Tetrachloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 96208 recovered outside control limits for the following analytes: Chlorodibromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

The following sample submitted for volatiles analysis was received with insufficient preservation(pH >2): DR-DPT-23-50 (240-27392-7).

Elevated reporting limits are provided for the following sample(s) due to insufficient sample provided for preparation/analysis: DR-DPT-23-50 (240-27392-7). Sample DR-DPT-23-50 had significant amounts of sediment in each vial. The lab had to decant the vials in order to obtain enough liquid volume so the needle on the instrument could reach the water level. The lab was able to decant 12mL of sample liquid from the vials and used 28mL of ultra pure DI water to fill the 40mL vial so the instrument needle could reach the water level inside the vial.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27392-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27392-1	DR-DPT-23-20	Water	07/30/2013 1130	07/31/2013 0915
240-27392-2	DR-DPT-23-25	Water	07/30/2013 1325	07/31/2013 0915
240-27392-3	DR-DPT-23-30	Water	07/30/2013 1345	07/31/2013 0915
240-27392-4	DR-DPT-23-35	Water	07/30/2013 1411	07/31/2013 0915
240-27392-5	DR-DPT-23-40	Water	07/30/2013 1430	07/31/2013 0915
240-27392-6	DR-DPT-23-45	Water	07/30/2013 1500	07/31/2013 0915
240-27392-7	DR-DPT-23-50	Water	07/30/2013 1535	07/31/2013 0915
240-27392-8TB	TB-073013	Water	07/30/2013 0000	07/31/2013 0915

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27392-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
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TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 7/30/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			112IC04882
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			Sampler: S. Cameron
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT-23-20	7/30/2013	1130	GW	Water	3		x	
DR-DPT-23-25	7/30/2013	1325	GW	Water	3		x	
DR-DPT-23-30	7/30/2013	1345	GW	Water	3		x	
DR-DPT-23-35	7/30/2013	1411	GW	Water	3		x	
DR-DPT-23-40	7/30/2013	1430	GW	Water	3		x	
DR-DPT-23-45	7/30/2013	1506	GW	Water	3		x	
DR-DPT-23-50	7/30/2013	1535	GW	Water	3		x	Significant Sediment
DR-DPT-	7/30/2013		GW	Water	3		x	
DR-DPT-	7/30/2013		GW	Water	3		x	
DR-DPT-	7/30/2013		GW	Water	3		x	
DR-DPT-	7/30/2013		GW	Water	3		x	
TB-073013	7/30/2013	—	GW	Water	2		x	

240-27392 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: 3 day TAT

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tera Tech	730-13/1610	[signature]	TestAmerica	7/30/13 / 1610
[signature]	TestAmerica	7/30/13 1700	[signature]	TAC	7/31/13 915
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 27392
Canton Facility

Client TETRA TECH Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 7-31-13 Opened on 7-31-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. 1.2 °C	Corrected Cooler Temp. 2.2 °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-23-20	240-27392-1	89	93	91	83
DR-DPT-23-25	240-27392-2	87	92	94	86
DR-DPT-23-30	240-27392-3	88	93	94	89
DR-DPT-23-35	240-27392-4	89	93	91	85
DR-DPT-23-40	240-27392-5	97	98	83	86
DR-DPT-23-45	240-27392-6	88	94	93	81
DR-DPT-23-50	240-27392-7	90	93	91	84
TB-073013	240-27392-8	91	93	91	81
	MB 240-95820/6	90	94	93	83
	MB 240-96032/6	87	92	90	84
	MB 240-96208/6	88	94	91	81
	LCS 240-95820/4	85	96	96	91
	LCS 240-96032/4	87	93	94	89
	LCS 240-96208/4	88	100	92	88
	240-27194-B-2 MS	87	93	95	92
	240-27323-B-1 MS	88	98	93	87
	240-27194-B-2 MSD	88	88	96	92
	240-27323-B-1 MSD	88	98	91	90

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Instrument ID: A3UX10 Start Date: 05/28/2013 13:16

Analysis Batch Number: 87495 End Date: 05/28/2013 17:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-87495/1		05/28/2013 13:16	1	BFB5262.D	DB-624 0.18(mm)
STD8260 240-87495/2 IC		05/28/2013 13:41	1		DB-624 0.18(mm)
STD8260 240-87495/3 IC		05/28/2013 14:03	1		DB-624 0.18(mm)
STD8260 240-87495/4 ICIS		05/28/2013 14:24	1		DB-624 0.18(mm)
STD8260 240-87495/5 IC		05/28/2013 14:46	1		DB-624 0.18(mm)
STD8260 240-87495/6 IC		05/28/2013 15:07	1		DB-624 0.18(mm)
STD8260 240-87495/7 IC		05/28/2013 15:28	1		DB-624 0.18(mm)
STDA9 240-87495/8 IC		05/28/2013 15:50	1	UXX4658.D	DB-624 0.18(mm)
STDA9 240-87495/9 IC		05/28/2013 16:11	1	UXX4659.D	DB-624 0.18(mm)
STDA9 240-87495/10 IC		05/28/2013 16:32	1	UXX4660.D	DB-624 0.18(mm)
STDA9 240-87495/11 IC		05/28/2013 16:53	1	UXX4661.D	DB-624 0.18(mm)
STDA9 240-87495/12 IC		05/28/2013 17:15	1	UXX4662.D	DB-624 0.18(mm)
STDA9 240-87495/13 IC		05/28/2013 17:36	1	UXX4663.D	DB-624 0.18(mm)
ICV 240-87495/14		05/28/2013 17:57	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab File ID: BFB5262.D BFB Injection Date: 05/28/2013

Instrument ID: A3UX10 BFB Injection Time: 13:16

Analysis Batch No.: 87495

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	52.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	98.2	
175	5.0 - 9.0 % of mass 174	6.7	(6.9)1
176	95.0 - 101.0 % of mass 174	93.5	(95.2)1
177	5.0 - 9.0 % of mass 176	6.1	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-87495/8	UXX4658.D	05/28/2013	15:50
	STDA9 240-87495/9	UXX4659.D	05/28/2013	16:11
	STDA9 240-87495/10	UXX4660.D	05/28/2013	16:32
	STDA9 240-87495/11	UXX4661.D	05/28/2013	16:53
	STDA9 240-87495/12	UXX4662.D	05/28/2013	17:15
	STDA9 240-87495/13	UXX4663.D	05/28/2013	17:36

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-87495/13	UXX4663.D
Level 2	STDA9 240-87495/12	UXX4662.D
Level 3	STDA9 240-87495/11	UXX4661.D
Level 4	STDA9 240-87495/10	UXX4660.D
Level 5	STDA9 240-87495/9	UXX4659.D
Level 6	STDA9 240-87495/8	UXX4658.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.9351 0.7200	0.8183	0.9669	0.7435	0.8522	Ave		0.8393				12.0		15.0			
Ethyl ether	0.3526 0.2524	0.2870	0.3279	0.2696	0.3339	Ave		0.3039				13.0		15.0			
3-Chloro-1-propene	0.1632 0.1612	0.1539	0.1609	0.1639	0.1752	Ave		0.1630				4.2		15.0			
Diisopropyl ether	0.2436 0.2941	0.2470	0.2427	0.2569	0.2816	Ave		0.2610				8.3		15.0			
2-Chloro-1,3-butadiene	0.4470 0.5692	0.4651	0.4677	0.4894	0.5665	Ave		0.5008				11.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.7474 0.9445	0.7998	0.8028	0.8547	0.9344	Ave		0.8473				9.3		15.0			
Propionitrile	0.0183 0.0231	0.0204	0.0273	0.0252	0.0240	Ave		0.0230				14.0		15.0			
Ethyl acetate	0.1590 0.1647	0.1524	0.2142	0.1705	0.1575	Ave		0.1697				13.0		15.0			
Methacrylonitrile	0.1102 0.1289	0.1319	0.1213	0.1325	0.1332	Ave		0.1263				7.1		15.0			
Isobutyl alcohol	0.0076 0.0057	0.0068	0.0075	0.0083	0.0073	Ave		0.0072				12.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6746 0.8156	0.6951	0.7166	0.7363	0.8000	Ave		0.7397				7.7		15.0			
n-Heptane	0.0683 0.0638	0.0609	0.0626	0.0604	0.0641	Ave		0.0634				4.5		15.0			
n-Butanol	0.0050	0.0051	0.0047	0.0072	0.0067	Lin	-0.083	0.0070							0.9920		0.9900
Methyl methacrylate	0.1815 0.1582	0.1559	0.1663	0.1628	0.1584	Ave		0.1639				5.8		15.0			
2-Nitropropane	0.0181 0.0163	0.0192	0.0150	0.0189	0.0149	Ave		0.0170				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0764 0.0641	0.0838	0.0840	0.0919	0.0886	Ave		0.0815				12.0		15.0			
1,2,3-Trimethylbenzene	2.1912 2.8021	2.2708	2.3128	2.4773	2.5677	Ave		2.4370				9.3		15.0			
2-Methylnaphthalene	1.0000 0.8868	0.9617	1.0575	1.0106	1.0960	Ave		1.0021				7.3		15.0			
n-Butyl acetate	0.1536 0.1805	0.1506	0.1861	0.1673	0.1756	Ave		0.1690				8.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-87495/13	UXX4663.D
Level 2	STDA9 240-87495/12	UXX4662.D
Level 3	STDA9 240-87495/11	UXX4661.D
Level 4	STDA9 240-87495/10	UXX4660.D
Level 5	STDA9 240-87495/9	UXX4659.D
Level 6	STDA9 240-87495/8	UXX4658.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	127120 4641248	225594	620957	1106779	2587641	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	47934 1627021	79121	210580	401365	1013725	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	22182 1039024	42434	103299	243939	531923	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	165594 9477660	340496	779327	1912336	4274419	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	60761 3668888	128215	300355	728585	1720158	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	101606 6088209	220490	515562	1272419	2837087	1.00 40.0	2.00	5.00	10.0	20.0
Propionitrile	FB	Ave	4971 298333	11271	35003	74894	145873	2.00 80.0	4.00	10.0	20.0	40.0
Ethyl acetate	FB	Ave	43232 2123201	84003	275066	507735	956406	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	14986 830622	36375	77927	197180	404505	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBZ	Ave	15087 464593	25923	69690	169683	294056	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	91704 5257574	191625	460165	1096069	2429204	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	9284 411463	16794	40232	89935	194768	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	CBZ	Lin	9943	19571	43753	148035	271992	20.0	40.0	100	200	400
Methyl methacrylate	FB	Ave	24679 1020032	42976	106781	242402	480941	1.00 40.0	2.00	5.00	10.0	20.0
2-Nitropropane	FB	Ave	4934 209689	10566	19233	56139	90255	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	41588 1466311	89364	227450	503090	1029492	10.0 400	20.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Ave	119237 6406127	242106	626623	1356339	2985138	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Ave	108832 4054651	205058	573047	1106653	2548438	2.00 80.0	4.00	10.0	20.0	40.0
n-Butyl acetate	CBZ	Ave	30583 1477120	57399	172095	343073	708917	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average ISTD
Lin = Linear ISTD

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Instrument ID: A3UX10 Start Date: 07/02/2013 12:26

Analysis Batch Number: 92306 End Date: 07/02/2013 23:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-92306/1		07/02/2013 12:26	1	BFB5311.D	DB-624 0.18(mm)
STD8260 240-92306/2 IC		07/02/2013 12:55	1	UXX5740.D	DB-624 0.18(mm)
STD8260 240-92306/3 IC		07/02/2013 13:16	1	UXX5741.D	DB-624 0.18(mm)
STD8260 240-92306/4 ICIS		07/02/2013 13:37	1	UXX5742.D	DB-624 0.18(mm)
STD8260 240-92306/5 IC		07/02/2013 13:59	1	UXX5743.D	DB-624 0.18(mm)
STD8260 240-92306/6 IC		07/02/2013 14:20	1	UXX5744.D	DB-624 0.18(mm)
STD8260 240-92306/7 IC		07/02/2013 14:41	1	UXX5745.D	DB-624 0.18(mm)
ICV 240-92306/8		07/02/2013 15:03	1	UXX5746.D	DB-624 0.18(mm)
CCV 240-92306/9		07/02/2013 15:24	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 15:46	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 16:30	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 17:34	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 17:55	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 18:17	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 18:38	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 19:00	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 19:21	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 19:42	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 20:03	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 20:25	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 20:46	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 21:08	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 21:29	8		DB-624 0.18(mm)
ZZZZZ		07/02/2013 21:50	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 22:11	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 22:33	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 23:16	3.333		DB-624 0.18(mm)
ZZZZZ		07/02/2013 23:37	8		DB-624 0.18(mm)
ZZZZZ		07/02/2013 23:58	8		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab File ID: BFB5311.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX10 BFB Injection Time: 12:26

Analysis Batch No.: 92306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	86.8	
175	5.0 - 9.0 % of mass 174	6.2	(7.1)1
176	95.0 - 101.0 % of mass 174	86.3	(99.4)1
177	5.0 - 9.0 % of mass 176	5.5	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92306/2	UXX5740.D	07/02/2013	12:55
	STD8260 240-92306/3	UXX5741.D	07/02/2013	13:16
	STD8260 240-92306/4	UXX5742.D	07/02/2013	13:37
	STD8260 240-92306/5	UXX5743.D	07/02/2013	13:59
	STD8260 240-92306/6	UXX5744.D	07/02/2013	14:20
	STD8260 240-92306/7	UXX5745.D	07/02/2013	14:41
	ICV 240-92306/8	UXX5746.D	07/02/2013	15:03

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92306/7	UXX5745.D
Level 2	STD8260 240-92306/6	UXX5744.D
Level 3	STD8260 240-92306/5	UXX5743.D
Level 4	STD8260 240-92306/4	UXX5742.D
Level 5	STD8260 240-92306/3	UXX5741.D
Level 6	STD8260 240-92306/2	UXX5740.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2977 0.2838	0.2577	0.2748	0.2528	0.2566	Ave		0.2706				6.6		15.0			
Chloromethane	0.4636 0.3885	0.4208	0.4187	0.3892	0.3928	Ave		0.4122			0.1000	7.1		15.0			
Vinyl chloride	0.3817 0.3523	0.3628	0.3635	0.3478	0.3489	Ave		0.3595				3.6		15.0			
Bromomethane	0.1738 0.1513	0.1661	0.1687	0.1771	0.1716	Ave		0.1681				5.4		15.0			
Chloroethane	0.2457 0.2275	0.2302	0.2304	0.2310	0.2376	Ave		0.2338				2.9		15.0			
Trichlorofluoromethane	0.3575 0.3719	0.3350	0.3525	0.3679	0.3820	Ave		0.3611				4.6		15.0			
Acrolein	0.0359 0.0431	0.0395	0.0411	0.0449	0.0462	Ave		0.0418				9.0		15.0			
1,1-Dichloroethene	0.3190 0.2928	0.2948	0.2913	0.2993	0.3010	Ave		0.2997				3.4		15.0			
Acetone	0.0740 0.0622	0.0776	0.0718	0.0736	0.0689	Ave		0.0713				7.4		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2062 0.2056	0.2022	0.2152	0.2144	0.2141	Ave		0.2096				2.7		15.0			
Iodomethane	0.4548 0.4274	0.4570	0.4317	0.4435	0.4405	Ave		0.4425				2.7		15.0			
Carbon disulfide	0.8923 0.9201	0.8872	0.8823	0.9357	0.9395	Ave		0.9095				2.8		15.0			
Acetonitrile	0.0167 0.0157	0.0178	0.0214	0.0237	0.0177	Qua	0.0061	0.0220	0						0.9940		0.9900
Methyl acetate	0.1969 0.2006	0.2062	0.2102	0.2165	0.2151	Ave		0.2076				3.8		15.0			
Methylene Chloride	0.7288 0.3199	0.5369	0.3954	0.3695	0.3438	Lin1	0.4289	0.3150							0.9990		0.9900

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0095 0.0104	0.0120	0.0145	0.0164	0.0130	Qua	-0.124	0.0171	0						0.9970		0.9900
Acrylonitrile	0.0905 0.1021	0.0983	0.1034	0.1068	0.1082	Ave		0.1016				6.4		15.0			
Methyl tert-butyl ether	0.7590 0.7679	0.7484	0.7512	0.8058	0.8208	Ave		0.7755				3.9		15.0			
trans-1,2-Dichloroethene	0.3358 0.3195	0.3308	0.3296	0.3254	0.3340	Ave		0.3292				1.8		15.0			
Hexane	0.0712 0.0637	0.0646	0.0668	0.0661	0.0671	Ave		0.0666				3.9		15.0			
1,1-Dichloroethane	0.5578 0.5246	0.5449	0.5273	0.5247	0.5369	Ave		0.5360			0.1000	2.5		15.0			
Vinyl acetate	0.0458 0.0460	0.0362	0.0441	0.0416	0.0442	Ave		0.0430				8.6		15.0			
2-Butanone	0.0991 0.0997	0.0968	0.1003	0.0974	0.1064	Ave		0.0999				3.4		15.0			
cis-1,2-Dichloroethene	0.3285 0.3322	0.3571	0.3290	0.3348	0.3453	Ave		0.3378				3.3		15.0			
2,2-Dichloropropane	0.2688 0.2905	0.2819	0.2776	0.2821	0.3040	Ave		0.2842				4.2		15.0			
Bromochloromethane	0.1521 0.1504	0.1506	0.1534	0.1499	0.1524	Ave		0.1515				0.9		15.0			
Tetrahydrofuran	0.0772 0.0698	0.0789	0.0767	0.0752	0.0716	Ave		0.0749				4.7		15.0			
Chloroform	0.4907 0.4900	0.5020	0.4890	0.4920	0.4962	Ave		0.4933				1.0		15.0			
1,1,1-Trichloroethane	0.4106 0.3726	0.3778	0.3695	0.3890	0.3851	Ave		0.3841				3.9		15.0			
Cyclohexane	0.5528 0.5297	0.5227	0.5349	0.5435	0.5429	Ave		0.5378				2.0		15.0			
1,1-Dichloropropene	0.3609 0.3601	0.3698	0.3664	0.3618	0.3692	Ave		0.3647				1.2		15.0			
Carbon tetrachloride	0.2610 0.2765	0.2656	0.2674	0.2761	0.2887	Ave		0.2725				3.7		15.0			
1,2-Dichloroethane	0.3474 0.3376	0.3583	0.3351	0.3500	0.3553	Ave		0.3473				2.7		15.0			
Benzene	1.1681 1.1119	1.1203	1.0964	1.1265	1.1340	Ave		1.1262				2.2		15.0			
Trichloroethene	0.3214 0.2780	0.2821	0.2900	0.2862	0.2843	Ave		0.2904				5.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloropropane	0.2454 0.2502	0.2581	0.2466	0.2561	0.2683	Ave		0.2541				3.4		15.0			
Methylcyclohexane	0.4919 0.4866	0.4934	0.4893	0.5052	0.5090	Ave		0.4959				1.8		15.0			
Dibromomethane	0.1412 0.1445	0.1506	0.1469	0.1502	0.1477	Ave		0.1468				2.4		15.0			
1,4-Dioxane	0.0014 0.0009	0.0011	0.0016	0.0020	0.0013	Ave		0.0014				26.0	*	15.0			
Bromodichloromethane	0.2890 0.3042	0.2800	0.2808	0.2937	0.3002	Ave		0.2913				3.4		15.0			
2-Chloroethyl vinyl ether	0.1328 0.1460	0.1268	0.1340	0.1400	0.1524	Ave		0.1387				6.8		15.0			
cis-1,3-Dichloropropene	0.3136 0.3654	0.2925	0.3234	0.3329	0.3608	Ave		0.3314				8.4		15.0			
4-Methyl-2-pentanone	0.1851 0.2307	0.1947	0.2072	0.2263	0.2356	Ave		0.2133				9.7		15.0			
Toluene	1.5717 1.7749	1.5621	1.5832	1.5919	1.6670	Ave		1.6251				5.1		15.0			
trans-1,3-Dichloropropene	0.3281 0.4436	0.3301	0.3424	0.3783	0.4187	Ave		0.3735				13.0		15.0			
Ethyl methacrylate	0.3469 0.4669	0.3719	0.3886	0.4197	0.4555	Ave		0.4082				12.0		15.0			
1,1,2-Trichloroethane	0.3016 0.3098	0.3088	0.3075	0.2994	0.3063	Ave		0.3056				1.4		15.0			
1,3-Dichloropropane	0.5636 0.5513	0.5066	0.5178	0.5309	0.5453	Ave		0.5359				4.0		15.0			
Tetrachloroethene	0.3249 0.3137	0.3109	0.3123	0.3155	0.3171	Ave		0.3157				1.6		15.0			
2-Hexanone	0.1784 0.2174	0.1735	0.1912	0.2073	0.2193	Ave		0.1979				10.0		15.0			
Dibromochloromethane	0.2360 0.2992	0.2543	0.2535	0.2707	0.2882	Ave		0.2670				8.9		15.0			
1,2-Dibromoethane	0.2969 0.3100	0.2975	0.2857	0.3063	0.3126	Ave		0.3015				3.3		15.0			
Chlorobenzene	1.1153 1.1370	1.1006	1.0569	1.0906	1.1038	Ave		1.1007			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2824 0.3322	0.2829	0.2918	0.3108	0.3194	Ave		0.3032				6.8		15.0			
Ethylbenzene	0.5758 0.6262	0.5863	0.6011	0.6014	0.6212	Ave		0.6020				3.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.7270 0.8215	0.7355	0.7415	0.7771	0.8022	Ave		0.7675				5.1		15.0			
o-Xylene	0.6796 0.7942	0.7047	0.7272	0.7639	0.7596	Ave		0.7382				5.7		15.0			
Styrene	1.1077 1.3987	1.1933	1.1883	1.2806	1.3155	Ave		1.2474				8.4		15.0			
Bromoform	0.1365 0.1881	0.1411	0.1461	0.1592	0.1772	Ave		0.1580			0.1000	13.0		15.0			
Isopropylbenzene	1.7511 2.0343	1.7718	1.8148	1.9530	1.9719	Ave		1.8828				6.3		15.0			
1,1,2,2-Tetrachloroethane	0.7449 0.7423	0.7656	0.8018	0.7659	0.7719	Ave		0.7654			0.3000	2.8		15.0			
Bromobenzene	0.8881 0.8401	0.8893	0.8519	0.8109	0.8110	Ave		0.8485				4.1		15.0			
1,2,3-Trichloropropane	0.2528 0.2485	0.2436	0.2471	0.2523	0.2472	Ave		0.2486				1.4		15.0			
trans-1,4-Dichloro-2-butene	0.1594 0.2065	0.1645	0.1863	0.1935	0.1991	Ave		0.1849				10.0		15.0			
n-Propylbenzene	0.8836 0.9348	0.9225	0.9442	0.9060	0.9061	Ave		0.9162				2.4		15.0			
2-Chlorotoluene	0.8471 0.8107	0.8035	0.8145	0.8068	0.8122	Ave		0.8158				1.9		15.0			
1,3,5-Trimethylbenzene	2.5762 2.8611	2.6002	2.7221	2.7556	2.8139	Ave		2.7215				4.2		15.0			
4-Chlorotoluene	0.8988 0.9081	0.8802	0.8823	0.8848	0.8823	Ave		0.8894				1.3		15.0			
tert-Butylbenzene	2.5038 2.4500	2.2239	2.4167	2.3292	2.3560	Ave		2.3799				4.2		15.0			
1,2,4-Trimethylbenzene	2.6043 2.8929	2.6775	2.7491	2.8000	2.8183	Ave		2.7570				3.8		15.0			
sec-Butylbenzene	3.0300 3.4431	3.1666	3.3039	3.3542	3.3916	Ave		3.2816				4.7		15.0			
1,3-Dichlorobenzene	1.5092 1.5056	1.5998	1.5710	1.5273	1.5059	Ave		1.5365				2.6		15.0			
p-Isopropyltoluene	2.4424 2.7807	2.5538	2.6635	2.6618	2.7434	Ave		2.6409				4.7		15.0			
1,4-Dichlorobenzene	1.7229 1.6045	1.6252	1.6225	1.5715	1.5870	Ave		1.6223				3.3		15.0			
n-Butylbenzene	2.0630 2.2382	2.0945	2.2927	2.3221	2.3183	Ave		2.2215				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4074 1.3553	1.4151	1.4245	1.4040	1.3915	Ave		1.3996				1.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0897 0.0915	0.0866	0.1008	0.1037	0.0925	Ave		0.0941				7.1		15.0			
1,3,5-Trichlorobenzene	0.9389 0.8233	0.9547	0.9599	0.9476	0.8670	Ave		0.9152				6.2		15.0			
1,2,4-Trichlorobenzene	0.8510 0.7437	0.8164	0.8427	0.8344	0.7483	Ave		0.8061				5.9		15.0			
Hexachlorobutadiene	0.2820 0.2374	0.2926	0.3073	0.2714	0.2509	Ave		0.2736				9.5		15.0			
Naphthalene	1.9175 1.8952	1.9376	2.0220	2.1068	1.9312	Ave		1.9684				4.1		15.0			
1,2,3-Trichlorobenzene	0.7657 0.6768	0.7464	0.7504	0.7341	0.6861	Ave		0.7266				5.0		15.0			
Dibromofluoromethane (Surr)	0.2502 0.2509	0.2370	0.2459	0.2475	0.2591	Ave		0.2484				2.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3197 0.2982	0.2804	0.2943	0.2970	0.3023	Ave		0.2987				4.3		15.0			
Toluene-d8 (Surr)	1.3686 1.4472	1.2543	1.3081	1.3123	1.3963	Ave		1.3478				5.2		15.0			
4-Bromofluorobenzene (Surr)	0.5086 0.5764	0.5161	0.5353	0.5693	0.5900	Ave		0.5493				6.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92306/7	UXX5745.D
Level 2	STD8260 240-92306/6	UXX5744.D
Level 3	STD8260 240-92306/5	UXX5743.D
Level 4	STD8260 240-92306/4	UXX5742.D
Level 5	STD8260 240-92306/3	UXX5741.D
Level 6	STD8260 240-92306/2	UXX5740.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	54767 2180564	95162	262835	480203	1004482	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	85277 2984973	155391	400443	739210	1537634	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	70212 2706851	133986	347620	660636	1365892	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	31968 1162486	61340	161325	336378	671729	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	45199 1748303	85025	220378	438782	930184	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	65756 2857760	123722	337134	698782	1495393	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	65961 3314703	145947	393423	852478	1807381	10.0 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	58681 2249654	108851	278629	568449	1178209	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	27214 956101	57319	137423	279435	539415	2.00 80.0	4.00	10.0	20.0	40.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	37938 1580123	74658	205774	407271	838026	1.00 40.0	2.00	5.00	10.0	20.0
Iodomethane	FB	Ave	83662 3283809	168768	412875	842427	1724556	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	164145 7070334	327622	843835	1777356	3677771	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Qua	30691 1208586	65848	204462	450380	693453	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	72432 3083150	152328	402026	822341	1683929	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	134064 2457788	198258	378186	701916	1345893	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Qua	35123 1604280	88712	276828	622138	1020440	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	33292 1568538	72622	197868	405753	847131	2.00 80.0	4.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	139617 5900323	276357	718419	1530564	3212934	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	61768 2454962	122171	315234	618061	1307651	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	13101 489668	23862	63899	125491	262839	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	102615 4030840	201210	504349	996770	2101588	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	8433 353611	13369	42150	78992	173147	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	36459 1531475	71527	191815	369981	833260	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	60428 2552828	131876	314617	635987	1351888	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	49450 2232447	104088	265496	535887	1190064	1.00 40.0	2.00	5.00	10.0	20.0
Bromochloromethane	FB	Ave	27972 1155697	55625	146735	284764	596483	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	14201 536666	29145	73383	142798	280377	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	90260 3765447	185386	467681	934550	1942446	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	75524 2863331	139528	353349	738942	1507411	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	101692 4070558	193022	511580	1032447	2125234	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	66390 2767091	136580	350400	687254	1445313	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	48010 2124983	98072	255707	524404	1129990	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	63911 2594304	132309	320526	664826	1390935	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	214876 8544149	413700	1048572	2139855	4439015	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	59120 2136557	104174	277396	543711	1112953	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	45140 1922801	95329	235825	486505	1050454	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	90480 3738967	182196	467947	959694	1992529	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	25978 1109980	55609	140513	285225	578370	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	12756 363364	20400	75685	186730	259234	50.0 2000	100	250	500	1000
Bromodichloromethane	FB	Ave	53160 2337294	103403	268572	557846	1175022	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	48840 2243516	93628	256271	531968	1193205	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	57686 2807512	108018	309334	632330	1412211	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	68088 3544783	143818	396273	859872	1844604	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	206008 9702058	416007	1115828	2232005	4813551	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	43003 2424719	87902	241350	530484	1209042	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	45475 2552061	99038	273881	588448	1315138	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	39528 1693508	82226	216697	419846	884435	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	73871 3013706	134912	364957	744369	1574532	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	42590 1714998	82796	220069	442338	915516	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	46761 2376657	92421	269510	581279	1266660	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	30933 1635344	67726	178636	379583	832088	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	38917 1694468	79216	201369	429470	902753	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	146185 6214957	293109	744913	1529216	3187168	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	37014 1816040	75346	205634	435735	922272	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	75468 3422833	156143	423627	843207	1793761	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	190586 8981495	391770	1045145	2179206	4632509	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	89083 4341277	187659	512498	1071126	2193452	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	145193 7645398	317802	837507	1795502	3798594	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Ave	17886 1028165	37590	102994	223200	511654	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	229517 11119836	471865	1279053	2738372	5693895	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	50482 2291780	109082	302647	632693	1300389	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	60187 2593630	126711	321547	669860	1366236	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	17130 767037	34713	93280	208407	416411	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	10801 637515	23434	70305	159838	335386	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	59880 2885925	131442	356417	748435	1526460	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	57408 2502678	114482	307432	666478	1368252	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	174586 8832782	370466	1027503	2276462	4740525	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	60913 2803440	125410	333051	730959	1486363	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	169681 7563798	316850	912207	1924137	3969144	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	176495 8930995	381477	1037689	2313096	4747938	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	205341 10629648	451167	1247109	2770941	5713783	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	102276 4648016	227934	592991	1261708	2537033	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	165521 8584748	363865	1005375	2198921	4621813	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	116764 4953445	231554	612446	1298210	2673620	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	139810 6909966	298413	865405	1918318	3905675	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	95379 4184083	201625	537715	1159841	2344239	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	6080 282442	12339	38031	85693	155776	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	63630 2541699	136021	362324	782845	1460567	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	57675 2296082	116316	318090	689274	1260676	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27392-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Ave	19110 733032	41686	115977	224217	422684	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	129948 5850983	276057	763241	1740423	3253448	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	51892 2089556	106343	283242	606460	1155873	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	46021 1928209	87510	235148	470215	1014217	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	58818 2291734	103531	281512	564143	1183218	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	179384 7910836	334032	921944	1840067	4031949	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	66663 3150924	137448	377286	798263	1703761	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3039	0.2653		2.00	0.0100	-12.7	50.0
Diisopropyl ether	Ave	0.2610	0.2472		10.0	0.0100	-5.3	50.0
Isobutyl alcohol	Ave	0.0072	0.0082		50.0	0.500	14.4	50.0
Cyclohexanone	Ave	0.0815	0.0097		20.0	0.200	-88.1*	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.645		0.0109	0.0100	8.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2662		1.00	0.0100	-1.6	50.0
Chloromethane	Ave	0.4122	0.3834	0.1000	1.00	0.0100	-7.0	50.0
Vinyl chloride	Ave	0.3595	0.3419		1.00	0.0100	-4.9	20.0
Bromomethane	Ave	0.1681	0.1473		1.00	0.0100	-12.3	50.0
Chloroethane	Ave	0.2338	0.2161		1.00	0.0100	-7.6	50.0
Trichlorofluoromethane	Ave	0.3611	0.3584		1.00	0.0100	-0.8	50.0
Acrolein	Ave	0.0418	0.0369		20.0	0.0300	-11.7	50.0
1,1-Dichloroethene	Ave	0.2997	0.2858		1.00	0.0100	-4.6	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2369		1.00	0.0100	13.0	50.0
Acetone	Ave	0.0713	0.0632		10.0	0.0200	-11.4	50.0
Iodomethane	Ave	0.4425	0.4338		1.00	0.0100	-2.0	50.0
Carbon disulfide	Ave	0.9095	0.9352		1.00	0.0100	2.8	50.0
Acetonitrile	Qua		0.0168		20.0	0.0300	-23.1	50.0
Methyl acetate	Ave	0.2076	0.1940		10.0	0.0100	-6.6	50.0
Methylene Chloride	Lin1		0.3201		1.00	0.0100	-12.0	50.0
tert-Butyl alcohol	Qua		0.0110		50.0	0.200	-27.1	50.0
Acrylonitrile	Ave	0.1016	0.0967		20.0	0.0300	-4.8	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7020		1.00	0.0100	-9.5	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3109		1.00	0.0100	-5.5	50.0
Hexane	Ave	0.0666	0.0720		1.00	0.0100	8.2	20.0
1,1-Dichloroethane	Ave	0.5360	0.5078	0.1000	1.00	0.0100	-5.3	50.0
Vinyl acetate	Ave	0.0430	0.0455		2.00	0.0100	5.9	50.0
2-Butanone	Ave	0.0999	0.0893		10.0	0.0200	-10.6	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3270		1.00	0.0100	-3.2	50.0
2,2-Dichloropropane	Ave	0.2842	0.2766		1.00	0.0100	-2.6	50.0
Bromochloromethane	Ave	0.1515	0.1430		1.00	0.0100	-5.6	50.0
Chloroform	Ave	0.4933	0.4800		1.00	0.0100	-2.7	20.0
Tetrahydrofuran	Ave	0.0749	0.0638		5.00	0.0100	-14.9	50.0
1,1,1-Trichloroethane	Ave	0.3841	0.3618		1.00	0.0100	-5.8	50.0
Cyclohexane	Ave	0.5378	0.5529		1.00	0.0100	2.8	50.0
1,1-Dichloropropene	Ave	0.3647	0.3597		1.00	0.0100	-1.4	50.0
Carbon tetrachloride	Ave	0.2725	0.2698		1.00	0.0100	-1.0	50.0
1,2-Dichloroethane	Ave	0.3473	0.3435		1.00	0.0100	-1.1	50.0
Benzene	Ave	1.126	1.099		1.00	0.0100	-2.4	50.0
Trichloroethene	Ave	0.2904	0.2787		1.00	0.0100	-4.0	50.0
1,2-Dichloropropane	Ave	0.2541	0.2548		1.00	0.0100	0.3	20.0
Methylcyclohexane	Ave	0.4959	0.5026		1.00	0.0100	1.4	50.0
Dibromomethane	Ave	0.1468	0.1511		1.00	0.0100	2.9	50.0
Bromodichloromethane	Ave	0.2913	0.2937		1.00	0.0100	0.8	50.0
2-Chloroethyl vinyl ether	Ave	0.1387	0.1358		10.0	0.0100	-2.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Ave	0.3314	0.3198		1.00	0.0100	-3.5	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2120		10.0	0.0200	-0.6	50.0
Toluene	Ave	1.625	1.565		1.00	0.0100	-3.7	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.3754		1.00	0.0100	0.5	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3043		1.00	0.0100	-0.4	50.0
1,3-Dichloropropane	Ave	0.5359	0.5408		1.00	0.0100	0.9	50.0
Tetrachloroethene	Ave	0.3157	0.3103		1.00	0.0100	-1.7	50.0
2-Hexanone	Ave	0.1979	0.1971		10.0	0.0200	-0.4	50.0
Dibromochloromethane	Ave	0.2670	0.2593		1.00	0.0100	-2.9	50.0
1,2-Dibromoethane	Ave	0.3015	0.2916		1.00	0.0100	-3.3	50.0
Chlorobenzene	Ave	1.101	1.054	0.3000	1.00	0.0100	-4.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.2950		1.00	0.0100	-2.7	50.0
Ethylbenzene	Ave	0.6020	0.5880		1.00	0.0100	-2.3	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7353		2.00	0.0200	-4.2	50.0
o-Xylene	Ave	0.7382	0.7063		1.00	0.0100	-4.3	50.0
Styrene	Ave	1.247	1.208		1.00	0.0100	-3.1	50.0
Bromoform	Ave	0.1580	0.1476	0.1000	1.00	0.0100	-6.6	50.0
Isopropylbenzene	Ave	1.883	1.773		1.00	0.0100	-5.8	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7464	0.3000	1.00	0.0100	-2.5	50.0
Bromobenzene	Ave	0.8485	0.8337		1.00	0.0100	-1.8	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2495		1.00	0.0100	0.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1877		1.00	0.0200	1.6	50.0
n-Propylbenzene	Ave	0.9162	0.9431		1.00	0.0100	2.9	50.0
2-Chlorotoluene	Ave	0.8158	0.7826		1.00	0.0100	-4.1	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.627		1.00	0.0100	-3.5	50.0
4-Chlorotoluene	Ave	0.8894	0.8613		1.00	0.0100	-3.2	50.0
tert-Butylbenzene	Ave	2.380	2.286		1.00	0.0100	-4.0	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.656		1.00	0.0100	-3.7	50.0
sec-Butylbenzene	Ave	3.282	3.199		1.00	0.0100	-2.5	50.0
1,3-Dichlorobenzene	Ave	1.536	1.461		1.00	0.0100	-4.9	50.0
p-Isopropyltoluene	Ave	2.641	2.626		1.00	0.0100	-0.6	50.0
1,4-Dichlorobenzene	Ave	1.622	1.546		1.00	0.0100	-4.7	50.0
n-Butylbenzene	Ave	2.221	2.238		1.00	0.0100	0.7	50.0
1,2-Dichlorobenzene	Ave	1.400	1.341		1.00	0.0100	-4.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.0955		2.00	0.0100	1.5	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.7202		1.00	0.0100	-10.7	50.0
Hexachlorobutadiene	Ave	0.2736	0.2467		1.00	0.0100	-9.8	50.0
Naphthalene	Ave	1.968	1.790		1.00	0.0100	-9.1	50.0
1,2,3-Trichlorobenzene	Ave	0.7266	0.6612		1.00	0.0100	-9.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2341		0.00942	0.0100	-5.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2638		0.00883	0.0100	-11.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.348	1.272		0.00944	0.0100	-5.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4913		0.00894	0.0100	-10.6	50.0

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Instrument ID: A3UX10 Start Date: 08/01/2013 11:33

Analysis Batch Number: 95820 End Date: 08/01/2013 22:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-95820/1		08/01/2013 11:33	1	BFB5339.D	DB-624 0.18(mm)
CCVIS 240-95820/2		08/01/2013 12:08	1	UXX6432.D	DB-624 0.18(mm)
CCV 240-95820/3		08/01/2013 12:30	1	UXX6433.D	DB-624 0.18(mm)
LCS 240-95820/4		08/01/2013 12:52	1	UXX6434.D	DB-624 0.18(mm)
MB 240-95820/6		08/01/2013 13:34	1	UXX6436.D	DB-624 0.18(mm)
ZZZZZ		08/01/2013 14:10	1		DB-624 0.18(mm)
ZZZZZ		08/01/2013 14:31	1.33		DB-624 0.18(mm)
ZZZZZ		08/01/2013 14:52	1.33		DB-624 0.18(mm)
ZZZZZ		08/01/2013 15:14	1.43		DB-624 0.18(mm)
ZZZZZ		08/01/2013 15:36	500		DB-624 0.18(mm)
ZZZZZ		08/01/2013 16:41	1		DB-624 0.18(mm)
ZZZZZ		08/01/2013 17:03	1		DB-624 0.18(mm)
ZZZZZ		08/01/2013 17:25	1		DB-624 0.18(mm)
ZZZZZ		08/01/2013 17:46	1		DB-624 0.18(mm)
ZZZZZ		08/01/2013 18:08	1		DB-624 0.18(mm)
ZZZZZ		08/01/2013 18:29	1		DB-624 0.18(mm)
ZZZZZ		08/01/2013 19:33	1		DB-624 0.18(mm)
ZZZZZ		08/01/2013 19:54	1		DB-624 0.18(mm)
240-27392-1	DR-DPT-23-20	08/01/2013 20:16	1	UXX6454.D	DB-624 0.18(mm)
240-27392-2	DR-DPT-23-25	08/01/2013 20:37	1	UXX6455.D	DB-624 0.18(mm)
240-27392-3	DR-DPT-23-30	08/01/2013 20:58	1	UXX6456.D	DB-624 0.18(mm)
ZZZZZ		08/01/2013 21:20	5000		DB-624 0.18(mm)
ZZZZZ		08/01/2013 21:41	5000		DB-624 0.18(mm)
240-27194-B-2 MS		08/01/2013 22:03	500	UXX6459.D	DB-624 0.18(mm)
240-27194-B-2 MSD		08/01/2013 22:24	500	UXX6460.D	DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab File ID: BFB5339.D BFB Injection Date: 08/01/2013

Instrument ID: A3UX10 BFB Injection Time: 11:33

Analysis Batch No.: 95820

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.5	
75	30.0 - 60.0 % of mass 95	51.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	78.0	
175	5.0 - 9.0 % of mass 174	5.4	(6.9)1
176	95.0 - 101.0 % of mass 174	76.1	(97.5)1
177	5.0 - 9.0 % of mass 176	5.3	(7.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-95820/2	UXX6432.D	08/01/2013	12:08
	CCV 240-95820/3	UXX6433.D	08/01/2013	12:30
	LCS 240-95820/4	UXX6434.D	08/01/2013	12:52
	MB 240-95820/6	UXX6436.D	08/01/2013	13:34
DR-DPT-23-20	240-27392-1	UXX6454.D	08/01/2013	20:16
DR-DPT-23-25	240-27392-2	UXX6455.D	08/01/2013	20:37
DR-DPT-23-30	240-27392-3	UXX6456.D	08/01/2013	20:58
	240-27194-B-2 MS	UXX6459.D	08/01/2013	22:03
	240-27194-B-2 MSD	UXX6460.D	08/01/2013	22:24

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCVIS 240-95820/2 Calibration Date: 08/01/2013 12:08

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6432.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2526		1.00	0.0100	-6.7	50.0
Chloromethane	Ave	0.4122	0.3933	0.1000	1.00	0.0100	-4.6	50.0
Vinyl chloride	Ave	0.3595	0.3321		1.00	0.0100	-7.6	20.0
Bromomethane	Ave	0.1681	0.1268		1.00	0.0100	-24.6	50.0
Chloroethane	Ave	0.2338	0.1821		1.00	0.0100	-22.1	50.0
Trichlorofluoromethane	Ave	0.3611	0.3520		1.00	0.0100	-2.5	50.0
Acrolein	Ave	0.0418	0.0308		20.0	0.100	-26.2	50.0
1,1-Dichloroethene	Ave	0.2997	0.2645		1.00	0.0100	-11.7	20.0
Acetone	Ave	0.0713	0.0813		10.0	0.0200	13.9	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2018		1.00	0.0100	-3.8	50.0
Iodomethane	Ave	0.4425	0.3998		1.00	0.0100	-9.6	50.0
Carbon disulfide	Ave	0.9095	0.8507		1.00	0.0100	-6.5	50.0
Acetonitrile	Qua		0.0186		20.0	0.100	-10.0	50.0
Methyl acetate	Ave	0.2076	0.2011		10.0	0.0200	-3.1	50.0
Methylene Chloride	Lin1		0.3362		1.00	0.0100	-6.9	50.0
tert-Butyl alcohol	Qua		0.0110		50.0	0.200	-22.5	50.0
Acrylonitrile	Ave	0.1016	0.0959		20.0	0.0200	-5.6	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7544		1.00	0.0100	-2.7	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3012		1.00	0.0100	-8.5	50.0
Hexane	Ave	0.0666	0.0659		1.00	0.0100	-1.1	20.0
1,1-Dichloroethane	Ave	0.5360	0.5092	0.1000	1.00	0.0100	-5.0	50.0
Vinyl acetate	Ave	0.0430	0.0358		2.00	0.0100	-16.7	50.0
2-Butanone	Ave	0.0999	0.1029		10.0	0.0200	2.9	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3082		1.00	0.0100	-8.8	50.0
2,2-Dichloropropane	Ave	0.2842	0.3410		1.00	0.0100	20.0	50.0
Bromochloromethane	Ave	0.1515	0.1410		1.00	0.0100	-6.9	50.0
Tetrahydrofuran	Ave	0.0749	0.0669		5.00	0.0100	-10.7	50.0
Chloroform	Ave	0.4933	0.4833		1.00	0.0100	-2.0	20.0
1,1,1-Trichloroethane	Ave	0.3841	0.4177		1.00	0.0100	8.8	50.0
Cyclohexane	Ave	0.5378	0.5192		1.00	0.0100	-3.5	50.0
1,1-Dichloropropene	Ave	0.3647	0.3601		1.00	0.0100	-1.3	50.0
Carbon tetrachloride	Ave	0.2725	0.3384		1.00	0.0100	24.2	50.0
1,2-Dichloroethane	Ave	0.3473	0.3826		1.00	0.0100	10.2	50.0
Benzene	Ave	1.126	1.086		1.00	0.0100	-3.5	50.0
Trichloroethene	Ave	0.2904	0.2740		1.00	0.0100	-5.6	50.0
1,2-Dichloropropane	Ave	0.2541	0.2599		1.00	0.0100	2.3	20.0
Methylcyclohexane	Ave	0.4959	0.4612		1.00	0.0100	-7.0	50.0
1,4-Dioxane	Ave	0.0014	0.0011		50.0	0.500	-23.1	50.0
Dibromomethane	Ave	0.1468	0.1483		1.00	0.0100	1.0	50.0
Bromodichloromethane	Ave	0.2913	0.3359		1.00	0.0100	15.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCVIS 240-95820/2 Calibration Date: 08/01/2013 12:08

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6432.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1397		10.0	0.0200	0.8	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3763		1.00	0.0100	13.5	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2224		10.0	0.0200	4.3	50.0
Toluene	Ave	1.625	1.694		1.00	0.0100	4.3	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4686		1.00	0.0100	25.5	50.0
Ethyl methacrylate	Ave	0.4082	0.4233		1.00	0.0100	3.7	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3050		1.00	0.0100	-0.2	50.0
1,3-Dichloropropane	Ave	0.5359	0.5571		1.00	0.0100	3.9	50.0
Tetrachloroethene	Ave	0.3157	0.3173		1.00	0.0100	0.5	50.0
2-Hexanone	Ave	0.1979	0.2111		10.0	0.0200	6.7	50.0
Dibromochloromethane	Ave	0.2670	0.3288		1.00	0.0100	23.2	50.0
1,2-Dibromoethane	Ave	0.3015	0.3033		1.00	0.0100	0.6	50.0
Chlorobenzene	Ave	1.101	1.072	0.3000	1.00	0.0100	-2.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3534		1.00	0.0100	16.5	50.0
Ethylbenzene	Ave	0.6020	0.5887		1.00	0.0100	-2.2	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7336		2.00	0.0200	-4.4	50.0
o-Xylene	Ave	0.7382	0.7242		1.00	0.0100	-1.9	50.0
Styrene	Ave	1.247	1.165		1.00	0.0100	-6.6	50.0
Bromoform	Ave	0.1580	0.1997	0.1000	1.00	0.0100	< 26.4	50.0
Isopropylbenzene	Ave	1.883	1.836		1.00	0.0100	-2.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7381	0.3000	1.00	0.0100	-3.6	50.0
Bromobenzene	Ave	0.8485	0.7947		1.00	0.0100	-6.3	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2438		1.00	0.0100	-1.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1702		1.00	0.0100	-7.9	50.0
n-Propylbenzene	Ave	0.9162	0.8981		1.00	0.0100	-2.0	50.0
2-Chlorotoluene	Ave	0.8158	0.7982		1.00	0.0100	-2.2	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.749		1.00	0.0100	1.0	50.0
4-Chlorotoluene	Ave	0.8894	0.8328		1.00	0.0100	-6.4	50.0
tert-Butylbenzene	Ave	2.380	2.321		1.00	0.0100	-2.5	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.783		1.00	0.0100	0.9	50.0
sec-Butylbenzene	Ave	3.282	3.239		1.00	0.0100	-1.3	50.0
1,3-Dichlorobenzene	Ave	1.536	1.503		1.00	0.0100	-2.2	50.0
p-Isopropyltoluene	Ave	2.641	2.590		1.00	0.0100	-1.9	50.0
1,4-Dichlorobenzene	Ave	1.622	1.563		1.00	0.0100	-3.7	50.0
n-Butylbenzene	Ave	2.221	2.189		1.00	0.0100	-1.5	50.0
1,2-Dichlorobenzene	Ave	1.400	1.367		1.00	0.0100	-2.3	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.0960		2.00	0.0100	2.0	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.8179		1.00	0.0100	-10.6	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.6950		1.00	0.0100	-13.8	50.0
Hexachlorobutadiene	Ave	0.2736	0.2288		1.00	0.0100	-16.4	50.0
Naphthalene	Ave	1.968	1.642		1.00	0.0100	-16.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCVIS 240-95820/2 Calibration Date: 08/01/2013 12:08

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6432.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.6245		1.00	0.0100	-14.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2141		0.00862	0.0100	-13.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2775		0.00929	0.0100	-7.1	50.0
Toluene-d8 (Surr)	Ave	1.348	1.257		0.00932	0.0100	-6.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4872		0.00887	0.0100	-11.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCV 240-95820/3 Calibration Date: 08/01/2013 12:30

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX6433.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.4640		2.00	0.0100	-44.7	50.0
Ethyl ether	Ave	0.3039	0.2500		2.00	0.0100	-17.7	50.0
3-Chloro-1-propene	Ave	0.1630	0.1565		2.00	0.0100	-4.0	50.0
Diisopropyl ether	Ave	0.2610	0.2506		10.0	0.0500	-4.0	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5067		2.00	0.0100	1.2	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8309		5.00	0.0100	-1.9	50.0
Propionitrile	Ave	0.0230	0.0307		4.00	0.0200	33.2	50.0
Ethyl acetate	Ave	0.1697	0.2126		4.00	0.0200	25.3	50.0
Methacrylonitrile	Ave	0.1263	0.1475		2.00	0.0100	16.8	50.0
Isobutyl alcohol	Ave	0.0072	0.0081		50.0	0.200	12.6	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6850		5.00	0.0100	-7.4	50.0
n-Heptane	Ave	0.0634	0.0651		1.00	0.0100	2.7	50.0
n-Butanol	Lin		0.0059		50.0	0.200	-10.3	50.0
Methyl methacrylate	Ave	0.1639	0.2139		2.00	0.0100	30.5	50.0
2-Nitropropane	Ave	0.0170	0.0523		2.00	0.0200	206.9*	50.0
Cyclohexanone	Ave	0.0815	0.0892		20.0	0.100	9.5	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.646		0.0109	0.0100	8.6	50.0
2-Methylnaphthalene	Ave	1.002	0.7237		5.00	0.0200	-27.8	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab File ID: UXX6436.D Lab Sample ID: MB 240-95820/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/01/2013 13:34

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-95820/4	UXX6434.D	08/01/2013 12:52
DR-DPT-23-20	240-27392-1	UXX6454.D	08/01/2013 20:16
DR-DPT-23-25	240-27392-2	UXX6455.D	08/01/2013 20:37
DR-DPT-23-30	240-27392-3	UXX6456.D	08/01/2013 20:58
	240-27194-B-2 MS	UXX6459.D	08/01/2013 22:03
	240-27194-B-2 MSD	UXX6460.D	08/01/2013 22:24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-95820/6

Matrix: Water | Lab File ID: UXX6436.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/01/2013 13:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 95820 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-95820/6

Matrix: Water Lab File ID: UXX6436.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/01/2013 13:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 95820 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-95820/6

Matrix: Water Lab File ID: UXX6436.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/01/2013 13:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 95820 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-95820/6

Matrix: Water Lab File ID: UXX6436.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/01/2013 13:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 95820 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6434.D

Lab ID: LCS 240-95820/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	12.0	120	72-116	*
1,1,1-Trichloroethane	10.0	10.5	105	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.74	97	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.2	102	74-151	
1,1-Dichloroethane	10.0	9.29	93	82-115	
1,1-Dichloroethene	10.0	8.75	88	78-131	
1,1-Dichloropropene	10.0	9.62	96	83-114	
1,2,3-Trichlorobenzene	10.0	7.90	79	54-126	
1,2,3-Trichloropropane	10.0	9.85	99	73-129	
1,2,3-Trimethylbenzene	10.0	10.9	109	70-130	
1,2,4-Trichlorobenzene	10.0	8.09	81	48-135	
1,2,4-Trimethylbenzene	10.0	9.79	98	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.8	108	42-136	
1,2-Dichlorobenzene	10.0	9.36	94	81-110	
1,2-Dichloroethane	10.0	10.8	108	71-127	
1,2-Dichloropropane	10.0	10.4	104	81-115	
1,3-Dichlorobenzene	10.0	9.32	93	80-110	
1,3-Dichloropropane	10.0	10.6	106	79-116	
1,4-Dichlorobenzene	10.0	9.32	93	82-110	
2,2-Dichloropropane	10.0	11.6	116	50-129	
2-Chloroethyl vinyl ether	10.0	9.70 J	97	52-131	
2-Chlorotoluene	10.0	9.65	96	76-116	
2-Hexanone	20.0	21.5	108	55-133	
Bromobenzene	10.0	9.14	91	76-115	
Bromochloromethane	10.0	8.92	89	77-120	
4-Chlorotoluene	10.0	9.25	93	77-115	
p-Isopropyltoluene	10.0	9.84	98	74-120	
Acetone	20.0	20.9	104	43-136	
Benzene	10.0	9.76	98	83-112	
Bromoform	10.0	12.3	123	40-131	
Bromomethane	10.0	6.90	69	11-185	
Carbon disulfide	10.0	9.48	95	62-142	
Carbon tetrachloride	10.0	12.1	121	66-128	
Chlorobenzene	10.0	9.68	97	85-110	
Chloroethane	10.0	6.97	70	25-153	
Chloroform	10.0	9.51	95	79-117	
Chloromethane	10.0	8.64	86	44-126	
cis-1,2-Dichloroethene	10.0	9.20	92	80-113	
cis-1,3-Dichloropropene	10.0	11.1	111	61-115	
Hexachlorobutadiene	10.0	7.34	73	36-134	
Dibromomethane	10.0	10.2	102	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6434.D

Lab ID: LCS 240-95820/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.7	117	72-121	
Dichlorodifluoromethane	10.0	7.69	77	19-129	
Ethylbenzene	10.0	9.62	96	83-112	
1,2-Dibromoethane	10.0	10.3	103	79-113	
Diisopropyl ether	10.0	9.19 J	92	77-118	
Naphthalene	10.0	8.07	81	32-141	
m-Xylene & p-Xylene	20.0	19.4	97	83-113	
n-Butylbenzene	10.0	9.68	97	66-125	
Isopropylbenzene	10.0	9.76	98	75-114	
n-Propylbenzene	10.0	9.81	98	74-121	
2-Butanone	20.0	20.1	100	60-126	
4-Methyl-2-pentanone	20.0	21.3	107	63-128	
sec-Butylbenzene	10.0	9.40	94	70-117	
Methyl tert-butyl ether	10.0	9.73	97	52-144	
Methylene Chloride	10.0	8.95	90	66-131	
o-Xylene	10.0	9.73	97	83-113	
Styrene	10.0	9.49	95	79-114	
tert-Butylbenzene	10.0	9.67	97	71-115	
Tetrachloroethene	10.0	9.98	100	79-114	
Toluene	10.0	10.4	104	84-111	
trans-1,2-Dichloroethene	10.0	8.81	88	83-117	
trans-1,3-Dichloropropene	10.0	12.2	122	58-117	*
Trichloroethene	10.0	9.19	92	76-117	
Trichlorofluoromethane	10.0	8.67	87	49-157	
Vinyl acetate	10.0	8.61	86	46-161	
Vinyl chloride	10.0	8.19	82	53-127	
tert-Butyl alcohol	200	172	86	70-130	
Xylenes, Total	30.0	29.1	97	83-112	
Dibromochloromethane	10.0	12.5	125	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6459.D

Lab ID: 240-27194-B-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5000	500 U	5730	115	64-118	
1,1-Dichloroethane	5000	340 J	5160	96	79-116	
1,1-Dichloroethene	5000	500 U	4490	90	74-135	
1,2-Dichlorobenzene	5000	100 J	4640	91	75-111	
1,2-Dichloroethane	5000	16000	21000	99	68-129	E
1,3-Dichlorobenzene	5000	500 U	4630	93	73-110	
1,4-Dichlorobenzene	5000	500 U	4580	92	75-110	
Benzene	5000	730	5590	97	72-121	
Chlorobenzene	5000	210 J	4910	94	80-110	
Chloroethane	5000	500 U	3610	72	21-165	
Chloroform	5000	400 J	5290	98	76-118	
cis-1,2-Dichloroethene	5000	180 J	4750	91	70-120	
Dichlorodifluoromethane	5000	500 U	3710	74	17-128	
Ethylbenzene	5000	89 J	4890	96	75-116	
m-Xylene & p-Xylene	10000	1000 U	9460	95	75-117	
Methylene Chloride	5000	500 U	4280	86	63-128	
o-Xylene	5000	500 U	4860	97	76-116	
Styrene	5000	500 U	4740	95	71-117	
Tetrachloroethene	5000	500 U	4900	98	70-117	
Toluene	5000	100 J	5270	103	78-114	
trans-1,2-Dichloroethene	5000	500 U	4610	92	80-119	
Trichloroethene	5000	120 J	4630	90	66-120	
Vinyl chloride	5000	480 J	4670	84	49-130	
Xylenes, Total	15000	1000 U	14300	95	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6460.D

Lab ID: 240-27194-B-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5000	5940	119	4	30	64-118	F
1,1-Dichloroethane	5000	5140	96	0	30	79-116	
1,1-Dichloroethene	5000	4440	89	1	30	74-135	
1,2-Dichlorobenzene	5000	4760	93	3	30	75-111	
1,2-Dichloroethane	5000	21400	107	2	30	68-129	E
1,3-Dichlorobenzene	5000	4730	95	2	30	73-110	
1,4-Dichlorobenzene	5000	4700	94	3	30	75-110	
Benzene	5000	5640	98	1	30	72-121	
Chlorobenzene	5000	5010	96	2	30	80-110	
Chloroethane	5000	3420	68	5	30	21-165	
Chloroform	5000	5290	98	0	30	76-118	
cis-1,2-Dichloroethene	5000	4700	90	1	30	70-120	
Dichlorodifluoromethane	5000	3640	73	2	30	17-128	
Ethylbenzene	5000	4970	98	2	30	75-116	
m-Xylene & p-Xylene	10000	9680	97	2	30	75-117	
Methylene Chloride	5000	4300	86	0	30	63-128	
o-Xylene	5000	4910	98	1	30	76-116	
Styrene	5000	4790	96	1	30	71-117	
Tetrachloroethene	5000	4940	99	1	30	70-117	
Toluene	5000	5320	104	1	30	78-114	
trans-1,2-Dichloroethene	5000	4560	91	1	30	80-119	
Trichloroethene	5000	4650	91	0	30	66-120	
Vinyl chloride	5000	4610	83	1	30	49-130	
Xylenes, Total	15000	14600	97	2	30	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Instrument ID: A3UX10 Start Date: 08/02/2013 13:05

Analysis Batch Number: 96032 End Date: 08/03/2013 00:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-96032/1		08/02/2013 13:05	1	BFB5340.D	DB-624 0.18(mm)
CCVIS 240-96032/2		08/02/2013 13:31	1	UXX6461.D	DB-624 0.18(mm)
CCV 240-96032/3		08/02/2013 13:53	1	UXX6462.D	DB-624 0.18(mm)
LCS 240-96032/4		08/02/2013 14:14	1	UXX6463.D	DB-624 0.18(mm)
MB 240-96032/6		08/02/2013 14:58	1	UXX6465.D	DB-624 0.18(mm)
ZZZZZ		08/02/2013 16:51	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 17:12	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 17:39	100		DB-624 0.18(mm)
ZZZZZ		08/02/2013 18:00	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 18:22	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 18:43	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 19:04	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 19:26	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 19:47	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 20:09	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 20:30	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 20:51	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 21:13	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 21:34	1		DB-624 0.18(mm)
ZZZZZ		08/02/2013 21:55	1		DB-624 0.18(mm)
240-27392-4	DR-DPT-23-35	08/02/2013 22:17	1	UXX6481.D	DB-624 0.18(mm)
240-27392-8	TB-073013	08/02/2013 23:21	1	UXX6484.D	DB-624 0.18(mm)
240-27392-7	DR-DPT-23-50	08/02/2013 23:42	3.33	UXX6485.D	DB-624 0.18(mm)
240-27323-B-1 MS		08/03/2013 00:03	1	UXX6486.D	DB-624 0.18(mm)
240-27323-B-1 MSD		08/03/2013 00:25	1	UXX6487.D	DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab File ID: BFB5340.D BFB Injection Date: 08/02/2013

Instrument ID: A3UX10 BFB Injection Time: 13:05

Analysis Batch No.: 96032

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.4	
75	30.0 - 60.0 % of mass 95	51.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.9	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	75.4	
175	5.0 - 9.0 % of mass 174	5.7	(7.5)1
176	95.0 - 101.0 % of mass 174	74.2	(98.5)1
177	5.0 - 9.0 % of mass 176	4.7	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-96032/2	UXX6461.D	08/02/2013	13:31
	CCV 240-96032/3	UXX6462.D	08/02/2013	13:53
	LCS 240-96032/4	UXX6463.D	08/02/2013	14:14
	MB 240-96032/6	UXX6465.D	08/02/2013	14:58
DR-DPT-23-35	240-27392-4	UXX6481.D	08/02/2013	22:17
TB-073013	240-27392-8	UXX6484.D	08/02/2013	23:21
DR-DPT-23-50	240-27392-7	UXX6485.D	08/02/2013	23:42
	240-27323-B-1 MS	UXX6486.D	08/03/2013	00:03
	240-27323-B-1 MSD	UXX6487.D	08/03/2013	00:25

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCVIS 240-96032/2 Calibration Date: 08/02/2013 13:31

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6461.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2536		1.00	0.0100	-6.3	50.0
Chloromethane	Ave	0.4122	0.4200	0.1000	1.00	0.0100	1.9	50.0
Vinyl chloride	Ave	0.3595	0.3560		1.00	0.0100	-1.0	20.0
Bromomethane	Ave	0.1681	0.1292		1.00	0.0100	-23.1	50.0
Chloroethane	Ave	0.2338	0.1904		1.00	0.0100	-18.5	50.0
Trichlorofluoromethane	Ave	0.3611	0.3835		1.00	0.0100	6.2	50.0
Acrolein	Ave	0.0418	0.0321		20.0	0.100	-23.2	50.0
1,1-Dichloroethene	Ave	0.2997	0.2884		1.00	0.0100	-3.8	20.0
Acetone	Ave	0.0713	0.0893		10.0	0.0200	25.2	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2157		1.00	0.0100	2.9	50.0
Iodomethane	Ave	0.4425	0.4384		1.00	0.0100	-0.9	50.0
Carbon disulfide	Ave	0.9095	0.9277		1.00	0.0100	2.0	50.0
Acetonitrile	Qua		0.0221		20.0	0.100	8.6	50.0
Methyl acetate	Ave	0.2076	0.2153		10.0	0.0200	3.7	50.0
Methylene Chloride	Lin1		0.4266		1.00	0.0100	21.8	50.0
tert-Butyl alcohol	Qua		0.0126		50.0	0.200	-15.7	50.0
Acrylonitrile	Ave	0.1016	0.1051		20.0	0.0200	3.5	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7869		1.00	0.0100	1.5	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3291		1.00	0.0100	-0.0	50.0
Hexane	Ave	0.0666	0.0651		1.00	0.0100	-2.3	20.0
1,1-Dichloroethane	Ave	0.5360	0.5434	0.1000	1.00	0.0100	1.4	50.0
Vinyl acetate	Ave	0.0430	0.0322		2.00	0.0100	-25.2	50.0
2-Butanone	Ave	0.0999	0.1004		10.0	0.0200	0.5	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3321		1.00	0.0100	-1.7	50.0
2,2-Dichloropropane	Ave	0.2842	0.3778		1.00	0.0100	32.9	50.0
Bromochloromethane	Ave	0.1515	0.1513		1.00	0.0100	-0.1	50.0
Tetrahydrofuran	Ave	0.0749	0.0652		5.00	0.0100	-13.0	50.0
Chloroform	Ave	0.4933	0.5182		1.00	0.0100	5.1	20.0
1,1,1-Trichloroethane	Ave	0.3841	0.4406		1.00	0.0100	14.7	50.0
Cyclohexane	Ave	0.5378	0.5679		1.00	0.0100	5.6	50.0
1,1-Dichloropropene	Ave	0.3647	0.3752		1.00	0.0100	2.9	50.0
Carbon tetrachloride	Ave	0.2725	0.3622		1.00	0.0100	32.9	50.0
1,2-Dichloroethane	Ave	0.3473	0.3795		1.00	0.0100	9.3	50.0
Benzene	Ave	1.126	1.106		1.00	0.0100	-1.8	50.0
Trichloroethene	Ave	0.2904	0.2725		1.00	0.0100	-6.2	50.0
1,2-Dichloropropane	Ave	0.2541	0.2563		1.00	0.0100	0.8	20.0
Methylcyclohexane	Ave	0.4959	0.4996		1.00	0.0100	0.8	50.0
1,4-Dioxane	Ave	0.0014	0.0013		50.0	0.500	-4.9	50.0
Dibromomethane	Ave	0.1468	0.1480		1.00	0.0100	0.8	50.0
Bromodichloromethane	Ave	0.2913	0.3307		1.00	0.0100	13.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCVIS 240-96032/2 Calibration Date: 08/02/2013 13:31

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6461.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1206		10.0	0.0200	-13.0	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3448		1.00	0.0100	4.0	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2223		10.0	0.0200	4.2	50.0
Toluene	Ave	1.625	1.640		1.00	0.0100	0.9	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4216		1.00	0.0100	12.9	50.0
Ethyl methacrylate	Ave	0.4082	0.3924		1.00	0.0100	-3.9	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3000		1.00	0.0100	-1.8	50.0
1,3-Dichloropropane	Ave	0.5359	0.5258		1.00	0.0100	-1.9	50.0
Tetrachloroethene	Ave	0.3157	0.3124		1.00	0.0100	-1.1	50.0
2-Hexanone	Ave	0.1979	0.2074		10.0	0.0200	4.8	50.0
Dibromochloromethane	Ave	0.2670	0.3302		1.00	0.0100	23.7	50.0
1,2-Dibromoethane	Ave	0.3015	0.2905		1.00	0.0100	-3.6	50.0
Chlorobenzene	Ave	1.101	1.056	0.3000	1.00	0.0100	-4.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3626		1.00	0.0100	19.6	50.0
Ethylbenzene	Ave	0.6020	0.5874		1.00	0.0100	-2.4	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7459		2.00	0.0200	-2.8	50.0
o-Xylene	Ave	0.7382	0.7314		1.00	0.0100	-0.9	50.0
Styrene	Ave	1.247	1.175		1.00	0.0100	-5.8	50.0
Bromoform	Ave	0.1580	0.2079	0.1000	1.00	0.0100	31.6	50.0
Isopropylbenzene	Ave	1.883	1.876		1.00	0.0100	-0.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7515	0.3000	1.00	0.0100	-1.8	50.0
Bromobenzene	Ave	0.8485	0.8022		1.00	0.0100	-5.5	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2489		1.00	0.0100	0.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1746		1.00	0.0100	-5.5	50.0
n-Propylbenzene	Ave	0.9162	0.8865		1.00	0.0100	-3.2	50.0
2-Chlorotoluene	Ave	0.8158	0.7752		1.00	0.0100	-5.0	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.640		1.00	0.0100	-3.0	50.0
4-Chlorotoluene	Ave	0.8894	0.8369		1.00	0.0100	-5.9	50.0
tert-Butylbenzene	Ave	2.380	2.278		1.00	0.0100	-4.3	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.694		1.00	0.0100	-2.3	50.0
sec-Butylbenzene	Ave	3.282	3.103		1.00	0.0100	-5.5	50.0
1,3-Dichlorobenzene	Ave	1.536	1.441		1.00	0.0100	-6.2	50.0
p-Isopropyltoluene	Ave	2.641	2.481		1.00	0.0100	-6.1	50.0
1,4-Dichlorobenzene	Ave	1.622	1.549		1.00	0.0100	-4.5	50.0
n-Butylbenzene	Ave	2.221	2.051		1.00	0.0100	-7.7	50.0
1,2-Dichlorobenzene	Ave	1.400	1.299		1.00	0.0100	-7.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.0984		2.00	0.0100	4.5	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.7148		1.00	0.0100	-21.9	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.5771		1.00	0.0100	-28.4	50.0
Hexachlorobutadiene	Ave	0.2736	0.1839		1.00	0.0100	-32.8	50.0
Naphthalene	Ave	1.968	1.425		1.00	0.0100	-27.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCVIS 240-96032/2 Calibration Date: 08/02/2013 13:31

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6461.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.5142		1.00	0.0100	-29.2	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2351		0.00947	0.0100	-5.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2736		0.00916	0.0100	-8.4	50.0
Toluene-d8 (Surr)	Ave	1.348	1.224		0.00908	0.0100	-9.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.5080		0.00925	0.0100	-7.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCV 240-96032/3 Calibration Date: 08/02/2013 13:53

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX6462.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.5221		2.00	0.0100	-37.8	50.0
Ethyl ether	Ave	0.3039	0.2601		2.00	0.0100	-14.4	50.0
3-Chloro-1-propene	Ave	0.1630	0.1591		2.00	0.0100	-2.4	50.0
Diisopropyl ether	Ave	0.2610	0.2583		10.0	0.0500	-1.0	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5184		2.00	0.0100	3.5	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8530		5.00	0.0100	0.7	50.0
Propionitrile	Ave	0.0230	0.0322		4.00	0.0200	39.7	50.0
Ethyl acetate	Ave	0.1697	0.2103		4.00	0.0200	23.9	50.0
Methacrylonitrile	Ave	0.1263	0.1489		2.00	0.0100	17.9	50.0
Isobutyl alcohol	Ave	0.0072	0.0086		50.0	0.200	19.7	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6889		5.00	0.0100	-6.9	50.0
n-Heptane	Ave	0.0634	0.0660		1.00	0.0100	4.1	50.0
n-Butanol	Lin		0.0067		50.0	0.200	1.4	50.0
Methyl methacrylate	Ave	0.1639	0.2087		2.00	0.0100	27.4	50.0
2-Nitropropane	Ave	0.0170	0.0527		2.00	0.0200	209.4*	50.0
Cyclohexanone	Ave	0.0815	0.0920		20.0	0.100	12.9	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.705		0.0111	0.0100	11.0	50.0
2-Methylnaphthalene	Ave	1.002	0.7318		5.00	0.0200	-27.0	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab File ID: UXX6465.D Lab Sample ID: MB 240-96032/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/02/2013 14:58

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-96032/4	UXX6463.D	08/02/2013 14:14
DR-DPT-23-35	240-27392-4	UXX6481.D	08/02/2013 22:17
TB-073013	240-27392-8	UXX6484.D	08/02/2013 23:21
DR-DPT-23-50	240-27392-7	UXX6485.D	08/02/2013 23:42
	240-27323-B-1 MS	UXX6486.D	08/03/2013 00:03
	240-27323-B-1 MSD	UXX6487.D	08/03/2013 00:25

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-96032/6

Matrix: Water | Lab File ID: UXX6465.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/02/2013 14:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96032 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96032/6

Matrix: Water Lab File ID: UXX6465.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/02/2013 14:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96032 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.79		1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96032/6

Matrix: Water Lab File ID: UXX6465.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/02/2013 14:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96032 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-96032/6

Matrix: Water | Lab File ID: UXX6465.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/02/2013 14:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96032 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6463.D

Lab ID: LCS 240-96032/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.3	113	72-116	
1,1,1-Trichloroethane	10.0	10.2	102	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.42	94	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.89	99	74-151	
1,1-Dichloroethane	10.0	9.09	91	82-115	
1,1-Dichloroethene	10.0	8.63	86	78-131	
1,1-Dichloropropene	10.0	9.30	93	83-114	
1,2,3-Trichlorobenzene	10.0	7.28	73	54-126	
1,2,3-Trichloropropane	10.0	9.69	97	73-129	
1,2,3-Trimethylbenzene	10.0	10.5	105	70-130	
1,2,4-Trichlorobenzene	10.0	7.30	73	48-135	
1,2,4-Trimethylbenzene	10.0	9.72	97	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.1	101	42-136	
1,2-Dichlorobenzene	10.0	9.11	91	81-110	
1,2-Dichloroethane	10.0	10.4	104	71-127	
1,2-Dichloropropane	10.0	9.72	97	81-115	
1,3-Dichlorobenzene	10.0	9.17	92	80-110	
1,3-Dichloropropane	10.0	9.90	99	79-116	
1,4-Dichlorobenzene	10.0	9.02	90	82-110	
2,2-Dichloropropane	10.0	11.7	117	50-129	
2-Chloroethyl vinyl ether	10.0	8.95 J	90	52-131	
2-Chlorotoluene	10.0	9.52	95	76-116	
2-Hexanone	20.0	19.9	100	55-133	
Bromobenzene	10.0	9.29	93	76-115	
Bromochloromethane	10.0	8.86	89	77-120	
4-Chlorotoluene	10.0	9.35	94	77-115	
p-Isopropyltoluene	10.0	9.40	94	74-120	
Acetone	20.0	20.6	103	43-136	
Benzene	10.0	9.25	92	83-112	
Bromoform	10.0	11.4	114	40-131	
Bromomethane	10.0	5.83	58	11-185	
Carbon disulfide	10.0	9.46	95	62-142	
Carbon tetrachloride	10.0	11.7	117	66-128	
Chlorobenzene	10.0	9.08	91	85-110	
Chloroethane	10.0	6.66	67	25-153	
Chloroform	10.0	9.30	93	79-117	
Chloromethane	10.0	7.98	80	44-126	
cis-1,2-Dichloroethene	10.0	8.88	89	80-113	
cis-1,3-Dichloropropene	10.0	10.6	106	61-115	
Hexachlorobutadiene	10.0	6.14	61	36-134	
Dibromomethane	10.0	9.73	97	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6463.D

Lab ID: LCS 240-96032/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.0	110	72-121	
Dichlorodifluoromethane	10.0	7.27	73	19-129	
Ethylbenzene	10.0	9.15	91	83-112	
1,2-Dibromoethane	10.0	9.34	93	79-113	
Diisopropyl ether	10.0	8.91 J	89	77-118	
Naphthalene	10.0	7.37	74	32-141	
m-Xylene & p-Xylene	20.0	18.3	91	83-113	
n-Butylbenzene	10.0	9.36	94	66-125	
Isopropylbenzene	10.0	9.13	91	75-114	
n-Propylbenzene	10.0	9.77	98	74-121	
2-Butanone	20.0	18.6	93	60-126	
4-Methyl-2-pentanone	20.0	20.2	101	63-128	
sec-Butylbenzene	10.0	9.30	93	70-117	
Methyl tert-butyl ether	10.0	9.36	94	52-144	
Methylene Chloride	10.0	10.6	106	66-131	
o-Xylene	10.0	9.12	91	83-113	
Styrene	10.0	9.00	90	79-114	
tert-Butylbenzene	10.0	9.59	96	71-115	
Tetrachloroethene	10.0	9.26	93	79-114	
Toluene	10.0	9.80	98	84-111	
trans-1,2-Dichloroethene	10.0	8.61	86	83-117	
trans-1,3-Dichloropropene	10.0	11.3	113	58-117	
Trichloroethene	10.0	8.78	88	76-117	
Trichlorofluoromethane	10.0	8.81	88	49-157	
Vinyl acetate	10.0	7.46	75	46-161	
Vinyl chloride	10.0	8.04	80	53-127	
tert-Butyl alcohol	200	163	82	70-130	
Xylenes, Total	30.0	27.4	91	83-112	
Dibromochloromethane	10.0	11.4	114	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6486.D

Lab ID: 240-27323-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	1.0 U	10.7	107	68-121	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	9.69	97	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	1.0 U	10.2	102	70-152	
1,1-Dichloroethane	10.0	1.0 U	9.74	97	79-116	
1,1-Dichloroethene	10.0	1.0 U	9.07	91	74-135	
1,2-Dichlorobenzene	10.0	1.0 U	8.87	89	75-111	
1,2-Dichloroethane	10.0	1.0 U	10.7	107	68-129	
1,2-Dichloropropane	10.0	1.0 U	10.2	102	78-115	
1,3-Dichlorobenzene	10.0	1.0 U	8.95	89	73-110	
1,4-Dichlorobenzene	10.0	1.0 U	8.90	89	75-110	
2-Chloroethyl vinyl ether	10.0	10 U	10 U	0	10-150	F
2-Hexanone	20.0	10 U	19.9	99	47-139	
Acetone	20.0	1.1 J	21.2	100	33-145	
Benzene	10.0	1.0 U	9.68	97	72-121	
Bromoform	10.0	1.0 U	11.6	116	32-128	
Bromomethane	10.0	1.0 U	6.12	61	10-186	
Carbon disulfide	10.0	1.0 U	9.92	99	57-147	
Carbon tetrachloride	10.0	1.0 U	12.4	124	59-129	
Chlorobenzene	10.0	1.0 U	9.50	95	80-110	
Chloroethane	10.0	1.0 U	6.86	69	21-165	
Chloroform	10.0	1.0 U	9.84	98	76-118	
Chloromethane	10.0	1.0 U	8.89	89	33-132	
cis-1,2-Dichloroethene	10.0	1.0 U	9.21	92	70-120	
cis-1,3-Dichloropropene	10.0	1.0 U	10.5	105	51-110	
Bromodichloromethane	10.0	1.0 U	11.5	115	67-120	
Ethylbenzene	10.0	1.0 U	9.34	93	75-116	
m-Xylene & p-Xylene	20.0	2.0 U	18.5	93	75-117	
2-Butanone	20.0	10 U	18.4	92	54-129	
4-Methyl-2-pentanone	20.0	10 U	20.9	104	56-131	
Methylene Chloride	10.0	1.0 U	8.50	85	63-128	
o-Xylene	10.0	1.0 U	9.30	93	76-116	
Styrene	10.0	1.0 U	9.15	92	71-117	
Tetrachloroethene	10.0	1.0 U	9.42	94	70-117	
Toluene	10.0	1.0 U	10.1	101	78-114	
trans-1,2-Dichloroethene	10.0	1.0 U	9.12	91	80-119	
trans-1,3-Dichloropropene	10.0	1.0 U	11.2	112	46-116	
Trichloroethene	10.0	1.0 U	9.14	91	66-120	
Trichlorofluoromethane	10.0	1.0 U	9.07	91	46-157	
Vinyl chloride	10.0	1.0 U	8.48	85	49-130	
Xylenes, Total	30.0	2.0 U	27.8	93	76-116	
Dibromochloromethane	10.0	1.0 U	11.4	114	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6487.D

Lab ID: 240-27323-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	11.1	111	3	30	68-121	
1,1,2,2-Tetrachloroethane	10.0	9.73	97	0	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.2	102	1	30	70-152	
1,1-Dichloroethane	10.0	10.1	101	3	30	79-116	
1,1-Dichloroethene	10.0	9.31	93	3	30	74-135	
1,2-Dichlorobenzene	10.0	9.66	97	9	30	75-111	
1,2-Dichloroethane	10.0	11.4	114	7	30	68-129	
1,2-Dichloropropane	10.0	10.6	106	3	30	78-115	
1,3-Dichlorobenzene	10.0	9.38	94	5	30	73-110	
1,4-Dichlorobenzene	10.0	9.40	94	5	30	75-110	
2-Chloroethyl vinyl ether	10.0	10 U	0	NC	30	10-150	F
2-Hexanone	20.0	21.1	105	6	30	47-139	
Acetone	20.0	21.6	103	2	30	33-145	
Benzene	10.0	10.2	102	6	30	72-121	
Bromoform	10.0	12.1	121	5	30	32-128	
Bromomethane	10.0	7.71	77	23	30	10-186	
Carbon disulfide	10.0	10.2	102	3	30	57-147	
Carbon tetrachloride	10.0	13.0	130	5	30	59-129	F
Chlorobenzene	10.0	9.61	96	1	30	80-110	
Chloroethane	10.0	7.56	76	10	30	21-165	
Chloroform	10.0	10.2	102	4	30	76-118	
Chloromethane	10.0	8.72	87	2	30	33-132	
cis-1,2-Dichloroethene	10.0	9.71	97	5	30	70-120	
cis-1,3-Dichloropropene	10.0	11.2	112	7	30	51-110	F
Bromodichloromethane	10.0	12.0	120	4	30	67-120	
Ethylbenzene	10.0	9.86	99	5	30	75-116	
m-Xylene & p-Xylene	20.0	19.5	97	5	30	75-117	
2-Butanone	20.0	20.1	100	9	30	54-129	
4-Methyl-2-pentanone	20.0	21.8	109	5	30	56-131	
Methylene Chloride	10.0	8.82	88	4	30	63-128	
o-Xylene	10.0	9.81	98	5	30	76-116	
Styrene	10.0	9.57	96	4	30	71-117	
Tetrachloroethene	10.0	9.63	96	2	30	70-117	
Toluene	10.0	10.5	105	4	30	78-114	
trans-1,2-Dichloroethene	10.0	9.66	97	6	30	80-119	
trans-1,3-Dichloropropene	10.0	11.7	117	4	30	46-116	F
Trichloroethene	10.0	9.38	94	3	30	66-120	
Trichlorofluoromethane	10.0	9.66	97	6	30	46-157	
Vinyl chloride	10.0	8.87	89	4	30	49-130	
Xylenes, Total	30.0	29.3	98	5	30	76-116	
Dibromochloromethane	10.0	11.9	119	4	30	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Instrument ID: A3UX10 Start Date: 08/05/2013 12:23

Analysis Batch Number: 96208 End Date: 08/05/2013 23:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-96208/1		08/05/2013 12:23	1	BFB5341.D	DB-624 0.18(mm)
CCVIS 240-96208/2		08/05/2013 12:52	1	UXX6488.D	DB-624 0.18(mm)
CCV 240-96208/3		08/05/2013 13:14	1	UXX6489.D	DB-624 0.18(mm)
LCS 240-96208/4		08/05/2013 13:36	1	UXX6490.D	DB-624 0.18(mm)
MB 240-96208/6		08/05/2013 14:19	1	UXX6492.D	DB-624 0.18(mm)
240-27392-6	DR-DPT-23-45	08/05/2013 15:50	1	UXX6496.D	DB-624 0.18(mm)
240-27392-5	DR-DPT-23-40	08/05/2013 17:01	8.33	UXX6498.D	DB-624 0.18(mm)
ZZZZZ		08/05/2013 17:22	8		DB-624 0.18(mm)
ZZZZZ		08/05/2013 17:43	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 18:05	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 18:26	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 18:47	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 19:09	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 19:30	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 19:51	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 20:13	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 20:34	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 20:55	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 21:17	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 21:38	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 21:59	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 23:03	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 23:25	1		DB-624 0.18(mm)
ZZZZZ		08/05/2013 23:46	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab File ID: BFB5341.D BFB Injection Date: 08/05/2013

Instrument ID: A3UX10 BFB Injection Time: 12:23

Analysis Batch No.: 96208

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.5	
75	30.0 - 60.0 % of mass 95	50.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	84.5	
175	5.0 - 9.0 % of mass 174	6.5	(7.7)1
176	95.0 - 101.0 % of mass 174	81.9	(96.8)1
177	5.0 - 9.0 % of mass 176	5.5	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-96208/2	UXX6488.D	08/05/2013	12:52
	CCV 240-96208/3	UXX6489.D	08/05/2013	13:14
	LCS 240-96208/4	UXX6490.D	08/05/2013	13:36
	MB 240-96208/6	UXX6492.D	08/05/2013	14:19
DR-DPT-23-45	240-27392-6	UXX6496.D	08/05/2013	15:50
DR-DPT-23-40	240-27392-5	UXX6498.D	08/05/2013	17:01

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCVIS 240-96208/2 Calibration Date: 08/05/2013 12:52

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6488.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2260		1.00	0.0100	-16.5	50.0
Chloromethane	Ave	0.4122	0.3749	0.1000	1.00	0.0100	-9.1	50.0
Vinyl chloride	Ave	0.3595	0.3182		1.00	0.0100	-11.5	20.0
Bromomethane	Ave	0.1681	0.1252		1.00	0.0100	-25.5	50.0
Chloroethane	Ave	0.2338	0.1804		1.00	0.0100	-22.8	50.0
Trichlorofluoromethane	Ave	0.3611	0.3535		1.00	0.0100	-2.1	50.0
Acrolein	Ave	0.0418	0.0391		20.0	0.100	-6.5	50.0
1,1-Dichloroethene	Ave	0.2997	0.2792		1.00	0.0100	-6.8	20.0
Acetone	Ave	0.0713	0.0813		10.0	0.0200	13.9	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2153		1.00	0.0100	2.7	50.0
Iodomethane	Ave	0.4425	0.4212		1.00	0.0100	-4.8	50.0
Carbon disulfide	Ave	0.9095	0.9051		1.00	0.0100	-0.5	50.0
Acetonitrile	Qua		0.0209		20.0	0.100	2.2	50.0
Methyl acetate	Ave	0.2076	0.1982		10.0	0.0200	-4.5	50.0
Methylene Chloride	Lin1		0.3615		1.00	0.0100	1.1	50.0
tert-Butyl alcohol	Qua		0.0118		50.0	0.200	-25.4	50.0
Acrylonitrile	Ave	0.1016	0.1009		20.0	0.0200	-0.7	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7766		1.00	0.0100	0.1	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3214		1.00	0.0100	-2.4	50.0
Hexane	Ave	0.0666	0.0673		1.00	0.0100	1.0	20.0
1,1-Dichloroethane	Ave	0.5360	0.5271	0.1000	1.00	0.0100	-1.7	50.0
Vinyl acetate	Ave	0.0430	0.0421		2.00	0.0100	-2.1	50.0
2-Butanone	Ave	0.0999	0.1067		10.0	0.0200	6.8	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3207		1.00	0.0100	-5.1	50.0
2,2-Dichloropropane	Ave	0.2842	0.3565		1.00	0.0100	25.4	50.0
Bromochloromethane	Ave	0.1515	0.1479		1.00	0.0100	-2.3	50.0
Tetrahydrofuran	Ave	0.0749	0.0658		5.00	0.0100	-12.1	50.0
Chloroform	Ave	0.4933	0.5026		1.00	0.0100	1.9	20.0
1,1,1-Trichloroethane	Ave	0.3841	0.4352		1.00	0.0100	13.3	50.0
Cyclohexane	Ave	0.5378	0.5445		1.00	0.0100	1.3	50.0
1,1-Dichloropropene	Ave	0.3647	0.3735		1.00	0.0100	2.4	50.0
Carbon tetrachloride	Ave	0.2725	0.3541		1.00	0.0100	29.9	50.0
1,2-Dichloroethane	Ave	0.3473	0.3937		1.00	0.0100	13.3	50.0
Benzene	Ave	1.126	1.137		1.00	0.0100	0.9	50.0
Trichloroethene	Ave	0.2904	0.2798		1.00	0.0100	-3.6	50.0
1,2-Dichloropropane	Ave	0.2541	0.2668		1.00	0.0100	5.0	20.0
Methylcyclohexane	Ave	0.4959	0.4914		1.00	0.0100	-0.9	50.0
1,4-Dioxane	Ave	0.0014	0.0011		50.0	0.500	-19.0	50.0
Dibromomethane	Ave	0.1468	0.1511		1.00	0.0100	2.9	50.0
Bromodichloromethane	Ave	0.2913	0.3452		1.00	0.0100	18.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCVIS 240-96208/2 Calibration Date: 08/05/2013 12:52

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6488.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1483		10.0	0.0200	6.9	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3894		1.00	0.0100	17.5	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2283		10.0	0.0200	7.1	50.0
Toluene	Ave	1.625	1.700		1.00	0.0100	4.6	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4724		1.00	0.0100	26.5	50.0
Ethyl methacrylate	Ave	0.4082	0.4031		1.00	0.0100	-1.3	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3102		1.00	0.0100	1.5	50.0
1,3-Dichloropropane	Ave	0.5359	0.5529		1.00	0.0100	3.2	50.0
Tetrachloroethene	Ave	0.3157	0.3163		1.00	0.0100	0.2	50.0
2-Hexanone	Ave	0.1979	0.2082		10.0	0.0200	5.2	50.0
Dibromochloromethane	Ave	0.2670	0.3370		1.00	0.0100	26.2	50.0
1,2-Dibromoethane	Ave	0.3015	0.2958		1.00	0.0100	-1.9	50.0
Chlorobenzene	Ave	1.101	1.070	0.3000	1.00	0.0100	-2.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3568		1.00	0.0100	17.7	50.0
Ethylbenzene	Ave	0.6020	0.5860		1.00	0.0100	-2.7	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7474		2.00	0.0200	-2.6	50.0
o-Xylene	Ave	0.7382	0.7182		1.00	0.0100	-2.7	50.0
Styrene	Ave	1.247	1.174		1.00	0.0100	-5.9	50.0
Bromoform	Ave	0.1580	0.2008	0.1000	1.00	0.0100	27.1	50.0
Isopropylbenzene	Ave	1.883	1.843		1.00	0.0100	-2.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7202	0.3000	1.00	0.0100	-5.9	50.0
Bromobenzene	Ave	0.8485	0.7948		1.00	0.0100	-6.3	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2421		1.00	0.0100	-2.6	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1889		1.00	0.0100	2.2	50.0
n-Propylbenzene	Ave	0.9162	0.8872		1.00	0.0100	-3.2	50.0
2-Chlorotoluene	Ave	0.8158	0.7824		1.00	0.0100	-4.1	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.698		1.00	0.0100	-0.9	50.0
4-Chlorotoluene	Ave	0.8894	0.8437		1.00	0.0100	-5.1	50.0
tert-Butylbenzene	Ave	2.380	2.281		1.00	0.0100	-4.2	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.681		1.00	0.0100	-2.8	50.0
sec-Butylbenzene	Ave	3.282	3.087		1.00	0.0100	-5.9	50.0
1,3-Dichlorobenzene	Ave	1.536	1.453		1.00	0.0100	-5.4	50.0
p-Isopropyltoluene	Ave	2.641	2.479		1.00	0.0100	-6.1	50.0
1,4-Dichlorobenzene	Ave	1.622	1.544		1.00	0.0100	-4.8	50.0
n-Butylbenzene	Ave	2.221	2.090		1.00	0.0100	-5.9	50.0
1,2-Dichlorobenzene	Ave	1.400	1.283		1.00	0.0100	-8.3	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.0929		2.00	0.0100	-1.3	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.7614		1.00	0.0100	-16.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.6127		1.00	0.0100	-24.0	50.0
Hexachlorobutadiene	Ave	0.2736	0.2139		1.00	0.0100	-21.8	50.0
Naphthalene	Ave	1.968	1.414		1.00	0.0100	-28.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCVIS 240-96208/2 Calibration Date: 08/05/2013 12:52

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6488.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.5694		1.00	0.0100	-21.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2182		0.00878	0.0100	-12.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2877		0.00963	0.0100	-3.7	50.0
Toluene-d8 (Surr)	Ave	1.348	1.239		0.00919	0.0100	-8.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4690		0.00854	0.0100	-14.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab Sample ID: CCV 240-96208/3 Calibration Date: 08/05/2013 13:14

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX6489.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.5176		2.00	0.0100	-38.3	50.0
Ethyl ether	Ave	0.3039	0.2560		2.00	0.0100	-15.8	50.0
3-Chloro-1-propene	Ave	0.1630	0.1670		2.00	0.0100	2.4	50.0
Diisopropyl ether	Ave	0.2610	0.2573		10.0	0.0500	-1.4	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5228		2.00	0.0100	4.4	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8504		5.00	0.0100	0.4	50.0
Propionitrile	Ave	0.0230	0.0295		4.00	0.0200	28.1	50.0
Ethyl acetate	Ave	0.1697	0.2062		4.00	0.0200	21.5	50.0
Methacrylonitrile	Ave	0.1263	0.1487		2.00	0.0100	17.7	50.0
Isobutyl alcohol	Ave	0.0072	0.0076		50.0	0.200	5.6	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6835		5.00	0.0100	-7.6	50.0
n-Heptane	Ave	0.0634	0.0633		1.00	0.0100	-0.2	50.0
n-Butanol	Lin		0.0058		50.0	0.200	-11.9	50.0
Methyl methacrylate	Ave	0.1639	0.1951		2.00	0.0100	19.0	50.0
2-Nitropropane	Ave	0.0170	0.0544		2.00	0.0200	219.1*	50.0
Cyclohexanone	Ave	0.0815	0.0778		20.0	0.100	-4.5	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.622		0.0108	0.0100	7.6	50.0
2-Methylnaphthalene	Ave	1.002	0.7365		5.00	0.0200	-26.5	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Lab File ID: UXX6492.D Lab Sample ID: MB 240-96208/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/05/2013 14:19

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-96208/4	UXX6490.D	08/05/2013 13:36
DR-DPT-23-45	240-27392-6	UXX6496.D	08/05/2013 15:50
DR-DPT-23-40	240-27392-5	UXX6498.D	08/05/2013 17:01

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96208/6

Matrix: Water Lab File ID: UXX6492.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/05/2013 14:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96208 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-96208/6

Matrix: Water | Lab File ID: UXX6492.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/05/2013 14:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96208 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96208/6

Matrix: Water Lab File ID: UXX6492.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/05/2013 14:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96208 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96208/6

Matrix: Water Lab File ID: UXX6492.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/05/2013 14:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96208 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6490.D

Lab ID: LCS 240-96208/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.5	115	72-116	
1,1,1-Trichloroethane	10.0	10.9	109	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.85	98	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.0	110	74-151	
1,1-Dichloroethane	10.0	9.80	98	82-115	
1,1-Dichloroethene	10.0	9.13	91	78-131	
1,1-Dichloropropene	10.0	10.2	102	83-114	
1,2,3-Trichlorobenzene	10.0	7.42	74	54-126	
1,2,3-Trichloropropane	10.0	9.61	96	73-129	
1,2,3-Trimethylbenzene	10.0	10.7	107	70-130	
1,2,4-Trichlorobenzene	10.0	7.52	75	48-135	
1,2,4-Trimethylbenzene	10.0	9.82	98	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.7	107	42-136	
1,2-Dichlorobenzene	10.0	9.43	94	81-110	
1,2-Dichloroethane	10.0	11.1	111	71-127	
1,2-Dichloropropane	10.0	10.4	104	81-115	
1,3-Dichlorobenzene	10.0	9.37	94	80-110	
1,3-Dichloropropane	10.0	10.2	102	79-116	
1,4-Dichlorobenzene	10.0	9.22	92	82-110	
2,2-Dichloropropane	10.0	12.1	121	50-129	
2-Chloroethyl vinyl ether	10.0	9.98 J	100	52-131	
2-Chlorotoluene	10.0	9.76	98	76-116	
2-Hexanone	20.0	20.8	104	55-133	
Bromobenzene	10.0	9.54	95	76-115	
Bromochloromethane	10.0	9.70	97	77-120	
4-Chlorotoluene	10.0	9.44	94	77-115	
p-Isopropyltoluene	10.0	9.79	98	74-120	
Acetone	20.0	21.4	107	43-136	
Benzene	10.0	9.84	98	83-112	
Bromoform	10.0	12.3	123	40-131	
Bromomethane	10.0	6.05	61	11-185	
Carbon disulfide	10.0	9.77	98	62-142	
Carbon tetrachloride	10.0	12.8	128	66-128	
Chlorobenzene	10.0	9.46	95	85-110	
Chloroethane	10.0	6.77	68	25-153	
Chloroform	10.0	10.1	101	79-117	
Chloromethane	10.0	8.75	87	44-126	
cis-1,2-Dichloroethene	10.0	9.42	94	80-113	
cis-1,3-Dichloropropene	10.0	11.3	113	61-115	
Hexachlorobutadiene	10.0	6.95	69	36-134	
Dibromomethane	10.0	10.2	102	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6490.D

Lab ID: LCS 240-96208/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	12.0	120	72-121	
Dichlorodifluoromethane	10.0	7.87	79	19-129	
Ethylbenzene	10.0	9.65	96	83-112	
1,2-Dibromoethane	10.0	9.65	96	79-113	
Diisopropyl ether	10.0	9.76 J	98	77-118	
Naphthalene	10.0	7.29	73	32-141	
m-Xylene & p-Xylene	20.0	18.9	94	83-113	
n-Butylbenzene	10.0	9.59	96	66-125	
Isopropylbenzene	10.0	9.45	95	75-114	
n-Propylbenzene	10.0	10.0	100	74-121	
2-Butanone	20.0	20.1	100	60-126	
4-Methyl-2-pentanone	20.0	21.5	108	63-128	
sec-Butylbenzene	10.0	9.73	97	70-117	
Methyl tert-butyl ether	10.0	9.83	98	52-144	
Methylene Chloride	10.0	9.48	95	66-131	
o-Xylene	10.0	9.58	96	83-113	
Styrene	10.0	9.37	94	79-114	
tert-Butylbenzene	10.0	9.36	94	71-115	
Tetrachloroethene	10.0	9.42	94	79-114	
Toluene	10.0	10.1	101	84-111	
trans-1,2-Dichloroethene	10.0	9.44	94	83-117	
trans-1,3-Dichloropropene	10.0	11.7	117	58-117	
Trichloroethene	10.0	9.49	95	76-117	
Trichlorofluoromethane	10.0	9.17	92	49-157	
Vinyl acetate	10.0	7.83	78	46-161	
Vinyl chloride	10.0	8.40	84	53-127	
tert-Butyl alcohol	200	164	82	70-130	
Xylenes, Total	30.0	28.5	95	83-112	
Dibromochloromethane	10.0	12.1	121	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Sample No.: STD8260 240-92306/4 Date Analyzed: 07/02/2013 13:37

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX5742.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1899526	5.20	1402128	7.87	826109	10.11
UPPER LIMIT		3799052	5.70	2804256	8.37	1652218	10.61
LOWER LIMIT		949763	4.70	701064	7.37	413055	9.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92306/8		1830940	5.20	1292823	7.87	693029	10.11
CCVIS 240-95820/2		1922331	5.20	1351523	7.87	741065	10.12
CCVIS 240-96032/2		1727522	5.20	1193071	7.87	676550	10.12
CCVIS 240-96208/2		1927283	5.20	1388117	7.87	755203	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Sample No.: CCVIS 240-95820/2 Date Analyzed: 08/01/2013 12:08

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX6432.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1922331	5.20	1351523	7.87	741065	10.12
UPPER LIMIT		3844662	5.70	2703046	8.37	1482130	10.62
LOWER LIMIT		961166	4.70	675762	7.37	370533	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-95820/3		1904358	5.20	1344257	7.87	658163	10.12
LCS 240-95820/4		1876654	5.20	1293355	7.87	719587	10.12
MB 240-95820/6		1691566	5.20	1221916	7.87	653617	10.12
240-27392-1	DR-DPT-23-20	1674901	5.20	1199301	7.87	603789	10.12
240-27392-2	DR-DPT-23-25	1665787	5.21	1130858	7.87	592839	10.12
240-27392-3	DR-DPT-23-30	1651635	5.20	1140762	7.88	671820	10.11
240-27194-B-2 MS		1733111	5.20	1178290	7.87	643258	10.12
240-27194-B-2 MSD		1789073	5.20	1222269	7.88	647908	10.11

FB = Fluorobenzene
FB = Fluorobenzene
CBZ = Chlorobenzene-d5
CBZ = Chlorobenzene-d5
Area Limit = 50%-200% of internal standard area
DCB = 1,4-Dichlorobenzene-d4
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Sample No.: CCVIS 240-96032/2 Date Analyzed: 08/02/2013 13:31

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX6461.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1727522	5.20	1193071	7.87	676550	10.12
UPPER LIMIT		3455044	5.70	2386142	8.37	1353100	10.62
LOWER LIMIT		863761	4.70	596536	7.37	338275	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-96032/3		1814060	5.20	1256845	7.87	624751	10.12
LCS 240-96032/4		1827745	5.20	1297690	7.87	674007	10.12
MB 240-96032/6		1703647	5.20	1197158	7.87	624233	10.12
240-27392-4	DR-DPT-23-35	1644315	5.20	1182605	7.87	619423	10.12
240-27392-8	TB-073013	1602465	5.20	1142107	7.87	565022	10.11
240-27392-7	DR-DPT-23-50	1613188	5.20	1103510	7.87	574335	10.12
240-27323-B-1 MS		1718955	5.20	1210912	7.87	647167	10.12
240-27323-B-1 MSD		1735665	5.20	1239782	7.87	685129	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27392-1

SDG No.:

Sample No.: CCVIS 240-96208/2 Date Analyzed: 08/05/2013 12:52

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX6488.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1927283	5.20	1388117	7.87	755203	10.12
UPPER LIMIT		3854566	5.70	2776234	8.37	1510406	10.62
LOWER LIMIT		963642	4.70	694059	7.37	377602	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-96208/3		1873959	5.20	1334757	7.87	674827	10.12
LCS 240-96208/4		1884693	5.20	1380910	7.87	729836	10.12
MB 240-96208/6		1789637	5.20	1243652	7.87	617457	10.12
240-27392-6	DR-DPT-23-45	1751811	5.20	1220722	7.87	586290	10.11
240-27392-5	DR-DPT-23-40	1586965	5.20	1107961	7.87	596930	10.12

FB = Fluorobenzene

FB = Fluorobenzene

CBZ = Chlorobenzene-d5

CBZ = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area

DCB = 1,4-Dichlorobenzene-d4

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

SDG 240-27392-1

SAMPLE ID DR-DPT-23-40

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST / IS AMOUNT (NG)	Final Volume (ML)	AVE RRF	CONCENTRATION ug/L
1586965	8.33	1174694	10	5	0.2904	212.33

Sample Volume (ML)

5

Trichloroethene = 210 ug/L

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27392-1

SDG No.:

Client Sample ID: DR-DPT-23-40 | Lab Sample ID: 240-27392-5

Matrix: Water | Lab File ID: UXX6498.D

Analysis Method: 8260B | Date Collected: 07/30/2013 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/05/2013 17:01

Soil Aliquot Vol: | Dilution Factor: 8.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96208 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	3.4	J	8.3	1.3
74-87-3	Chloromethane	8.3	U	8.3	2.5
156-59-2	cis-1,2-Dichloroethene	130		8.3	1.4
10061-01-5	cis-1,3-Dichloropropene	8.3	U	8.3	1.2
87-68-3	Hexachlorobutadiene	8.3	U	8.3	2.5
74-95-3	Dibromomethane	8.3	U	8.3	2.3
75-27-4	Bromodichloromethane	8.3	U	8.3	1.2
75-71-8	Dichlorodifluoromethane	8.3	U	8.3	2.6
100-41-4	Ethylbenzene	8.3	U	8.3	1.4
106-93-4	1,2-Dibromoethane	8.3	U	8.3	2.0
108-20-3	Diisopropyl ether	83	U	83	12
91-20-3	Naphthalene	8.3	U	8.3	2.0
179601-23-1	m-Xylene & p-Xylene	17	U	17	2.0
104-51-8	n-Butylbenzene	8.3	U	8.3	1.0
98-82-8	Isopropylbenzene	8.3	U	8.3	1.1
103-65-1	n-Propylbenzene	8.3	U	8.3	1.2
78-93-3	2-Butanone	83	U	83	4.7
108-10-1	4-Methyl-2-pentanone	83	U	83	2.7
135-98-8	sec-Butylbenzene	8.3	U	8.3	1.1
1634-04-4	Methyl tert-butyl ether	8.3	U	8.3	1.4
994-05-8	Tert-amyl-methyl ether (TAME)	42	U	42	0.56
75-09-2	Methylene Chloride	8.3	U	8.3	2.7
95-47-6	o-Xylene	8.3	U	8.3	1.2
100-42-5	Styrene	8.3	U	8.3	0.92
637-92-3	Ethyl-t-butyl ether (ETBE)	42	U	42	0.92
98-06-6	tert-Butylbenzene	8.3	U	8.3	1.1
127-18-4	Tetrachloroethene	8.3	U	8.3	2.4
108-88-3	Toluene	8.3	U	8.3	1.1
156-60-5	trans-1,2-Dichloroethene	8.3	U	8.3	1.6
10061-02-6	trans-1,3-Dichloropropene	8.3	U	8.3	1.6
79-01-6	Trichloroethene	210		8.3	1.4
75-69-4	Trichlorofluoromethane	8.3	U	8.3	1.7
108-05-4	Vinyl acetate	17	U	17	1.6
75-01-4	Vinyl chloride	80		8.3	1.8
75-65-0	tert-Butyl alcohol	420	U	420	32
1330-20-7	Xylenes, Total	17	U	17	2.3

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX10\20130805-22217.b\UXX6498.D
Lims ID: 240-27392-A-5 Client ID: DR-DPT-23-40
Inject. Date: 05-Aug-2013 17:01:30 Dil. Factor: 8.3300
Sample Type: Client
Sample ID: 240-0022217-012
Misc. Info.:
Operator: 1644 Instrument ID: A3UX10
Purge Vol: 5.000 mL ALS Bottle#: 11
Lims Batch ID: 96208 Lims Sample ID: 12
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX10\20130805-22217.b\8260_10.m
Last Update: 05-Aug-2013 17:29:30 Calib Date: 02-Jul-2013 14:41:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX10\20130702-21321.b\UXX5745.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: RT Order ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK007

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.197	5.197	0.0	99	1586965	10.0	
* 2 Chlorobenzene-d5	117	7.871	7.871	0.0	87	1107961	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.119	10.119	0.0	97	596930	10.0	
$ 5 Dibromofluoromethane (Surr)	113	4.629	4.629	0.0	54	383680	9.73	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.913	4.913	0.0	0	463648	9.78	
$ 7 Toluene-d8 (Surr)	98	6.558	6.558	0.0	93	1246748	8.35	
$ 8 4-Bromofluorobenzene (Surr)	95	8.983	8.984	-0.001	89	524145	8.61	
12 Dichlorodifluoromethane	85		1.564					
13 Chloromethane	50		1.695					9
14 Vinyl chloride	62	1.789	1.801	-0.012	99	547492	9.60	
16 Bromomethane	94		2.085					
17 Chloroethane	64		2.168					9
19 Trichlorofluoromethane	101		2.393					
23 1,1-Dichloroethene	96	2.807	2.807	0.0	81	13478	0.2834	
24 Acetone	43	2.819	2.819	0.0	51	9963	0.8799	
25 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.831					
27 Carbon disulfide	76		3.008					9
31 Methylene Chloride	84		3.197					
32 2-Methyl-2-propanol	59		3.257					9
35 Methyl tert-butyl ether	73		3.422					
34 trans-1,2-Dichloroethene	96	3.434	3.422	0.012	59	7160	0.1371	
37 1,1-Dichloroethane	63		3.765					
38 Vinyl acetate	86		3.789					
39 Isopropyl ether	87		3.824					
41 Tert-butyl ethyl ether	59		4.120					
42 2-Butanone (MEK)	43		4.239					
43 cis-1,2-Dichloroethene	96	4.238	4.239	-0.001	83	809210	15.1	
44 2,2-Dichloropropane	77		4.250					
48 Chlorobromomethane	128		4.440					
50 Chloroform	83	4.487	4.499	-0.012	86	31533	0.4028	
51 1,1,1-Trichloroethane	97		4.676					
53 1,1-Dichloropropene	75		4.807					

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
54 Carbon tetrachloride	117		4.818					
56 1,2-Dichloroethane	62	4.972	4.972	0.0	91	120838	2.19	
57 Benzene	78	4.972	4.984	-0.012	59	56528	0.3163	
58 Tert-amyl methyl ether	73		5.055					
61 Trichloroethene	130	5.516	5.517	-0.001	96	1174694	25.5	
64 1,2-Dichloropropane	63		5.694					9
66 Dibromomethane	93		5.801					
68 Dichlorobromomethane	83		5.919					
70 2-Chloroethyl vinyl ether	63		6.167					
71 cis-1,3-Dichloropropene	75		6.309					
72 4-Methyl-2-pentanone (MIBK)	43		6.440					
73 Toluene	91		6.617					9
74 trans-1,3-Dichloropropene	75		6.795					
77 1,3-Dichloropropane	76		7.114					
78 Tetrachloroethene	164		7.126					
79 2-Hexanone	43		7.173					
81 Chlorodibromomethane	129		7.327					
83 Ethylene Dibromide	107		7.445					
85 Chlorobenzene	112	7.895	7.907	-0.012	92	513997	4.21	
86 1,1,1,2-Tetrachloroethane	131		7.966					
87 Ethylbenzene	106		8.001					
88 m-Xylene & p-Xylene	106		8.108					
89 o-Xylene	106		8.487					9
90 Styrene	104		8.498					
91 Bromoform	173		8.676					
92 Isopropylbenzene	105		8.842					9
95 1,1,2,2-Tetrachloroethane	83		9.102					
96 Bromobenzene	156		9.137					
97 1,2,3-Trichloropropane	110		9.149					
99 N-Propylbenzene	120		9.232					
100 2-Chlorotoluene	126		9.327					
102 4-Chlorotoluene	126		9.421					
103 tert-Butylbenzene	119		9.729					
104 1,2,4-Trimethylbenzene	105		9.776					9
105 sec-Butylbenzene	105		9.942					9
106 1,3-Dichlorobenzene	146		10.049					9
107 4-Isopropyltoluene	119		10.084					9
108 1,4-Dichlorobenzene	146		10.143					9
109 1,2,3-Trimethylbenzene	105		10.190					
110 n-Butylbenzene	91		10.486					
111 1,2-Dichlorobenzene	146		10.510					9
112 1,2-Dibromo-3-Chloropropane	157		11.279					
114 1,2,4-Trichlorobenzene	180		12.119					9
115 Hexachlorobutadiene	225		12.297					
116 Naphthalene	128		12.356					9
117 1,2,3-Trichlorobenzene	180		12.616					
S 122 Xylenes, Total	106		16.530					7

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **SEPTEMBER 9, 2013**

FROM: **EDWARD SEDLMYER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN – MARTIN STATE ARIPORT (MSA) – ROAD SOURCE AREAS
SDG 240-27440-1

SAMPLES: 9/Aqueous/VOC

DR-DPT-24-15	DR-DPT-24-25	DR-DPT-24-30
DR-DPT-24-35	DR-DPT-24-40	DR-DPT-24-45
DR-DPT-24-50	DR-DPT-24-55	TB-073113

Overview

The sample set for Lockheed Martin – MSA Road Source Areas, SDG 240-27440-1 consists of eight (8) aqueous environmental samples and one (1) trip blank. The samples were analyzed for volatile organic compounds (VOCs).

The samples were collected by Tetra Tech on July 31, 2013 and analyzed by Test America (North Canton). All analyses were conducted in accordance with SW-846 Method 8260B analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, internal standard recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

- The VOC initial calibration and associated continuing calibration relative response factors (RRFs) were less than the 0.05 quality control limit for tert-butyl alcohol and vinyl acetate on instrument A3UX17. The non-detected results reported for tert-butyl alcohol and vinyl acetate were rejected (UR). The positive tert-butyl alcohol result for sample DR-DPT-24-55 was qualified as estimated (J).

Minor

- A VOC continuing calibration percent difference (%D) was greater than the quality control limit of 20% and greater than 50% for naphthalene for instrument A3UX17 on 08/06/13 @ 12:23. The nondetected naphthalene results for samples DR-DPT-24-15, DR-DPT-24-25, DR-DPT-24-40, DR-DPT-24-50, DR-DPT-24-55, and TB-073113 were qualified as estimated (UJ).

- The following contaminants were detected in the laboratory method or trip blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Methylene chloride[1]	0.936 ug/L	9.36 ug/L
Acetone[2]	7.1 ug/L	71 ug/L

(1) Maximum concentration present in Method blank 96551/6 affecting samples DR-DPT-24-30, DR-DPT-24-35, and DR-DPT-24-45.
(2) Maximum concentration present in the trip blank affecting all samples.

An action level of 10X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive results less than the blank action level were qualified (B) as a result of laboratory blank contamination.

- Sample DR-DPT-24-55 had a pH >2.The positive and nondetected results for sample DR-DPT-24-55 were qualified estimated (J) and (UJ), respectively.

- Sample DR-DPT-24-55 had sediment in all vials. The laboratory decanted off the water from the sediment so the purge needle would not be imbedded in the sediment. This resulted in headspace in the vial which probably resulted in a loss of VOC compounds. The positive and nondetected results for sample DR-DPT-24-55 have been qualified as estimated (J) and (UJ), respectively.

- Sample DR-DPT-24-55 had a trichloroethene concentration greater than the linear calibration range of the instrument. The sample was not diluted and rerun due to the lack of sample volume. The positive trichloroethene result for sample DR-DPT-24-55 was qualified as estimated (J).

- Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

Notes

The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for bromomethane, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, and 1,2,3-trichlorobenzene, for instrument A3UX17 on 08/06/13 @ 12:23. No action was taken on this basis because the affected sample results were nondetected for the aforementioned compounds.

The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for bromomethane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene, for instrument A3UX17 on 08/07/13 @ 12:14. No action was taken on this basis because the affected sample results were nondetected for the aforementioned compounds.

Samples DR-DPT-24-25, DR-DPT-24-30, DR-DPT-24-35, DR-DPT-24-40, DR-DPT-24-45, DR-DPT-24-50, and DR-DPT-24-55 were diluted due to concentrations greater than the linear calibration range of the instrument. This accounts for the elevated detection limit for the nondetected compounds.

Executive Summary

Laboratory Performance: Two VOC compounds had RRF noncompliances resulting in the rejection of data. One VOC compound had a %D noncompliance resulting in qualification of the data. Blank contamination resulted in the qualification of data.

Other Factors Affecting Data Quality: Positive results less than the reporting limit (RL) were qualified due to uncertainty near the detection limit. Preservation noncompliance resulted in the qualification of data for one sample. Sample headspace noncompliance resulted in the qualification of data for one sample.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Edward Sedlmyer
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-15			DR-DPT-24-25			DR-DPT-24-30			DR-DPT-24-35		
SDG: 240-27440-1	LAB_ID	240-27440-1			240-27440-2			240-27440-3			240-27440-4		
FRACTION: OV	SAMP_DATE	7/31/2013			7/31/2013			7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U		23	U		140	U		15	U	
1,1,1-TRICHLOROETHANE	0.22	U		22	U		140	U		15	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U		18	U		110	U		12	U	
1,1,2-TRICHLOROETHANE												
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U		28	U		180	U		19	U	
1,1-DICHLOROETHANE	1.4			15	U		94	U		10	U	
1,1-DICHLOROETHENE	0.19	U		19	U		120	U		14	J	P
1,1-DICHLOROPROPENE	0.13	U		13	U		81	U		8.7	U	
1,2,3-TRICHLOROBENZENE	0.17	U		17	U		110	U		11	U	
1,2,3-TRICHLOROPROPANE	0.43	U		43	U		270	U		29	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U		0.59	U		3.7	U		0.39	U	
1,2,4-TRICHLOROBENZENE	0.15	U		15	U		94	U		10	U	
1,2,4-TRIMETHYLBENZENE	0.12	U		12	U		75	U		8	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U		67	U		420	U		45	U	
1,2-DIBROMOETHANE	0.24	U		24	U		150	U		16	U	
1,2-DICHLOROBENZENE	0.13	U		13	U		81	U		8.7	U	
1,2-DICHLOROETHANE	0.22	U		25	J	P	140	U		100		
1,2-DICHLOROPROPANE	0.18	U		18	U		110	U		12	U	
1,3-DICHLOROBENZENE	0.14	U		14	U		88	U		9.3	U	
1,3-DICHLOROPROPANE	0.16	U		16	U		100	U		11	U	
1,4-DICHLOROBENZENE	0.13	U		13	U		81	U		8.7	U	
1,4-DIOXANE												
1-PENTENE												
2,2-DICHLOROPROPANE	0.13	U		13	U		81	U		8.7	U	
2-BUTANONE	1.3	J	P	57	U		360	U		38	U	
2-CHLOROETHYL VINYL ETHER	0.99	U		99	U		620	U		66	U	
2-CHLOROTOLUENE	0.11	U		11	U		69	U		7.3	U	
2-HEXANONE	0.41	U		41	U		260	U		27	U	
4-CHLOROTOLUENE	0.18	U		18	U		110	U		12	U	
4-ISOPROPYLTOLUENE	0.12	U		12	U		75	U		8	U	
4-METHYL-2-PENTANONE	0.32	U		32	U		200	U		21	U	
ACETONE	5	B	B	110	U		690	U		73	U	
BENZENE	0.8	J	P	13	U		81	U		16	J	P
BROMOBENZENE	0.13	U		13	U		81	U		8.7	U	
BROMOCHLOROMETHANE	0.29	U		29	U		180	U		19	U	
BROMODICHLOROMETHANE	0.15	U		15	U		94	U		10	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-40			DR-DPT-24-45			DR-DPT-24-50			DR-DPT-24-55		
SDG: 240-27440-1	LAB_ID	240-27440-5			240-27440-6			240-27440-7			240-27440-8		
FRACTION: OV	SAMP_DATE	7/31/2013			7/31/2013			7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		2.6	U		12	U		7.7	U		1.4	UJ	MQ
1,1,1-TRICHLOROETHANE		2.4	U		11	U		7.3	U		1.3	UJ	MQ
1,1,2,2-TETRACHLOROETHANE		2	U		9	U		6	U		1.1	UJ	MQ
1,1,2-TRICHLOROETHANE													
1,1,2-TRICHLOROTRIFLUOROETHANE		3.1	U		14	U		9.3	U		1.6	UJ	MQ
1,1-DICHLOROETHANE		1.7	U		7.5	U		5	U		0.88	UJ	MQ
1,1-DICHLOROETHENE		2.1	U		9.5	U		6.3	U		2.7	J	MPQ
1,1-DICHLOROPROPENE		1.4	U		6.5	U		4.3	U		0.76	UJ	MQ
1,2,3-TRICHLOROBENZENE		1.9	U		8.5	U		5.7	U		1	UJ	MQ
1,2,3-TRICHLOROPROPANE		4.8	U		22	U		14	U		2.5	UJ	MQ
1,2,3-TRIMETHYLBENZENE		0.066	U		0.3	U		0.2	U		0.035	UJ	MQ
1,2,4-TRICHLOROBENZENE		1.7	U		7.5	U		5	U		0.88	UJ	MQ
1,2,4-TRIMETHYLBENZENE		1.3	U		6	U		4	U		0.71	UJ	MQ
1,2-DIBROMO-3-CHLOROPROPANE		7.4	U		34	U		22	U		3.9	UJ	MQ
1,2-DIBROMOETHANE		2.7	U		12	U		8	U		1.4	UJ	MQ
1,2-DICHLOROBENZENE		1.4	U		6.5	U		4.3	U		0.76	UJ	MQ
1,2-DICHLOROETHANE		4.1	J	P	17	J	P	10	J	P	35	J	MQ
1,2-DICHLOROPROPANE		2	U		9	U		6	U		1.1	UJ	MQ
1,3-DICHLOROBENZENE		1.6	U		7	U		4.7	U		0.82	UJ	MQ
1,3-DICHLOROPROPANE		1.8	U		8	U		5.3	U		0.94	UJ	MQ
1,4-DICHLOROBENZENE		1.4	U		6.5	U		4.3	U		0.76	UJ	MQ
1,4-DIOXANE													
1-PENTENE													
2,2-DICHLOROPROPANE		1.4	U		6.5	U		4.3	U		0.76	UJ	MQ
2-BUTANONE		6.3	U		29	U		19	U		3.4	UJ	MQ
2-CHLOROETHYL VINYL ETHER		11	U		50	U		33	U		5.8	UJ	MQ
2-CHLOROTOLUENE		1.2	U		5.5	U		3.7	U		0.65	UJ	MQ
2-HEXANONE		4.6	U		21	U		14	U		2.4	UJ	MQ
4-CHLOROTOLUENE		2	U		9	U		6	U		1.1	UJ	MQ
4-ISOPROPYLTOLUENE		1.3	U		6	U		4	U		0.71	UJ	MQ
4-METHYL-2-PENTANONE		3.6	U		16	U		11	U		1.9	UJ	MQ
ACETONE		12	U		55	U		37	U		40	B	B
BENZENE		1.4	U		6.5	U		4.3	U		3.2	J	MPQ
BROMOBENZENE		1.4	U		6.5	U		4.3	U		0.76	UJ	MQ
BROMOCHLOROMETHANE		3.2	U		15	U		9.7	U		1.7	UJ	MQ
BROMODICHLOROMETHANE		1.7	U		7.5	U		5	U		0.88	UJ	MQ

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-55			TB-073113		
SDG: 240-27440-1	LAB_ID	240-27440-8			240-27440-9		
FRACTION: OV	SAMP_DATE	7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	TIC			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE					0.23	U	
1,1,1-TRICHLOROETHANE					0.22	U	
1,1,2,2-TETRACHLOROETHANE					0.18	U	
1,1,2-TRICHLOROETHANE		2	J	MPQ			
1,1,2-TRICHLOROTRIFLUOROETHANE					0.28	U	
1,1-DICHLOROETHANE					0.15	U	
1,1-DICHLOROETHENE					0.19	U	
1,1-DICHLOROPROPENE					0.13	U	
1,2,3-TRICHLOROBENZENE					0.17	U	
1,2,3-TRICHLOROPROPANE					0.43	U	
1,2,3-TRIMETHYLBENZENE					0.0059	U	
1,2,4-TRICHLOROBENZENE					0.15	U	
1,2,4-TRIMETHYLBENZENE					0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE					0.67	U	
1,2-DIBROMOETHANE					0.24	U	
1,2-DICHLOROBENZENE					0.13	U	
1,2-DICHLOROETHANE					0.22	U	
1,2-DICHLOROPROPANE					0.18	U	
1,3-DICHLOROBENZENE					0.14	U	
1,3-DICHLOROPROPANE					0.16	U	
1,4-DICHLOROBENZENE					0.13	U	
1,4-DIOXANE		160	Z1	NJ			
1-PENTENE		9	Z1	NJ			
2,2-DICHLOROPROPANE					0.13	U	
2-BUTANONE					0.57	U	
2-CHLOROETHYL VINYL ETHER					0.99	U	
2-CHLOROTOLUENE					0.11	U	
2-HEXANONE					0.41	U	
4-CHLOROTOLUENE					0.18	U	
4-ISOPROPYLTOLUENE					0.12	U	
4-METHYL-2-PENTANONE					0.32	U	
ACETONE					7.1	J	P
BENZENE					0.13	U	
BROMOBENZENE					0.13	U	
BROMOCHLOROMETHANE					0.29	U	
BROMODICHLOROMETHANE					0.15	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-15			DR-DPT-24-25			DR-DPT-24-30			DR-DPT-24-35		
SDG: 240-27440-1	LAB_ID	240-27440-1			240-27440-2			240-27440-3			240-27440-4		
FRACTION: OV	SAMP_DATE	7/31/2013			7/31/2013			7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		0.64	U		64	U		400	U		43	U	
BROMOMETHANE		0.41	U		41	U		260	U		27	U	
CARBON DISULFIDE		0.42	J	P	13	U		81	U		8.7	U	
CARBON TETRACHLORIDE		0.13	U		13	U		81	U		8.7	U	
CHLOROBENZENE		0.3	J	P	15	U		94	U		58	J	P
CHLORODIBROMOMETHANE		0.18	U		18	U		110	U		12	U	
CHLOROETHANE		0.29	U		29	U		180	U		19	U	
CHLOROFORM		0.16	U		16	U		100	U		20	J	P
CHLOROMETHANE		0.3	U		30	U		190	U		20	U	
CIS-1,2-DICHLOROETHENE		0.17	U		340			580	J	P	500		
CIS-1,3-DICHLOROPROPENE		0.14	U		14	U		88	U		9.3	U	
DIBROMOMETHANE		0.28	U		28	U		180	U		19	U	
DICHLORODIFLUOROMETHANE		0.31	U		31	U		190	U		21	U	
DIISOPROPYL ETHER		1.5	U		150	U		940	U		100	U	
ETHYL TERT-BUTYL ETHER		0.11	U		11	U		69	U		7.3	U	
ETHYLBENZENE		0.17	U		17	U		110	U		11	U	
HEXACHLOROBUTADIENE		0.3	U		30	U		190	U		20	U	
ISOPROPYLBENZENE		0.13	U		13	U		81	U		8.7	U	
M+P-XYLENES		0.24	U		24	U		150	U		16	U	
METHYL ACETATE													
METHYL TERT-BUTYL ETHER		0.17	U		17	U		110	U		11	U	
METHYLENE CHLORIDE		0.33	U		55	J	P	610	B	A	44	B	A
NAPHTHALENE		0.24	UJ	C	24	UJ	C	150	U		16	U	
N-BUTYLBENZENE		0.12	U		12	U		75	U		8	U	
N-PROPYLBENZENE		0.14	U		14	U		88	U		9.3	U	
O-XYLENE		0.14	U		14	U		88	U		9.3	U	
SEC-BUTYLBENZENE		0.13	U		13	U		81	U		8.7	U	
STYRENE		0.11	U		11	U		69	U		7.3	U	
TERT-AMYL METHYL ETHER		0.067	U		6.7	U		42	U		4.5	U	
TERT-BUTYLBENZENE		0.13	U		13	U		81	U		8.7	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	390	UR	C	2400	UR	C	260	UR	C
TETRACHLOROETHENE		0.29	U		29	U		180	U		19	U	
TOLUENE		0.26	J	P	13	U		81	U		8.7	U	
TOTAL XYLENES		0.14	U		14	U		88	U		9.3	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		19	U		120	U		13	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		19	U		120	U		13	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-40			DR-DPT-24-45			DR-DPT-24-50			DR-DPT-24-55		
SDG: 240-27440-1	LAB_ID	240-27440-5			240-27440-6			240-27440-7			240-27440-8		
FRACTION: OV	SAMP_DATE	7/31/2013			7/31/2013			7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM	7.1	U		32	U		21	U		3.8	UJ	MQ
BROMOMETHANE	4.6	U		21	U		14	U		2.4	UJ	MQ
CARBON DISULFIDE	1.4	U		6.5	U		4.3	U		0.76	UJ	MQ
CARBON TETRACHLORIDE	2.3	J	P	6.5	U		7.2	J	P	0.76	UJ	MQ
CHLOROBENZENE	1.7	U		7.5	U		5	U		8.1	J	MQ
CHLORODIBROMOMETHANE	2	U		9	U		6	U		1.1	UJ	MQ
CHLOROETHANE	3.2	U		15	U		9.7	U		1.7	UJ	MQ
CHLOROFORM	18			48	J	P	90			13	J	MQ
CHLOROMETHANE	3.3	U		15	U		10	U		1.8	UJ	MQ
CIS-1,2-DICHLOROETHENE	29			66			93			130	J	MQ
CIS-1,3-DICHLOROPROPENE	1.6	U		7	U		4.7	U		0.82	UJ	MQ
DIBROMOMETHANE	3.1	U		14	U		9.3	U		1.6	UJ	MQ
DICHLORODIFLUOROMETHANE	3.4	U		16	U		10	U		1.8	UJ	MQ
DIISOPROPYL ETHER	17	U		75	U		50	U		8.8	UJ	MQ
ETHYL TERT-BUTYL ETHER	1.2	U		5.5	U		3.7	U		0.65	UJ	MQ
ETHYLBENZENE	1.9	U		8.5	U		5.7	U		1	UJ	MQ
HEXACHLOROBUTADIENE	3.3	U		15	U		10	U		1.8	UJ	MQ
ISOPROPYLBENZENE	1.4	U		6.5	U		4.3	U		0.76	UJ	MQ
M+P-XYLENES	2.7	U		12	U		8	U		1.4	UJ	MQ
METHYL ACETATE												
METHYL TERT-BUTYL ETHER	1.9	U		8.5	U		5.7	U		1	UJ	MQ
METHYLENE CHLORIDE	3.7	U		31	B	A	17	J	P	25	J	MQ
NAPHTHALENE	2.7	UJ	C	12	U		8	UJ	C	1.4	UJ	CMQ
N-BUTYLBENZENE	1.3	U		6	U		4	U		0.71	UJ	MQ
N-PROPYLBENZENE	1.6	U		7	U		4.7	U		0.82	UJ	MQ
O-XYLENE	1.6	U		7	U		4.7	U		0.82	UJ	MQ
SEC-BUTYLBENZENE	1.4	U		6.5	U		4.3	U		0.76	UJ	MQ
STYRENE	1.2	U		5.5	U		3.7	U		0.65	UJ	MQ
TERT-AMYL METHYL ETHER	0.74	U		3.4	U		2.2	U		0.39	UJ	MQ
TERT-BUTYLBENZENE	1.4	U		6.5	U		4.3	U		0.76	UJ	MQ
TERTIARY-BUTYL ALCOHOL	43	UR	C	200	UR	C	130	UR	C	28	J	CMPQ
TETRACHLOROETHENE	3.2	U		15	U		9.7	U		1.7	UJ	MQ
TOLUENE	1.4	U		6.5	U		4.3	U		2.8	J	MPQ
TOTAL XYLENES	1.6	U		7	U		4.7	U		0.82	UJ	MQ
TRANS-1,2-DICHLOROETHENE	2.1	U		9.5	U		6.3	U		1.1	UJ	MQ
TRANS-1,3-DICHLOROPROPENE	2.1	U		9.5	U		6.3	U		1.1	UJ	MQ

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-55			TB-073113		
SDG: 240-27440-1	LAB_ID	240-27440-8			240-27440-9		
FRACTION: OV	SAMP_DATE	7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	TIC			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM					0.64	U	
BROMOMETHANE					0.41	U	
CARBON DISULFIDE					0.13	U	
CARBON TETRACHLORIDE					0.13	U	
CHLOROBENZENE					0.15	U	
CHLORODIBROMOMETHANE					0.18	U	
CHLOROETHANE					0.29	U	
CHLOROFORM					0.16	U	
CHLOROMETHANE					0.3	U	
CIS-1,2-DICHLOROETHENE					0.17	U	
CIS-1,3-DICHLOROPROPENE					0.14	U	
DIBROMOMETHANE					0.28	U	
DICHLORODIFLUOROMETHANE					0.31	U	
DIISOPROPYL ETHER					1.5	U	
ETHYL TERT-BUTYL ETHER					0.11	U	
ETHYLBENZENE					0.17	U	
HEXACHLOROBUTADIENE					0.3	U	
ISOPROPYLBENZENE					0.13	U	
M+P-XYLENES					0.24	U	
METHYL ACETATE		2.2	J	MPQ			
METHYL TERT-BUTYL ETHER					0.17	U	
METHYLENE CHLORIDE					0.33	U	
NAPHTHALENE					0.24	UJ	C
N-BUTYLBENZENE					0.12	U	
N-PROPYLBENZENE					0.14	U	
O-XYLENE					0.14	U	
SEC-BUTYLBENZENE					0.13	U	
STYRENE					0.11	U	
TERT-AMYL METHYL ETHER					0.067	U	
TERT-BUTYLBENZENE					0.13	U	
TERTIARY-BUTYL ALCOHOL					3.9	UR	C
TETRACHLOROETHENE					0.29	U	
TOLUENE					0.13	U	
TOTAL XYLENES					0.14	U	
TRANS-1,2-DICHLOROETHENE					0.19	U	
TRANS-1,3-DICHLOROPROPENE					0.19	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-15			DR-DPT-24-25			DR-DPT-24-30			DR-DPT-24-35		
SDG: 240-27440-1	LAB_ID	240-27440-1			240-27440-2			240-27440-3			240-27440-4		
FRACTION: OV	SAMP_DATE	7/31/2013			7/31/2013			7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROETHENE		0.17	U		3100			17000			1800		
TRICHLOROFLUOROMETHANE		0.21	U		21	U		130	U		14	U	
VINYL ACETATE		0.19	UR	C	19	UR	C	120	UR	C	13	UR	C
VINYL CHLORIDE		4.5			150			140	U		420		

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-40			DR-DPT-24-45			DR-DPT-24-50			DR-DPT-24-55		
SDG: 240-27440-1	LAB_ID	240-27440-5			240-27440-6			240-27440-7			240-27440-8		
FRACTION: OV	SAMP_DATE	7/31/2013			7/31/2013			7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROETHENE		420			1100			1300			260	J	LMQ
TRICHLOROFLUOROMETHANE		2.3	U		11	U		7	U		1.2	UJ	MQ
VINYL ACETATE		2.1	UR	C	9.5	UR	C	6.3	UR	C	1.1	UR	C
VINYL CHLORIDE		2.4	U		11	U		7.3	U		29	J	MQ

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-55			TB-073113		
SDG: 240-27440-1	LAB_ID	240-27440-8			240-27440-9		
FRACTION: OV	SAMP_DATE	7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	TIC			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROETHENE					0.17	U	
TRICHLOROFLUOROMETHANE					0.21	U	
VINYL ACETATE					0.19	UR	C
VINYL CHLORIDE					0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-15			DR-DPT-24-40			DR-DPT-24-55			TB-073113		
SDG: 240-27440-1	LAB_ID	240-27440-1			240-27440-5			240-27440-8			240-27440-9		
FRACTION: TICOV	SAMP_DATE	7/31/2013			7/31/2013			7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-BUTENE								9.2	NJ	Z1			
1-BUTENE, 2-METHYL-								10	NJ	Z1			
FORMAMIDE, N-METHYLTHIO		1.5	Z1	NJ									
NAPHTHALENE, 1-METHYL-		1.5	Z1	NJ									
SILANOL, TRIMETHYL-					14	R	Z2				6	R	Z2

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-15			DR-DPT-24-40			DR-DPT-24-55			TB-073113		
SDG: 240-27440-1	LAB_ID	240-27440-1			240-27440-5			240-27440-8			240-27440-9		
FRACTION: TICOV	SAMP_DATE	7/31/2013			7/31/2013			7/31/2013			7/31/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-BUTENE								9.2	NJ	Z1			
1-BUTENE, 2-METHYL-								10	NJ	Z1			
FORMAMIDE, N-METHYLTHIO		1.5	Z1	NJ									
NAPHTHALENE, 1-METHYL-		1.5	Z1	NJ									
SILANOL, TRIMETHYL-					14	R	Z2				6	R	Z2

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-25 | Lab Sample ID: 240-27440-2

Matrix: Water | Lab File ID: UXR6845.D

Analysis Method: 8260B | Date Collected: 07/31/2013 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 18:45

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	100	U	100	23
71-55-6	1,1,1-Trichloroethane	100	U	100	22
79-34-5	1,1,2,2-Tetrachloroethane	100	U	100	18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	100	U	100	28
75-34-3	1,1-Dichloroethane	100	U	100	15
75-35-4	1,1-Dichloroethene	100	U	100	19
563-58-6	1,1-Dichloropropene	100	U	100	13
87-61-6	1,2,3-Trichlorobenzene	100	U	100	17
96-18-4	1,2,3-Trichloropropane	100	U	100	43
526-73-8	1,2,3-Trimethylbenzene	500	U	500	0.59
120-82-1	1,2,4-Trichlorobenzene	100	U	100	15
95-63-6	1,2,4-Trimethylbenzene	100	U	100	12
96-12-8	1,2-Dibromo-3-Chloropropane	200	U	200	67
95-50-1	1,2-Dichlorobenzene	100	U	100	13
107-06-2	1,2-Dichloroethane	25	J	100	22
78-87-5	1,2-Dichloropropane	100	U	100	18
541-73-1	1,3-Dichlorobenzene	100	U	100	14
142-28-9	1,3-Dichloropropane	100	U	100	16
106-46-7	1,4-Dichlorobenzene	100	U	100	13
594-20-7	2,2-Dichloropropane	100	U	100	13
110-75-8	2-Chloroethyl vinyl ether	1000	U	1000	99
95-49-8	2-Chlorotoluene	100	U	100	11
591-78-6	2-Hexanone	1000	U	1000	41
108-86-1	Bromobenzene	100	U	100	13
74-97-5	Bromochloromethane	100	U	100	29
106-43-4	4-Chlorotoluene	100	U	100	18
99-87-6	p-Isopropyltoluene	100	U	100	12
67-64-1	Acetone	1000	U	1000	110
71-43-2	Benzene	100	U	100	13
75-25-2	Bromoform	100	U	100	64
74-83-9	Bromomethane	100	U	100	41
75-15-0	Carbon disulfide	100	U	100	13
56-23-5	Carbon tetrachloride	100	U	100	13
108-90-7	Chlorobenzene	100	U	100	15
75-00-3	Chloroethane	100	U	100	29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-25 | Lab Sample ID: 240-27440-2

Matrix: Water | Lab File ID: UXR6845.D

Analysis Method: 8260B | Date Collected: 07/31/2013 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 18:45

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	100	U	100	16
74-87-3	Chloromethane	100	U	100	30
156-59-2	cis-1,2-Dichloroethene	340		100	17
10061-01-5	cis-1,3-Dichloropropene	100	U	100	14
87-68-3	Hexachlorobutadiene	100	U	100	30
74-95-3	Dibromomethane	100	U	100	28
75-27-4	Bromodichloromethane	100	U	100	15
75-71-8	Dichlorodifluoromethane	100	U	100	31
100-41-4	Ethylbenzene	100	U	100	17
106-93-4	1,2-Dibromoethane	100	U	100	24
108-20-3	Diisopropyl ether	1000	U	1000	150
91-20-3	Naphthalene	100	U	100	24
179601-23-1	m-Xylene & p-Xylene	200	U	200	24
104-51-8	n-Butylbenzene	100	U	100	12
98-82-8	Isopropylbenzene	100	U	100	13
103-65-1	n-Propylbenzene	100	U	100	14
78-93-3	2-Butanone	1000	U	1000	57
108-10-1	4-Methyl-2-pentanone	1000	U	1000	32
135-98-8	sec-Butylbenzene	100	U	100	13
1634-04-4	Methyl tert-butyl ether	100	U	100	17
994-05-8	Tert-amyl-methyl ether (TAME)	500	U	500	6.7
75-09-2	Methylene Chloride	55	J	100	33
95-47-6	o-Xylene	100	U	100	14
100-42-5	Styrene	100	U	100	11
637-92-3	Ethyl-t-butyl ether (ETBE)	500	U	500	11
98-06-6	tert-Butylbenzene	100	U	100	13
127-18-4	Tetrachloroethene	100	U	100	29
108-88-3	Toluene	100	U	100	13
156-60-5	trans-1,2-Dichloroethene	100	U	100	19
10061-02-6	trans-1,3-Dichloropropene	100	U	100	19
79-01-6	Trichloroethene	3100		100	17
75-69-4	Trichlorofluoromethane	100	U	100	21
108-05-4	Vinyl acetate	200	U	200	19
75-01-4	Vinyl chloride	150		100	22
75-65-0	tert-Butyl alcohol	5000	U	5000	390
1330-20-7	Xylenes, Total	200	U	200	14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-25 | Lab Sample ID: 240-27440-2

Matrix: Water | Lab File ID: UXR6845.D

Analysis Method: 8260B | Date Collected: 07/31/2013 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 18:45

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	100	U	100	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	77		74-115
1868-53-7	Dibromofluoromethane (Surr)	103		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-25 Lab Sample ID: 240-27440-2

Matrix: Water Lab File ID: UXR6845.D

Analysis Method: 8260B Date Collected: 07/31/2013 10:35

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 18:45

Soil Aliquot Vol: Dilution Factor: 100

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-15 Lab Sample ID: 240-27440-1

Matrix: Water Lab File ID: UXR6844.D

Analysis Method: 8260B Date Collected: 07/31/2013 10:00

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 18:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.4		1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	5.0	J	10	1.1
71-43-2	Benzene	0.80	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.42	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	0.30	J	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-15 | Lab Sample ID: 240-27440-1

Matrix: Water | Lab File ID: UXR6844.D

Analysis Method: 8260B | Date Collected: 07/31/2013 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 18:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	1.3	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.26	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	4.5		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-15 Lab Sample ID: 240-27440-1

Matrix: Water Lab File ID: UXR6844.D

Analysis Method: 8260B Date Collected: 07/31/2013 10:00

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 18:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	102		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-15 Lab Sample ID: 240-27440-1

Matrix: Water Lab File ID: UXR6844.D

Analysis Method: 8260B Date Collected: 07/31/2013 10:00

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 18:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

Number TICs Found: 2 TIC Result Total: 3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1000196-87-7	Formamide, N-methylthio	4.68	1.5	T J N
90-12-0	Naphthalene, 1-methyl-	14.67	1.5	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-30 Lab Sample ID: 240-27440-3

Matrix: Water Lab File ID: UXR6860.D

Analysis Method: 8260B Date Collected: 07/31/2013 11:00

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2013 15:06

Soil Aliquot Vol: Dilution Factor: 625

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	630	U	630	140
71-55-6	1,1,1-Trichloroethane	630	U	630	140
79-34-5	1,1,2,2-Tetrachloroethane	630	U	630	110
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	630	U	630	180
75-34-3	1,1-Dichloroethane	630	U	630	94
75-35-4	1,1-Dichloroethene	630	U	630	120
563-58-6	1,1-Dichloropropene	630	U	630	81
87-61-6	1,2,3-Trichlorobenzene	630	U	630	110
96-18-4	1,2,3-Trichloropropane	630	U	630	270
526-73-8	1,2,3-Trimethylbenzene	3100	U	3100	3.7
120-82-1	1,2,4-Trichlorobenzene	630	U	630	94
95-63-6	1,2,4-Trimethylbenzene	630	U	630	75
96-12-8	1,2-Dibromo-3-Chloropropane	1300	U	1300	420
95-50-1	1,2-Dichlorobenzene	630	U	630	81
107-06-2	1,2-Dichloroethane	630	U	630	140
78-87-5	1,2-Dichloropropane	630	U	630	110
541-73-1	1,3-Dichlorobenzene	630	U	630	88
142-28-9	1,3-Dichloropropane	630	U	630	100
106-46-7	1,4-Dichlorobenzene	630	U	630	81
594-20-7	2,2-Dichloropropane	630	U	630	81
110-75-8	2-Chloroethyl vinyl ether	6300	U	6300	620
95-49-8	2-Chlorotoluene	630	U	630	69
591-78-6	2-Hexanone	6300	U	6300	260
108-86-1	Bromobenzene	630	U	630	81
74-97-5	Bromochloromethane	630	U	630	180
106-43-4	4-Chlorotoluene	630	U	630	110
99-87-6	p-Isopropyltoluene	630	U	630	75
67-64-1	Acetone	6300	U	6300	690
71-43-2	Benzene	630	U	630	81
75-25-2	Bromoform	630	U	630	400
74-83-9	Bromomethane	630	U	630	260
75-15-0	Carbon disulfide	630	U	630	81
56-23-5	Carbon tetrachloride	630	U	630	81
108-90-7	Chlorobenzene	630	U	630	94
75-00-3	Chloroethane	630	U	630	180

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-30 | Lab Sample ID: 240-27440-3

Matrix: Water | Lab File ID: UXR6860.D

Analysis Method: 8260B | Date Collected: 07/31/2013 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/07/2013 15:06

Soil Aliquot Vol: | Dilution Factor: 625

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96551 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	630	U	630	100
74-87-3	Chloromethane	630	U	630	190
156-59-2	cis-1,2-Dichloroethene	580	J	630	110
10061-01-5	cis-1,3-Dichloropropene	630	U	630	88
87-68-3	Hexachlorobutadiene	630	U	630	190
74-95-3	Dibromomethane	630	U	630	180
75-27-4	Bromodichloromethane	630	U	630	94
75-71-8	Dichlorodifluoromethane	630	U	630	190
100-41-4	Ethylbenzene	630	U	630	110
106-93-4	1,2-Dibromoethane	630	U	630	150
108-20-3	Diisopropyl ether	6300	U	6300	940
91-20-3	Naphthalene	630	U	630	150
179601-23-1	m-Xylene & p-Xylene	1300	U	1300	150
104-51-8	n-Butylbenzene	630	U	630	75
98-82-8	Isopropylbenzene	630	U	630	81
103-65-1	n-Propylbenzene	630	U	630	88
78-93-3	2-Butanone	6300	U	6300	360
108-10-1	4-Methyl-2-pentanone	6300	U	6300	200
135-98-8	sec-Butylbenzene	630	U	630	81
1634-04-4	Methyl tert-butyl ether	630	U	630	110
994-05-8	Tert-amyl-methyl ether (TAME)	3100	U	3100	42
75-09-2	Methylene Chloride	610	J B	630	210
95-47-6	o-Xylene	630	U	630	88
100-42-5	Styrene	630	U	630	69
637-92-3	Ethyl-t-butyl ether (ETBE)	3100	U	3100	69
98-06-6	tert-Butylbenzene	630	U	630	81
127-18-4	Tetrachloroethene	630	U	630	180
108-88-3	Toluene	630	U	630	81
156-60-5	trans-1,2-Dichloroethene	630	U	630	120
10061-02-6	trans-1,3-Dichloropropene	630	U	630	120
79-01-6	Trichloroethene	17000		630	110
75-69-4	Trichlorofluoromethane	630	U	630	130
108-05-4	Vinyl acetate	1300	U	1300	120
75-01-4	Vinyl chloride	630	U	630	140
75-65-0	tert-Butyl alcohol	31000	U	31000	2400
1330-20-7	Xylenes, Total	1300	U	1300	88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-30 Lab Sample ID: 240-27440-3

Matrix: Water Lab File ID: UXR6860.D

Analysis Method: 8260B Date Collected: 07/31/2013 11:00

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2013 15:06

Soil Aliquot Vol: Dilution Factor: 625

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	630	U	630	110

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	82		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-30 | Lab Sample ID: 240-27440-3

Matrix: Water | Lab File ID: UXR6860.D

Analysis Method: 8260B | Date Collected: 07/31/2013 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/07/2013 15:06

Soil Aliquot Vol: | Dilution Factor: 625

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96551 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-35 | Lab Sample ID: 240-27440-4

Matrix: Water | Lab File ID: UXR6861.D

Analysis Method: 8260B | Date Collected: 07/31/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/07/2013 15:29

Soil Aliquot Vol: | Dilution Factor: 66.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96551 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	67	U	67	15
71-55-6	1,1,1-Trichloroethane	67	U	67	15
79-34-5	1,1,2,2-Tetrachloroethane	67	U	67	12
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	67	U	67	19
75-34-3	1,1-Dichloroethane	67	U	67	10
75-35-4	1,1-Dichloroethene	14	J	67	13
563-58-6	1,1-Dichloropropene	67	U	67	8.7
87-61-6	1,2,3-Trichlorobenzene	67	U	67	11
96-18-4	1,2,3-Trichloropropane	67	U	67	29
526-73-8	1,2,3-Trimethylbenzene	330	U	330	0.39
120-82-1	1,2,4-Trichlorobenzene	67	U	67	10
95-63-6	1,2,4-Trimethylbenzene	67	U	67	8.0
96-12-8	1,2-Dibromo-3-Chloropropane	130	U	130	45
95-50-1	1,2-Dichlorobenzene	67	U	67	8.7
107-06-2	1,2-Dichloroethane	100		67	15
78-87-5	1,2-Dichloropropane	67	U	67	12
541-73-1	1,3-Dichlorobenzene	67	U	67	9.3
142-28-9	1,3-Dichloropropane	67	U	67	11
106-46-7	1,4-Dichlorobenzene	67	U	67	8.7
594-20-7	2,2-Dichloropropane	67	U	67	8.7
110-75-8	2-Chloroethyl vinyl ether	670	U	670	66
95-49-8	2-Chlorotoluene	67	U	67	7.3
591-78-6	2-Hexanone	670	U	670	27
108-86-1	Bromobenzene	67	U	67	8.7
74-97-5	Bromochloromethane	67	U	67	19
106-43-4	4-Chlorotoluene	67	U	67	12
99-87-6	p-Isopropyltoluene	67	U	67	8.0
67-64-1	Acetone	670	U	670	73
71-43-2	Benzene	16	J	67	8.7
75-25-2	Bromoform	67	U	67	43
74-83-9	Bromomethane	67	U	67	27
75-15-0	Carbon disulfide	67	U	67	8.7
56-23-5	Carbon tetrachloride	67	U	67	8.7
108-90-7	Chlorobenzene	58	J	67	10
75-00-3	Chloroethane	67	U	67	19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-35 | Lab Sample ID: 240-27440-4

Matrix: Water | Lab File ID: UXR6861.D

Analysis Method: 8260B | Date Collected: 07/31/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/07/2013 15:29

Soil Aliquot Vol: | Dilution Factor: 66.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96551 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	20	J	67	11
74-87-3	Chloromethane	67	U	67	20
156-59-2	cis-1,2-Dichloroethene	500		67	11
10061-01-5	cis-1,3-Dichloropropene	67	U	67	9.3
87-68-3	Hexachlorobutadiene	67	U	67	20
74-95-3	Dibromomethane	67	U	67	19
75-27-4	Bromodichloromethane	67	U	67	10
75-71-8	Dichlorodifluoromethane	67	U	67	21
100-41-4	Ethylbenzene	67	U	67	11
106-93-4	1,2-Dibromoethane	67	U	67	16
108-20-3	Diisopropyl ether	670	U	670	100
91-20-3	Naphthalene	67	U	67	16
179601-23-1	m-Xylene & p-Xylene	130	U	130	16
104-51-8	n-Butylbenzene	67	U	67	8.0
98-82-8	Isopropylbenzene	67	U	67	8.7
103-65-1	n-Propylbenzene	67	U	67	9.3
78-93-3	2-Butanone	670	U	670	38
108-10-1	4-Methyl-2-pentanone	670	U	670	21
135-98-8	sec-Butylbenzene	67	U	67	8.7
1634-04-4	Methyl tert-butyl ether	67	U	67	11
994-05-8	Tert-amyl-methyl ether (TAME)	330	U	330	4.5
75-09-2	Methylene Chloride	44	J B	67	22
95-47-6	o-Xylene	67	U	67	9.3
100-42-5	Styrene	67	U	67	7.3
637-92-3	Ethyl-t-butyl ether (ETBE)	330	U	330	7.3
98-06-6	tert-Butylbenzene	67	U	67	8.7
127-18-4	Tetrachloroethene	67	U	67	19
108-88-3	Toluene	67	U	67	8.7
156-60-5	trans-1,2-Dichloroethene	67	U	67	13
10061-02-6	trans-1,3-Dichloropropene	67	U	67	13
79-01-6	Trichloroethene	1800		67	11
75-69-4	Trichlorofluoromethane	67	U	67	14
108-05-4	Vinyl acetate	130	U	130	13
75-01-4	Vinyl chloride	420		67	15
75-65-0	tert-Butyl alcohol	3300	U	3300	260
1330-20-7	Xylenes, Total	130	U	130	9.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-35 Lab Sample ID: 240-27440-4

Matrix: Water Lab File ID: UXR6861.D

Analysis Method: 8260B Date Collected: 07/31/2013 11:30

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2013 15:29

Soil Aliquot Vol: Dilution Factor: 66.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	67	U	67	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	99		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-35 | Lab Sample ID: 240-27440-4

Matrix: Water | Lab File ID: UXR6861.D

Analysis Method: 8260B | Date Collected: 07/31/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/07/2013 15:29

Soil Aliquot Vol: | Dilution Factor: 66.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96551 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-40 | Lab Sample ID: 240-27440-5

Matrix: Water | Lab File ID: UXR6848.D

Analysis Method: 8260B | Date Collected: 07/31/2013 13:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 19:52

Soil Aliquot Vol: | Dilution Factor: 11.11

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	11	U	11	2.6
71-55-6	1,1,1-Trichloroethane	11	U	11	2.4
79-34-5	1,1,2,2-Tetrachloroethane	11	U	11	2.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	11	U	11	3.1
75-34-3	1,1-Dichloroethane	11	U	11	1.7
75-35-4	1,1-Dichloroethene	11	U	11	2.1
563-58-6	1,1-Dichloropropene	11	U	11	1.4
87-61-6	1,2,3-Trichlorobenzene	11	U	11	1.9
96-18-4	1,2,3-Trichloropropane	11	U	11	4.8
526-73-8	1,2,3-Trimethylbenzene	56	U	56	0.066
120-82-1	1,2,4-Trichlorobenzene	11	U	11	1.7
95-63-6	1,2,4-Trimethylbenzene	11	U	11	1.3
96-12-8	1,2-Dibromo-3-Chloropropane	22	U	22	7.4
95-50-1	1,2-Dichlorobenzene	11	U	11	1.4
107-06-2	1,2-Dichloroethane	4.1	J	11	2.4
78-87-5	1,2-Dichloropropane	11	U	11	2.0
541-73-1	1,3-Dichlorobenzene	11	U	11	1.6
142-28-9	1,3-Dichloropropane	11	U	11	1.8
106-46-7	1,4-Dichlorobenzene	11	U	11	1.4
594-20-7	2,2-Dichloropropane	11	U	11	1.4
110-75-8	2-Chloroethyl vinyl ether	110	U	110	11
95-49-8	2-Chlorotoluene	11	U	11	1.2
591-78-6	2-Hexanone	110	U	110	4.6
108-86-1	Bromobenzene	11	U	11	1.4
74-97-5	Bromochloromethane	11	U	11	3.2
106-43-4	4-Chlorotoluene	11	U	11	2.0
99-87-6	p-Isopropyltoluene	11	U	11	1.3
67-64-1	Acetone	110	U	110	12
71-43-2	Benzene	11	U	11	1.4
75-25-2	Bromoform	11	U	11	7.1
74-83-9	Bromomethane	11	U	11	4.6
75-15-0	Carbon disulfide	11	U	11	1.4
56-23-5	Carbon tetrachloride	2.3	J	11	1.4
108-90-7	Chlorobenzene	11	U	11	1.7
75-00-3	Chloroethane	11	U	11	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-40 Lab Sample ID: 240-27440-5

Matrix: Water Lab File ID: UXR6848.D

Analysis Method: 8260B Date Collected: 07/31/2013 13:40

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 19:52

Soil Aliquot Vol: Dilution Factor: 11.11

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	18		11	1.8
74-87-3	Chloromethane	11	U	11	3.3
156-59-2	cis-1,2-Dichloroethene	29		11	1.9
10061-01-5	cis-1,3-Dichloropropene	11	U	11	1.6
87-68-3	Hexachlorobutadiene	11	U	11	3.3
74-95-3	Dibromomethane	11	U	11	3.1
75-27-4	Bromodichloromethane	11	U	11	1.7
75-71-8	Dichlorodifluoromethane	11	U	11	3.4
100-41-4	Ethylbenzene	11	U	11	1.9
106-93-4	1,2-Dibromoethane	11	U	11	2.7
108-20-3	Diisopropyl ether	110	U	110	17
91-20-3	Naphthalene	11	U	11	2.7
179601-23-1	m-Xylene & p-Xylene	22	U	22	2.7
104-51-8	n-Butylbenzene	11	U	11	1.3
98-82-8	Isopropylbenzene	11	U	11	1.4
103-65-1	n-Propylbenzene	11	U	11	1.6
78-93-3	2-Butanone	110	U	110	6.3
108-10-1	4-Methyl-2-pentanone	110	U	110	3.6
135-98-8	sec-Butylbenzene	11	U	11	1.4
1634-04-4	Methyl tert-butyl ether	11	U	11	1.9
994-05-8	Tert-amyl-methyl ether (TAME)	56	U	56	0.74
75-09-2	Methylene Chloride	11	U	11	3.7
95-47-6	o-Xylene	11	U	11	1.6
100-42-5	Styrene	11	U	11	1.2
637-92-3	Ethyl-t-butyl ether (ETBE)	56	U	56	1.2
98-06-6	tert-Butylbenzene	11	U	11	1.4
127-18-4	Tetrachloroethene	11	U	11	3.2
108-88-3	Toluene	11	U	11	1.4
156-60-5	trans-1,2-Dichloroethene	11	U	11	2.1
10061-02-6	trans-1,3-Dichloropropene	11	U	11	2.1
79-01-6	Trichloroethene	420		11	1.9
75-69-4	Trichlorofluoromethane	11	U	11	2.3
108-05-4	Vinyl acetate	22	U	22	2.1
75-01-4	Vinyl chloride	11	U	11	2.4
75-65-0	tert-Butyl alcohol	560	U	560	43
1330-20-7	Xylenes, Total	22	U	22	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-40 | Lab Sample ID: 240-27440-5

Matrix: Water | Lab File ID: UXR6848.D

Analysis Method: 8260B | Date Collected: 07/31/2013 13:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 19:52

Soil Aliquot Vol: | Dilution Factor: 11.11

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	11	U	11	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	82		74-115
1868-53-7	Dibromofluoromethane (Surr)	104		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-40 Lab Sample ID: 240-27440-5

Matrix: Water Lab File ID: UXR6848.D

Analysis Method: 8260B Date Collected: 07/31/2013 13:40

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 19:52

Soil Aliquot Vol: Dilution Factor: 11.11

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

Number TICs Found: 1 TIC Result Total: 14

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.68	14	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-45 Lab Sample ID: 240-27440-6

Matrix: Water Lab File ID: UXR6862.D

Analysis Method: 8260B Date Collected: 07/31/2013 14:00

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2013 15:51

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	50	U	50	12
71-55-6	1,1,1-Trichloroethane	50	U	50	11
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	9.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	50	U	50	14
75-34-3	1,1-Dichloroethane	50	U	50	7.5
75-35-4	1,1-Dichloroethene	50	U	50	9.5
563-58-6	1,1-Dichloropropene	50	U	50	6.5
87-61-6	1,2,3-Trichlorobenzene	50	U	50	8.5
96-18-4	1,2,3-Trichloropropane	50	U	50	22
526-73-8	1,2,3-Trimethylbenzene	250	U	250	0.30
120-82-1	1,2,4-Trichlorobenzene	50	U	50	7.5
95-63-6	1,2,4-Trimethylbenzene	50	U	50	6.0
96-12-8	1,2-Dibromo-3-Chloropropane	100	U	100	34
95-50-1	1,2-Dichlorobenzene	50	U	50	6.5
107-06-2	1,2-Dichloroethane	17	J	50	11
78-87-5	1,2-Dichloropropane	50	U	50	9.0
541-73-1	1,3-Dichlorobenzene	50	U	50	7.0
142-28-9	1,3-Dichloropropane	50	U	50	8.0
106-46-7	1,4-Dichlorobenzene	50	U	50	6.5
594-20-7	2,2-Dichloropropane	50	U	50	6.5
110-75-8	2-Chloroethyl vinyl ether	500	U	500	50
95-49-8	2-Chlorotoluene	50	U	50	5.5
591-78-6	2-Hexanone	500	U	500	21
108-86-1	Bromobenzene	50	U	50	6.5
74-97-5	Bromochloromethane	50	U	50	15
106-43-4	4-Chlorotoluene	50	U	50	9.0
99-87-6	p-Isopropyltoluene	50	U	50	6.0
67-64-1	Acetone	500	U	500	55
71-43-2	Benzene	50	U	50	6.5
75-25-2	Bromoform	50	U	50	32
74-83-9	Bromomethane	50	U	50	21
75-15-0	Carbon disulfide	50	U	50	6.5
56-23-5	Carbon tetrachloride	50	U	50	6.5
108-90-7	Chlorobenzene	50	U	50	7.5
75-00-3	Chloroethane	50	U	50	15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-45 Lab Sample ID: 240-27440-6

Matrix: Water Lab File ID: UXR6862.D

Analysis Method: 8260B Date Collected: 07/31/2013 14:00

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2013 15:51

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	48	J	50	8.0
74-87-3	Chloromethane	50	U	50	15
156-59-2	cis-1,2-Dichloroethene	66		50	8.5
10061-01-5	cis-1,3-Dichloropropene	50	U	50	7.0
87-68-3	Hexachlorobutadiene	50	U	50	15
74-95-3	Dibromomethane	50	U	50	14
75-27-4	Bromodichloromethane	50	U	50	7.5
75-71-8	Dichlorodifluoromethane	50	U	50	16
100-41-4	Ethylbenzene	50	U	50	8.5
106-93-4	1,2-Dibromoethane	50	U	50	12
108-20-3	Diisopropyl ether	500	U	500	75
91-20-3	Naphthalene	50	U	50	12
179601-23-1	m-Xylene & p-Xylene	100	U	100	12
104-51-8	n-Butylbenzene	50	U	50	6.0
98-82-8	Isopropylbenzene	50	U	50	6.5
103-65-1	n-Propylbenzene	50	U	50	7.0
78-93-3	2-Butanone	500	U	500	29
108-10-1	4-Methyl-2-pentanone	500	U	500	16
135-98-8	sec-Butylbenzene	50	U	50	6.5
1634-04-4	Methyl tert-butyl ether	50	U	50	8.5
994-05-8	Tert-amyl-methyl ether (TAME)	250	U	250	3.4
75-09-2	Methylene Chloride	31	J B	50	17
95-47-6	o-Xylene	50	U	50	7.0
100-42-5	Styrene	50	U	50	5.5
637-92-3	Ethyl-t-butyl ether (ETBE)	250	U	250	5.5
98-06-6	tert-Butylbenzene	50	U	50	6.5
127-18-4	Tetrachloroethene	50	U	50	15
108-88-3	Toluene	50	U	50	6.5
156-60-5	trans-1,2-Dichloroethene	50	U	50	9.5
10061-02-6	trans-1,3-Dichloropropene	50	U	50	9.5
79-01-6	Trichloroethene	1100		50	8.5
75-69-4	Trichlorofluoromethane	50	U	50	11
108-05-4	Vinyl acetate	100	U	100	9.5
75-01-4	Vinyl chloride	50	U	50	11
75-65-0	tert-Butyl alcohol	2500	U	2500	200
1330-20-7	Xylenes, Total	100	U	100	7.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-45 | Lab Sample ID: 240-27440-6

Matrix: Water | Lab File ID: UXR6862.D

Analysis Method: 8260B | Date Collected: 07/31/2013 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/07/2013 15:51

Soil Aliquot Vol: | Dilution Factor: 50

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96551 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	50	U	50	9.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	99		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-45 Lab Sample ID: 240-27440-6

Matrix: Water Lab File ID: UXR6862.D

Analysis Method: 8260B Date Collected: 07/31/2013 14:00

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2013 15:51

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96551 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-50 | Lab Sample ID: 240-27440-7

Matrix: Water | Lab File ID: UXR6850.D

Analysis Method: 8260B | Date Collected: 07/31/2013 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 20:37

Soil Aliquot Vol: | Dilution Factor: 33.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	33	U	33	7.7
71-55-6	1,1,1-Trichloroethane	33	U	33	7.3
79-34-5	1,1,2,2-Tetrachloroethane	33	U	33	6.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	33	U	33	9.3
75-34-3	1,1-Dichloroethane	33	U	33	5.0
75-35-4	1,1-Dichloroethene	33	U	33	6.3
563-58-6	1,1-Dichloropropene	33	U	33	4.3
87-61-6	1,2,3-Trichlorobenzene	33	U	33	5.7
96-18-4	1,2,3-Trichloropropane	33	U	33	14
526-73-8	1,2,3-Trimethylbenzene	170	U	170	0.20
120-82-1	1,2,4-Trichlorobenzene	33	U	33	5.0
95-63-6	1,2,4-Trimethylbenzene	33	U	33	4.0
96-12-8	1,2-Dibromo-3-Chloropropane	67	U	67	22
95-50-1	1,2-Dichlorobenzene	33	U	33	4.3
107-06-2	1,2-Dichloroethane	10	J	33	7.3
78-87-5	1,2-Dichloropropane	33	U	33	6.0
541-73-1	1,3-Dichlorobenzene	33	U	33	4.7
142-28-9	1,3-Dichloropropane	33	U	33	5.3
106-46-7	1,4-Dichlorobenzene	33	U	33	4.3
594-20-7	2,2-Dichloropropane	33	U	33	4.3
110-75-8	2-Chloroethyl vinyl ether	330	U	330	33
95-49-8	2-Chlorotoluene	33	U	33	3.7
591-78-6	2-Hexanone	330	U	330	14
108-86-1	Bromobenzene	33	U	33	4.3
74-97-5	Bromochloromethane	33	U	33	9.7
106-43-4	4-Chlorotoluene	33	U	33	6.0
99-87-6	p-Isopropyltoluene	33	U	33	4.0
67-64-1	Acetone	330	U	330	37
71-43-2	Benzene	33	U	33	4.3
75-25-2	Bromoform	33	U	33	21
74-83-9	Bromomethane	33	U	33	14
75-15-0	Carbon disulfide	33	U	33	4.3
56-23-5	Carbon tetrachloride	7.2	J	33	4.3
108-90-7	Chlorobenzene	33	U	33	5.0
75-00-3	Chloroethane	33	U	33	9.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-50 Lab Sample ID: 240-27440-7

Matrix: Water Lab File ID: UXR6850.D

Analysis Method: 8260B Date Collected: 07/31/2013 14:30

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:37

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	90		33	5.3
74-87-3	Chloromethane	33	U	33	10
156-59-2	cis-1,2-Dichloroethene	93		33	5.7
10061-01-5	cis-1,3-Dichloropropene	33	U	33	4.7
87-68-3	Hexachlorobutadiene	33	U	33	10
74-95-3	Dibromomethane	33	U	33	9.3
75-27-4	Bromodichloromethane	33	U	33	5.0
75-71-8	Dichlorodifluoromethane	33	U	33	10
100-41-4	Ethylbenzene	33	U	33	5.7
106-93-4	1,2-Dibromoethane	33	U	33	8.0
108-20-3	Diisopropyl ether	330	U	330	50
91-20-3	Naphthalene	33	U	33	8.0
179601-23-1	m-Xylene & p-Xylene	67	U	67	8.0
104-51-8	n-Butylbenzene	33	U	33	4.0
98-82-8	Isopropylbenzene	33	U	33	4.3
103-65-1	n-Propylbenzene	33	U	33	4.7
78-93-3	2-Butanone	330	U	330	19
108-10-1	4-Methyl-2-pentanone	330	U	330	11
135-98-8	sec-Butylbenzene	33	U	33	4.3
1634-04-4	Methyl tert-butyl ether	33	U	33	5.7
994-05-8	Tert-amyl-methyl ether (TAME)	170	U	170	2.2
75-09-2	Methylene Chloride	17	J	33	11
95-47-6	o-Xylene	33	U	33	4.7
100-42-5	Styrene	33	U	33	3.7
637-92-3	Ethyl-t-butyl ether (ETBE)	170	U	170	3.7
98-06-6	tert-Butylbenzene	33	U	33	4.3
127-18-4	Tetrachloroethene	33	U	33	9.7
108-88-3	Toluene	33	U	33	4.3
156-60-5	trans-1,2-Dichloroethene	33	U	33	6.3
10061-02-6	trans-1,3-Dichloropropene	33	U	33	6.3
79-01-6	Trichloroethene	1300		33	5.7
75-69-4	Trichlorofluoromethane	33	U	33	7.0
108-05-4	Vinyl acetate	67	U	67	6.3
75-01-4	Vinyl chloride	33	U	33	7.3
75-65-0	tert-Butyl alcohol	1700	U	1700	130
1330-20-7	Xylenes, Total	67	U	67	4.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-50 Lab Sample ID: 240-27440-7

Matrix: Water Lab File ID: UXR6850.D

Analysis Method: 8260B Date Collected: 07/31/2013 14:30

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:37

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	33	U	33	6.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	81		74-115
1868-53-7	Dibromofluoromethane (Surr)	108		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-50 Lab Sample ID: 240-27440-7

Matrix: Water Lab File ID: UXR6850.D

Analysis Method: 8260B Date Collected: 07/31/2013 14:30

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:37

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-55 | Lab Sample ID: 240-27440-8

Matrix: Water | Lab File ID: UXR6852.D

Analysis Method: 8260B | Date Collected: 07/31/2013 15:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 21:21

Soil Aliquot Vol: | Dilution Factor: 5.88

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.9	U	5.9	1.4
71-55-6	1,1,1-Trichloroethane	5.9	U	5.9	1.3
79-34-5	1,1,2,2-Tetrachloroethane	5.9	U	5.9	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.9	U	5.9	1.6
75-34-3	1,1-Dichloroethane	5.9	U	5.9	0.88
75-35-4	1,1-Dichloroethene	2.7	J	5.9	1.1
563-58-6	1,1-Dichloropropene	5.9	U	5.9	0.76
87-61-6	1,2,3-Trichlorobenzene	5.9	U	5.9	1.0
96-18-4	1,2,3-Trichloropropane	5.9	U	5.9	2.5
526-73-8	1,2,3-Trimethylbenzene	29	U	29	0.035
120-82-1	1,2,4-Trichlorobenzene	5.9	U	5.9	0.88
95-63-6	1,2,4-Trimethylbenzene	5.9	U	5.9	0.71
96-12-8	1,2-Dibromo-3-Chloropropane	12	U	12	3.9
95-50-1	1,2-Dichlorobenzene	5.9	U	5.9	0.76
107-06-2	1,2-Dichloroethane	35		5.9	1.3
78-87-5	1,2-Dichloropropane	5.9	U	5.9	1.1
541-73-1	1,3-Dichlorobenzene	5.9	U	5.9	0.82
142-28-9	1,3-Dichloropropane	5.9	U	5.9	0.94
106-46-7	1,4-Dichlorobenzene	5.9	U	5.9	0.76
594-20-7	2,2-Dichloropropane	5.9	U	5.9	0.76
110-75-8	2-Chloroethyl vinyl ether	59	U	59	5.8
95-49-8	2-Chlorotoluene	5.9	U	5.9	0.65
591-78-6	2-Hexanone	59	U	59	2.4
108-86-1	Bromobenzene	5.9	U	5.9	0.76
74-97-5	Bromochloromethane	5.9	U	5.9	1.7
106-43-4	4-Chlorotoluene	5.9	U	5.9	1.1
99-87-6	p-Isopropyltoluene	5.9	U	5.9	0.71
67-64-1	Acetone	40	J	59	6.5
71-43-2	Benzene	3.2	J	5.9	0.76
75-25-2	Bromoform	5.9	U	5.9	3.8
74-83-9	Bromomethane	5.9	U	5.9	2.4
75-15-0	Carbon disulfide	5.9	U	5.9	0.76
56-23-5	Carbon tetrachloride	5.9	U	5.9	0.76
108-90-7	Chlorobenzene	8.1		5.9	0.88
75-00-3	Chloroethane	5.9	U	5.9	1.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-55 | Lab Sample ID: 240-27440-8

Matrix: Water | Lab File ID: UXR6852.D

Analysis Method: 8260B | Date Collected: 07/31/2013 15:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 21:21

Soil Aliquot Vol: | Dilution Factor: 5.88

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	13		5.9	0.94
74-87-3	Chloromethane	5.9	U	5.9	1.8
156-59-2	cis-1,2-Dichloroethene	130		5.9	1.0
10061-01-5	cis-1,3-Dichloropropene	5.9	U	5.9	0.82
87-68-3	Hexachlorobutadiene	5.9	U	5.9	1.8
74-95-3	Dibromomethane	5.9	U	5.9	1.6
75-27-4	Bromodichloromethane	5.9	U	5.9	0.88
75-71-8	Dichlorodifluoromethane	5.9	U	5.9	1.8
100-41-4	Ethylbenzene	5.9	U	5.9	1.0
106-93-4	1,2-Dibromoethane	5.9	U	5.9	1.4
108-20-3	Diisopropyl ether	59	U	59	8.8
91-20-3	Naphthalene	5.9	U	5.9	1.4
179601-23-1	m-Xylene & p-Xylene	12	U	12	1.4
104-51-8	n-Butylbenzene	5.9	U	5.9	0.71
98-82-8	Isopropylbenzene	5.9	U	5.9	0.76
103-65-1	n-Propylbenzene	5.9	U	5.9	0.82
78-93-3	2-Butanone	59	U	59	3.4
108-10-1	4-Methyl-2-pentanone	59	U	59	1.9
135-98-8	sec-Butylbenzene	5.9	U	5.9	0.76
1634-04-4	Methyl tert-butyl ether	5.9	U	5.9	1.0
994-05-8	Tert-amyl-methyl ether (TAME)	29	U	29	0.39
75-09-2	Methylene Chloride	25		5.9	1.9
95-47-6	o-Xylene	5.9	U	5.9	0.82
100-42-5	Styrene	5.9	U	5.9	0.65
637-92-3	Ethyl-t-butyl ether (ETBE)	29	U	29	0.65
98-06-6	tert-Butylbenzene	5.9	U	5.9	0.76
127-18-4	Tetrachloroethene	5.9	U	5.9	1.7
108-88-3	Toluene	2.8	J	5.9	0.76
156-60-5	trans-1,2-Dichloroethene	5.9	U	5.9	1.1
10061-02-6	trans-1,3-Dichloropropene	5.9	U	5.9	1.1
79-01-6	Trichloroethene	260	E	5.9	1.0
75-69-4	Trichlorofluoromethane	5.9	U	5.9	1.2
108-05-4	Vinyl acetate	12	U	12	1.1
75-01-4	Vinyl chloride	29		5.9	1.3
75-65-0	tert-Butyl alcohol	28	J	290	23
1330-20-7	Xylenes, Total	12	U	12	0.82

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-55 | Lab Sample ID: 240-27440-8

Matrix: Water | Lab File ID: UXR6852.D

Analysis Method: 8260B | Date Collected: 07/31/2013 15:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 21:21

Soil Aliquot Vol: | Dilution Factor: 5.88

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	5.9	U	5.9	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	74		74-115
1868-53-7	Dibromofluoromethane (Surr)	98		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-55 | Lab Sample ID: 240-27440-8

Matrix: Water | Lab File ID: UXR6852.D

Analysis Method: 8260B | Date Collected: 07/31/2013 15:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 21:21

Soil Aliquot Vol: | Dilution Factor: 5.88

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96361 | Units: ug/L

Number TICs Found: 6 | TIC Result Total: 192.4

CAS NO.	COMPOUND NAME	RT	RESULT	Q
106-98-9	1-Butene	2.14	9.2	T J N
109-67-1	1-Pentene	2.68	9.0	T J N
563-46-2	1-Butene, 2-methyl-	2.75	10	T J N
79-20-9	Methyl acetate	3.55	2.2	J
123-91-1	1,4-Dioxane	6.39	160	J
79-00-5	1,1,2-Trichloroethane	7.57	2.0	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: TB-073113 Lab Sample ID: 240-27440-9

Matrix: Water Lab File ID: UXR6851.D

Analysis Method: 8260B Date Collected: 07/31/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	7.1	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: TB-073113 Lab Sample ID: 240-27440-9

Matrix: Water Lab File ID: UXR6851.D

Analysis Method: 8260B Date Collected: 07/31/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: TB-073113 Lab Sample ID: 240-27440-9

Matrix: Water Lab File ID: UXR6851.D

Analysis Method: 8260B Date Collected: 07/31/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	74		74-115
1868-53-7	Dibromofluoromethane (Surr)	101		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: TB-073113 Lab Sample ID: 240-27440-9

Matrix: Water Lab File ID: UXR6851.D

Analysis Method: 8260B Date Collected: 07/31/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

Number TICs Found: 1 TIC Result Total: 6

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.68	6.0	T J N

Appendix C

Support Documentation

HOLDTIME

SDG 240-27440-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-073113	240-27440-9	TB	07/31/2013	08/06/2013	08/06/2013	6	0	6
OV	UG/L	DR-DPT-24-55	240-27440-8	NM	07/31/2013	08/06/2013	08/06/2013	6	0	6
OV	UG/L	DR-DPT-24-50	240-27440-7	NM	07/31/2013	08/06/2013	08/06/2013	6	0	6
OV	UG/L	DR-DPT-24-45	240-27440-6	NM	07/31/2013	08/07/2013	08/07/2013	7	0	7
OV	UG/L	DR-DPT-24-40	240-27440-5	NM	07/31/2013	08/06/2013	08/06/2013	6	0	6
OV	UG/L	DR-DPT-24-35	240-27440-4	NM	07/31/2013	08/07/2013	08/07/2013	7	0	7
OV	UG/L	DR-DPT-24-30	240-27440-3	NM	07/31/2013	08/07/2013	08/07/2013	7	0	7
OV	UG/L	DR-DPT-24-25	240-27440-2	NM	07/31/2013	08/06/2013	08/06/2013	6	0	6
OV	UG/L	DR-DPT-24-15	240-27440-1	NM	07/31/2013	08/06/2013	08/06/2013	6	0	6

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-27440-1

Job Description: DUMP ROAD SOURCE AREAS

For:
Tetra Tech, Inc
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Approved for release.
John McFadden
Project Manager I
8/9/2013 10:47 AM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
08/09/2013

cc: Samantha Brenner
Ms. Kelly Carper
Vanessa Good
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: DUMP ROAD SOURCE AREAS

Report Number: 240-27440-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT
The samples were received on 08/01/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 5.8 C.

The following volatile sample was received with headspace in 3 of 3 sample vials.: DR-DPT-24-55 (240-27440-8). There was also quite a bit of sediment in each vial.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples DR-DPT-24-15 (240-27440-1), DR-DPT-24-25 (240-27440-2), DR-DPT-24-30 (240-27440-3), DR-DPT-24-35 (240-27440-4), DR-DPT-24-40 (240-27440-5), DR-DPT-24-45 (240-27440-6), DR-DPT-24-50 (240-27440-7), DR-DPT-24-55 (240-27440-8) and TB-073113 (240-27440-9) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/06/2013 and 08/07/2013.

Methylene Chloride was detected in method blank MB 240-96551/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-24-25 (240-27440-2)[100X], DR-DPT-24-30 (240-27440-3)[625X], DR-DPT-24-35 (240-27440-4)[66.67X], DR-DPT-24-40 (240-27440-5)[11.11X], DR-DPT-24-45 (240-27440-6)[50X], DR-DPT-24-50 (240-27440-7)[33.33X] and DR-DPT-24-55 (240-27440-8)[5.88X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample(s) submitted for volatiles analysis was received with insufficient preservation (pH >2): DR-DPT-24-55 (240-27440-8).

Elevated reporting limits are provided for the following sample due to insufficient sample provided for preparation/analysis: DR-DPT-24-55 (240-27440-8). Sample DR-DPT-24-55 had a lot of sediment in all 3 vials. The lab had to decant the water, with permission from the client, from all 3 vials in order to have enough volume in a vial so the instrument needle could reach the water level and not imbed into sediment.

Sample DR-DPT-24-55 (240-27440-8) was reported with an "E" flag for Trichloroethene. After the initial run the lab did not have much volume left to do a rerun. Also there was so much headspace left in the vial that was used to decant the sample into there was going to be a large loss of volatiles into the headspace. The analyst and MS Supervisor both thought the run with the "E" flag was going to be a more accurate run.

No MS/MSD in batch 96551 due to analyst prep error.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27440-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27440-1	DR-DPT-24-15	Water	07/31/2013 1000	08/01/2013 0920
240-27440-2	DR-DPT-24-25	Water	07/31/2013 1035	08/01/2013 0920
240-27440-3	DR-DPT-24-30	Water	07/31/2013 1100	08/01/2013 0920
240-27440-4	DR-DPT-24-35	Water	07/31/2013 1130	08/01/2013 0920
240-27440-5	DR-DPT-24-40	Water	07/31/2013 1340	08/01/2013 0920
240-27440-6	DR-DPT-24-45	Water	07/31/2013 1400	08/01/2013 0920
240-27440-7	DR-DPT-24-50	Water	07/31/2013 1430	08/01/2013 0920
240-27440-8	DR-DPT-24-55	Water	07/31/2013 1520	08/01/2013 0920
240-27440-9TB	TB-073113	Water	07/31/2013 0000	08/01/2013 0920

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 7/31/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaronnd Time			Job No. 112C04882
Germantown, MD 20874	Calendar (C) or Work Days (W)			SDG No.
(301) 528-3021 Phone	TAT if different from Below: 5 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			Sampler: S. Cameron
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT-24-15	7/31/2013	1000	GW	Water	3		x	
DR-DPT-24-25	7/31/2013	1035	GW	Water	3		x	
DR-DPT-24-30	7/31/2013	1100	GW	Water	3		x	
DR-DPT-24-35	7/31/2013	1130	GW	Water	3		x	
DR-DPT-24-40	7/31/2013	1340	GW	Water	3		x	
DR-DPT-24-45	7/31/2013	1410	GW	Water	3		x	
DR-DPT-24-50	7/31/2013	1430	GW	Water	3		x	
DR-DPT-24-55	7/31/2013	1520	GW	Water	3		x	
DR-DPT-	7/31/2013		GW	Water	3		x	
DR-DPT-	7/31/2013		GW	Water	3		x	
DR-DPT-	7/31/2013		GW	Water	3		x	
TB-073113	7/31/2013	—	GW	Water	2		x	

240-27440 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: 5 day TAT

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	7-31-13 1600		TestAmerica	7/31/13 1600
Relinquished by:	Company: TestAmerica	Date/Time: 7/31/13 1640	Received by:	Company: TA	Date/Time: 8-1-13 920
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 27440
Canton Facility

Client TetraTech Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 8-1-13 Opened on 8-1-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF -1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. 5.8 °C	Corrected Cooler Temp. 5.8 °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-27440-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	E	Result exceeded calibration range.
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-24-15	240-27440-1	102	96	84	79
DR-DPT-24-25	240-27440-2	103	96	77	78
DR-DPT-24-30	240-27440-3	95	87	82	78
DR-DPT-24-35	240-27440-4	99	97	86	79
DR-DPT-24-40	240-27440-5	104	106	82	81
DR-DPT-24-45	240-27440-6	99	100	89	82
DR-DPT-24-50	240-27440-7	108	105	81	75
DR-DPT-24-55	240-27440-8	98	94	74	79
TB-073113	240-27440-9	101	96	74	78
	MB 240-96361/6	107	105	81	83
	MB 240-96551/6	103	100	83	79
	LCS 240-96361/4	95	93	85	98
	LCS 240-96551/4	97	90	87	92
	240-27428-A-1 MS	105	97	88	99
	240-27428-A-1 MSD	98	93	86	99

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Instrument ID: A3UX17 Start Date: 05/07/2013 11:36

Analysis Batch Number: 84979 End Date: 05/07/2013 16:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-84979/1		05/07/2013 11:36	1	BFB224.D	DB-624 0.18(mm)
STD8260 240-84979/2 IC		05/07/2013 11:59	1		DB-624 0.18(mm)
STD8260 240-84979/3 IC		05/07/2013 12:21	1		DB-624 0.18(mm)
STD8260 240-84979/4 ICIS		05/07/2013 12:44	1		DB-624 0.18(mm)
STD8260 240-84979/5 IC		05/07/2013 13:06	1		DB-624 0.18(mm)
STD8260 240-84979/6 IC		05/07/2013 13:29	1		DB-624 0.18(mm)
STD8260 240-84979/7 IC		05/07/2013 13:51	1		DB-624 0.18(mm)
STDA9 240-84979/8 IC		05/07/2013 14:13	1	UXR4181.D	DB-624 0.18(mm)
STDA9 240-84979/9 IC		05/07/2013 14:35	1	UXR4182.D	DB-624 0.18(mm)
STDA9 240-84979/10 IC		05/07/2013 14:57	1	UXR4183.D	DB-624 0.18(mm)
STDA9 240-84979/11 IC		05/07/2013 15:20	1	UXR4184.D	DB-624 0.18(mm)
STDA9 240-84979/12 IC		05/07/2013 15:42	1	UXR4185.D	DB-624 0.18(mm)
STDA9 240-84979/13 IC		05/07/2013 16:05	1	UXR4186.D	DB-624 0.18(mm)
ICV 240-84979/14		05/07/2013 16:27	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab File ID: BFB224.D BFB Injection Date: 05/07/2013

Instrument ID: A3UX17 BFB Injection Time: 11:36

Analysis Batch No.: 84979

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.8	
75	30.0 - 60.0 % of mass 95	46.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.6)1
174	50.0 - 120.00 % of mass 95	75.7	
175	5.0 - 9.0 % of mass 174	5.3	(7.0)1
176	95.0 - 101.0 % of mass 174	76.1	(100.5)1
177	5.0 - 9.0 % of mass 176	4.8	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-84979/8	UXR4181.D	05/07/2013	14:13
	STDA9 240-84979/9	UXR4182.D	05/07/2013	14:35
	STDA9 240-84979/10	UXR4183.D	05/07/2013	14:57
	STDA9 240-84979/11	UXR4184.D	05/07/2013	15:20
	STDA9 240-84979/12	UXR4185.D	05/07/2013	15:42
	STDA9 240-84979/13	UXR4186.D	05/07/2013	16:05

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 84979

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2013 14:13 Calibration End Date: 05/07/2013 16:05 Calibration ID: 15038

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-84979/13	UXR4186.D
Level 2	STDA9 240-84979/12	UXR4185.D
Level 3	STDA9 240-84979/11	UXR4184.D
Level 4	STDA9 240-84979/10	UXR4183.D
Level 5	STDA9 240-84979/9	UXR4182.D
Level 6	STDA9 240-84979/8	UXR4181.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4720 0.4666	0.4444	0.4425	0.4216	0.4511	Ave		0.4497				4.0		15.0			
Ethyl ether	0.2660 0.2823	0.2592	0.2598	0.2486	0.2724	Ave		0.2647				4.4		15.0			
3-Chloro-1-propene	0.1359 0.1610	0.1324	0.1370	0.1376	0.1525	Ave		0.1427				7.9		15.0			
Diisopropyl ether	0.2473 0.2740	0.2449	0.2495	0.2413	0.2619	Ave		0.2531				4.9		15.0			
2-Chloro-1,3-butadiene	0.4637 0.5263	0.4684	0.4797	0.4705	0.5114	Ave		0.4867				5.3		15.0			
Ethyl-t-butyl ether (ETBE)	0.9024 1.0209	0.8872	0.9050	0.8908	0.9641	Ave		0.9284				5.7		15.0			
Ethyl acetate	0.2738 0.2913	0.2604	0.2567	0.2603	0.2798	Ave		0.2704				5.0		15.0			
Propionitrile	0.0395 0.0446	0.0399	0.0413	0.0388	0.0444	Ave		0.0414				6.1		15.0			
Methacrylonitrile	0.2320 0.1962	0.2047	0.1845	0.1766	0.1935	Ave		0.1979				9.8		15.0			
Isobutyl alcohol	0.0129 0.0119	0.0118	0.0112	0.0113	0.0120	Ave		0.0118				4.9		15.0			
Tert-amyl-methyl ether (TAME)	0.7464 0.8505	0.7381	0.7539	0.7377	0.8150	Ave		0.7736				6.1		15.0			
n-Heptane	0.0701 0.0767	0.0672	0.0711	0.0682	0.0753	Ave		0.0714				5.4		15.0			
n-Butanol	0.0085 0.0102	0.0089	0.0092	0.0093	0.0103	Ave		0.0094				7.5		15.0			
Methyl methacrylate	0.2379 0.2805	0.2371	0.2462	0.2423	0.2654	Ave		0.2516				7.0		15.0			
2-Nitropropane	0.0556 0.0713	0.0560	0.0523	0.0573	0.0637	Ave		0.0594				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 84979

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2013 14:13 Calibration End Date: 05/07/2013 16:05 Calibration ID: 15038

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1022 0.1284	0.1025	0.1176	0.1228	0.1393	Ave		0.1188				12.0		15.0			
1,2,3-Trimethylbenzene	2.3866 2.6962	2.4621	2.4926	2.4662	2.6461	Ave		2.5250				4.7		15.0			
2-Methylnaphthalene	1.5422	1.4901	1.2024	1.0735	0.7790	Ave		1.2174				26.0	*	15.0			
n-Butyl acetate	0.2099 0.2525	0.2109	0.2217	0.2175	0.2461	Ave		0.2264				8.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 84979

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2013 14:13 Calibration End Date: 05/07/2013 16:05 Calibration ID: 15038

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-84979/13	UXR4186.D
Level 2	STDA9 240-84979/12	UXR4185.D
Level 3	STDA9 240-84979/11	UXR4184.D
Level 4	STDA9 240-84979/10	UXR4183.D
Level 5	STDA9 240-84979/9	UXR4182.D
Level 6	STDA9 240-84979/8	UXR4181.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	79940 3043870	154972	383972	733078	1539348	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	45059 1842064	90375	225466	432203	929568	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	23014 1050358	46162	118883	239228	520518	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	209441 8937010	426942	1082427	2098172	4468292	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	78530 3433569	163358	416288	818100	1744912	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	152834 6660412	309376	785374	1548924	3289715	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl acetate	FB	Ave	92757 3801369	181593	445447	905058	1909498	2.00 80.0	4.00	10.0	20.0	40.0
Propionitrile	FB	Ave	13364 581591	27853	71685	134817	303337	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	39298 1279991	71392	160115	307135	660197	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBZ	Ave	35502 1294714	66709	157577	319234	681697	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	126406 5548732	257393	654211	1282678	2780994	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	11874 500489	23420	61713	118647	256988	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	CBZ	Ave	23543 1111363	50281	128758	263072	584490	20.0 800	40.0	100	200	400
Methyl methacrylate	FB	Ave	40286 1830102	82684	213668	421260	905484	1.00 40.0	2.00	5.00	10.0	20.0
2-Nitropropane	FB	Ave	18843 929919	39047	90822	199319	434953	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	76168 3869087	155429	444985	930068	2134585	10.0 400	20.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 84979

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2013 14:13 Calibration End Date: 05/07/2013 16:05 Calibration ID: 15038

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Ave	177939 8127400	373372	943461	1868351	4053977	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Ave	229967	451957	910211	1626486	2387040	2.00	4.00	10.0	20.0	40.0
n-Butyl acetate	CBZ	Ave	57964 2756633	119373	310849	613242	1397201	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average ISTD

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Instrument ID: A3UX17 Start Date: 07/02/2013 09:20

Analysis Batch Number: 92260 End Date: 07/02/2013 21:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-92260/1		07/02/2013 09:20	1	BFB353.D	DB-624 0.18(mm)
STD8260 240-92260/2 IC		07/02/2013 09:46	1	UXR6124.D	DB-624 0.18(mm)
STD8260 240-92260/3 IC		07/02/2013 10:08	1	UXR6125.D	DB-624 0.18(mm)
STD8260 240-92260/4 ICIS		07/02/2013 10:31	1	UXR6126.D	DB-624 0.18(mm)
STD8260 240-92260/5 IC		07/02/2013 10:53	1	UXR6127.D	DB-624 0.18(mm)
STD8260 240-92260/6 IC		07/02/2013 11:15	1	UXR6128.D	DB-624 0.18(mm)
STD8260 240-92260/7 IC		07/02/2013 11:37	1	UXR6129.D	DB-624 0.18(mm)
ICV 240-92260/8		07/02/2013 12:00	1	UXR6130.D	DB-624 0.18(mm)
CCV 240-92260/9		07/02/2013 13:34	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 13:56	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 14:41	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 15:23	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 16:39	10		DB-624 0.18(mm)
ZZZZZ		07/02/2013 18:03	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 18:25	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 19:09	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 19:32	28.571		DB-624 0.18(mm)
ZZZZZ		07/02/2013 19:54	10		DB-624 0.18(mm)
ZZZZZ		07/02/2013 20:39	28.571		DB-624 0.18(mm)
ZZZZZ		07/02/2013 21:01	25		DB-624 0.18(mm)
ZZZZZ		07/02/2013 21:23	10		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab File ID: BFB353.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX17 BFB Injection Time: 09:20

Analysis Batch No.: 92260

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.9	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.6	(0.7)1
174	50.0 - 120.00 % of mass 95	90.4	
175	5.0 - 9.0 % of mass 174	6.3	(7.0)1
176	95.0 - 101.0 % of mass 174	89.1	(98.6)1
177	5.0 - 9.0 % of mass 176	5.3	(5.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92260/2	UXR6124.D	07/02/2013	09:46
	STD8260 240-92260/3	UXR6125.D	07/02/2013	10:08
	STD8260 240-92260/4	UXR6126.D	07/02/2013	10:31
	STD8260 240-92260/5	UXR6127.D	07/02/2013	10:53
	STD8260 240-92260/6	UXR6128.D	07/02/2013	11:15
	STD8260 240-92260/7	UXR6129.D	07/02/2013	11:37
	ICV 240-92260/8	UXR6130.D	07/02/2013	12:00

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92260/7	UXR6129.D
Level 2	STD8260 240-92260/6	UXR6128.D
Level 3	STD8260 240-92260/5	UXR6127.D
Level 4	STD8260 240-92260/4	UXR6126.D
Level 5	STD8260 240-92260/3	UXR6125.D
Level 6	STD8260 240-92260/2	UXR6124.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3223 0.3393	0.3181	0.3024	0.3004	0.3388	Ave		0.3202				5.3		15.0			
Chloromethane	0.4544 0.4578	0.4523	0.3929	0.4056	0.4875	Ave		0.4418			0.1000	8.0		15.0			
Vinyl chloride	0.4102 0.3798	0.3589	0.3503	0.3461	0.3994	Ave		0.3741				7.1		15.0			
Bromomethane	0.1230 0.1142	0.1222	0.0977	0.1057	0.1303	Ave		0.1155				10.0		15.0			
Chloroethane	0.1129 0.1281	0.1159	0.0846	0.1067	0.1312	Ave		0.1132				15.0		15.0			
Trichlorofluoromethane	0.3421 0.3476	0.3140	0.2938	0.3068	0.3554	Ave		0.3266				7.7		15.0			
Acrolein	0.0511 0.0494	0.0454	0.0435	0.0467	0.0511	Ave		0.0479				6.6		15.0			
1,1-Dichloroethene	0.2571 0.2867	0.2790	0.2658	0.2658	0.3037	Ave		0.2763				6.2		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2376 0.2392	0.2346	0.2256	0.2277	0.2502	Ave		0.2358				3.8		15.0			
Acetone	0.1744 0.0914	0.1137	0.0964	0.0931	0.0997	Lin1	0.0810	0.0920							0.9980		0.9900
Iodomethane	0.3498 0.4346	0.3974	0.3967	0.3960	0.4630	Ave		0.4062				9.5		15.0			
Carbon disulfide	0.7196 0.8532	0.7423	0.7167	0.7319	0.8720	Ave		0.7726				9.1		15.0			
Acetonitrile	0.0456 0.0363	0.0399	0.0281	0.0351	0.0309	Lin1	0.0404	0.0341							0.9910		0.9900
Methyl acetate	0.2619 0.2316	0.2391	0.2253	0.2251	0.2463	Ave		0.2382				6.0		15.0			
Methylene Chloride	1.1339 0.3108	0.5024	0.3675	0.3274	0.3357	Lin1	0.4058	0.3018							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0200 0.0192	0.0202	0.0152	0.0193	0.0162	Ave		0.0184				12.0		15.0			
Acrylonitrile	0.1340 0.1211	0.1183	0.1163	0.1204	0.1315	Ave		0.1236				5.9		15.0			
Methyl tert-butyl ether	0.7215 0.7881	0.7180	0.7115	0.7210	0.8152	Ave		0.7459				5.9		15.0			
trans-1,2-Dichloroethene	0.2980 0.3126	0.2933	0.2935	0.2838	0.3255	Ave		0.3011				5.1		15.0			
Hexane	0.0647 0.0811	0.0684	0.0717	0.0771	0.0870	Ave		0.0750				11.0		15.0			
1,1-Dichloroethane	0.4693 0.5520	0.5186	0.5101	0.5082	0.5741	Ave		0.5220			0.1000	7.0		15.0			
Vinyl acetate	0.0413 0.0541	0.0420	0.0414	0.0446	0.0553	Ave		0.0464				14.0		15.0			
2,2-Dichloropropane	0.2591 0.3070	0.2724	0.2646	0.2756	0.3223	Ave		0.2835				8.9		15.0			
cis-1,2-Dichloroethene	0.2858 0.3181	0.3108	0.2951	0.2946	0.3295	Ave		0.3056				5.4		15.0			
2-Butanone	0.1485 0.1278	0.1310	0.1199	0.1285	0.1339	Ave		0.1316				7.2		15.0			
Bromochloromethane	0.1398 0.1527	0.1469	0.1440	0.1386	0.1587	Ave		0.1468				5.3		15.0			
Tetrahydrofuran	0.0722 0.0804	0.0844	0.0811	0.0775	0.0849	Ave		0.0801				5.9		15.0			
Chloroform	0.4852 0.5245	0.4983	0.4978	0.4775	0.5543	Ave		0.5063				5.6		15.0			
1,1,1-Trichloroethane	0.3690 0.4340	0.3962	0.3904	0.4052	0.4480	Ave		0.4071				7.2		15.0			
Cyclohexane	0.4887 0.6445	0.5424	0.5673	0.5896	0.6635	Ave		0.5827				11.0		15.0			
1,1-Dichloropropene	0.3484 0.4169	0.3664	0.3760	0.3807	0.4327	Ave		0.3869				8.2		15.0			
Carbon tetrachloride	0.3418 0.4159	0.3617	0.3578	0.3669	0.4185	Ave		0.3771				8.5		15.0			
Benzene	1.1898 1.1961	1.1603	1.1274	1.1009	1.2515	Ave		1.1710				4.6		15.0			
1,2-Dichloroethane	0.3930 0.4351	0.4136	0.4178	0.4053	0.4559	Ave		0.4201				5.3		15.0			
Trichloroethene	0.2698 0.3135	0.2986	0.2884	0.2943	0.3227	Ave		0.2979				6.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.4315 0.5318	0.4455	0.4468	0.5032	0.5380	Ave		0.4828				9.8		15.0			
1,2-Dichloropropane	0.2862 0.3044	0.2800	0.2821	0.2832	0.3164	Ave		0.2921				5.1		15.0			
Dibromomethane	0.1395 0.1609	0.1519	0.1489	0.1510	0.1651	Ave		0.1529				5.9		15.0			
1,4-Dioxane	0.0023 0.0025	0.0030	0.0022	0.0030	0.0022	Ave		0.0025				14.0		15.0			
Bromodichloromethane	0.2888 0.3879	0.3306	0.3279	0.3403	0.3820	Ave		0.3429				11.0		15.0			
2-Chloroethyl vinyl ether	0.1405 0.1783	0.1405	0.1501	0.1612	0.1837	Ave		0.1590				12.0		15.0			
cis-1,3-Dichloropropene	0.3115 0.4587	0.3478	0.3667	0.3856	0.4540	Ave		0.3874				15.0		15.0			
4-Methyl-2-pentanone	0.2553 0.2669	0.2545	0.2314	0.2551	0.2782	Ave		0.2569				6.1		15.0			
Toluene	1.3021 1.5660	1.4857	1.5259	1.4959	1.7627	Ave		1.5230				9.7		15.0			
trans-1,3-Dichloropropene	0.3095 0.4917	0.3622	0.4125	0.4256	0.5422	Lin1	-0.156	0.4987							0.9930		0.9900
Ethyl methacrylate	0.2873 0.4520	0.3617	0.3962	0.4120	0.5071	Lin1	-0.128	0.4640							0.9940		0.9900
1,1,2-Trichloroethane	0.2620 0.2919	0.2917	0.3126	0.2924	0.3429	Ave		0.2989				9.0		15.0			
Tetrachloroethene	0.3251 0.3387	0.3449	0.3322	0.3316	0.3809	Ave		0.3422				5.9		15.0			
1,3-Dichloropropane	0.5100 0.5344	0.5403	0.5472	0.5294	0.6145	Ave		0.5460				6.6		15.0			
2-Hexanone	0.2134 0.2235	0.2009	0.2121	0.2203	0.2588	Ave		0.2215				9.0		15.0			
Dibromochloromethane	0.2672 0.3403	0.2767	0.2875	0.3009	0.3614	Ave		0.3056				12.0		15.0			
1,2-Dibromoethane	0.2718 0.3078	0.2933	0.2979	0.2998	0.3406	Ave		0.3019				7.5		15.0			
Chlorobenzene	1.0336 1.0296	1.0736	0.9932	1.0160	1.1012	Ave		1.0412			0.3000	3.8		15.0			
1,1,1,2-Tetrachloroethane	0.3225 0.3679	0.3455	0.3360	0.3498	0.3755	Ave		0.3495				5.6		15.0			
Ethylbenzene	0.4592 0.5652	0.5397	0.5104	0.5432	0.5908	Ave		0.5348				8.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.5523 0.7172	0.6526	0.6529	0.7040	0.7434	Ave		0.6704				10.0		15.0			
o-Xylene	0.5596 0.6746	0.6471	0.5751	0.6530	0.6722	Ave		0.6303				8.0		15.0			
Styrene	0.7832 1.1392	1.0109	0.9596	1.1027	1.1554	Ave		1.0252				14.0		15.0			
Bromoform	0.1587 0.2167	0.1855	0.1679	0.1979	0.2112	Ave		0.1896			0.1000	12.0		15.0			
Isopropylbenzene	1.2975 1.7865	1.6058	1.4021	1.7416	1.6737	Ave		1.5846				12.0		15.0			
1,1,2,2-Tetrachloroethane	0.5949 0.5897	0.6942	0.7135	0.6603	0.7537	Ave		0.6677			0.3000	9.9		15.0			
Bromobenzene	0.7409 0.7971	0.8019	0.8706	0.8037	0.9421	Ave		0.8260				8.5		15.0			
trans-1,4-Dichloro-2-butene	0.1420	0.1606	0.1973	0.1818	0.2574	Ave		0.1878				24.0	*	15.0			
1,2,3-Trichloropropane	0.2483 0.2118	0.2361	0.2538	0.2280	0.2714	Ave		0.2416				8.6		15.0			
n-Propylbenzene	0.6211 0.8461	0.7652	0.8446	0.8150	0.9632	Ave		0.8092				14.0		15.0			
2-Chlorotoluene	0.5766 0.7056	0.6461	0.7207	0.7206	0.8083	Ave		0.6963				11.0		15.0			
1,3,5-Trimethylbenzene	1.7328 2.5501	2.3224	2.4151	2.5420	2.7191	Ave		2.3803				14.0		15.0			
4-Chlorotoluene	0.5810 0.7447	0.7173	0.7968	0.7475	0.8723	Ave		0.7433				13.0		15.0			
tert-Butylbenzene	1.7565 2.2855	2.0708	2.3638	2.2608	2.4174	Ave		2.1925				11.0		15.0			
1,2,4-Trimethylbenzene	1.7940 2.5755	2.3657	2.3673	2.6187	2.6987	Ave		2.4033				14.0		15.0			
sec-Butylbenzene	2.2505 2.9931	2.8678	2.7937	3.0418	3.0878	Ave		2.8391				11.0		15.0			
1,3-Dichlorobenzene	1.5016 1.4651	1.6322	1.5141	1.5531	1.5720	Ave		1.5397				3.8		15.0			
p-Isopropyltoluene	1.9920 2.7142	2.5267	2.3747	2.7364	2.7397	Ave		2.5139				12.0		15.0			
1,4-Dichlorobenzene	1.6614 1.5087	1.6864	1.5588	1.5856	1.6207	Ave		1.6036				4.1		15.0			
n-Butylbenzene	1.9502 2.2067	2.0766	1.8145	2.2005	2.1637	Ave		2.0687				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.5565 1.3566	1.5885	1.3652	1.4847	1.4246	Ave		1.4627				6.7		15.0			
1,2-Dibromo-3-Chloropropane	0.1083 0.0945	0.1134	0.0988	0.1178	0.1139	Ave		0.1078				8.6		15.0			
1,3,5-Trichlorobenzene	1.4227 1.0423	1.1833	0.9899	1.1825	1.1199	Ave		1.1568				13.0		15.0			
1,2,4-Trichlorobenzene	1.3992 0.7944	1.0485	0.9061	0.9889	1.0932	Qua	-0.814	1.3217	-0.013						0.9940		0.9900
Hexachlorobutadiene	0.8577 0.4096	0.5785	0.4643	0.5487	0.5226	Qua	-0.164	0.6234	-0.005						0.9980		0.9900
Naphthalene	2.3471	1.7820	1.7350	1.9088	2.0992	Ave		1.9744				13.0		15.0			
1,2,3-Trichlorobenzene	1.5049	0.9894	0.9304	0.8656	1.0349	Lin1	0.1955	0.9536							0.9900		0.9900
Dibromofluoromethane (Surr)	0.2570 0.2718	0.2401	0.2412	0.2422	0.2860	Ave		0.2564				7.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3673 0.3525	0.3374	0.3278	0.3244	0.3727	Ave		0.3470				5.9		15.0			
Toluene-d8 (Surr)	1.3184 1.3778	1.2295	1.3293	1.2752	1.5607	Ave		1.3485				8.6		15.0			
4-Bromofluorobenzene (Surr)	0.5042 0.5333	0.5117	0.4346	0.5246	0.5224	Ave		0.5052				7.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92260/7	UXR6129.D
Level 2	STD8260 240-92260/6	UXR6128.D
Level 3	STD8260 240-92260/5	UXR6127.D
Level 4	STD8260 240-92260/4	UXR6126.D
Level 5	STD8260 240-92260/3	UXR6125.D
Level 6	STD8260 240-92260/2	UXR6124.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	20544 1717218	82616	201041	402968	820058	0.500 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	28967 2316919	117474	261271	544199	1179862	0.500 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	26145 1922246	93225	232897	464290	966631	0.500 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	7839 578065	31737	64975	141822	315297	0.500 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	7199 648181	30095	56221	143207	317563	0.500 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	21804 1759440	81564	195340	411642	860245	0.500 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	32580 2499093	117943	289526	626411	1237718	5.00 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	16389 1450888	72470	176724	356617	735108	0.500 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	15145 1210840	60931	150034	305423	605613	0.500 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Lin1	22229 924879	59045	128239	249923	482495	1.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	22296 2199525	103227	263789	531251	1120678	0.500 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	45869 4318373	192820	476522	981856	2110562	0.500 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Lin1	29096 1835923	103646	187095	470923	748983	5.00 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	33387 2344207	124233	299622	603952	1192192	1.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	72277 1572806	130503	244379	439262	812470	0.500 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	25544 1947233	105034	201683	518492	783099	10.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	17079 1225942	61471	154610	323073	636448	1.00 80.0	4.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	45991 3988608	186495	473059	967263	1973115	0.500 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	18998 1582137	76186	195145	380695	787926	0.500 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	4124 410679	17760	47676	103468	210455	0.500 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	29911 2793615	134709	339151	681834	1389428	0.500 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	2631 273582	10898	27542	59795	133845	0.500 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	16513 1553590	70757	175915	369761	780106	0.500 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	18216 1609940	80737	196189	395240	797580	0.500 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	18929 1293227	68048	159454	344869	648031	1.00 80.0	4.00	10.0	20.0	40.0
Bromochloromethane	FB	Ave	8909 772601	38167	95781	186005	384140	0.500 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	4604 406776	21930	53952	104018	205513	0.500 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	30925 2654671	129426	331017	640630	1341538	0.500 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	23523 2196753	102909	259576	543658	1084375	0.500 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	31148 3262166	140891	377199	791009	1606020	0.500 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	22210 2110264	95164	249997	510791	1047242	0.500 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	21790 2104895	93958	237933	492179	1012984	0.500 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	75840 6053680	301388	749656	1477002	3029122	0.500 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	25052 2201985	107436	277822	543794	1103539	0.500 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	17199 1586467	77559	191768	394872	780987	0.500 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	27504 2691619	115715	297052	675102	1302120	0.500 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	18245 1540853	72737	187600	379892	765743	0.500 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	8894 814280	39464	99000	202569	399652	0.500 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	7422 627720	39306	74568	199033	269888	25.0 2000	100	250	500	1000
Bromodichloromethane	FB	Ave	18409 1963013	85876	218026	456571	924497	0.500 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	17906 1804846	72979	199613	432578	889086	1.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	19857 2321639	90338	243832	517339	1098833	0.500 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	32542 2701929	132225	307659	684444	1346799	1.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	66006 6613398	317715	764865	1631808	3196453	0.500 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Lin1	15687 2076609	77451	206770	464285	983209	0.500 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Lin1	14562 1909006	77347	198620	449480	919507	0.500 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	13279 1232919	62369	156705	318922	621796	0.500 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	16478 1430476	73760	166509	361693	690723	0.500 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	25853 2256950	115546	274309	577470	1114428	0.500 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	21631 1887808	85924	212649	480544	938491	1.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	13543 1437062	59167	144095	328241	655315	0.500 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	13779 1299696	62723	149351	327057	617642	0.500 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	52398 4348033	229587	497864	1108340	1996944	0.500 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	16346 1553520	73886	168420	381600	680879	0.500 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	23277 2386708	115415	255857	592582	1071421	0.500 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	55994 6057465	279107	654563	1535937	2696349	1.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	28368 2849048	138378	288263	712270	1218925	0.500 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	39702 4810862	216174	481023	1202829	2095292	0.500 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Ave	8044 915051	39658	84166	215837	383019	0.500 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	65775 7544732	343391	702832	1899854	3035157	0.500 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	17191 1467792	91700	166579	434744	655991	0.500 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	21410 1984110	105921	203254	529205	820006	0.500 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	4105	21212	46059	119738	224083	0.500	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	7177 527309	31185	59260	150157	236239	0.500 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	17950 2106041	101075	197183	536641	838383	0.500 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	16662 1756291	85337	168265	474500	703582	0.500 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	50077 6347665	306757	563827	1673760	2366763	0.500 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	16790 1853695	94751	186010	492190	759219	0.500 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	50761 5688969	273520	551861	1488641	2104138	0.500 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	51843 6410921	312474	552663	1724266	2349013	0.500 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	65037 7450304	378796	652213	2002897	2687606	0.500 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	43395 3646907	215589	353492	1022617	1368284	0.500 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	57566 6756063	333744	554399	1801761	2384619	0.500 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	48012 3755321	222756	363906	1044039	1410692	0.500 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	56359 5492943	274289	423614	1448941	1883322	0.500 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	44982 3376840	209819	318720	977576	1239957	0.500 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	3130 235160	14975	23075	77573	99119	0.500 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	41113 2594495	156299	231091	778597	974767	0.500 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Qua	40436 1977281	138488	211526	651139	951528	0.500 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27440-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Qua	24786 1019523	76414	108386	361278	454906	0.500 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	67827	235373	405043	1256844	1827134	0.500	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Lin1	43490	130683	217214	569936	900782	0.500	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	16382 1375738	62358	160376	324973	692261	0.500 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	23410 1784196	87630	217931	435233	902039	0.500 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	66835 5818791	262927	666346	1391025	2830218	0.500 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	25560 2252295	109425	217868	572279	947401	0.500 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: ICV 240-92260/8 Calibration Date: 07/02/2013 12:00

Instrument ID: A3UX17 Calib Start Date: 05/07/2013 14:13

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/07/2013 16:05

Lab File ID: UXR6130.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2647	0.2981		2.00	0.0100	12.6	50.0
Diisopropyl ether	Ave	0.2531	0.2478		10.0	0.0100	-2.1	50.0
Isobutyl alcohol	Ave	0.0118	0.0106		50.0	0.500	-10.2	50.0
Cyclohexanone	Ave	0.1188	0.0201		20.0	0.200	-83.1*	50.0
1,2,3-Trimethylbenzene	Ave	2.525	2.247		0.00890	0.0100	-11.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: ICV 240-92260/8 Calibration Date: 07/02/2013 12:00

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6130.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3202	0.2957		1.00	0.0100	-7.7	50.0
Chloromethane	Ave	0.4418	0.4174	0.1000	1.00	0.0100	-5.5	50.0
Vinyl chloride	Ave	0.3741	0.3615		1.00	0.0100	-3.4	20.0
Bromomethane	Ave	0.1155	0.0997		1.00	0.0100	-13.7	50.0
Chloroethane	Ave	0.1132	0.0945		1.00	0.0100	-16.5	50.0
Trichlorofluoromethane	Ave	0.3266	0.3057		1.00	0.0100	-6.4	50.0
Acrolein	Ave	0.0479	0.0405		20.0	0.0300	-15.4	50.0
1,1-Dichloroethene	Ave	0.2763	0.2831		1.00	0.0100	2.4	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2358	0.2478		1.00	0.0100	5.1	50.0
Acetone	Lin1		0.0790		10.0	0.0200	-18.6	50.0
Iodomethane	Ave	0.4062	0.4026		1.00	0.0100	-0.9	50.0
Carbon disulfide	Ave	0.7726	0.8095		1.00	0.0100	4.8	50.0
Acetonitrile	Lin1		0.0295		20.0	0.0300	-17.3	50.0
Methyl acetate	Ave	0.2382	0.2401		10.0	0.0100	0.8	50.0
Methylene Chloride	Lin1		0.3303		1.00	0.0100	-4.0	50.0
tert-Butyl alcohol	Ave	0.0184	0.0153		50.0	0.200	-16.6	50.0
Acrylonitrile	Ave	0.1236	0.1209		20.0	0.0300	-2.1	50.0
Methyl tert-butyl ether	Ave	0.7459	0.7409		1.00	0.0100	-0.7	50.0
trans-1,2-Dichloroethene	Ave	0.3011	0.3005		1.00	0.0100	-0.2	50.0
Hexane	Ave	0.0750	0.0821		1.00	0.0100	9.5	20.0
1,1-Dichloroethane	Ave	0.5220	0.5326	0.1000	1.00	0.0100	2.0	50.0
Vinyl acetate	Ave	0.0464	0.0513		2.00	0.0100	10.5	50.0
2,2-Dichloropropane	Ave	0.2835	0.2664		1.00	0.0100	-6.0	50.0
cis-1,2-Dichloroethene	Ave	0.3056	0.3185		1.00	0.0100	4.2	50.0
2-Butanone	Ave	0.1316	0.1192		10.0	0.0200	-9.4	50.0
Bromochloromethane	Ave	0.1468	0.1465		1.00	0.0100	-0.2	50.0
Tetrahydrofuran	Ave	0.0801	0.0783		5.00	0.0100	-2.3	50.0
Chloroform	Ave	0.5063	0.5069		1.00	0.0100	0.1	20.0
1,1,1-Trichloroethane	Ave	0.4071	0.4101		1.00	0.0100	0.7	50.0
Cyclohexane	Ave	0.5827	0.5848		1.00	0.0100	0.4	50.0
1,1-Dichloropropene	Ave	0.3869	0.3863		1.00	0.0100	-0.2	50.0
Carbon tetrachloride	Ave	0.3771	0.3705		1.00	0.0100	-1.8	50.0
Benzene	Ave	1.171	1.168		1.00	0.0100	-0.3	50.0
1,2-Dichloroethane	Ave	0.4201	0.4331		1.00	0.0100	3.1	50.0
Trichloroethene	Ave	0.2979	0.3031		1.00	0.0100	1.8	50.0
Methylcyclohexane	Ave	0.4828	0.4576		1.00	0.0100	-5.2	50.0
1,2-Dichloropropane	Ave	0.2921	0.2926		1.00	0.0100	0.2	20.0
Dibromomethane	Ave	0.1529	0.1597		1.00	0.0100	4.5	50.0
Bromodichloromethane	Ave	0.3429	0.3572		1.00	0.0100	4.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1590	0.1527		10.0	0.0100	-4.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: ICV 240-92260/8 Calibration Date: 07/02/2013 12:00

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6130.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Ave	0.3874	0.3849		1.00	0.0100	-0.7	50.0
4-Methyl-2-pentanone	Ave	0.2569	0.2551		10.0	0.0200	-0.7	50.0
Toluene	Ave	1.523	1.556		1.00	0.0100	2.2	20.0
trans-1,3-Dichloropropene	Lin1		0.4292		1.00	0.0100	-10.8	50.0
1,1,2-Trichloroethane	Ave	0.2989	0.3175		1.00	0.0100	6.2	50.0
Tetrachloroethene	Ave	0.3422	0.3309		1.00	0.0100	-3.3	50.0
1,3-Dichloropropane	Ave	0.5460	0.5534		1.00	0.0100	1.4	50.0
2-Hexanone	Ave	0.2215	0.2145		10.0	0.0200	-3.1	50.0
Dibromochloromethane	Ave	0.3056	0.3086		1.00	0.0100	1.0	50.0
1,2-Dibromoethane	Ave	0.3019	0.3024		1.00	0.0100	0.2	50.0
Chlorobenzene	Ave	1.041	0.997	0.3000	1.00	0.0100	-4.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3495	0.3266		1.00	0.0100	-6.6	50.0
Ethylbenzene	Ave	0.5348	0.5117		1.00	0.0100	-4.3	20.0
m-Xylene & p-Xylene	Ave	0.6704	0.6472		2.00	0.0200	-3.5	50.0
o-Xylene	Ave	0.6303	0.5908		1.00	0.0100	-6.3	50.0
Styrene	Ave	1.025	1.007		1.00	0.0100	-1.7	50.0
Bromoform	Ave	0.1896	0.1829	0.1000	1.00	0.0100	-3.6	50.0
Isopropylbenzene	Ave	1.585	1.425		1.00	0.0100	-10.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6677	0.6837	0.3000	1.00	0.0100	2.4	50.0
Bromobenzene	Ave	0.8260	0.8468		1.00	0.0100	2.5	50.0
1,2,3-Trichloropropane	Ave	0.2416	0.2439		1.00	0.0100	1.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1878	0.2049		1.00	0.0200	9.1	50.0
n-Propylbenzene	Ave	0.8092	0.8646		1.00	0.0100	6.8	50.0
2-Chlorotoluene	Ave	0.6963	0.6948		1.00	0.0100	-0.2	50.0
1,3,5-Trimethylbenzene	Ave	2.380	2.375		1.00	0.0100	-0.2	50.0
4-Chlorotoluene	Ave	0.7433	0.7522		1.00	0.0100	1.2	50.0
tert-Butylbenzene	Ave	2.192	2.026		1.00	0.0100	-7.6	50.0
1,2,4-Trimethylbenzene	Ave	2.403	2.377		1.00	0.0100	-1.1	50.0
sec-Butylbenzene	Ave	2.839	2.657		1.00	0.0100	-6.4	50.0
1,3-Dichlorobenzene	Ave	1.540	1.413		1.00	0.0100	-8.2	50.0
p-Isopropyltoluene	Ave	2.514	2.354		1.00	0.0100	-6.4	50.0
1,4-Dichlorobenzene	Ave	1.604	1.414		1.00	0.0100	-11.8	50.0
n-Butylbenzene	Ave	2.069	1.785		1.00	0.0100	-13.7	50.0
1,2-Dichlorobenzene	Ave	1.463	1.260		1.00	0.0100	-13.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1078	0.0851		2.00	0.0100	-21.0	50.0
1,2,4-Trichlorobenzene	Qua		0.6063		1.00	0.0100	-45.1	50.0
Hexachlorobutadiene	Qua		0.3045		1.00	0.0100	-46.1	50.0
Naphthalene	Ave	1.974	1.026		1.00	0.0100	-48.1	50.0
1,2,3-Trichlorobenzene	Lin1		0.5077		1.00	0.0100	-48.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2564	0.2340		0.00813	0.00891	-8.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3470	0.3072		0.00789	0.00891	-11.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: ICV 240-92260/8 Calibration Date: 07/02/2013 12:00

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6130.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.349	1.256		0.00830	0.00891	-6.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5052	0.4410		0.00778	0.00891	-12.7	50.0

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Instrument ID: A3UX17 Start Date: 08/06/2013 11:53

Analysis Batch Number: 96361 End Date: 08/06/2013 22:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-96361/1		08/06/2013 11:53	1	BFB405.D	DB-624 0.18(mm)
CCVIS 240-96361/2		08/06/2013 12:23	1	UXR6828.D	DB-624 0.18(mm)
CCV 240-96361/3		08/06/2013 12:45	1	UXR6829.D	DB-624 0.18(mm)
LCS 240-96361/4		08/06/2013 13:08	1	UXR6830.D	DB-624 0.18(mm)
MB 240-96361/6		08/06/2013 13:52	1	UXR6832.D	DB-624 0.18(mm)
ZZZZZ		08/06/2013 14:16	1.67		DB-624 0.18(mm)
ZZZZZ		08/06/2013 14:38	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 15:01	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 15:23	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 15:45	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 16:08	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 16:30	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 16:53	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 17:15	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 17:38	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 18:00	1		DB-624 0.18(mm)
240-27440-1	DR-DPT-24-15	08/06/2013 18:22	1	UXR6844.D	DB-624 0.18(mm)
240-27440-2	DR-DPT-24-25	08/06/2013 18:45	100	UXR6845.D	DB-624 0.18(mm)
240-27440-5	DR-DPT-24-40	08/06/2013 19:52	11.11	UXR6848.D	DB-624 0.18(mm)
240-27440-7	DR-DPT-24-50	08/06/2013 20:37	33.33	UXR6850.D	DB-624 0.18(mm)
240-27440-9	TB-073113	08/06/2013 20:59	1	UXR6851.D	DB-624 0.18(mm)
240-27440-8	DR-DPT-24-55	08/06/2013 21:21	5.88	UXR6852.D	DB-624 0.18(mm)
240-27428-A-1 MS		08/06/2013 21:44	1	UXR6853.D	DB-624 0.18(mm)
240-27428-A-1 MSD		08/06/2013 22:06	1	UXR6854.D	DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab File ID: BFB405.D BFB Injection Date: 08/06/2013

Instrument ID: A3UX17 BFB Injection Time: 11:53

Analysis Batch No.: 96361

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	48.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	93.6	
175	5.0 - 9.0 % of mass 174	6.9	(7.4)1
176	95.0 - 101.0 % of mass 174	92.9	(99.2)1
177	5.0 - 9.0 % of mass 176	6.0	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-96361/2	UXR6828.D	08/06/2013	12:23
	CCV 240-96361/3	UXR6829.D	08/06/2013	12:45
	LCS 240-96361/4	UXR6830.D	08/06/2013	13:08
	MB 240-96361/6	UXR6832.D	08/06/2013	13:52
DR-DPT-24-15	240-27440-1	UXR6844.D	08/06/2013	18:22
DR-DPT-24-25	240-27440-2	UXR6845.D	08/06/2013	18:45
DR-DPT-24-40	240-27440-5	UXR6848.D	08/06/2013	19:52
DR-DPT-24-50	240-27440-7	UXR6850.D	08/06/2013	20:37
TB-073113	240-27440-9	UXR6851.D	08/06/2013	20:59
DR-DPT-24-55	240-27440-8	UXR6852.D	08/06/2013	21:21
	240-27428-A-1 MS	UXR6853.D	08/06/2013	21:44
	240-27428-A-1 MSD	UXR6854.D	08/06/2013	22:06

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: CCVIS 240-96361/2 Calibration Date: 08/06/2013 12:23

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6828.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3202	0.3349		1.00	0.0100	4.6	50.0
Chloromethane	Ave	0.4418	0.4717	0.1000	1.00	0.0100	6.8	50.0
Vinyl chloride	Ave	0.3741	0.4221		1.00	0.0100	12.8	20.0
Bromomethane	Ave	0.1155	0.1464		1.00	0.0100	(26.7)	50.0
Chloroethane	Ave	0.1132	0.1225		1.00	0.0100	8.2	50.0
Trichlorofluoromethane	Ave	0.3266	0.3593		1.00	0.0100	10.0	50.0
Acrolein	Ave	0.0479	0.0441		20.0	0.100	-7.9	50.0
1,1-Dichloroethene	Ave	0.2763	0.2890		1.00	0.0100	4.6	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2358	0.2556		1.00	0.0100	8.4	50.0
Acetone	Lin1		0.1091		10.0	0.0200	14.1	50.0
Iodomethane	Ave	0.4062	0.4230		1.00	0.0100	4.1	50.0
Carbon disulfide	Ave	0.7726	0.8201		1.00	0.0100	6.1	50.0
Acetonitrile	Lin1		0.0425		20.0	0.100	23.6	50.0
Methyl acetate	Ave	0.2382	0.2510		10.0	0.0200	5.4	50.0
Methylene Chloride	Lin1		0.3471		1.00	0.0100	1.6	50.0
tert-Butyl alcohol	Ave	0.0184	(0.0194)		50.0	0.200	5.6	50.0
Acrylonitrile	Ave	0.1236	0.1266		20.0	0.0200	2.4	50.0
Methyl tert-butyl ether	Ave	0.7459	0.7489		1.00	0.0100	0.4	50.0
trans-1,2-Dichloroethene	Ave	0.3011	0.3127		1.00	0.0100	3.9	50.0
Hexane	Ave	0.0750	0.0739		1.00	0.0100	-1.5	20.0
1,1-Dichloroethane	Ave	0.5220	0.5649	0.1000	1.00	0.0100	8.2	50.0
Vinyl acetate	Ave	0.0464	(0.0451)		2.00	0.0100	-2.8	50.0
2,2-Dichloropropane	Ave	0.2835	0.3123		1.00	0.0100	10.2	50.0
2-Butanone	Ave	0.1316	0.1352		10.0	0.0200	2.7	50.0
cis-1,2-Dichloroethene	Ave	0.3056	0.3220		1.00	0.0100	5.3	50.0
Bromochloromethane	Ave	0.1468	0.1614		1.00	0.0100	9.9	50.0
Tetrahydrofuran	Ave	0.0801	0.0810		5.00	0.0100	1.1	50.0
Chloroform	Ave	0.5063	0.5500		1.00	0.0100	8.6	20.0
1,1,1-Trichloroethane	Ave	0.4071	0.4504		1.00	0.0100	10.6	50.0
Cyclohexane	Ave	0.5827	0.6049		1.00	0.0100	3.8	50.0
1,1-Dichloropropene	Ave	0.3869	0.4204		1.00	0.0100	8.7	50.0
Carbon tetrachloride	Ave	0.3771	0.4218		1.00	0.0100	11.8	50.0
Benzene	Ave	1.171	1.184		1.00	0.0100	1.1	50.0
1,2-Dichloroethane	Ave	0.4201	0.4487		1.00	0.0100	6.8	50.0
Trichloroethene	Ave	0.2979	0.3224		1.00	0.0100	8.2	50.0
Methylcyclohexane	Ave	0.4828	0.4878		1.00	0.0100	1.0	50.0
1,2-Dichloropropane	Ave	0.2921	0.3052		1.00	0.0100	4.5	20.0
1,4-Dioxane	Ave	0.0025	0.0026		50.0	0.500	1.0	50.0
Dibromomethane	Ave	0.1529	0.1629		1.00	0.0100	6.5	50.0
Bromodichloromethane	Ave	0.3429	0.3814		1.00	0.0100	11.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: CCVIS 240-96361/2 Calibration Date: 08/06/2013 12:23

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6828.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1590	0.1555		10.0	0.0200	-2.2	50.0
cis-1,3-Dichloropropene	Ave.	0.3874	0.4113		1.00	0.0100	6.2	50.0
4-Methyl-2-pentanone	Ave	0.2569	0.2650		10.0	0.0200	3.2	50.0
Toluene	Ave	1.523	1.427		1.00	0.0100	-6.3	20.0
trans-1,3-Dichloropropene	Lin1		0.4159		1.00	0.0100	-13.5	50.0
Ethyl methacrylate	Lin1		0.3652		1.00	0.0100	-18.5	50.0
1,1,2-Trichloroethane	Ave	0.2989	0.2849		1.00	0.0100	-4.7	50.0
Tetrachloroethene	Ave	0.3422	0.3389		1.00	0.0100	-1.0	50.0
1,3-Dichloropropane	Ave	0.5460	0.4962		1.00	0.0100	-9.1	50.0
2-Hexanone	Ave	0.2215	0.2004		10.0	0.0200	-9.5	50.0
Dibromochloromethane	Ave	0.3056	0.3103		1.00	0.0100	1.5	50.0
1,2-Dibromoethane	Ave	0.3019	0.2875		1.00	0.0100	-4.8	50.0
Chlorobenzene	Ave	1.041	0.9352	0.3000	1.00	0.0100	-10.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3495	0.3502		1.00	0.0100	0.2	50.0
Ethylbenzene	Ave	0.5348	0.5173		1.00	0.0100	-3.3	20.0
m-Xylene & p-Xylene	Ave	0.6704	0.6500		2.00	0.0200	-3.0	50.0
o-Xylene	Ave	0.6303	0.6110		1.00	0.0100	-3.1	50.0
Styrene	Ave	1.025	1.010		1.00	0.0100	-1.5	50.0
Bromoform	Ave	0.1896	0.1859	0.1000	1.00	0.0100	-1.9	50.0
Isopropylbenzene	Ave	1.585	1.530		1.00	0.0100	-3.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6677	0.5405	0.3000	1.00	0.0100	-19.1	50.0
Bromobenzene	Ave	0.8260	0.7371		1.00	0.0100	-10.8	50.0
1,2,3-Trichloropropane	Ave	0.2416	0.2066		1.00	0.0100	-14.5	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1878	0.1260		1.00	0.0100	-32.9	50.0
n-Propylbenzene	Ave	0.8092	0.7302		1.00	0.0100	-9.8	50.0
2-Chlorotoluene	Ave	0.6963	0.6315		1.00	0.0100	-9.3	50.0
1,3,5-Trimethylbenzene	Ave	2.380	2.175		1.00	0.0100	-8.6	50.0
4-Chlorotoluene	Ave	0.7433	0.6831		1.00	0.0100	-8.1	50.0
tert-Butylbenzene	Ave	2.192	1.914		1.00	0.0100	-12.7	50.0
1,2,4-Trimethylbenzene	Ave	2.403	2.219		1.00	0.0100	-7.7	50.0
sec-Butylbenzene	Ave	2.839	2.483		1.00	0.0100	-12.6	50.0
1,3-Dichlorobenzene	Ave	1.540	1.341		1.00	0.0100	-12.9	50.0
p-Isopropyltoluene	Ave	2.514	2.266		1.00	0.0100	-9.9	50.0
1,4-Dichlorobenzene	Ave	1.604	1.392		1.00	0.0100	-13.2	50.0
n-Butylbenzene	Ave	2.069	1.761		1.00	0.0100	-14.9	50.0
1,2-Dichlorobenzene	Ave	1.463	1.252		1.00	0.0100	-14.4	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1078	0.0857		2.00	0.0100	-20.5	50.0
1,3,5-Trichlorobenzene	Ave	1.157	0.9068		1.00	0.0100	-21.6	50.0
1,2,4-Trichlorobenzene	Qua		0.6696		1.00	0.0100	-39.7	50.0
Hexachlorobutadiene	Qua		0.3705		1.00	0.0100	-34.3	50.0
Naphthalene	Ave	1.974	0.9334		1.00	0.0100	-52.7*	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: CCVIS 240-96361/2 Calibration Date: 08/06/2013 12:23

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6828.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Lin1		0.5044		1.00	0.0100	-49.2	50.0
Dibromofluoromethane (Surr)	Ave	0.2564	0.2496		0.00868	0.00891	-2.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3470	0.3183		0.00817	0.00891	-8.3	50.0
Toluene-d8 (Surr)	Ave	1.349	1.130		0.00746	0.00891	-16.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5052	0.4630		0.00817	0.00891	-8.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: CCV 240-96361/3 Calibration Date: 08/06/2013 12:45

Instrument ID: A3UX17 Calib Start Date: 05/07/2013 14:13

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/07/2013 16:05

Lab File ID: UXR6829.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.4497	0.4395		2.00	0.0100	-2.3	50.0
Ethyl ether	Ave	0.2647	0.2781		2.00	0.0100	5.0	50.0
3-Chloro-1-propene	Ave	0.1427	0.1218		2.00	0.0100	-14.7	50.0
Diisopropyl ether	Ave	0.2531	0.2421		10.0	0.0500	-4.4	50.0
2-Chloro-1,3-butadiene	Ave	0.4867	0.5245		2.00	0.0100	7.8	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.9284	0.8343		5.00	0.0100	-10.1	50.0
Ethyl acetate	Ave	0.2704	0.2617		4.00	0.0200	-3.2	50.0
Propionitrile	Ave	0.0414	0.0398		4.00	0.0200	-3.9	50.0
Methacrylonitrile	Ave	0.1979	0.1712		2.00	0.0100	-13.5	50.0
Isobutyl alcohol	Ave	0.0118	0.0098		50.0	0.200	-17.3	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7736	0.6282		5.00	0.0100	-18.8	50.0
n-Heptane	Ave	0.0714	0.0794		1.00	0.0100	11.1	50.0
n-Butanol	Ave	0.0094	0.0072		50.0	0.200	-23.6	50.0
Methyl methacrylate	Ave	0.2516	0.2059		2.00	0.0100	-18.1	50.0
2-Nitropropane	Ave	0.0594	0.0537		2.00	0.0200	-9.5	50.0
Cyclohexanone	Ave	0.1188	0.1096		20.0	0.100	-7.7	50.0
1,2,3-Trimethylbenzene	Ave	2.525	2.143		0.00849	0.0100	-15.1	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab File ID: UXR6832.D Lab Sample ID: MB 240-96361/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/06/2013 13:52

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-96361/4	UXR6830.D	08/06/2013 13:08
DR-DPT-24-15	240-27440-1	UXR6844.D	08/06/2013 18:22
DR-DPT-24-25	240-27440-2	UXR6845.D	08/06/2013 18:45
DR-DPT-24-40	240-27440-5	UXR6848.D	08/06/2013 19:52
DR-DPT-24-50	240-27440-7	UXR6850.D	08/06/2013 20:37
TB-073113	240-27440-9	UXR6851.D	08/06/2013 20:59
DR-DPT-24-55	240-27440-8	UXR6852.D	08/06/2013 21:21
	240-27428-A-1 MS	UXR6853.D	08/06/2013 21:44
	240-27428-A-1 MSD	UXR6854.D	08/06/2013 22:06

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96361/6

Matrix: Water Lab File ID: UXR6832.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 13:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96361/6

Matrix: Water Lab File ID: UXR6832.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 13:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96361/6

Matrix: Water Lab File ID: UXR6832.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 13:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	81		74-115
1868-53-7	Dibromofluoromethane (Surr)	107		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96361/6

Matrix: Water Lab File ID: UXR6832.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 13:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96361 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6830.D

Lab ID: LCS 240-96361/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.90	99	72-116	
1,1,1-Trichloroethane	10.0	10.8	108	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.41	84	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.2	112	74-151	
1,1-Dichloroethane	10.0	10.6	106	82-115	
1,1-Dichloroethene	10.0	10.4	104	78-131	
1,1-Dichloropropene	10.0	10.2	102	83-114	
1,2,3-Trichlorobenzene	10.0	5.43	54	54-126	
1,2,3-Trichloropropane	10.0	8.06	81	73-129	
1,2,3-Trimethylbenzene	10.0	8.80	88	70-130	
1,2,4-Trichlorobenzene	10.0	6.00	60	48-135	
1,2,4-Trimethylbenzene	10.0	9.35	94	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.02	80	42-136	
1,2-Dichlorobenzene	10.0	8.43	84	81-110	
1,2-Dichloroethane	10.0	11.1	111	71-127	
1,2-Dichloropropane	10.0	10.3	103	81-115	
1,3-Dichlorobenzene	10.0	8.74	87	80-110	
1,3-Dichloropropane	10.0	9.30	93	79-116	
1,4-Dichlorobenzene	10.0	8.43	84	82-110	
2,2-Dichloropropane	10.0	10.4	104	50-129	
2-Chloroethyl vinyl ether	10.0	8.73 J	87	52-131	
2-Chlorotoluene	10.0	8.94	89	76-116	
2-Hexanone	20.0	19.1	95	55-133	
Bromobenzene	10.0	8.88	89	76-115	
Bromochloromethane	10.0	10.5	105	77-120	
4-Chlorotoluene	10.0	8.95	89	77-115	
p-Isopropyltoluene	10.0	9.31	93	74-120	
Acetone	20.0	21.0	105	43-136	
Benzene	10.0	10.4	104	83-112	
Bromoform	10.0	9.53	95	40-131	
Bromomethane	10.0	10.9	109	11-185	
Carbon disulfide	10.0	10.4	104	62-142	
Carbon tetrachloride	10.0	10.8	108	66-128	
Chlorobenzene	10.0	9.28	93	85-110	
Chloroethane	10.0	10.0	100	25-153	
Chloroform	10.0	10.7	107	79-117	
Chloromethane	10.0	9.60	96	44-126	
cis-1,2-Dichloroethene	10.0	10.5	105	80-113	
cis-1,3-Dichloropropene	10.0	10.2	102	61-115	
Hexachlorobutadiene	10.0	6.43	64	36-134	
Dibromomethane	10.0	11.3	113	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6830.D

Lab ID: LCS 240-96361/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.1	111	72-121	
Dichlorodifluoromethane	10.0	7.79	78	19-129	
Ethylbenzene	10.0	9.72	97	83-112	
1,2-Dibromoethane	10.0	9.71	97	79-113	
Diisopropyl ether	10.0	10.3	103	77-118	
Naphthalene	10.0	5.08	51	32-141	
m-Xylene & p-Xylene	20.0	19.7	98	83-113	
n-Butylbenzene	10.0	8.73	87	66-125	
Isopropylbenzene	10.0	9.74	97	75-114	
n-Propylbenzene	10.0	9.33	93	74-121	
2-Butanone	20.0	20.8	104	60-126	
4-Methyl-2-pentanone	20.0	21.1	105	63-128	
sec-Butylbenzene	10.0	8.83	88	70-117	
Methyl tert-butyl ether	10.0	10.2	102	52-144	
Methylene Chloride	10.0	10.1	101	66-131	
o-Xylene	10.0	9.61	96	83-113	
Styrene	10.0	9.86	99	79-114	
tert-Butylbenzene	10.0	8.61	86	71-115	
Tetrachloroethene	10.0	9.36	94	79-114	
Toluene	10.0	9.48	95	84-111	
trans-1,2-Dichloroethene	10.0	10.2	102	83-117	
trans-1,3-Dichloropropene	10.0	8.19	82	58-117	
Trichloroethene	10.0	10.5	105	76-117	
Trichlorofluoromethane	10.0	10.0	100	49-157	
Vinyl acetate	10.0	9.59	96	46-161	
Vinyl chloride	10.0	9.86	99	53-127	
tert-Butyl alcohol	200	234	117	70-130	
Xylenes, Total	30.0	29.3	98	83-112	
Dibromochloromethane	10.0	9.76	98	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Instrument ID: A3UX17 Start Date: 08/07/2013 11:45

Analysis Batch Number: 96551 End Date: 08/07/2013 22:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-96551/1		08/07/2013 11:45	1	BFB406.D	DB-624 0.18(mm)
CCVIS 240-96551/2		08/07/2013 12:14	1	UXR6855.D	DB-624 0.18(mm)
CCV 240-96551/3		08/07/2013 12:36	1	UXR6856.D	DB-624 0.18(mm)
LCS 240-96551/4		08/07/2013 12:58	1	UXR6857.D	DB-624 0.18(mm)
ZZZZZ		08/07/2013 13:21	1		DB-624 0.18(mm)
MB 240-96551/6		08/07/2013 13:44	1	UXR6859.D	DB-624 0.18(mm)
240-27440-3	DR-DPT-24-30	08/07/2013 15:06	625	UXR6860.D	DB-624 0.18(mm)
240-27440-4	DR-DPT-24-35	08/07/2013 15:29	66.67	UXR6861.D	DB-624 0.18(mm)
240-27440-6	DR-DPT-24-45	08/07/2013 15:51	50	UXR6862.D	DB-624 0.18(mm)
ZZZZZ		08/07/2013 16:13	1		DB-624 0.18(mm)
ZZZZZ		08/07/2013 16:36	1		DB-624 0.18(mm)
ZZZZZ		08/07/2013 16:59	1		DB-624 0.18(mm)
ZZZZZ		08/07/2013 17:21	1.82		DB-624 0.18(mm)
ZZZZZ		08/07/2013 17:43	1		DB-624 0.18(mm)
ZZZZZ		08/07/2013 18:06	1		DB-624 0.18(mm)
ZZZZZ		08/07/2013 18:27	10		DB-624 0.18(mm)
ZZZZZ		08/07/2013 18:49	8.33		DB-624 0.18(mm)
ZZZZZ		08/07/2013 19:12	20		DB-624 0.18(mm)
ZZZZZ		08/07/2013 19:33	33.33		DB-624 0.18(mm)
ZZZZZ		08/07/2013 19:56	41.67		DB-624 0.18(mm)
ZZZZZ		08/07/2013 20:18	3.33		DB-624 0.18(mm)
ZZZZZ		08/07/2013 20:41	10		DB-624 0.18(mm)
ZZZZZ		08/07/2013 21:03	1		DB-624 0.18(mm)
ZZZZZ		08/07/2013 21:25	1		DB-624 0.18(mm)
ZZZZZ		08/07/2013 21:48	22.22		DB-624 0.18(mm)
ZZZZZ		08/07/2013 22:10	1		DB-624 0.18(mm)
ZZZZZ		08/07/2013 22:32	625		DB-624 0.18(mm)
ZZZZZ		08/07/2013 22:54	625		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab File ID: BFB406.D BFB Injection Date: 08/07/2013

Instrument ID: A3UX17 BFB Injection Time: 11:45

Analysis Batch No.: 96551

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.9	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.7	(0.7)1
174	50.0 - 120.00 % of mass 95	95.8	
175	5.0 - 9.0 % of mass 174	6.6	(6.9)1
176	95.0 - 101.0 % of mass 174	95.6	(99.8)1
177	5.0 - 9.0 % of mass 176	5.8	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-96551/2	UXR6855.D	08/07/2013	12:14
	CCV 240-96551/3	UXR6856.D	08/07/2013	12:36
	LCS 240-96551/4	UXR6857.D	08/07/2013	12:58
	MB 240-96551/6	UXR6859.D	08/07/2013	13:44
DR-DPT-24-30	240-27440-3	UXR6860.D	08/07/2013	15:06
DR-DPT-24-35	240-27440-4	UXR6861.D	08/07/2013	15:29
DR-DPT-24-45	240-27440-6	UXR6862.D	08/07/2013	15:51

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: CCVIS 240-96551/2 Calibration Date: 08/07/2013 12:14

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6855.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3202	0.3645		1.00	0.0100	13.8	50.0
Chloromethane	Ave	0.4418	0.4908	0.1000	1.00	0.0100	11.1	50.0
Vinyl chloride	Ave	0.3741	0.4440		1.00	0.0100	18.7	20.0
Bromomethane	Ave	0.1155	0.1427		1.00	0.0100	(23.5)	50.0
Chloroethane	Ave	0.1132	0.1111		1.00	0.0100	-1.9	50.0
Trichlorofluoromethane	Ave	0.3266	0.3664		1.00	0.0100	12.2	50.0
Acrolein	Ave	0.0479	0.0435		20.0	0.100	-9.2	50.0
1,1-Dichloroethene	Ave	0.2763	0.3007		1.00	0.0100	8.8	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2358	0.2715		1.00	0.0100	15.1	50.0
Acetone	Lin1		0.1072		10.0	0.0200	12.0	50.0
Iodomethane	Ave	0.4062	0.4429		1.00	0.0100	9.0	50.0
Carbon disulfide	Ave	0.7726	0.8161		1.00	0.0100	5.6	50.0
Acetonitrile	Lin1		0.0427		20.0	0.100	24.0	50.0
Methyl acetate	Ave	0.2382	0.2600		10.0	0.0200	9.1	50.0
Methylene Chloride	Lin1		0.3949		1.00	0.0100	17.4	50.0
tert-Butyl alcohol	Ave	0.0184	0.0210		50.0	0.200	14.1	50.0
Acrylonitrile	Ave	0.1236	0.1303		20.0	0.0200	5.5	50.0
Methyl tert-butyl ether	Ave	0.7459	0.7939		1.00	0.0100	6.4	50.0
trans-1,2-Dichloroethene	Ave	0.3011	0.3266		1.00	0.0100	8.5	50.0
Hexane	Ave	0.0750	0.0797		1.00	0.0100	6.3	20.0
1,1-Dichloroethane	Ave	0.5220	0.5748	0.1000	1.00	0.0100	10.1	50.0
Vinyl acetate	Ave	0.0464	0.0417		2.00	0.0100	-10.2	50.0
2,2-Dichloropropane	Ave	0.2835	0.3197		1.00	0.0100	12.8	50.0
cis-1,2-Dichloroethene	Ave	0.3056	0.3317		1.00	0.0100	8.5	50.0
2-Butanone	Ave	0.1316	0.1399		10.0	0.0200	6.3	50.0
Bromochloromethane	Ave	0.1468	0.1660		1.00	0.0100	13.1	50.0
Tetrahydrofuran	Ave	0.0801	0.0828		5.00	0.0100	3.4	50.0
Chloroform	Ave	0.5063	0.5687		1.00	0.0100	12.3	20.0
1,1,1-Trichloroethane	Ave	0.4071	0.4617		1.00	0.0100	13.4	50.0
Cyclohexane	Ave	0.5827	0.6119		1.00	0.0100	5.0	50.0
1,1-Dichloropropene	Ave	0.3869	0.4194		1.00	0.0100	8.4	50.0
Carbon tetrachloride	Ave	0.3771	0.4379		1.00	0.0100	16.1	50.0
Benzene	Ave	1.171	1.239		1.00	0.0100	5.8	50.0
1,2-Dichloroethane	Ave	0.4201	0.4689		1.00	0.0100	11.6	50.0
Trichloroethene	Ave	0.2979	0.3398		1.00	0.0100	14.1	50.0
Methylcyclohexane	Ave	0.4828	0.5061		1.00	0.0100	4.8	50.0
1,2-Dichloropropane	Ave	0.2921	0.3015		1.00	0.0100	3.2	20.0
1,4-Dioxane	Ave	0.0025	0.0027		50.0	0.500	7.6	50.0
Dibromomethane	Ave	0.1529	0.1760		1.00	0.0100	15.1	50.0
Bromodichloromethane	Ave	0.3429	0.3890		1.00	0.0100	13.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: CCVIS 240-96551/2 Calibration Date: 08/07/2013 12:14

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6855.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1590	0.1563		10.0	0.0200	-1.7	50.0
cis-1,3-Dichloropropene	Ave	0.3874	0.4218		1.00	0.0100	8.9	50.0
4-Methyl-2-pentanone	Ave	0.2569	0.2654		10.0	0.0200	3.3	50.0
Toluene	Ave	1.523	1.583		1.00	0.0100	3.9	20.0
trans-1,3-Dichloropropene	Lin1		0.4380		1.00	0.0100	-9.0	50.0
Ethyl methacrylate	Lin1		0.3847		1.00	0.0100	-14.3	50.0
1,1,2-Trichloroethane	Ave	0.2989	0.3119		1.00	0.0100	4.3	50.0
Tetrachloroethene	Ave	0.3422	0.3801		1.00	0.0100	11.1	50.0
1,3-Dichloropropane	Ave	0.5460	0.5465		1.00	0.0100	0.1	50.0
2-Hexanone	Ave	0.2215	0.2141		10.0	0.0200	-3.4	50.0
Dibromochloromethane	Ave	0.3056	0.3403		1.00	0.0100	11.3	50.0
1,2-Dibromoethane	Ave	0.3019	0.3098		1.00	0.0100	2.6	50.0
Chlorobenzene	Ave	1.041	1.058	0.3000	1.00	0.0100	1.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3495	0.3831		1.00	0.0100	9.6	50.0
Ethylbenzene	Ave	0.5348	0.5466		1.00	0.0100	2.2	20.0
m-Xylene & p-Xylene	Ave	0.6704	0.7198		2.00	0.0200	7.4	50.0
o-Xylene	Ave	0.6303	0.6460		1.00	0.0100	2.5	50.0
Styrene	Ave	1.025	1.090		1.00	0.0100	6.3	50.0
Bromoform	Ave	0.1896	0.2189	0.1000	1.00	0.0100	15.4	50.0
Isopropylbenzene	Ave	1.585	1.663		1.00	0.0100	5.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6677	0.6310	0.3000	1.00	0.0100	-5.5	50.0
Bromobenzene	Ave	0.8260	0.8400		1.00	0.0100	1.7	50.0
1,2,3-Trichloropropane	Ave	0.2416	0.2275		1.00	0.0100	-5.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1878	0.1607		1.00	0.0100	-14.5	50.0
n-Propylbenzene	Ave	0.8092	0.8274		1.00	0.0100	2.2	50.0
2-Chlorotoluene	Ave	0.6963	0.7165		1.00	0.0100	2.9	50.0
1,3,5-Trimethylbenzene	Ave	2.380	2.489		1.00	0.0100	4.6	50.0
4-Chlorotoluene	Ave	0.7433	0.7856		1.00	0.0100	5.7	50.0
tert-Butylbenzene	Ave	2.192	2.048		1.00	0.0100	-6.6	50.0
1,2,4-Trimethylbenzene	Ave	2.403	2.412		1.00	0.0100	0.4	50.0
sec-Butylbenzene	Ave	2.839	2.714		1.00	0.0100	-4.4	50.0
1,3-Dichlorobenzene	Ave	1.540	1.533		1.00	0.0100	-0.4	50.0
p-Isopropyltoluene	Ave	2.514	2.583		1.00	0.0100	2.7	50.0
1,4-Dichlorobenzene	Ave	1.604	1.572		1.00	0.0100	-2.0	50.0
n-Butylbenzene	Ave	2.069	1.933		1.00	0.0100	-6.6	50.0
1,2-Dichlorobenzene	Ave	1.463	1.453		1.00	0.0100	-0.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1078	0.0923		2.00	0.0100	-14.4	50.0
1,3,5-Trichlorobenzene	Ave	1.157	1.040		1.00	0.0100	-10.1	50.0
1,2,4-Trichlorobenzene	Qua		0.7632		1.00	0.0100	<31.7>	50.0
Hexachlorobutadiene	Qua		0.4409		1.00	0.0100	<21.5	50.0
Naphthalene	Ave	1.974	1.072		1.00	0.0100	<45.7>	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: CCVIS 240-96551/2 Calibration Date: 08/07/2013 12:14

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6855.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Lin1		0.5790		1.00	0.0100	-41.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2564	0.2721		0.00946	0.00891	6.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3470	0.3496		0.00898	0.00891	0.8	50.0
Toluene-d8 (Surr)	Ave	1.349	1.305		0.00862	0.00891	-3.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5052	0.5056		0.00892	0.00891	0.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab Sample ID: CCV 240-96551/3 Calibration Date: 08/07/2013 12:36

Instrument ID: A3UX17 Calib Start Date: 05/07/2013 14:13

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/07/2013 16:05

Lab File ID: UXR6856.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.4497	0.4235		2.00	0.0100	-5.8	50.0
Ethyl ether	Ave	0.2647	0.2674		2.00	0.0100	1.0	50.0
3-Chloro-1-propene	Ave	0.1427	0.1282		2.00	0.0100	-10.2	50.0
Diisopropyl ether	Ave	0.2531	0.2427		10.0	0.0500	-4.1	50.0
2-Chloro-1,3-butadiene	Ave	0.4867	0.5109		2.00	0.0100	5.0	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.9284	0.8279		5.00	0.0100	-10.8	50.0
Ethyl acetate	Ave	0.2704	0.2518		4.00	0.0200	-6.9	50.0
Propionitrile	Ave	0.0414	0.0379		4.00	0.0200	-8.4	50.0
Methacrylonitrile	Ave	0.1979	0.1730		2.00	0.0100	-12.6	50.0
Isobutyl alcohol	Ave	0.0118	0.0113		50.0	0.200	-4.9	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7736	0.6424		5.00	0.0100	-17.0	50.0
n-Heptane	Ave	0.0714	0.0768		1.00	0.0100	7.5	50.0
n-Butanol	Ave	0.0094	0.0079		50.0	0.200	-15.6	50.0
Methyl methacrylate	Ave	0.2516	0.2111		2.00	0.0100	-16.1	50.0
2-Nitropropane	Ave	0.0594	0.0509		2.00	0.0200	-14.2	50.0
Cyclohexanone	Ave	0.1188	0.1033		20.0	0.100	-13.0	50.0
1,2,3-Trimethylbenzene	Ave	2.525	2.507		0.00993	0.0100	-0.7	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Lab File ID: UXR6859.D Lab Sample ID: MB 240-96551/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/07/2013 13:44

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
DR-DPT-24-30	240-27440-3	UXR6860.D	08/07/2013 15:06
DR-DPT-24-35	240-27440-4	UXR6861.D	08/07/2013 15:29
DR-DPT-24-45	240-27440-6	UXR6862.D	08/07/2013 15:51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96551/6

Matrix: Water Lab File ID: UXR6859.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2013 13:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-96551/6

Matrix: Water | Lab File ID: UXR6859.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/07/2013 13:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96551 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	0.936	J	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96551/6

Matrix: Water Lab File ID: UXR6859.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2013 13:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	83		74-115
1868-53-7	Dibromofluoromethane (Surr)	103		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96551/6

Matrix: Water Lab File ID: UXR6859.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/07/2013 13:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96551 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6857.D

Lab ID: LCS 240-96551/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.2	102	72-116	
1,1,1-Trichloroethane	10.0	10.9	109	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.45	84	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.4	114	74-151	
1,1-Dichloroethane	10.0	10.4	104	82-115	
1,1-Dichloroethene	10.0	10.0	100	78-131	
1,1-Dichloropropene	10.0	9.91	99	83-114	
1,2,3-Trichlorobenzene	10.0	5.68	57	54-126	
1,2,3-Trichloropropane	10.0	8.90	89	73-129	
1,2,3-Trimethylbenzene	10.0	8.92	89	70-130	
1,2,4-Trichlorobenzene	10.0	6.60	66	48-135	
1,2,4-Trimethylbenzene	10.0	9.39	94	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.01	80	42-136	
1,2-Dichlorobenzene	10.0	8.77	88	81-110	
1,2-Dichloroethane	10.0	10.4	104	71-127	
1,2-Dichloropropane	10.0	9.74	97	81-115	
1,3-Dichlorobenzene	10.0	9.30	93	80-110	
1,3-Dichloropropane	10.0	9.07	91	79-116	
1,4-Dichlorobenzene	10.0	8.84	88	82-110	
2,2-Dichloropropane	10.0	10.4	104	50-129	
2-Chloroethyl vinyl ether	10.0	8.51 J	85	52-131	
2-Chlorotoluene	10.0	9.47	95	76-116	
2-Hexanone	20.0	17.6	88	55-133	
Bromobenzene	10.0	9.47	95	76-115	
Bromochloromethane	10.0	10.7	107	77-120	
4-Chlorotoluene	10.0	9.56	96	77-115	
p-Isopropyltoluene	10.0	9.86	99	74-120	
Acetone	20.0	20.2	101	43-136	
Benzene	10.0	9.75	97	83-112	
Bromoform	10.0	10.8	108	40-131	
Bromomethane	10.0	10.7	107	11-185	
Carbon disulfide	10.0	10.1	101	62-142	
Carbon tetrachloride	10.0	10.7	107	66-128	
Chlorobenzene	10.0	9.69	97	85-110	
Chloroethane	10.0	10.6	106	25-153	
Chloroform	10.0	10.6	106	79-117	
Chloromethane	10.0	9.34	93	44-126	
cis-1,2-Dichloroethene	10.0	10.3	103	80-113	
cis-1,3-Dichloropropene	10.0	10.0	100	61-115	
Hexachlorobutadiene	10.0	7.28	73	36-134	
Dibromomethane	10.0	10.6	106	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6857.D

Lab ID: LCS 240-96551/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.9	109	72-121	
Dichlorodifluoromethane	10.0	7.60	76	19-129	
Ethylbenzene	10.0	9.71	97	83-112	
1,2-Dibromoethane	10.0	9.82	98	79-113	
Diisopropyl ether	10.0	10.2	102	77-118	
Naphthalene	10.0	5.16	52	32-141	
m-Xylene & p-Xylene	20.0	19.7	99	83-113	
n-Butylbenzene	10.0	8.92	89	66-125	
Isopropylbenzene	10.0	9.86	99	75-114	
n-Propylbenzene	10.0	9.81	98	74-121	
2-Butanone	20.0	20.2	101	60-126	
4-Methyl-2-pentanone	20.0	19.2	96	63-128	
sec-Butylbenzene	10.0	9.15	92	70-117	
Methyl tert-butyl ether	10.0	10.0	100	52-144	
Methylene Chloride	10.0	10.7	107	66-131	
o-Xylene	10.0	9.83	98	83-113	
Styrene	10.0	10.1	101	79-114	
tert-Butylbenzene	10.0	8.82	88	71-115	
Tetrachloroethene	10.0	10.2	102	79-114	
Toluene	10.0	9.58	96	84-111	
trans-1,2-Dichloroethene	10.0	10.0	100	83-117	
trans-1,3-Dichloropropene	10.0	8.31	83	58-117	
Trichloroethene	10.0	10.5	105	76-117	
Trichlorofluoromethane	10.0	10.3	103	49-157	
Vinyl acetate	10.0	9.16	92	46-161	
Vinyl chloride	10.0	9.72	97	53-127	
tert-Butyl alcohol	200	236	118	70-130	
Xylenes, Total	30.0	29.5	98	83-112	
Dibromochloromethane	10.0	9.91	99	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6853.D

Lab ID: 240-27428-A-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Benzene	10.0	1.0 U	10.8	108	72-121	
Ethylbenzene	10.0	1.0 U	9.66	97	75-116	
m-Xylene & p-Xylene	20.0	2.0 U	20.0	100	75-117	
o-Xylene	10.0	1.0 U	9.68	97	76-116	
Toluene	10.0	1.0 U	9.55	96	78-114	
Xylenes, Total	30.0	2.0 U	29.7	99	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6854.D

Lab ID: 240-27428-A-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzene	10.0	10.1	101	6	30	72-121	
Ethylbenzene	10.0	9.32	93	4	30	75-116	
m-Xylene & p-Xylene	20.0	19.2	96	4	30	75-117	
o-Xylene	10.0	9.31	93	4	30	76-116	
Toluene	10.0	9.22	92	4	30	78-114	
Xylenes, Total	30.0	28.5	95	4	30	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Sample No.: STD8260 240-92260/4 Date Analyzed: 07/02/2013 10:31

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR6126.D Heated Purge: (Y/N) N

Calibration ID: 16141

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1341606	5.76	1090840	8.48	658450	10.72
UPPER LIMIT		2683212	6.26	2181680	8.98	1316900	11.22
LOWER LIMIT		670803	5.26	545420	7.98	329225	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92260/8		1263222	5.76	971310	8.48	471339	10.72
CCVIS 240-96361/2		1022019	5.76	917057	8.48	562097	10.72
CCVIS 240-96551/2		962540	5.76	807630	8.48	477872	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Sample No.: CCVIS 240-96361/2 Date Analyzed: 08/06/2013 12:23

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR6828.D Heated Purge: (Y/N) N

Calibration ID: 16141

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1022019	5.76	917057	8.48	562097	10.72
UPPER LIMIT		2044038	6.26	1834114	8.98	1124194	11.22
LOWER LIMIT		511010	5.26	458529	7.98	281049	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-96361/3		1064661	5.76	911466	8.48	486599	10.72
LCS 240-96361/4		1025625	5.76	897068	8.48	561217	10.72
MB 240-96361/6		937940	5.76	851207	8.48	445943	10.72
240-27440-1	DR-DPT-24-15	944960	5.76	782762	8.48	363194	10.72
240-27440-2	DR-DPT-24-25	939339	5.76	904521	8.48	499871	10.72
240-27440-5	DR-DPT-24-40	874828	5.76	798295	8.48	452471	10.72
240-27440-7	DR-DPT-24-50	852155	5.76	735540	8.48	331053	10.72
240-27440-9	TB-073113	899776	5.76	833679	8.48	443487	10.72
240-27440-8	DR-DPT-24-55	882333	5.76	826827	8.48	451888	10.72
240-27428-A-1 MS		947570	5.76	859313	8.48	544225	10.72
240-27428-A-1 MSD		980100	5.76	872820	8.48	548066	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27440-1

SDG No.:

Sample No.: CCVIS 240-96551/2 Date Analyzed: 08/07/2013 12:14

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR6855.D Heated Purge: (Y/N) N

Calibration ID: 16141

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		962540	5.76	807630	8.48	477872	10.72
UPPER LIMIT		1925080	6.26	1615260	8.98	955744	11.22
LOWER LIMIT		481270	5.26	403815	7.98	238936	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-96551/3		1052903	5.76	783142	8.48	418668	10.72
LCS 240-96551/4		1037928	5.76	856473	8.48	533416	10.72
MB 240-96551/6		909863	5.76	763330	8.48	427407	10.72
240-27440-3	DR-DPT-24-30	1003248	5.76	828743	8.48	441296	10.72
240-27440-4	DR-DPT-24-35	986225	5.76	768691	8.48	422199	10.72
240-27440-6	DR-DPT-24-45	950740	5.76	763208	8.48	411388	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

SDG 240-27440-1

SAMPLE ID DR-DPT-24-30

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST / IS AMOUNT (NG)	Final Volume (ML)	AVE RRF	CONCENTRATION ug/L
1003248	625	807627 / 10	5	0.2979	16889.32
			Sample Volume (ML)		
			5		

Trichloroethene = 17,000

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27440-1

SDG No.:

Client Sample ID: DR-DPT-24-30 | Lab Sample ID: 240-27440-3

Matrix: Water | Lab File ID: UXR6860.D

Analysis Method: 8260B | Date Collected: 07/31/2013 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/07/2013 15:06

Soil Aliquot Vol: | Dilution Factor: 625

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96551 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	630	U	630	100
74-87-3	Chloromethane	630	U	630	190
156-59-2	cis-1,2-Dichloroethene	580	J	630	110
10061-01-5	cis-1,3-Dichloropropene	630	U	630	88
87-68-3	Hexachlorobutadiene	630	U	630	190
74-95-3	Dibromomethane	630	U	630	180
75-27-4	Bromodichloromethane	630	U	630	94
75-71-8	Dichlorodifluoromethane	630	U	630	190
100-41-4	Ethylbenzene	630	U	630	110
106-93-4	1,2-Dibromoethane	630	U	630	150
108-20-3	Diisopropyl ether	6300	U	6300	940
91-20-3	Naphthalene	630	U	630	150
179601-23-1	m-Xylene & p-Xylene	1300	U	1300	150
104-51-8	n-Butylbenzene	630	U	630	75
98-82-8	Isopropylbenzene	630	U	630	81
103-65-1	n-Propylbenzene	630	U	630	88
78-93-3	2-Butanone	6300	U	6300	360
108-10-1	4-Methyl-2-pentanone	6300	U	6300	200
135-98-8	sec-Butylbenzene	630	U	630	81
1634-04-4	Methyl tert-butyl ether	630	U	630	110
994-05-8	Tert-amyl-methyl ether (TAME)	3100	U	3100	42
75-09-2	Methylene Chloride	610	J B	630	210
95-47-6	o-Xylene	630	U	630	88
100-42-5	Styrene	630	U	630	69
637-92-3	Ethyl-t-butyl ether (ETBE)	3100	U	3100	69
98-06-6	tert-Butylbenzene	630	U	630	81
127-18-4	Tetrachloroethene	630	U	630	180
108-88-3	Toluene	630	U	630	81
156-60-5	trans-1,2-Dichloroethene	630	U	630	120
10061-02-6	trans-1,3-Dichloropropene	630	U	630	120
79-01-6	Trichloroethene	17000		630	110
75-69-4	Trichlorofluoromethane	630	U	630	130
108-05-4	Vinyl acetate	1300	U	1300	120
75-01-4	Vinyl chloride	630	U	630	140
75-65-0	tert-Butyl alcohol	31000	U	31000	2400
1330-20-7	Xylenes, Total	1300	U	1300	88

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCCHROM\ChromData\A3UX17\20130807-22294.b\UXR6860.D
Lims ID: 240-27440-C-3 Client ID: DR-DPT-24-30
Inject. Date: 07-Aug-2013 15:06:30 Dil. Factor: 625.0000
Sample Type: Client
Sample ID: 240-0022294-007
Misc. Info.:
Operator: 1644 Instrument ID: A3UX17
Purge Vol: 5.000 mL ALS Bottle#: 6
Lims Batch ID: 96551 Lims Sample ID: 7
Detector: MS SCAN

Method: \\NCCHROM\ChromData\A3UX17\20130807-22294.b\8260_17.m
Last Update: 08-Aug-2013 08:38:12 Calib Date: 02-Jul-2013 11:37:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCCHROM\ChromData\A3UX17\20130702-21310.b\UXR6129.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK037

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.763	5.763	0.0	99	1003248	10.0	
* 2 Chlorobenzene-d5	117	8.479	8.479	0.0	86	828743	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.0	94	441296	10.0	
$ 6 Dibromofluoromethane (Surr)	113	5.194	5.182	0.012	60	217520	8.46	
$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.491	5.491	0.0	0	271248	7.79	
$ 8 Toluene-d8 (Surr)	98	7.151	7.151	0.0	93	814204	7.29	
$ 9 4-Bromofluorobenzene (Surr)	95	9.594	9.594	0.0	96	292330	6.98	
14 Dichlorodifluoromethane	85		1.648					
15 Chloromethane	50		1.826					
17 Vinyl chloride	62	1.957	1.957	0.0	25	6901	0.1839	
18 Bromomethane	94		2.313					
19 Chloroethane	64		2.419					9
21 Trichlorofluoromethane	101		2.668					
25 1,1-Dichloroethene	96		3.178					
26 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.190					
27 Acetone	43		3.237					
29 Carbon disulfide	76		3.392					9
33 Methylene Chloride	84	3.641	3.641	0.0	92	70426	0.9813	
34 2-Methyl-2-propanol	59		3.736					
35 Methyl tert-butyl ether	73		3.878					
37 trans-1,2-Dichloroethene	96		3.890					
39 1,1-Dichloroethane	63		4.269					
41 Isopropyl ether	87		4.305					
40 Vinyl acetate	86		4.305					
43 Tert-butyl ethyl ether	59		4.625					
45 cis-1,2-Dichloroethene	96	4.779	4.779	0.0	54	28518	0.9300	
44 2,2-Dichloropropane	77		4.779					9
46 2-Butanone (MEK)	43		4.791					
50 Chlorobromomethane	128		4.993					
52 Chloroform	83		5.052					9
53 1,1,1-Trichloroethane	97		5.206					
56 1,1-Dichloropropene	75		5.348					

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
55 Carbon tetrachloride	117		5.348					
58 Benzene	78		5.538					
59 1,2-Dichloroethane	62	5.550	5.550	0.0	3	5180	0.1229	
60 Tert-amyl methyl ether	73		5.609					
63 Trichloroethene	130	6.084	6.084	0.0	93	807627	27.0	
66 1,2-Dichloropropane	63		6.285					
69 Dibromomethane	93		6.392					
70 Dichlorobromomethane	83		6.522					
72 2-Chloroethyl vinyl ether	63		6.759					
73 cis-1,3-Dichloropropene	75		6.902					
74 4-Methyl-2-pentanone (MIBK)	43		7.032					
75 Toluene	91		7.210					9
76 trans-1,3-Dichloropropene	75		7.400					
79 Tetrachloroethene	164		7.696					9
81 1,3-Dichloropropane	76		7.732					
82 2-Hexanone	43		7.779					
84 Chlorodibromomethane	129		7.945					
85 Ethylene Dibromide	107		8.052					
87 Chlorobenzene	112		8.503					9
88 1,1,1,2-Tetrachloroethane	131		8.574					
89 Ethylbenzene	106		8.586					
90 m-Xylene & p-Xylene	106		8.692					9
91 o-Xylene	106		9.084					9
92 Styrene	104		9.096					
93 Bromoform	173		9.285					
95 Isopropylbenzene	105		9.428					9
97 1,1,2,2-Tetrachloroethane	83		9.724					
98 Bromobenzene	156		9.748					
100 1,2,3-Trichloropropane	110		9.772					
101 N-Propylbenzene	120		9.831					
102 2-Chlorotoluene	126		9.926					
104 4-Chlorotoluene	126		10.032					
105 tert-Butylbenzene	119		10.317					
106 1,2,4-Trimethylbenzene	105		10.364					9
107 sec-Butylbenzene	105		10.530					9
108 1,3-Dichlorobenzene	146		10.661					
109 4-Isopropyltoluene	119		10.673					9
110 1,4-Dichlorobenzene	146		10.744					
111 1,2,3-Trimethylbenzene	105		10.791					9
112 n-Butylbenzene	91		11.076					9
113 1,2-Dichlorobenzene	146		11.123					9
114 1,2-Dibromo-3-Chloropropane	157		11.906					
116 1,2,4-Trichlorobenzene	180		12.724					9
117 Hexachlorobutadiene	225		12.890					9
118 Naphthalene	128		12.997					9
119 1,2,3-Trichlorobenzene	180		13.258					9
S 124 Xylenes, Total	106		16.530					7

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **NOVEMBER 5, 2013**

FROM: **EDWARD SEDLMYER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN – MARTIN STATE ARIPORT (MSA) – DUMP ROAD SOURCE AREAS
SDG 240-27487-1

SAMPLES: 8/Aqueous/VOC

DR-DPT-24-60	DR-DPT-29-10	DR-DPT-29-15
DR-DPT-29-20	DR-DPT-29-25	DR-DPT-29-30
DR-DPT-29-35	DR-DPT-29-40	

Overview

The sample set for Lockheed Martin – MSA Dump Road Source Areas, SDG 240-27487-1 consists of eight (8) aqueous environmental samples. The samples were analyzed for volatile organic compounds (VOCs).

The samples were collected by Tetra Tech on August 1, 2013 and analyzed by Test America (North Canton). All analyses were conducted in accordance with SW-846 Method 8260B analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, internal standard recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

- The VOC initial calibration and associated continuing calibration relative response factors (RRFs) were less than the 0.05 quality control limit for tert-butyl alcohol and vinyl acetate on instrument A3UX10. The non-detected results reported for tert-butyl alcohol and vinyl acetate were rejected (UR). The positive tert-butyl alcohol results were qualified as estimated (J).

- Tentatively identified compounds (TICS) containing silanol were qualified as rejected (R) in several samples. This compound is indicative of column bleed.

Minor

- The following contaminant was detected in the laboratory method blank at the following maximum concentration:

Analyte	Maximum Concentration	Action Level
Acetone	1.51 ug/L	15.1 ug/L

An action level of 10X the maximum contaminant level for acetone has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive results less than the blank action level were qualified (B) as a result of laboratory blank contamination.

- Samples DR-DPT-24-60, DR-DPT-29-35 and DR-DPT-29-40 had a pH >2.The positive and nondetected results for samples DR-DPT-24-60, DR-DPT-29-35 and DR-DPT-29-40 were qualified estimated (J) and (UJ), respectively.

- Samples DR-DPT-24-60 and DR-DPT-29-40 had sediment in all vials. The laboratory decanted off the water from the sediment so the purge needle would not be imbedded in the sediment. This resulted in headspace in the vial which probably resulted in a loss of VOC compounds. The positive and nondetected results for samples DR-DPT-24-60 and DR-DPT-29-40 have been qualified as estimated (J) and (UJ), respectively.

- Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

Notes

The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for bromomethane, chloroethane, 2,2-dichloropropane, carbon tetrachloride, bromodichloromethane, trans-1,3-dichoroproene, dibromochloromethane, 1,1,1,2-tetrachloroethane, bromoform, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene, for instrument A3UX10 on 08/06/13 @ 12:29. No action was taken on this basis because the affected sample results were nondetected for the aforementioned compounds.

Samples DR-DPT-24-60 and DR-DPT-29-40 were diluted due to sample matrix problems. This accounts for the elevated detection limit for the nondetected compounds.

Executive Summary

Laboratory Performance: Two VOC compounds had RRF noncompliances resulting in the rejection of data. TICs containing silanol were rejected.

Other Factors Affecting Data Quality: Positive results less than the reporting limit (RL) were qualified due to uncertainty near the detection limit. Preservation noncompliance resulted in the qualification of data for three samples. Sample headspace noncompliance resulted in the qualification of data for two samples.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Edward Sedlmyer
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-60						DR-DPT-24-60A			DR-DPT-29-10		
SDG: 240-27487-1	LAB_ID	240-27487-1						240-27487-1			240-27487-2		
FRACTION: OV	SAMP_DATE	8/1/2013						8/1/2013			8/1/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			TIC			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.46	UJ	MQ							0.23	U	
1,1,1-TRICHLOROETHANE		0.44	UJ	MQ							0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.36	UJ	MQ							0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.56	UJ	MQ							0.28	U	
1,1-DICHLOROETHANE		0.3	UJ	MQ							0.15	U	
1,1-DICHLOROETHENE		0.38	UJ	MQ							0.19	U	
1,1-DICHLOROPROPENE		0.26	UJ	MQ							0.13	U	
1,2,3-TRICHLOROBENZENE		0.34	UJ	MQ							0.17	U	
1,2,3-TRICHLOROPROPANE		0.86	UJ	MQ							0.43	U	
1,2,3-TRIMETHYLBENZENE		0.012	UJ	MQ							0.0059	U	
1,2,4-TRICHLOROBENZENE		0.3	UJ	MQ							0.15	U	
1,2,4-TRIMETHYLBENZENE		0.24	UJ	MQ							0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		1.3	UJ	MQ							0.67	U	
1,2-DIBROMOETHANE		0.48	UJ	MQ							0.24	U	
1,2-DICHLOROBENZENE		0.26	UJ	MQ							0.13	U	
1,2-DICHLOROETHANE		4.1	J	MQ							0.22	U	
1,2-DICHLOROPROPANE		0.36	UJ	MQ							0.18	U	
1,3-DICHLOROBENZENE		0.28	UJ	MQ							0.14	U	
1,3-DICHLOROPROPANE		0.32	UJ	MQ							0.16	U	
1,4-DICHLOROBENZENE		0.26	UJ	MQ							0.13	U	
1-BUTANOL					37	J	P						
1-PENTENE													
2,2-DICHLOROPROPANE		0.26	UJ	MQ							0.13	U	
2-BUTANONE		6.6	J	MPQ							1.2	J	P
2-CHLOROETHYL VINYL ETHER		2	UJ	MQ							0.99	U	
2-CHLOROTOLUENE		0.22	UJ	MQ							0.11	U	
2-HEXANONE		0.82	UJ	MQ							0.41	U	
2-METHYL-1-BUTENE					7.2	NJ	Z1	4.5	NJ	Z1			
2-METHYLBUTANE													
2-PENTENE (CIS)													
4-CHLOROTOLUENE		0.36	UJ	MQ							0.18	U	
4-ISOPROPYLTOLUENE		0.24	UJ	MQ							0.12	U	
4-METHYL-2-PENTANONE		0.64	UJ	MQ							0.32	U	
ACETONE		31	B	A							7.6	B	A
BENZENE		0.6	J	MPQ							0.16	J	P
BROMOBENZENE		0.26	UJ	MQ							0.13	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-29-15			DR-DPT-29-20			DR-DPT-29-25					
SDG: 240-27487-1	LAB_ID	240-27487-3			240-27487-4			240-27487-5					
FRACTION: OV	SAMP_DATE	8/1/2013			8/1/2013			8/1/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U		0.23	U				
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U				
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U				
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U				
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U				
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U				
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U				
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U				
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U				
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U				
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U				
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U				
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U				
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U				
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U				
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U				
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U				
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U				
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U				
1-BUTANOL													
1-PENTENE													
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.13	U				
2-BUTANONE		0.57	U		0.57	U		0.57	U				
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		0.99	U				
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U				
2-HEXANONE		0.41	U		0.41	U		0.41	U				
2-METHYL-1-BUTENE													
2-METHYLBUTANE											2.4	NJ	Z1
2-PENTENE (CIS)													
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U				
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U				
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U				
ACETONE		2.7	B	A	2.9	B	A	3.3	B	A			
BENZENE		0.13	U		0.13	U		0.13	J	P			
BROMOBENZENE		0.13	U		0.13	U		0.13	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-29-30						DR-DPT-29-35					
SDG: 240-27487-1	LAB_ID	240-27487-6						240-27487-7					
FRACTION: OV	SAMP_DATE	8/1/2013						8/1/2013					
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U					0.23	UJ	M			
1,1,1-TRICHLOROETHANE		0.22	U					0.22	UJ	M			
1,1,2,2-TETRACHLOROETHANE		0.18	U					0.18	UJ	M			
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U					0.28	UJ	M			
1,1-DICHLOROETHANE		0.15	U					0.15	UJ	M			
1,1-DICHLOROETHENE		0.19	U					0.19	UJ	M			
1,1-DICHLOROPROPENE		0.13	U					0.13	UJ	M			
1,2,3-TRICHLOROBENZENE		0.17	U					0.17	UJ	M			
1,2,3-TRICHLOROPROPANE		0.43	U					0.43	UJ	M			
1,2,3-TRIMETHYLBENZENE		0.0059	U					0.0059	UJ	M			
1,2,4-TRICHLOROBENZENE		0.15	U					0.15	UJ	M			
1,2,4-TRIMETHYLBENZENE		0.12	U					0.15	J	MP			
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U					0.67	UJ	M			
1,2-DIBROMOETHANE		0.24	U					0.24	UJ	M			
1,2-DICHLOROBENZENE		0.13	U					0.13	UJ	M			
1,2-DICHLOROETHANE		0.22	U					0.22	UJ	M			
1,2-DICHLOROPROPANE		0.18	U					0.18	UJ	M			
1,3-DICHLOROBENZENE		0.14	U					0.14	UJ	M			
1,3-DICHLOROPROPANE		0.16	U					0.16	UJ	M			
1,4-DICHLOROBENZENE		0.13	U					0.13	UJ	M			
1-BUTANOL													
1-PENTENE											5.5	NJ	Z1
2,2-DICHLOROPROPANE		0.13	U					0.13	UJ	M			
2-BUTANONE		0.74	J	P				4	J	MP			
2-CHLOROETHYL VINYL ETHER		0.99	U					0.99	UJ	M			
2-CHLOROTOLUENE		0.11	U					0.11	UJ	M			
2-HEXANONE		0.41	U					0.66	J	MP			
2-METHYL-1-BUTENE													
2-METHYLBUTANE					1.9	NJ	Z1				4	NJ	Z1
2-PENTENE (CIS)													
4-CHLOROTOLUENE		0.18	U					0.18	UJ	M			
4-ISOPROPYLTOLUENE		0.12	U					0.12	UJ	M			
4-METHYL-2-PENTANONE		0.32	U					0.32	UJ	M			
ACETONE		3	B	A				15	B	A			
BENZENE		0.16	J	P				0.69	J	MP			
BROMOBENZENE		0.13	U					0.13	UJ	M			

PROJ_NO: 04882	NSAMPLE	DR-DPT-29-40					
SDG: 240-27487-1	LAB_ID	240-27487-8					
FRACTION: OV	SAMP_DATE	8/1/2013					
MEDIA: WATER	QC_TYPE	NM			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.92	UJ	MQ			
1,1,1-TRICHLOROETHANE		0.88	UJ	MQ			
1,1,2,2-TETRACHLOROETHANE		0.72	UJ	MQ			
1,1,2-TRICHLOROTRIFLUOROETHANE		1.1	UJ	MQ			
1,1-DICHLOROETHANE		0.6	UJ	MQ			
1,1-DICHLOROETHENE		0.76	UJ	MQ			
1,1-DICHLOROPROPENE		0.52	UJ	MQ			
1,2,3-TRICHLOROBENZENE		0.68	UJ	MQ			
1,2,3-TRICHLOROPROPANE		1.7	UJ	MQ			
1,2,3-TRIMETHYLBENZENE		0.024	UJ	MQ			
1,2,4-TRICHLOROBENZENE		0.6	UJ	MQ			
1,2,4-TRIMETHYLBENZENE		0.48	UJ	MQ			
1,2-DIBROMO-3-CHLOROPROPANE		2.7	UJ	MQ			
1,2-DIBROMOETHANE		0.96	UJ	MQ			
1,2-DICHLOROBENZENE		0.52	UJ	MQ			
1,2-DICHLOROETHANE		0.88	UJ	MQ			
1,2-DICHLOROPROPANE		0.72	UJ	MQ			
1,3-DICHLOROBENZENE		0.56	UJ	MQ			
1,3-DICHLOROPROPANE		0.64	UJ	MQ			
1,4-DICHLOROBENZENE		0.52	UJ	MQ			
1-BUTANOL					53	J	P
1-PENTENE							
2,2-DICHLOROPROPANE		0.52	UJ	MQ			
2-BUTANONE		6.9	J	MPQ			
2-CHLOROETHYL VINYL ETHER		4	UJ	MQ			
2-CHLOROTOLUENE		0.44	UJ	MQ			
2-HEXANONE		1.6	UJ	MQ			
2-METHYL-1-BUTENE							
2-METHYLBUTANE							
2-PENTENE (CIS)					7.8	NJ	Z1
4-CHLOROTOLUENE		0.72	UJ	MQ			
4-ISOPROPYLTOLUENE		0.48	UJ	MQ			
4-METHYL-2-PENTANONE		1.3	UJ	MQ			
ACETONE		26	B	A			
BENZENE		1.2	J	MPQ			
BROMOBENZENE		0.52	UJ	MQ			

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-60						DR-DPT-24-60A			DR-DPT-29-10		
SDG: 240-27487-1	LAB_ID	240-27487-1						240-27487-1			240-27487-2		
FRACTION: OV	SAMP_DATE	8/1/2013						8/1/2013			8/1/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			TIC			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOCHLOROMETHANE		0.58	UJ	MQ							0.29	U	
BROMODICHLOROMETHANE		0.3	UJ	MQ							0.15	U	
BROMOFORM		1.3	UJ	MQ							0.64	U	
BROMOMETHANE		0.82	UJ	MQ							0.41	U	
CARBON DISULFIDE		0.54	J	MPQ							0.13	U	
CARBON TETRACHLORIDE		0.26	UJ	MQ							0.13	U	
CHLOROBENZENE		0.3	UJ	MQ							0.15	U	
CHLORODIBROMOMETHANE		0.36	UJ	MQ							0.18	U	
CHLOROETHANE		0.58	UJ	MQ							0.29	U	
CHLOROFORM		0.92	J	MPQ							0.16	U	
CHLOROMETHANE		0.6	UJ	MQ							0.3	U	
CIS-1,2-DICHLOROETHENE		5.4	J	MQ							0.17	U	
CIS-1,3-DICHLOROPROPENE		0.28	UJ	MQ							0.14	U	
CYCLOHEXANE													
DIBROMOMETHANE		0.56	UJ	MQ							0.28	U	
DICHLORODIFLUOROMETHANE		0.62	UJ	MQ							0.31	U	
DIISOPROPYL ETHER		3	UJ	MQ							1.5	U	
ETHYL TERT-BUTYL ETHER		0.22	UJ	MQ							0.11	U	
ETHYLBENZENE		0.34	UJ	MQ							0.17	U	
HEXACHLOROBUTADIENE		0.6	UJ	MQ							0.3	U	
HEXANE													
ISOBUTANOL													
ISOPROPYLBENZENE		0.26	UJ	MQ							0.13	U	
M+P-XYLENES		0.48	UJ	MQ							0.24	U	
METHYL TERT-BUTYL ETHER		0.34	UJ	MQ							0.17	U	
METHYLENE CHLORIDE		4.2	J	MQ							0.33	U	
NAPHTHALENE		0.48	UJ	MQ							0.24	U	
N-BUTYLBENZENE		0.24	UJ	MQ							0.12	U	
N-PROPYLBENZENE		0.28	UJ	MQ							0.14	U	
O-XYLENE		0.28	UJ	MQ							0.14	U	
SEC-BUTYLBENZENE		0.26	UJ	MQ							0.13	U	
STYRENE		0.22	UJ	MQ							0.11	U	
TERT-AMYL METHYL ETHER		0.13	UJ	MQ							0.067	U	
TERT-BUTYLBENZENE		0.26	UJ	MQ							0.13	U	
TERTIARY-BUTYL ALCOHOL		26	J	CMPQ							3.9	UR	C
TETRACHLOROETHENE		0.58	UJ	MQ							0.29	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-29-15			DR-DPT-29-20			DR-DPT-29-25					
SDG: 240-27487-1	LAB_ID	240-27487-3			240-27487-4			240-27487-5					
FRACTION: OV	SAMP_DATE	8/1/2013			8/1/2013			8/1/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U				
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U				
BROMOFORM		0.64	U		0.64	U		0.64	U				
BROMOMETHANE		0.41	U		0.41	U		0.41	U				
CARBON DISULFIDE		0.13	U		0.6	J	P	0.26	J	P			
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U				
CHLOROBENZENE		0.15	U		0.15	U		0.15	U				
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U				
CHLOROETHANE		0.29	U		0.29	U		0.29	U				
CHLOROFORM		0.16	U		0.16	U		0.16	U				
CHLOROMETHANE		0.3	U		0.3	U		0.3	U				
CIS-1,2-DICHLOROETHENE		0.23	J	P	2.1			0.17	U				
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U				
CYCLOHEXANE											0.2	J	P
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U				
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U				
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U				
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U				
ETHYLBENZENE		0.17	U		0.17	U		0.17	U				
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U				
HEXANE											0.73	J	P
ISOBUTANOL													
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U				
M+P-XYLENES		0.24	U		0.24	U		0.24	U				
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U				
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U				
NAPHTHALENE		0.24	U		0.24	U		0.24	U				
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U				
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U				
O-XYLENE		0.14	U		0.14	U		0.14	U				
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U				
STYRENE		0.11	U		0.11	U		0.11	U				
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U				
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U				
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3.9	UR	C	3.9	UR	C			
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-29-30						DR-DPT-29-35					
SDG: 240-27487-1	LAB_ID	240-27487-6						240-27487-7					
FRACTION: OV	SAMP_DATE	8/1/2013						8/1/2013					
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOCHLOROMETHANE	0.29	U					0.29	UJ	M			
BROMODICHLOROMETHANE	0.15	U					0.15	UJ	M			
BROMOFORM	0.64	U					0.64	UJ	M			
BROMOMETHANE	0.41	U					0.41	UJ	M			
CARBON DISULFIDE	0.25	J	P				0.44	J	MP			
CARBON TETRACHLORIDE	0.13	U					0.13	UJ	M			
CHLOROBENZENE	0.15	U					0.15	UJ	M			
CHLORODIBROMOMETHANE	0.18	U					0.18	UJ	M			
CHLOROETHANE	0.29	U					0.29	UJ	M			
CHLOROFORM	0.16	U					0.16	UJ	M			
CHLOROMETHANE	0.3	U					0.3	UJ	M			
CIS-1,2-DICHLOROETHENE	0.17	U					0.17	UJ	M			
CIS-1,3-DICHLOROPROPENE	0.14	U					0.14	UJ	M			
CYCLOHEXANE				0.15	J	P						
DIBROMOMETHANE	0.28	U					0.28	UJ	M			
DICHLORODIFLUOROMETHANE	0.31	U					0.31	UJ	M			
DIISOPROPYL ETHER	1.5	U					1.5	UJ	M			
ETHYL TERT-BUTYL ETHER	0.11	U					0.11	UJ	M			
ETHYLBENZENE	0.17	U					0.24	J	MP			
HEXACHLOROBUTADIENE	0.3	U					0.3	UJ	M			
HEXANE				0.56	J	P				2.5	NJ	Z1
ISOBUTANOL										27	J	P
ISOPROPYLBENZENE	0.13	U					0.13	UJ	M			
M+P-XYLENES	0.24	U					0.52	J	MP			
METHYL TERT-BUTYL ETHER	0.17	U					0.17	UJ	M			
METHYLENE CHLORIDE	0.33	U					0.33	UJ	M			
NAPHTHALENE	0.24	U					0.24	UJ	M			
N-BUTYLBENZENE	0.12	U					0.12	UJ	M			
N-PROPYLBENZENE	0.14	U					0.14	UJ	M			
O-XYLENE	0.14	U					0.21	J	MP			
SEC-BUTYLBENZENE	0.13	U					0.13	UJ	M			
STYRENE	0.11	U					0.11	UJ	M			
TERT-AMYL METHYL ETHER	0.067	U					0.067	UJ	M			
TERT-BUTYLBENZENE	0.13	U					0.13	UJ	M			
TERTIARY-BUTYL ALCOHOL	8.9	J	CP				3.9	UR	C			
TETRACHLOROETHENE	0.29	U					0.29	UJ	M			

PROJ_NO: 04882	NSAMPLE	DR-DPT-29-40					
SDG: 240-27487-1	LAB_ID	240-27487-8					
FRACTION: OV	SAMP_DATE	8/1/2013					
MEDIA: WATER	QC_TYPE	NM			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOCHLOROMETHANE		1.2	UJ	MQ			
BROMODICHLOROMETHANE		0.6	UJ	MQ			
BROMOFORM		2.6	UJ	MQ			
BROMOMETHANE		1.6	UJ	MQ			
CARBON DISULFIDE		0.52	UJ	MQ			
CARBON TETRACHLORIDE		0.52	UJ	MQ			
CHLOROBENZENE		0.6	UJ	MQ			
CHLORODIBROMOMETHANE		0.72	UJ	MQ			
CHLOROETHANE		1.2	UJ	MQ			
CHLOROFORM		0.64	UJ	MQ			
CHLOROMETHANE		1.2	UJ	MQ			
CIS-1,2-DICHLOROETHENE		0.68	UJ	MQ			
CIS-1,3-DICHLOROPROPENE		0.56	UJ	MQ			
CYCLOHEXANE							
DIBROMOMETHANE		1.1	UJ	MQ			
DICHLORODIFLUOROMETHANE		1.2	UJ	MQ			
DIISOPROPYL ETHER		6	UJ	MQ			
ETHYL TERT-BUTYL ETHER		0.44	UJ	MQ			
ETHYLBENZENE		0.68	UJ	MQ			
HEXACHLOROBUTADIENE		1.2	UJ	MQ			
HEXANE					1.4	J	P
ISOBUTANOL							
ISOPROPYLBENZENE		0.52	UJ	MQ			
M+P-XYLENES		0.96	UJ	MQ			
METHYL TERT-BUTYL ETHER		0.68	UJ	MQ			
METHYLENE CHLORIDE		3.7	J	MPQ			
NAPHTHALENE		0.96	UJ	MQ			
N-BUTYLBENZENE		0.48	UJ	MQ			
N-PROPYLBENZENE		0.56	UJ	MQ			
O-XYLENE		0.56	UJ	MQ			
SEC-BUTYLBENZENE		0.52	UJ	MQ			
STYRENE		0.44	UJ	MQ			
TERT-AMYL METHYL ETHER		0.27	UJ	MQ			
TERT-BUTYLBENZENE		0.52	UJ	MQ			
TERTIARY-BUTYL ALCOHOL		16	UR	C			
TETRACHLOROETHENE		1.2	UJ	MQ			

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-60						DR-DPT-24-60A			DR-DPT-29-10		
SDG: 240-27487-1	LAB_ID	240-27487-1						240-27487-1			240-27487-2		
FRACTION: OV	SAMP_DATE	8/1/2013						8/1/2013			8/1/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			TIC			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TETRAHYDROFURAN													
TOLUENE		0.98	J	MPQ							0.13	U	
TOTAL XYLENES		0.28	UJ	MQ							0.14	U	
TRANS-1,2-DICHLOROETHENE		0.38	UJ	MQ							0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.38	UJ	MQ							0.19	U	
TRICHLOROETHENE		5	J	MPQ							0.29	J	P
TRICHLOROFLUOROMETHANE		0.42	UJ	MQ							0.21	U	
VINYL ACETATE		0.38	UR	C							0.19	UR	C
VINYL CHLORIDE		0.44	UJ	MQ							0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-29-15			DR-DPT-29-20			DR-DPT-29-25					
SDG: 240-27487-1	LAB_ID	240-27487-3			240-27487-4			240-27487-5					
FRACTION: OV	SAMP_DATE	8/1/2013			8/1/2013			8/1/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TETRAHYDROFURAN													
TOLUENE		0.13	U		0.13	U		0.16	J	P			
TOTAL XYLENES		0.14	U		0.14	U		0.14	U				
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U				
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U				
TRICHLOROETHENE		0.17	U		0.17	U		0.17	U				
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U				
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C			
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-29-30						DR-DPT-29-35					
SDG: 240-27487-1	LAB_ID	240-27487-6						240-27487-7					
FRACTION: OV	SAMP_DATE	8/1/2013						8/1/2013					
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TETRAHYDROFURAN													
TOLUENE		0.19	J	P				1.3	J	M			
TOTAL XYLENES		0.14	U					0.73	J	MP			
TRANS-1,2-DICHLOROETHENE		0.19	U					0.19	UJ	M			
TRANS-1,3-DICHLOROPROPENE		0.19	U					0.19	UJ	M			
TRICHLOROETHENE		0.17	U					0.17	UJ	M			
TRICHLOROFLUOROMETHANE		0.21	U					0.21	UJ	M			
VINYL ACETATE		0.19	UR	C				0.19	UR	C			
VINYL CHLORIDE		0.22	U					0.22	UJ	M			

PROJ_NO: 04882	NSAMPLE	DR-DPT-29-40					
SDG: 240-27487-1	LAB_ID	240-27487-8					
FRACTION: OV	SAMP_DATE	8/1/2013					
MEDIA: WATER	QC_TYPE	NM			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TETRAHYDROFURAN					1.7	J	P
TOLUENE		1.6	J	MPQ			
TOTAL XYLENES		0.56	UJ	MQ			
TRANS-1,2-DICHLOROETHENE		0.76	UJ	MQ			
TRANS-1,3-DICHLOROPROPENE		0.76	UJ	MQ			
TRICHLOROETHENE		0.68	UJ	MQ			
TRICHLOROFLUOROMETHANE		0.84	UJ	MQ			
VINYL ACETATE		0.76	UR	C			
VINYL CHLORIDE		0.88	UJ	MQ			

PROJ_NO: 04882	NSAMPLE	DR-DPT-24-60			DR-DPT-29-10			DR-DPT-29-15			DR-DPT-29-25		
SDG: 240-27487-1	LAB_ID	240-27487-1			240-27487-2			240-27487-3			240-27487-5		
FRACTION: TICOV	SAMP_DATE	8/1/2013			8/1/2013			8/1/2013			8/1/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-BUTENE		6.3	NJ	Z1									
1-PENTENE, 2-METHYL-		2.9	NJ	Z1									
2-BUTENE, 2-METHYL-											1.1	NJ	Z1
CYCLOPROPANE, 1,2-DIMETHYL-, CIS-													
CYCLOPROPANE, 1,2-DIMETHYL-, TRANS-													
CYCLOPROPANE, 1-ETHYL-2-METHYL-, CIS-													
N-TERT-BUTOXYCARBONYLIMIDAZOLE		7.3	NJ	Z1									
SILANOL, TRIMETHYL-		3.1	R	Z2	1.5	R	Z2						
TERT-BUTYLDIMETHYLSILANOL								1.8	R	Z2			

PROJ_NO: 04882	NSAMPLE	DR-DPT-29-30			DR-DPT-29-35			DR-DPT-29-40		
SDG: 240-27487-1	LAB_ID	240-27487-6			240-27487-7			240-27487-8		
FRACTION: TICOV	SAMP_DATE	8/1/2013			8/1/2013			8/1/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-BUTENE					12	NJ	Z1	6.6	NJ	Z1
1-PENTENE, 2-METHYL-					6.4	NJ	Z1			
2-BUTENE, 2-METHYL-										
CYCLOPROPANE, 1,2-DIMETHYL-, CIS-					8.1	NJ	Z1			
CYCLOPROPANE, 1,2-DIMETHYL-, TRANS-					14	NJ	Z1			
CYCLOPROPANE, 1-ETHYL-2-METHYL-, CIS-					3.9	NJ	Z1			
N-TERT-BUTOXYCARBONYLIMIDAZOLE										
SILANOL, TRIMETHYL-		1.7	R	Z2						
TERT-BUTYLDIMETHYLSILANOL										

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-24-60 Lab Sample ID: 240-27487-1

Matrix: Water Lab File ID: UXX6540.D

Analysis Method: 8260B Date Collected: 08/01/2013 09:35

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 21:30

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.46
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.36
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	2.0	U	2.0	0.56
75-34-3	1,1-Dichloroethane	2.0	U	2.0	0.30
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.38
563-58-6	1,1-Dichloropropene	2.0	U	2.0	0.26
87-61-6	1,2,3-Trichlorobenzene	2.0	U	2.0	0.34
96-18-4	1,2,3-Trichloropropane	2.0	U	2.0	0.86
526-73-8	1,2,3-Trimethylbenzene	10	U	10	0.012
120-82-1	1,2,4-Trichlorobenzene	2.0	U	2.0	0.30
95-63-6	1,2,4-Trimethylbenzene	2.0	U	2.0	0.24
96-12-8	1,2-Dibromo-3-Chloropropane	4.0	U	4.0	1.3
95-50-1	1,2-Dichlorobenzene	2.0	U	2.0	0.26
107-06-2	1,2-Dichloroethane	4.1		2.0	0.44
78-87-5	1,2-Dichloropropane	2.0	U	2.0	0.36
541-73-1	1,3-Dichlorobenzene	2.0	U	2.0	0.28
142-28-9	1,3-Dichloropropane	2.0	U	2.0	0.32
106-46-7	1,4-Dichlorobenzene	2.0	U	2.0	0.26
594-20-7	2,2-Dichloropropane	2.0	U	2.0	0.26
110-75-8	2-Chloroethyl vinyl ether	20	U	20	2.0
95-49-8	2-Chlorotoluene	2.0	U	2.0	0.22
591-78-6	2-Hexanone	20	U	20	0.82
108-86-1	Bromobenzene	2.0	U	2.0	0.26
74-97-5	Bromochloromethane	2.0	U	2.0	0.58
106-43-4	4-Chlorotoluene	2.0	U	2.0	0.36
99-87-6	p-Isopropyltoluene	2.0	U	2.0	0.24
67-64-1	Acetone	31	B	20	2.2
71-43-2	Benzene	0.60	J	2.0	0.26
75-25-2	Bromoform	2.0	U	2.0	1.3
74-83-9	Bromomethane	2.0	U	2.0	0.82
75-15-0	Carbon disulfide	0.54	J	2.0	0.26
56-23-5	Carbon tetrachloride	2.0	U	2.0	0.26
108-90-7	Chlorobenzene	2.0	U	2.0	0.30
75-00-3	Chloroethane	2.0	U	2.0	0.58

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-24-60 Lab Sample ID: 240-27487-1

Matrix: Water Lab File ID: UXX6540.D

Analysis Method: 8260B Date Collected: 08/01/2013 09:35

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 21:30

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.92	J	2.0	0.32
74-87-3	Chloromethane	2.0	U	2.0	0.60
156-59-2	cis-1,2-Dichloroethene	5.4		2.0	0.34
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	0.28
87-68-3	Hexachlorobutadiene	2.0	U	2.0	0.60
74-95-3	Dibromomethane	2.0	U	2.0	0.56
75-27-4	Bromodichloromethane	2.0	U	2.0	0.30
75-71-8	Dichlorodifluoromethane	2.0	U	2.0	0.62
100-41-4	Ethylbenzene	2.0	U	2.0	0.34
106-93-4	1,2-Dibromoethane	2.0	U	2.0	0.48
108-20-3	Diisopropyl ether	20	U	20	3.0
91-20-3	Naphthalene	2.0	U	2.0	0.48
179601-23-1	m-Xylene & p-Xylene	4.0	U	4.0	0.48
104-51-8	n-Butylbenzene	2.0	U	2.0	0.24
98-82-8	Isopropylbenzene	2.0	U	2.0	0.26
103-65-1	n-Propylbenzene	2.0	U	2.0	0.28
78-93-3	2-Butanone	6.6	J	20	1.1
108-10-1	4-Methyl-2-pentanone	20	U	20	0.64
135-98-8	sec-Butylbenzene	2.0	U	2.0	0.26
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	0.34
994-05-8	Tert-amyl-methyl ether (TAME)	10	U	10	0.13
75-09-2	Methylene Chloride	4.2		2.0	0.66
95-47-6	o-Xylene	2.0	U	2.0	0.28
100-42-5	Styrene	2.0	U	2.0	0.22
637-92-3	Ethyl-t-butyl ether (ETBE)	10	U	10	0.22
98-06-6	tert-Butylbenzene	2.0	U	2.0	0.26
127-18-4	Tetrachloroethene	2.0	U	2.0	0.58
108-88-3	Toluene	0.98	J	2.0	0.26
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	0.38
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	0.38
79-01-6	Trichloroethene	5.0		2.0	0.34
75-69-4	Trichlorofluoromethane	2.0	U	2.0	0.42
108-05-4	Vinyl acetate	4.0	U	4.0	0.38
75-01-4	Vinyl chloride	2.0	U	2.0	0.44
75-65-0	tert-Butyl alcohol	26	J	100	7.8
1330-20-7	Xylenes, Total	4.0	U	4.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-24-60 Lab Sample ID: 240-27487-1

Matrix: Water Lab File ID: UXX6540.D

Analysis Method: 8260B Date Collected: 08/01/2013 09:35

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 21:30

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	2.0	U	2.0	0.36

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-24-60 Lab Sample ID: 240-27487-1

Matrix: Water Lab File ID: UXX6540.D

Analysis Method: 8260B Date Collected: 08/01/2013 09:35

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 21:30

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

Number TICs Found: 7 TIC Result Total: 68.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
106-98-9	1-Butene	1.94	6.3	T J N
563-46-2	1-Butene, 2-methyl-	2.45	7.2	T J N
563-46-2	1-Butene, 2-methyl-	2.64	4.5	T J N
763-29-1	1-Pentene, 2-methyl-	3.58	2.9	T J N
1066-40-6	Silanol, trimethyl-	4.12	3.1	T J N
71-36-3	n-Butanol	5.40	37	J
49761-82-2	N-tert-Butoxycarbonylimidazole	8.36	7.3	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-10 Lab Sample ID: 240-27487-2

Matrix: Water Lab File ID: UXX6535.D

Analysis Method: 8260B Date Collected: 08/01/2013 10:30

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 19:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	7.6	J B	10	1.1
71-43-2	Benzene	0.16	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-10 Lab Sample ID: 240-27487-2

Matrix: Water Lab File ID: UXX6535.D

Analysis Method: 8260B Date Collected: 08/01/2013 10:30

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 19:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	1.2	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.29	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-10 | Lab Sample ID: 240-27487-2

Matrix: Water | Lab File ID: UXX6535.D

Analysis Method: 8260B | Date Collected: 08/01/2013 10:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 19:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	86		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-10 Lab Sample ID: 240-27487-2

Matrix: Water Lab File ID: UXX6535.D

Analysis Method: 8260B Date Collected: 08/01/2013 10:30

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 19:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

Number TICs Found: 1 TIC Result Total: 1.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	1.5	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-15 Lab Sample ID: 240-27487-3

Matrix: Water Lab File ID: UXX6536.D

Analysis Method: 8260B Date Collected: 08/01/2013 10:55

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	2.7	J B	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-15 Lab Sample ID: 240-27487-3

Matrix: Water Lab File ID: UXX6536.D

Analysis Method: 8260B Date Collected: 08/01/2013 10:55

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.23	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-15 Lab Sample ID: 240-27487-3

Matrix: Water Lab File ID: UXX6536.D

Analysis Method: 8260B Date Collected: 08/01/2013 10:55

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	88		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-15 Lab Sample ID: 240-27487-3

Matrix: Water Lab File ID: UXX6536.D

Analysis Method: 8260B Date Collected: 08/01/2013 10:55

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

Number TICs Found: 1 TIC Result Total: 1.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
18173-64-3	tert-Butyldimethylsilanol	4.12	1.8	T J N

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-20 | Lab Sample ID: 240-27487-4

Matrix: Water | Lab File ID: UXX6537.D

Analysis Method: 8260B | Date Collected: 08/01/2013 11:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 20:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	2.9	J B	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.60	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-20 | Lab Sample ID: 240-27487-4

Matrix: Water | Lab File ID: UXX6537.D

Analysis Method: 8260B | Date Collected: 08/01/2013 11:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 20:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	2.1		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-20 Lab Sample ID: 240-27487-4

Matrix: Water Lab File ID: UXX6537.D

Analysis Method: 8260B Date Collected: 08/01/2013 11:10

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-20 Lab Sample ID: 240-27487-4

Matrix: Water Lab File ID: UXX6537.D

Analysis Method: 8260B Date Collected: 08/01/2013 11:10

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-25 Lab Sample ID: 240-27487-5

Matrix: Water Lab File ID: UXX6538.D

Analysis Method: 8260B Date Collected: 08/01/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	3.3	J B	10	1.1
71-43-2	Benzene	0.13	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.26	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-25 Lab Sample ID: 240-27487-5

Matrix: Water Lab File ID: UXX6538.D

Analysis Method: 8260B Date Collected: 08/01/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.16	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-25 Lab Sample ID: 240-27487-5

Matrix: Water Lab File ID: UXX6538.D

Analysis Method: 8260B Date Collected: 08/01/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-25 Lab Sample ID: 240-27487-5

Matrix: Water Lab File ID: UXX6538.D

Analysis Method: 8260B Date Collected: 08/01/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 20:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

Number TICs Found: 4 TIC Result Total: 4.43

CAS NO.	COMPOUND NAME	RT	RESULT	Q
78-78-4	Butane, 2-methyl-	2.24	2.4	T J N
513-35-9	2-Butene, 2-methyl-	2.65	1.1	T J N
110-54-3	Hexane	3.66	0.73	J
110-82-7	Cyclohexane	4.75	0.20	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-30 | Lab Sample ID: 240-27487-6

Matrix: Water | Lab File ID: UXX6539.D

Analysis Method: 8260B | Date Collected: 08/01/2013 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 21:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	3.0	J B	10	1.1
71-43-2	Benzene	0.16	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.25	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-30 Lab Sample ID: 240-27487-6

Matrix: Water Lab File ID: UXX6539.D

Analysis Method: 8260B Date Collected: 08/01/2013 13:10

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 21:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	0.74	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.19	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	8.9	J	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-30 | Lab Sample ID: 240-27487-6

Matrix: Water | Lab File ID: UXX6539.D

Analysis Method: 8260B | Date Collected: 08/01/2013 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 21:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-30 Lab Sample ID: 240-27487-6

Matrix: Water Lab File ID: UXX6539.D

Analysis Method: 8260B Date Collected: 08/01/2013 13:10

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 21:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

Number TICs Found: 4 TIC Result Total: 4.31

CAS NO.	COMPOUND NAME	RT	RESULT	Q
78-78-4	Butane, 2-methyl-	2.24	1.9	T J N
110-54-3	Hexane	3.66	0.56	J
1066-40-6	Silanol, trimethyl-	4.12	1.7	T J N
110-82-7	Cyclohexane	4.74	0.15	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-35 Lab Sample ID: 240-27487-7

Matrix: Water Lab File ID: UXX6541.D

Analysis Method: 8260B Date Collected: 08/01/2013 13:45

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 21:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	0.15	J	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	0.66	J	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	15	B	10	1.1
71-43-2	Benzene	0.69	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.44	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-35 | Lab Sample ID: 240-27487-7

Matrix: Water | Lab File ID: UXX6541.D

Analysis Method: 8260B | Date Collected: 08/01/2013 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 21:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	0.24	J	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	0.52	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	4.0	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	0.21	J	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.3		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	0.73	J	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-35 | Lab Sample ID: 240-27487-7

Matrix: Water | Lab File ID: UXX6541.D

Analysis Method: 8260B | Date Collected: 08/01/2013 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/06/2013 21:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	87		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-35 Lab Sample ID: 240-27487-7

Matrix: Water Lab File ID: UXX6541.D

Analysis Method: 8260B Date Collected: 08/01/2013 13:45

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 21:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

Number TICs Found: 9 TIC Result Total: 83.4

CAS NO.	COMPOUND NAME	RT	RESULT	Q
106-98-9	1-Butene	1.94	12	T J N
78-78-4	Butane, 2-methyl-	2.24	4.0	T J N
109-67-1	1-Pentene	2.38	5.5	T J N
2402-6-4	Cyclopropane, 1,2-dimethyl-, trans-	2.44	14	T J N
930-18-7	Cyclopropane, 1,2-dimethyl-, cis-	2.64	8.1	T J N
19781-68-1	Cyclopropane, 1-ethyl-2-methyl-, cis-	3.15	3.9	T J N
763-29-1	1-Pentene, 2-methyl-	3.58	6.4	T J N
110-54-3	Hexane	3.66	2.5	
78-83-1	Isobutyl alcohol	4.83	27	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-40 Lab Sample ID: 240-27487-8

Matrix: Water Lab File ID: UXX6542.D

Analysis Method: 8260B Date Collected: 08/01/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 22:12

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.0	U	4.0	0.92
71-55-6	1,1,1-Trichloroethane	4.0	U	4.0	0.88
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.72
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.0	U	4.0	1.1
75-34-3	1,1-Dichloroethane	4.0	U	4.0	0.60
75-35-4	1,1-Dichloroethene	4.0	U	4.0	0.76
563-58-6	1,1-Dichloropropene	4.0	U	4.0	0.52
87-61-6	1,2,3-Trichlorobenzene	4.0	U	4.0	0.68
96-18-4	1,2,3-Trichloropropane	4.0	U	4.0	1.7
526-73-8	1,2,3-Trimethylbenzene	20	U	20	0.024
120-82-1	1,2,4-Trichlorobenzene	4.0	U	4.0	0.60
95-63-6	1,2,4-Trimethylbenzene	4.0	U	4.0	0.48
96-12-8	1,2-Dibromo-3-Chloropropane	8.0	U	8.0	2.7
95-50-1	1,2-Dichlorobenzene	4.0	U	4.0	0.52
107-06-2	1,2-Dichloroethane	4.0	U	4.0	0.88
78-87-5	1,2-Dichloropropane	4.0	U	4.0	0.72
541-73-1	1,3-Dichlorobenzene	4.0	U	4.0	0.56
142-28-9	1,3-Dichloropropane	4.0	U	4.0	0.64
106-46-7	1,4-Dichlorobenzene	4.0	U	4.0	0.52
594-20-7	2,2-Dichloropropane	4.0	U	4.0	0.52
110-75-8	2-Chloroethyl vinyl ether	40	U	40	4.0
95-49-8	2-Chlorotoluene	4.0	U	4.0	0.44
591-78-6	2-Hexanone	40	U	40	1.6
108-86-1	Bromobenzene	4.0	U	4.0	0.52
74-97-5	Bromochloromethane	4.0	U	4.0	1.2
106-43-4	4-Chlorotoluene	4.0	U	4.0	0.72
99-87-6	p-Isopropyltoluene	4.0	U	4.0	0.48
67-64-1	Acetone	26	J B	40	4.4
71-43-2	Benzene	1.2	J	4.0	0.52
75-25-2	Bromoform	4.0	U	4.0	2.6
74-83-9	Bromomethane	4.0	U	4.0	1.6
75-15-0	Carbon disulfide	4.0	U	4.0	0.52
56-23-5	Carbon tetrachloride	4.0	U	4.0	0.52
108-90-7	Chlorobenzene	4.0	U	4.0	0.60
75-00-3	Chloroethane	4.0	U	4.0	1.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-40 Lab Sample ID: 240-27487-8

Matrix: Water Lab File ID: UXX6542.D

Analysis Method: 8260B Date Collected: 08/01/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 22:12

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	4.0	U	4.0	0.64
74-87-3	Chloromethane	4.0	U	4.0	1.2
156-59-2	cis-1,2-Dichloroethene	4.0	U	4.0	0.68
10061-01-5	cis-1,3-Dichloropropene	4.0	U	4.0	0.56
87-68-3	Hexachlorobutadiene	4.0	U	4.0	1.2
74-95-3	Dibromomethane	4.0	U	4.0	1.1
75-27-4	Bromodichloromethane	4.0	U	4.0	0.60
75-71-8	Dichlorodifluoromethane	4.0	U	4.0	1.2
100-41-4	Ethylbenzene	4.0	U	4.0	0.68
106-93-4	1,2-Dibromoethane	4.0	U	4.0	0.96
108-20-3	Diisopropyl ether	40	U	40	6.0
91-20-3	Naphthalene	4.0	U	4.0	0.96
179601-23-1	m-Xylene & p-Xylene	8.0	U	8.0	0.96
104-51-8	n-Butylbenzene	4.0	U	4.0	0.48
98-82-8	Isopropylbenzene	4.0	U	4.0	0.52
103-65-1	n-Propylbenzene	4.0	U	4.0	0.56
78-93-3	2-Butanone	6.9	J	40	2.3
108-10-1	4-Methyl-2-pentanone	40	U	40	1.3
135-98-8	sec-Butylbenzene	4.0	U	4.0	0.52
1634-04-4	Methyl tert-butyl ether	4.0	U	4.0	0.68
994-05-8	Tert-amyl-methyl ether (TAME)	20	U	20	0.27
75-09-2	Methylene Chloride	3.7	J	4.0	1.3
95-47-6	o-Xylene	4.0	U	4.0	0.56
100-42-5	Styrene	4.0	U	4.0	0.44
637-92-3	Ethyl-t-butyl ether (ETBE)	20	U	20	0.44
98-06-6	tert-Butylbenzene	4.0	U	4.0	0.52
127-18-4	Tetrachloroethene	4.0	U	4.0	1.2
108-88-3	Toluene	1.6	J	4.0	0.52
156-60-5	trans-1,2-Dichloroethene	4.0	U	4.0	0.76
10061-02-6	trans-1,3-Dichloropropene	4.0	U	4.0	0.76
79-01-6	Trichloroethene	4.0	U	4.0	0.68
75-69-4	Trichlorofluoromethane	4.0	U	4.0	0.84
108-05-4	Vinyl acetate	8.0	U	8.0	0.76
75-01-4	Vinyl chloride	4.0	U	4.0	0.88
75-65-0	tert-Butyl alcohol	200	U	200	16
1330-20-7	Xylenes, Total	8.0	U	8.0	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-40 Lab Sample ID: 240-27487-8

Matrix: Water Lab File ID: UXX6542.D

Analysis Method: 8260B Date Collected: 08/01/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 22:12

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	4.0	U	4.0	0.72

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: DR-DPT-29-40 Lab Sample ID: 240-27487-8

Matrix: Water Lab File ID: UXX6542.D

Analysis Method: 8260B Date Collected: 08/01/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 22:12

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

Number TICs Found: 5 TIC Result Total: 70.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
106-98-9	1-Butene	1.94	6.6	T J N
627-20-3	2-Pentene, (Z)-	2.44	7.8	T J N
110-54-3	Hexane	3.66	1.4	J
109-99-9	Tetrahydrofuran	4.50	1.7	J
71-36-3	n-Butanol	5.39	53	J

Appendix C

Support Documentation

HOLDTIME

SDG 240-27487-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-29-40	240-27487-8	NM	08/01/2013	08/06/2013	08/06/2013	5	0	5
OV	UG/L	DR-DPT-29-35	240-27487-7	NM	08/01/2013	08/06/2013	08/06/2013	5	0	5
OV	UG/L	DR-DPT-29-30	240-27487-6	NM	08/01/2013	08/06/2013	08/06/2013	5	0	5
OV	UG/L	DR-DPT-29-25	240-27487-5	NM	08/01/2013	08/06/2013	08/06/2013	5	0	5
OV	UG/L	DR-DPT-29-20	240-27487-4	NM	08/01/2013	08/06/2013	08/06/2013	5	0	5
OV	UG/L	DR-DPT-29-15	240-27487-3	NM	08/01/2013	08/06/2013	08/06/2013	5	0	5
OV	UG/L	DR-DPT-29-10	240-27487-2	NM	08/01/2013	08/06/2013	08/06/2013	5	0	5
OV	UG/L	DR-DPT-24-60	240-27487-1	NM	08/01/2013	08/06/2013	08/06/2013	5	0	5

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-27487-1

Job Description: DUMP ROAD SOURCE AREAS

For:
Tetra Tech, Inc
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Approved for release.
John McFadden
Project Manager I
8/12/2013 10:49 AM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
08/12/2013

cc: Samantha Brenner
Ms. Kelly Carper
Vanessa Good
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: DUMP ROAD SOURCE AREAS

Report Number: 240-27487-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/02/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.4 C.

The following volatile sample was received with headspace in 3 of 3 sample vials and there was a lot of sediment in all of the vials.: DR-DPT-24-60 (240-27487-1)

The following volatile sample was received with headspace in 6 of 6 sample vials and there was a lot of sediment in all of the vials: DR-DPT-29-40 (240-27487-8)

The lab did not receive the trip blanks (TB-080113) listed on the chain of custody.

The septums of the vials for sample DR-DPT-29-40 are bulging outwards, but are still intact.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-24-60 (240-27487-1), DR-DPT-29-10 (240-27487-2), DR-DPT-29-15 (240-27487-3), DR-DPT-29-20 (240-27487-4), DR-DPT-29-25 (240-27487-5), DR-DPT-29-30 (240-27487-6), DR-DPT-29-35 (240-27487-7) and DR-DPT-29-40 (240-27487-8) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/06/2013.

Acetone was detected in method blank MB 240-96359/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-24-60 (240-27487-1)[2X] and DR-DPT-29-40 (240-27487-8)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample(s) submitted for volatiles analysis was received with insufficient preservation (pH >2): DR-DPT-24-60 (240-27487-1), DR-DPT-29-35 (240-27487-7), DR-DPT-29-40 (240-27487-8).

Elevated reporting limits are provided for the following sample(s) due to insufficient sample provided for preparation/analysis: DR-DPT-24-60 (240-27487-1), DR-DPT-29-40 (240-27487-8). Samples DR-DPT-24-60 and DR-DPT-29-40 had a significant amount of sediment in each vial for each sample. The lab had to decant the water from the vials in order to have enough volume where the needle from the instrument could reach the water level without embedding into the sediment.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27487-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27487-1	DR-DPT-24-60	Water	08/01/2013 0935	08/02/2013 0915
240-27487-2	DR-DPT-29-10	Water	08/01/2013 1030	08/02/2013 0915
240-27487-3	DR-DPT-29-15	Water	08/01/2013 1055	08/02/2013 0915
240-27487-4	DR-DPT-29-20	Water	08/01/2013 1110	08/02/2013 0915
240-27487-5	DR-DPT-29-25	Water	08/01/2013 1140	08/02/2013 0915
240-27487-6	DR-DPT-29-30	Water	08/01/2013 1310	08/02/2013 0915
240-27487-7	DR-DPT-29-35	Water	08/01/2013 1345	08/02/2013 0915
240-27487-8	DR-DPT-29-40	Water	08/01/2013 1440	08/02/2013 0915

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27487-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

North Canton
4101 Shuffel Street, N W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497 0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/1/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W)			SDG No.
(301) 528-3021 Phone	TAT if different from Below 5 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			Sampler: S. Cameron
Site: MSA	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes
DR-DPT-24-60	8/1/2013	0935	GW	Water	3		x	
DR-DPT-29-10	8/1/2013	1030	GW	Water	3		x	
DR-DPT-29-15	8/1/2013	1055	GW	Water	3		x	
DR-DPT-29-20	8/1/2013	1110	GW	Water	3		x	
DR-DPT-29-25	8/1/2013	1140	GW	Water	3		x	
DR-DPT-29-30	8/1/2013	1310	GW	Water	3		x	
DR-DPT-29-35	8/1/2013	1345	GW	Water	3		x	
DR-DPT-29-40	8/1/2013	1440	GW	Water	6		x	Abt of sediment collected double bottle ware for additional volume.
DR-DPT-	8/1/2013		GW	Water	3		x	
DR-DPT-	8/1/2013		GW	Water	3		x	
DR-DPT-	8/1/2013		GW	Water	3		x	
TB-080113	8/1/2013	—	GW	Water	2		x	

240-27487 Chain of Custody

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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: 5 day TAT

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8-1-13 1600		TestAmerica	8/1/13 1601
Relinquished by:	Company:	Date/Time: 8/1/13 1700	Received by:	Company: TA	Date/Time: 8-2-13 915
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 27487**
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: Derek M. Dean

Cooler Received on 8-2-13 Opened on 8-2-13

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF −1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. 4.4 °C	Corrected Cooler Temp. 4.4 °C	☐ See Multiple Cooler Form	
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC376062
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM JWM Date 8/2/13 by JWM via (Verbal) Voice Mail Other
Concerning #14

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: Dany Burns

Did not receive 2x40ml trip blanks.

Septums on Sample ID DR-DPT-29-40 are compromised.

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-24-60	240-27487-1	88	93	89	85
DR-DPT-29-10	240-27487-2	86	93	92	83
DR-DPT-29-15	240-27487-3	88	93	88	83
DR-DPT-29-20	240-27487-4	89	92	89	82
DR-DPT-29-25	240-27487-5	88	92	91	82
DR-DPT-29-30	240-27487-6	87	95	87	83
DR-DPT-29-35	240-27487-7	89	94	90	87
DR-DPT-29-40	240-27487-8	87	94	91	82
	MB 240-96359/6	88	96	91	85
	LCS 240-96359/4	89	101	92	92
	240-27386-A-1 MS	89	92	94	88
	240-27386-C-1 MSD	87	98	92	90

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Instrument ID: A3UX10 Start Date: 05/28/2013 13:16

Analysis Batch Number: 87495 End Date: 05/28/2013 17:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-87495/1		05/28/2013 13:16	1	BFB5262.D	DB-624 0.18(mm)
STD8260 240-87495/2 IC		05/28/2013 13:41	1		DB-624 0.18(mm)
STD8260 240-87495/3 IC		05/28/2013 14:03	1		DB-624 0.18(mm)
STD8260 240-87495/4 ICIS		05/28/2013 14:24	1		DB-624 0.18(mm)
STD8260 240-87495/5 IC		05/28/2013 14:46	1		DB-624 0.18(mm)
STD8260 240-87495/6 IC		05/28/2013 15:07	1		DB-624 0.18(mm)
STD8260 240-87495/7 IC		05/28/2013 15:28	1		DB-624 0.18(mm)
STDA9 240-87495/8 IC		05/28/2013 15:50	1	UXX4658.D	DB-624 0.18(mm)
STDA9 240-87495/9 IC		05/28/2013 16:11	1	UXX4659.D	DB-624 0.18(mm)
STDA9 240-87495/10 IC		05/28/2013 16:32	1	UXX4660.D	DB-624 0.18(mm)
STDA9 240-87495/11 IC		05/28/2013 16:53	1	UXX4661.D	DB-624 0.18(mm)
STDA9 240-87495/12 IC		05/28/2013 17:15	1	UXX4662.D	DB-624 0.18(mm)
STDA9 240-87495/13 IC		05/28/2013 17:36	1	UXX4663.D	DB-624 0.18(mm)
ICV 240-87495/14		05/28/2013 17:57	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab File ID: BFB5262.D BFB Injection Date: 05/28/2013

Instrument ID: A3UX10 BFB Injection Time: 13:16

Analysis Batch No.: 87495

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	52.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	98.2	
175	5.0 - 9.0 % of mass 174	6.7	(6.9)1
176	95.0 - 101.0 % of mass 174	93.5	(95.2)1
177	5.0 - 9.0 % of mass 176	6.1	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-87495/8	UXX4658.D	05/28/2013	15:50
	STDA9 240-87495/9	UXX4659.D	05/28/2013	16:11
	STDA9 240-87495/10	UXX4660.D	05/28/2013	16:32
	STDA9 240-87495/11	UXX4661.D	05/28/2013	16:53
	STDA9 240-87495/12	UXX4662.D	05/28/2013	17:15
	STDA9 240-87495/13	UXX4663.D	05/28/2013	17:36

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-27487-1 | Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 | Calibration End Date: 05/28/2013 17:36 | Calibration ID: 15348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-87495/13	UXX4663.D
Level 2	STDA9 240-87495/12	UXX4662.D
Level 3	STDA9 240-87495/11	UXX4661.D
Level 4	STDA9 240-87495/10	UXX4660.D
Level 5	STDA9 240-87495/9	UXX4659.D
Level 6	STDA9 240-87495/8	UXX4658.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.9351 0.7200	0.8183	0.9669	0.7435	0.8522	Ave		0.8393				12.0		15.0			
Ethyl ether	0.3526 0.2524	0.2870	0.3279	0.2696	0.3339	Ave		0.3039				13.0		15.0			
3-Chloro-1-propene	0.1632 0.1612	0.1539	0.1609	0.1639	0.1752	Ave		0.1630				4.2		15.0			
Diisopropyl ether	0.2436 0.2941	0.2470	0.2427	0.2569	0.2816	Ave		0.2610				8.3		15.0			
2-Chloro-1,3-butadiene	0.4470 0.5692	0.4651	0.4677	0.4894	0.5665	Ave		0.5008				11.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.7474 0.9445	0.7998	0.8028	0.8547	0.9344	Ave		0.8473				9.3		15.0			
Propionitrile	0.0183 0.0231	0.0204	0.0273	0.0252	0.0240	Ave		0.0230				14.0		15.0			
Ethyl acetate	0.1590 0.1647	0.1524	0.2142	0.1705	0.1575	Ave		0.1697				13.0		15.0			
Methacrylonitrile	0.1102 0.1289	0.1319	0.1213	0.1325	0.1332	Ave		0.1263				7.1		15.0			
Isobutyl alcohol	0.0076 0.0057	0.0068	0.0075	0.0083	0.0073	Ave		0.0072				12.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6746 0.8156	0.6951	0.7166	0.7363	0.8000	Ave		0.7397				7.7		15.0			
n-Heptane	0.0683 0.0638	0.0609	0.0626	0.0604	0.0641	Ave		0.0634				4.5		15.0			
n-Butanol	0.0050	0.0051	0.0047	0.0072	0.0067	Lin	-0.083	0.0070							0.9920		0.9900
Methyl methacrylate	0.1815 0.1582	0.1559	0.1663	0.1628	0.1584	Ave		0.1639				5.8		15.0			
2-Nitropropane	0.0181 0.0163	0.0192	0.0150	0.0189	0.0149	Ave		0.0170				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0764 0.0641	0.0838	0.0840	0.0919	0.0886	Ave		0.0815				12.0		15.0			
1,2,3-Trimethylbenzene	2.1912 2.8021	2.2708	2.3128	2.4773	2.5677	Ave		2.4370				9.3		15.0			
2-Methylnaphthalene	1.0000 0.8868	0.9617	1.0575	1.0106	1.0960	Ave		1.0021				7.3		15.0			
n-Butyl acetate	0.1536 0.1805	0.1506	0.1861	0.1673	0.1756	Ave		0.1690				8.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-87495/13	UXX4663.D
Level 2	STDA9 240-87495/12	UXX4662.D
Level 3	STDA9 240-87495/11	UXX4661.D
Level 4	STDA9 240-87495/10	UXX4660.D
Level 5	STDA9 240-87495/9	UXX4659.D
Level 6	STDA9 240-87495/8	UXX4658.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	127120 4641248	225594	620957	1106779	2587641	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	47934 1627021	79121	210580	401365	1013725	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	22182 1039024	42434	103299	243939	531923	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	165594 9477660	340496	779327	1912336	4274419	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	60761 3668888	128215	300355	728585	1720158	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	101606 6088209	220490	515562	1272419	2837087	1.00 40.0	2.00	5.00	10.0	20.0
Propionitrile	FB	Ave	4971 298333	11271	35003	74894	145873	2.00 80.0	4.00	10.0	20.0	40.0
Ethyl acetate	FB	Ave	43232 2123201	84003	275066	507735	956406	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	14986 830622	36375	77927	197180	404505	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBZ	Ave	15087 464593	25923	69690	169683	294056	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	91704 5257574	191625	460165	1096069	2429204	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	9284 411463	16794	40232	89935	194768	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	CBZ	Lin	9943	19571	43753	148035	271992	20.0	40.0	100	200	400
Methyl methacrylate	FB	Ave	24679 1020032	42976	106781	242402	480941	1.00 40.0	2.00	5.00	10.0	20.0
2-Nitropropane	FB	Ave	4934 209689	10566	19233	56139	90255	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	41588 1466311	89364	227450	503090	1029492	10.0 400	20.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Ave	119237 6406127	242106	626623	1356339	2985138	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Ave	108832 4054651	205058	573047	1106653	2548438	2.00 80.0	4.00	10.0	20.0	40.0
n-Butyl acetate	CBZ	Ave	30583 1477120	57399	172095	343073	708917	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average ISTD
Lin = Linear ISTD

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Instrument ID: A3UX10 Start Date: 07/02/2013 12:26

Analysis Batch Number: 92306 End Date: 07/02/2013 23:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-92306/1		07/02/2013 12:26	1	BFB5311.D	DB-624 0.18(mm)
STD8260 240-92306/2 IC		07/02/2013 12:55	1	UXX5740.D	DB-624 0.18(mm)
STD8260 240-92306/3 IC		07/02/2013 13:16	1	UXX5741.D	DB-624 0.18(mm)
STD8260 240-92306/4 ICIS		07/02/2013 13:37	1	UXX5742.D	DB-624 0.18(mm)
STD8260 240-92306/5 IC		07/02/2013 13:59	1	UXX5743.D	DB-624 0.18(mm)
STD8260 240-92306/6 IC		07/02/2013 14:20	1	UXX5744.D	DB-624 0.18(mm)
STD8260 240-92306/7 IC		07/02/2013 14:41	1	UXX5745.D	DB-624 0.18(mm)
ICV 240-92306/8		07/02/2013 15:03	1	UXX5746.D	DB-624 0.18(mm)
CCV 240-92306/9		07/02/2013 15:24	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 15:46	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 16:30	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 17:34	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 17:55	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 18:17	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 18:38	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 19:00	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 19:21	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 19:42	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 20:03	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 20:25	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 20:46	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 21:08	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 21:29	8		DB-624 0.18(mm)
ZZZZZ		07/02/2013 21:50	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 22:11	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 22:33	1		DB-624 0.18(mm)
ZZZZZ		07/02/2013 23:16	3.333		DB-624 0.18(mm)
ZZZZZ		07/02/2013 23:37	8		DB-624 0.18(mm)
ZZZZZ		07/02/2013 23:58	8		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab File ID: BFB5311.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX10 BFB Injection Time: 12:26

Analysis Batch No.: 92306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	86.8	
175	5.0 - 9.0 % of mass 174	6.2	(7.1)1
176	95.0 - 101.0 % of mass 174	86.3	(99.4)1
177	5.0 - 9.0 % of mass 176	5.5	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92306/2	UXX5740.D	07/02/2013	12:55
	STD8260 240-92306/3	UXX5741.D	07/02/2013	13:16
	STD8260 240-92306/4	UXX5742.D	07/02/2013	13:37
	STD8260 240-92306/5	UXX5743.D	07/02/2013	13:59
	STD8260 240-92306/6	UXX5744.D	07/02/2013	14:20
	STD8260 240-92306/7	UXX5745.D	07/02/2013	14:41
	ICV 240-92306/8	UXX5746.D	07/02/2013	15:03

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92306/7	UXX5745.D
Level 2	STD8260 240-92306/6	UXX5744.D
Level 3	STD8260 240-92306/5	UXX5743.D
Level 4	STD8260 240-92306/4	UXX5742.D
Level 5	STD8260 240-92306/3	UXX5741.D
Level 6	STD8260 240-92306/2	UXX5740.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2977 0.2838	0.2577	0.2748	0.2528	0.2566	Ave		0.2706				6.6		15.0			
Chloromethane	0.4636 0.3885	0.4208	0.4187	0.3892	0.3928	Ave		0.4122			0.1000	7.1		15.0			
Vinyl chloride	0.3817 0.3523	0.3628	0.3635	0.3478	0.3489	Ave		0.3595				3.6		15.0			
Bromomethane	0.1738 0.1513	0.1661	0.1687	0.1771	0.1716	Ave		0.1681				5.4		15.0			
Chloroethane	0.2457 0.2275	0.2302	0.2304	0.2310	0.2376	Ave		0.2338				2.9		15.0			
Trichlorofluoromethane	0.3575 0.3719	0.3350	0.3525	0.3679	0.3820	Ave		0.3611				4.6		15.0			
Acrolein	0.0359 0.0431	0.0395	0.0411	0.0449	0.0462	Ave		0.0418				9.0		15.0			
1,1-Dichloroethene	0.3190 0.2928	0.2948	0.2913	0.2993	0.3010	Ave		0.2997				3.4		15.0			
Acetone	0.0740 0.0622	0.0776	0.0718	0.0736	0.0689	Ave		0.0713				7.4		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2062 0.2056	0.2022	0.2152	0.2144	0.2141	Ave		0.2096				2.7		15.0			
Iodomethane	0.4548 0.4274	0.4570	0.4317	0.4435	0.4405	Ave		0.4425				2.7		15.0			
Carbon disulfide	0.8923 0.9201	0.8872	0.8823	0.9357	0.9395	Ave		0.9095				2.8		15.0			
Acetonitrile	0.0167 0.0157	0.0178	0.0214	0.0237	0.0177	Qua	0.0061	0.0220	0						0.9940		0.9900
Methyl acetate	0.1969 0.2006	0.2062	0.2102	0.2165	0.2151	Ave		0.2076				3.8		15.0			
Methylene Chloride	0.7288 0.3199	0.5369	0.3954	0.3695	0.3438	Linl	0.4289	0.3150							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0095 0.0104	0.0120	0.0145	0.0164	0.0130	Qua	-0.124	0.0171	0						0.9970		0.9900
Acrylonitrile	0.0905 0.1021	0.0983	0.1034	0.1068	0.1082	Ave		0.1016				6.4		15.0			
Methyl tert-butyl ether	0.7590 0.7679	0.7484	0.7512	0.8058	0.8208	Ave		0.7755				3.9		15.0			
trans-1,2-Dichloroethene	0.3358 0.3195	0.3308	0.3296	0.3254	0.3340	Ave		0.3292				1.8		15.0			
Hexane	0.0712 0.0637	0.0646	0.0668	0.0661	0.0671	Ave		0.0666				3.9		15.0			
1,1-Dichloroethane	0.5578 0.5246	0.5449	0.5273	0.5247	0.5369	Ave		0.5360			0.1000	2.5		15.0			
Vinyl acetate	0.0458 0.0460	0.0362	0.0441	0.0416	0.0442	Ave		0.0430				8.6		15.0			
2-Butanone	0.0991 0.0997	0.0968	0.1003	0.0974	0.1064	Ave		0.0999				3.4		15.0			
cis-1,2-Dichloroethene	0.3285 0.3322	0.3571	0.3290	0.3348	0.3453	Ave		0.3378				3.3		15.0			
2,2-Dichloropropane	0.2688 0.2905	0.2819	0.2776	0.2821	0.3040	Ave		0.2842				4.2		15.0			
Bromochloromethane	0.1521 0.1504	0.1506	0.1534	0.1499	0.1524	Ave		0.1515				0.9		15.0			
Tetrahydrofuran	0.0772 0.0698	0.0789	0.0767	0.0752	0.0716	Ave		0.0749				4.7		15.0			
Chloroform	0.4907 0.4900	0.5020	0.4890	0.4920	0.4962	Ave		0.4933				1.0		15.0			
1,1,1-Trichloroethane	0.4106 0.3726	0.3778	0.3695	0.3890	0.3851	Ave		0.3841				3.9		15.0			
Cyclohexane	0.5528 0.5297	0.5227	0.5349	0.5435	0.5429	Ave		0.5378				2.0		15.0			
1,1-Dichloropropene	0.3609 0.3601	0.3698	0.3664	0.3618	0.3692	Ave		0.3647				1.2		15.0			
Carbon tetrachloride	0.2610 0.2765	0.2656	0.2674	0.2761	0.2887	Ave		0.2725				3.7		15.0			
1,2-Dichloroethane	0.3474 0.3376	0.3583	0.3351	0.3500	0.3553	Ave		0.3473				2.7		15.0			
Benzene	1.1681 1.1119	1.1203	1.0964	1.1265	1.1340	Ave		1.1262				2.2		15.0			
Trichloroethene	0.3214 0.2780	0.2821	0.2900	0.2862	0.2843	Ave		0.2904				5.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloropropane	0.2454 0.2502	0.2581	0.2466	0.2561	0.2683	Ave		0.2541				3.4		15.0			
Methylcyclohexane	0.4919 0.4866	0.4934	0.4893	0.5052	0.5090	Ave		0.4959				1.8		15.0			
Dibromomethane	0.1412 0.1445	0.1506	0.1469	0.1502	0.1477	Ave		0.1468				2.4		15.0			
1,4-Dioxane	0.0014 0.0009	0.0011	0.0016	0.0020	0.0013	Ave		0.0014				26.0	*	15.0			
Bromodichloromethane	0.2890 0.3042	0.2800	0.2808	0.2937	0.3002	Ave		0.2913				3.4		15.0			
2-Chloroethyl vinyl ether	0.1328 0.1460	0.1268	0.1340	0.1400	0.1524	Ave		0.1387				6.8		15.0			
cis-1,3-Dichloropropene	0.3136 0.3654	0.2925	0.3234	0.3329	0.3608	Ave		0.3314				8.4		15.0			
4-Methyl-2-pentanone	0.1851 0.2307	0.1947	0.2072	0.2263	0.2356	Ave		0.2133				9.7		15.0			
Toluene	1.5717 1.7749	1.5621	1.5832	1.5919	1.6670	Ave		1.6251				5.1		15.0			
trans-1,3-Dichloropropene	0.3281 0.4436	0.3301	0.3424	0.3783	0.4187	Ave		0.3735				13.0		15.0			
Ethyl methacrylate	0.3469 0.4669	0.3719	0.3886	0.4197	0.4555	Ave		0.4082				12.0		15.0			
1,1,2-Trichloroethane	0.3016 0.3098	0.3088	0.3075	0.2994	0.3063	Ave		0.3056				1.4		15.0			
1,3-Dichloropropane	0.5636 0.5513	0.5066	0.5178	0.5309	0.5453	Ave		0.5359				4.0		15.0			
Tetrachloroethene	0.3249 0.3137	0.3109	0.3123	0.3155	0.3171	Ave		0.3157				1.6		15.0			
2-Hexanone	0.1784 0.2174	0.1735	0.1912	0.2073	0.2193	Ave		0.1979				10.0		15.0			
Dibromochloromethane	0.2360 0.2992	0.2543	0.2535	0.2707	0.2882	Ave		0.2670				8.9		15.0			
1,2-Dibromoethane	0.2969 0.3100	0.2975	0.2857	0.3063	0.3126	Ave		0.3015				3.3		15.0			
Chlorobenzene	1.1153 1.1370	1.1006	1.0569	1.0906	1.1038	Ave		1.1007			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2824 0.3322	0.2829	0.2918	0.3108	0.3194	Ave		0.3032				6.8		15.0			
Ethylbenzene	0.5758 0.6262	0.5863	0.6011	0.6014	0.6212	Ave		0.6020				3.2		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.7270 0.8215	0.7355	0.7415	0.7771	0.8022	Ave		0.7675				5.1		15.0			
o-Xylene	0.6796 0.7942	0.7047	0.7272	0.7639	0.7596	Ave		0.7382				5.7		15.0			
Styrene	1.1077 1.3987	1.1933	1.1883	1.2806	1.3155	Ave		1.2474				8.4		15.0			
Bromoform	0.1365 0.1881	0.1411	0.1461	0.1592	0.1772	Ave		0.1580			0.1000	13.0		15.0			
Isopropylbenzene	1.7511 2.0343	1.7718	1.8148	1.9530	1.9719	Ave		1.8828				6.3		15.0			
1,1,2,2-Tetrachloroethane	0.7449 0.7423	0.7656	0.8018	0.7659	0.7719	Ave		0.7654			0.3000	2.8		15.0			
Bromobenzene	0.8881 0.8401	0.8893	0.8519	0.8109	0.8110	Ave		0.8485				4.1		15.0			
1,2,3-Trichloropropane	0.2528 0.2485	0.2436	0.2471	0.2523	0.2472	Ave		0.2486				1.4		15.0			
trans-1,4-Dichloro-2-butene	0.1594 0.2065	0.1645	0.1863	0.1935	0.1991	Ave		0.1849				10.0		15.0			
n-Propylbenzene	0.8836 0.9348	0.9225	0.9442	0.9060	0.9061	Ave		0.9162				2.4		15.0			
2-Chlorotoluene	0.8471 0.8107	0.8035	0.8145	0.8068	0.8122	Ave		0.8158				1.9		15.0			
1,3,5-Trimethylbenzene	2.5762 2.8611	2.6002	2.7221	2.7556	2.8139	Ave		2.7215				4.2		15.0			
4-Chlorotoluene	0.8988 0.9081	0.8802	0.8823	0.8848	0.8823	Ave		0.8894				1.3		15.0			
tert-Butylbenzene	2.5038 2.4500	2.2239	2.4167	2.3292	2.3560	Ave		2.3799				4.2		15.0			
1,2,4-Trimethylbenzene	2.6043 2.8929	2.6775	2.7491	2.8000	2.8183	Ave		2.7570				3.8		15.0			
sec-Butylbenzene	3.0300 3.4431	3.1666	3.3039	3.3542	3.3916	Ave		3.2816				4.7		15.0			
1,3-Dichlorobenzene	1.5092 1.5056	1.5998	1.5710	1.5273	1.5059	Ave		1.5365				2.6		15.0			
p-Isopropyltoluene	2.4424 2.7807	2.5538	2.6635	2.6618	2.7434	Ave		2.6409				4.7		15.0			
1,4-Dichlorobenzene	1.7229 1.6045	1.6252	1.6225	1.5715	1.5870	Ave		1.6223				3.3		15.0			
n-Butylbenzene	2.0630 2.2382	2.0945	2.2927	2.3221	2.3183	Ave		2.2215				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4074 1.3553	1.4151	1.4245	1.4040	1.3915	Ave		1.3996				1.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0897 0.0915	0.0866	0.1008	0.1037	0.0925	Ave		0.0941				7.1		15.0			
1,3,5-Trichlorobenzene	0.9389 0.8233	0.9547	0.9599	0.9476	0.8670	Ave		0.9152				6.2		15.0			
1,2,4-Trichlorobenzene	0.8510 0.7437	0.8164	0.8427	0.8344	0.7483	Ave		0.8061				5.9		15.0			
Hexachlorobutadiene	0.2820 0.2374	0.2926	0.3073	0.2714	0.2509	Ave		0.2736				9.5		15.0			
Naphthalene	1.9175 1.8952	1.9376	2.0220	2.1068	1.9312	Ave		1.9684				4.1		15.0			
1,2,3-Trichlorobenzene	0.7657 0.6768	0.7464	0.7504	0.7341	0.6861	Ave		0.7266				5.0		15.0			
Dibromofluoromethane (Surr)	0.2502 0.2509	0.2370	0.2459	0.2475	0.2591	Ave		0.2484				2.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3197 0.2982	0.2804	0.2943	0.2970	0.3023	Ave		0.2987				4.3		15.0			
Toluene-d8 (Surr)	1.3686 1.4472	1.2543	1.3081	1.3123	1.3963	Ave		1.3478				5.2		15.0			
4-Bromofluorobenzene (Surr)	0.5086 0.5764	0.5161	0.5353	0.5693	0.5900	Ave		0.5493				6.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92306/7	UXX5745.D
Level 2	STD8260 240-92306/6	UXX5744.D
Level 3	STD8260 240-92306/5	UXX5743.D
Level 4	STD8260 240-92306/4	UXX5742.D
Level 5	STD8260 240-92306/3	UXX5741.D
Level 6	STD8260 240-92306/2	UXX5740.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	54767 2180564	95162	262835	480203	1004482	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	85277 2984973	155391	400443	739210	1537634	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	70212 2706851	133986	347620	660636	1365892	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	31968 1162486	61340	161325	336378	671729	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	45199 1748303	85025	220378	438782	930184	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	65756 2857760	123722	337134	698782	1495393	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	65961 3314703	145947	393423	852478	1807381	10.0 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	58681 2249654	108851	278629	568449	1178209	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	27214 956101	57319	137423	279435	539415	2.00 80.0	4.00	10.0	20.0	40.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	37938 1580123	74658	205774	407271	838026	1.00 40.0	2.00	5.00	10.0	20.0
Iodomethane	FB	Ave	83662 3283809	168768	412875	842427	1724556	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	164145 7070334	327622	843835	1777356	3677771	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Qua	30691 1208586	65848	204462	450380	693453	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	72432 3083150	152328	402026	822341	1683929	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	134064 2457788	198258	378186	701916	1345893	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Qua	35123 1604280	88712	276828	622138	1020440	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	33292 1568538	72622	197868	405753	847131	2.00 80.0	4.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	139617 5900323	276357	718419	1530564	3212934	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	61768 2454962	122171	315234	618061	1307651	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	13101 489668	23862	63899	125491	262839	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	102615 4030840	201210	504349	996770	2101588	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	8433 353611	13369	42150	78992	173147	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	36459 1531475	71527	191815	369981	833260	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	60428 2552828	131876	314617	635987	1351888	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	49450 2232447	104088	265496	535887	1190064	1.00 40.0	2.00	5.00	10.0	20.0
Bromochloromethane	FB	Ave	27972 1155697	55625	146735	284764	596483	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	14201 536666	29145	73383	142798	280377	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	90260 3765447	185386	467681	934550	1942446	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	75524 2863331	139528	353349	738942	1507411	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	101692 4070558	193022	511580	1032447	2125234	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	66390 2767091	136580	350400	687254	1445313	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	48010 2124983	98072	255707	524404	1129990	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	63911 2594304	132309	320526	664826	1390935	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	214876 8544149	413700	1048572	2139855	4439015	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	59120 2136557	104174	277396	543711	1112953	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	45140 1922801	95329	235825	486505	1050454	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	90480 3738967	182196	467947	959694	1992529	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	25978 1109980	55609	140513	285225	578370	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	12756 363364	20400	75685	186730	259234	50.0 2000	100	250	500	1000
Bromodichloromethane	FB	Ave	53160 2337294	103403	268572	557846	1175022	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	48840 2243516	93628	256271	531968	1193205	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	57686 2807512	108018	309334	632330	1412211	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	68088 3544783	143818	396273	859872	1844604	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	206008 9702058	416007	1115828	2232005	4813551	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	43003 2424719	87902	241350	530484	1209042	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	45475 2552061	99038	273881	588448	1315138	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	39528 1693508	82226	216697	419846	884435	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	73871 3013706	134912	364957	744369	1574532	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	42590 1714998	82796	220069	442338	915516	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	46761 2376657	92421	269510	581279	1266660	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	30933 1635344	67726	178636	379583	832088	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	38917 1694468	79216	201369	429470	902753	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	146185 6214957	293109	744913	1529216	3187168	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	37014 1816040	75346	205634	435735	922272	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	75468 3422833	156143	423627	843207	1793761	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	190586 8981495	391770	1045145	2179206	4632509	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	89083 4341277	187659	512498	1071126	2193452	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	145193 7645398	317802	837507	1795502	3798594	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Ave	17886 1028165	37590	102994	223200	511654	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	229517 11119836	471865	1279053	2738372	5693895	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	50482 2291780	109082	302647	632693	1300389	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	60187 2593630	126711	321547	669860	1366236	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	17130 767037	34713	93280	208407	416411	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	10801 637515	23434	70305	159838	335386	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	59880 2885925	131442	356417	748435	1526460	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	57408 2502678	114482	307432	666478	1368252	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	174586 8832782	370466	1027503	2276462	4740525	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	60913 2803440	125410	333051	730959	1486363	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	169681 7563798	316850	912207	1924137	3969144	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	176495 8930995	381477	1037689	2313096	4747938	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	205341 10629648	451167	1247109	2770941	5713783	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	102276 4648016	227934	592991	1261708	2537033	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	165521 8584748	363865	1005375	2198921	4621813	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	116764 4953445	231554	612446	1298210	2673620	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	139810 6909966	298413	865405	1918318	3905675	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	95379 4184083	201625	537715	1159841	2344239	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	6080 282442	12339	38031	85693	155776	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	63630 2541699	136021	362324	782845	1460567	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	57675 2296082	116316	318090	689274	1260676	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27487-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Ave	19110 733032	41686	115977	224217	422684	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	129948 5850983	276057	763241	1740423	3253448	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	51892 2089556	106343	283242	606460	1155873	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	46021 1928209	87510	235148	470215	1014217	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	58818 2291734	103531	281512	564143	1183218	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	179384 7910836	334032	921944	1840067	4031949	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	66663 3150924	137448	377286	798263	1703761	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2662		1.00	0.0100	-1.6	50.0
Chloromethane	Ave	0.4122	0.3834	0.1000	1.00	0.0100	-7.0	50.0
Vinyl chloride	Ave	0.3595	0.3419		1.00	0.0100	-4.9	20.0
Bromomethane	Ave	0.1681	0.1473		1.00	0.0100	-12.3	50.0
Chloroethane	Ave	0.2338	0.2161		1.00	0.0100	-7.6	50.0
Trichlorofluoromethane	Ave	0.3611	0.3584		1.00	0.0100	-0.8	50.0
Acrolein	Ave	0.0418	0.0369		20.0	0.0300	-11.7	50.0
1,1-Dichloroethene	Ave	0.2997	0.2858		1.00	0.0100	-4.6	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2369		1.00	0.0100	13.0	50.0
Acetone	Ave	0.0713	0.0632		10.0	0.0200	-11.4	50.0
Iodomethane	Ave	0.4425	0.4338		1.00	0.0100	-2.0	50.0
Carbon disulfide	Ave	0.9095	0.9352		1.00	0.0100	2.8	50.0
Acetonitrile	Qua		0.0168		20.0	0.0300	23.1	50.0
Methyl acetate	Ave	0.2076	0.1940		10.0	0.0100	-6.6	50.0
Methylene Chloride	Lin1		0.3201		1.00	0.0100	-12.0	50.0
tert-Butyl alcohol	Qua		0.0110		50.0	0.200	-27.1	50.0
Acrylonitrile	Ave	0.1016	0.0967		20.0	0.0300	-4.8	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7020		1.00	0.0100	-9.5	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3109		1.00	0.0100	-5.5	50.0
Hexane	Ave	0.0666	0.0720		1.00	0.0100	8.2	20.0
1,1-Dichloroethane	Ave	0.5360	0.5078	0.1000	1.00	0.0100	-5.3	50.0
Vinyl acetate	Ave	0.0430	0.0455		2.00	0.0100	5.9	50.0
2-Butanone	Ave	0.0999	0.0893		10.0	0.0200	-10.6	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3270		1.00	0.0100	-3.2	50.0
2,2-Dichloropropane	Ave	0.2842	0.2766		1.00	0.0100	-2.6	50.0
Bromochloromethane	Ave	0.1515	0.1430		1.00	0.0100	-5.6	50.0
Chloroform	Ave	0.4933	0.4800		1.00	0.0100	-2.7	20.0
Tetrahydrofuran	Ave	0.0749	0.0638		5.00	0.0100	-14.9	50.0
1,1,1-Trichloroethane	Ave	0.3841	0.3618		1.00	0.0100	-5.8	50.0
Cyclohexane	Ave	0.5378	0.5529		1.00	0.0100	2.8	50.0
1,1-Dichloropropene	Ave	0.3647	0.3597		1.00	0.0100	-1.4	50.0
Carbon tetrachloride	Ave	0.2725	0.2698		1.00	0.0100	-1.0	50.0
1,2-Dichloroethane	Ave	0.3473	0.3435		1.00	0.0100	-1.1	50.0
Benzene	Ave	1.126	1.099		1.00	0.0100	-2.4	50.0
Trichloroethene	Ave	0.2904	0.2787		1.00	0.0100	-4.0	50.0
1,2-Dichloropropane	Ave	0.2541	0.2548		1.00	0.0100	0.3	20.0
Methylcyclohexane	Ave	0.4959	0.5026		1.00	0.0100	1.4	50.0
Dibromomethane	Ave	0.1468	0.1511		1.00	0.0100	2.9	50.0
Bromodichloromethane	Ave	0.2913	0.2937		1.00	0.0100	0.8	50.0
2-Chloroethyl vinyl ether	Ave	0.1387	0.1358		10.0	0.0100	-2.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Ave	0.3314	0.3198		1.00	0.0100	-3.5	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2120		10.0	0.0200	-0.6	50.0
Toluene	Ave	1.625	1.565		1.00	0.0100	-3.7	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.3754		1.00	0.0100	0.5	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3043		1.00	0.0100	-0.4	50.0
1,3-Dichloropropane	Ave	0.5359	0.5408		1.00	0.0100	0.9	50.0
Tetrachloroethene	Ave	0.3157	0.3103		1.00	0.0100	-1.7	50.0
2-Hexanone	Ave	0.1979	0.1971		10.0	0.0200	-0.4	50.0
Dibromochloromethane	Ave	0.2670	0.2593		1.00	0.0100	-2.9	50.0
1,2-Dibromoethane	Ave	0.3015	0.2916		1.00	0.0100	-3.3	50.0
Chlorobenzene	Ave	1.101	1.054	0.3000	1.00	0.0100	-4.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.2950		1.00	0.0100	-2.7	50.0
Ethylbenzene	Ave	0.6020	0.5880		1.00	0.0100	-2.3	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7353		2.00	0.0200	-4.2	50.0
o-Xylene	Ave	0.7382	0.7063		1.00	0.0100	-4.3	50.0
Styrene	Ave	1.247	1.208		1.00	0.0100	-3.1	50.0
Bromoform	Ave	0.1580	0.1476	0.1000	1.00	0.0100	-6.6	50.0
Isopropylbenzene	Ave	1.883	1.773		1.00	0.0100	-5.8	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7464	0.3000	1.00	0.0100	-2.5	50.0
Bromobenzene	Ave	0.8485	0.8337		1.00	0.0100	-1.8	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2495		1.00	0.0100	0.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1877		1.00	0.0200	1.6	50.0
n-Propylbenzene	Ave	0.9162	0.9431		1.00	0.0100	2.9	50.0
2-Chlorotoluene	Ave	0.8158	0.7826		1.00	0.0100	-4.1	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.627		1.00	0.0100	-3.5	50.0
4-Chlorotoluene	Ave	0.8894	0.8613		1.00	0.0100	-3.2	50.0
tert-Butylbenzene	Ave	2.380	2.286		1.00	0.0100	-4.0	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.656		1.00	0.0100	-3.7	50.0
sec-Butylbenzene	Ave	3.282	3.199		1.00	0.0100	-2.5	50.0
1,3-Dichlorobenzene	Ave	1.536	1.461		1.00	0.0100	-4.9	50.0
p-Isopropyltoluene	Ave	2.641	2.626		1.00	0.0100	-0.6	50.0
1,4-Dichlorobenzene	Ave	1.622	1.546		1.00	0.0100	-4.7	50.0
n-Butylbenzene	Ave	2.221	2.238		1.00	0.0100	0.7	50.0
1,2-Dichlorobenzene	Ave	1.400	1.341		1.00	0.0100	-4.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.0955		2.00	0.0100	1.5	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.7202		1.00	0.0100	-10.7	50.0
Hexachlorobutadiene	Ave	0.2736	0.2467		1.00	0.0100	-9.8	50.0
Naphthalene	Ave	1.968	1.790		1.00	0.0100	-9.1	50.0
1,2,3-Trichlorobenzene	Ave	0.7266	0.6612		1.00	0.0100	-9.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2341		0.00942	0.0100	-5.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2638		0.00883	0.0100	-11.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.348	1.272		0.00944	0.0100	-5.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4913		0.00894	0.0100	-10.6	50.0

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Instrument ID: A3UX10 Start Date: 08/06/2013 11:57

Analysis Batch Number: 96359 End Date: 08/06/2013 22:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-96359/1		08/06/2013 11:57	1	BFB5342.D	DB-624 0.18(mm)
CCVIS 240-96359/2		08/06/2013 12:29	1	UXX6518.D	DB-624 0.18(mm)
CCV 240-96359/3		08/06/2013 12:51	1	UXX6519.D	DB-624 0.18(mm)
LCS 240-96359/4		08/06/2013 13:12	1	UXX6520.D	DB-624 0.18(mm)
MB 240-96359/6		08/06/2013 13:55	1	UXX6522.D	DB-624 0.18(mm)
ZZZZZ		08/06/2013 15:23	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 15:44	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 16:06	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 16:27	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 16:48	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 17:10	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 17:32	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 17:54	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 18:16	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 18:37	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 18:59	1		DB-624 0.18(mm)
ZZZZZ		08/06/2013 19:21	1		DB-624 0.18(mm)
240-27487-2	DR-DPT-29-10	08/06/2013 19:43	1	UXX6535.D	DB-624 0.18(mm)
240-27487-3	DR-DPT-29-15	08/06/2013 20:04	1	UXX6536.D	DB-624 0.18(mm)
240-27487-4	DR-DPT-29-20	08/06/2013 20:26	1	UXX6537.D	DB-624 0.18(mm)
240-27487-5	DR-DPT-29-25	08/06/2013 20:47	1	UXX6538.D	DB-624 0.18(mm)
240-27487-6	DR-DPT-29-30	08/06/2013 21:08	1	UXX6539.D	DB-624 0.18(mm)
240-27487-1	DR-DPT-24-60	08/06/2013 21:30	2	UXX6540.D	DB-624 0.18(mm)
240-27487-7	DR-DPT-29-35	08/06/2013 21:51	1	UXX6541.D	DB-624 0.18(mm)
240-27487-8	DR-DPT-29-40	08/06/2013 22:12	4	UXX6542.D	DB-624 0.18(mm)
240-27386-A-1 MS		08/06/2013 22:34	1	UXX6543.D	DB-624 0.18(mm)
240-27386-C-1 MSD		08/06/2013 22:55	1	UXX6544.D	DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab File ID: BFB5342.D BFB Injection Date: 08/06/2013

Instrument ID: A3UX10 BFB Injection Time: 11:57

Analysis Batch No.: 96359

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.0	
75	30.0 - 60.0 % of mass 95	51.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.2	(0.3)1
174	50.0 - 120.00 % of mass 95	74.0	
175	5.0 - 9.0 % of mass 174	6.0	(8.1)1
176	95.0 - 101.0 % of mass 174	72.0	(97.2)1
177	5.0 - 9.0 % of mass 176	5.1	(7.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-96359/2	UXX6518.D	08/06/2013	12:29
	CCV 240-96359/3	UXX6519.D	08/06/2013	12:51
	LCS 240-96359/4	UXX6520.D	08/06/2013	13:12
	MB 240-96359/6	UXX6522.D	08/06/2013	13:55
DR-DPT-29-10	240-27487-2	UXX6535.D	08/06/2013	19:43
DR-DPT-29-15	240-27487-3	UXX6536.D	08/06/2013	20:04
DR-DPT-29-20	240-27487-4	UXX6537.D	08/06/2013	20:26
DR-DPT-29-25	240-27487-5	UXX6538.D	08/06/2013	20:47
DR-DPT-29-30	240-27487-6	UXX6539.D	08/06/2013	21:08
DR-DPT-24-60	240-27487-1	UXX6540.D	08/06/2013	21:30
DR-DPT-29-35	240-27487-7	UXX6541.D	08/06/2013	21:51
DR-DPT-29-40	240-27487-8	UXX6542.D	08/06/2013	22:12
	240-27386-A-1 MS	UXX6543.D	08/06/2013	22:34
	240-27386-C-1 MSD	UXX6544.D	08/06/2013	22:55

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab Sample ID: CCVIS 240-96359/2 Calibration Date: 08/06/2013 12:29

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6518.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2594		1.00	0.0100	-4.1	50.0
Chloromethane	Ave	0.4122	0.4191	0.1000	1.00	0.0100	1.7	50.0
Vinyl chloride	Ave	0.3595	0.3424		1.00	0.0100	-4.8	20.0
Bromomethane	Ave	0.1681	0.1115		1.00	0.0100	-33.7	50.0
Chloroethane	Ave	0.2338	0.1718		1.00	0.0100	-26.5	50.0
Trichlorofluoromethane	Ave	0.3611	0.3445		1.00	0.0100	-4.6	50.0
Acrolein	Ave	0.0418	0.0375		20.0	0.100	-10.3	50.0
1,1-Dichloroethene	Ave	0.2997	0.2815		1.00	0.0100	-6.1	20.0
Acetone	Ave	0.0713	0.0827		10.0	0.0200	15.9	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2157		1.00	0.0100	2.9	50.0
Iodomethane	Ave	0.4425	0.3973		1.00	0.0100	-10.2	50.0
Carbon disulfide	Ave	0.9095	0.8902		1.00	0.0100	-2.1	50.0
Acetonitrile	Qua		0.0206		20.0	0.100	1.0	50.0
Methyl acetate	Ave	0.2076	0.1941		10.0	0.0200	-6.5	50.0
Methylene Chloride	Lin1		0.3456		1.00	0.0100	-3.9	50.0
tert-Butyl alcohol	Qua		0.0116		50.0	0.200	-22.9	50.0
Acrylonitrile	Ave	0.1016	0.0965		20.0	0.0200	-5.0	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7537		1.00	0.0100	-2.8	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3171		1.00	0.0100	-3.7	50.0
Hexane	Ave	0.0666	0.0686		1.00	0.0100	3.0	20.0
1,1-Dichloroethane	Ave	0.5360	0.5220	0.1000	1.00	0.0100	-2.6	50.0
Vinyl acetate	Ave	0.0430	0.0398		2.00	0.0100	-7.3	50.0
2-Butanone	Ave	0.0999	0.1066		10.0	0.0200	6.6	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3190		1.00	0.0100	-5.6	50.0
2,2-Dichloropropane	Ave	0.2842	0.3487		1.00	0.0100	22.7	50.0
Bromochloromethane	Ave	0.1515	0.1465		1.00	0.0100	-3.3	50.0
Tetrahydrofuran	Ave	0.0749	0.0726		5.00	0.0100	-3.1	50.0
Chloroform	Ave	0.4933	0.5048		1.00	0.0100	2.3	20.0
1,1,1-Trichloroethane	Ave	0.3841	0.4345		1.00	0.0100	13.1	50.0
Cyclohexane	Ave	0.5378	0.5401		1.00	0.0100	0.4	50.0
1,1-Dichloropropene	Ave	0.3647	0.3682		1.00	0.0100	1.0	50.0
Carbon tetrachloride	Ave	0.2725	0.3554		1.00	0.0100	30.4	50.0
1,2-Dichloroethane	Ave	0.3473	0.4086		1.00	0.0100	17.7	50.0
Benzene	Ave	1.126	1.152		1.00	0.0100	2.3	50.0
Trichloroethene	Ave	0.2904	0.2811		1.00	0.0100	-3.2	50.0
1,2-Dichloropropane	Ave	0.2541	0.2735		1.00	0.0100	7.6	20.0
Methylcyclohexane	Ave	0.4959	0.4892		1.00	0.0100	-1.4	50.0
Dibromomethane	Ave	0.1468	0.1520		1.00	0.0100	3.5	50.0
1,4-Dioxane	Ave	0.0014	0.0011		50.0	0.500	-19.6	50.0
Bromodichloromethane	Ave	0.2913	0.3520		1.00	0.0100	20.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab Sample ID: CCVIS 240-96359/2 Calibration Date: 08/06/2013 12:29

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6518.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1464		10.0	0.0200	5.6	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3936		1.00	0.0100	18.8	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2301		10.0	0.0200	7.9	50.0
Toluene	Ave	1.625	1.713		1.00	0.0100	5.4	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4758		1.00	0.0100	27.4	50.0
Ethyl methacrylate	Ave	0.4082	0.4285		1.00	0.0100	5.0	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3120		1.00	0.0100	2.1	50.0
1,3-Dichloropropane	Ave	0.5359	0.5786		1.00	0.0100	8.0	50.0
Tetrachloroethene	Ave	0.3157	0.3281		1.00	0.0100	3.9	50.0
2-Hexanone	Ave	0.1979	0.2150		10.0	0.0200	8.6	50.0
Dibromochloromethane	Ave	0.2670	0.3471		1.00	0.0100	30.0	50.0
1,2-Dibromoethane	Ave	0.3015	0.3073		1.00	0.0100	1.9	50.0
Chlorobenzene	Ave	1.101	1.077	0.3000	1.00	0.0100	-2.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3731		1.00	0.0100	23.0	50.0
Ethylbenzene	Ave	0.6020	0.5991		1.00	0.0100	-0.5	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7702		2.00	0.0200	0.3	50.0
o-Xylene	Ave	0.7382	0.7257		1.00	0.0100	-1.7	50.0
Styrene	Ave	1.247	1.184		1.00	0.0100	-5.1	50.0
Bromoform	Ave	0.1580	0.2042	0.1000	1.00	0.0100	29.2	50.0
Isopropylbenzene	Ave	1.883	1.838		1.00	0.0100	-2.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7850	0.3000	1.00	0.0100	2.6	50.0
Bromobenzene	Ave	0.8485	0.8350		1.00	0.0100	-1.6	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2538		1.00	0.0100	2.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1992		1.00	0.0100	7.7	50.0
n-Propylbenzene	Ave	0.9162	0.9397		1.00	0.0100	2.6	50.0
2-Chlorotoluene	Ave	0.8158	0.8282		1.00	0.0100	1.5	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.852		1.00	0.0100	4.8	50.0
4-Chlorotoluene	Ave	0.8894	0.8814		1.00	0.0100	-0.9	50.0
tert-Butylbenzene	Ave	2.380	2.371		1.00	0.0100	-0.4	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.805		1.00	0.0100	1.7	50.0
sec-Butylbenzene	Ave	3.282	3.228		1.00	0.0100	-1.6	50.0
1,3-Dichlorobenzene	Ave	1.536	1.477		1.00	0.0100	-3.9	50.0
p-Isopropyltoluene	Ave	2.641	2.572		1.00	0.0100	-2.6	50.0
1,4-Dichlorobenzene	Ave	1.622	1.607		1.00	0.0100	-1.0	50.0
n-Butylbenzene	Ave	2.221	2.141		1.00	0.0100	-3.6	50.0
1,2-Dichlorobenzene	Ave	1.400	1.351		1.00	0.0100	-3.4	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.1026		2.00	0.0100	9.0	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.7754		1.00	0.0100	-15.3	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.6208		1.00	0.0100	-23.0	50.0
Hexachlorobutadiene	Ave	0.2736	0.2003		1.00	0.0100	-26.8	50.0
Naphthalene	Ave	1.968	1.432		1.00	0.0100	-27.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab Sample ID: CCVIS 240-96359/2 Calibration Date: 08/06/2013 12:29

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6518.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.5355		1.00	0.0100	-26.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2111		0.00850	0.0100	-15.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2907		0.00973	0.0100	-2.7	50.0
Toluene-d8 (Surr)	Ave	1.348	1.205		0.00894	0.0100	-10.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4736		0.00862	0.0100	-13.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab Sample ID: CCV 240-96359/3 Calibration Date: 08/06/2013 12:51

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX6519.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.5138		2.00	0.0100	-38.8	50.0
Ethyl ether	Ave	0.3039	0.2671		2.00	0.0100	-12.1	50.0
3-Chloro-1-propene	Ave	0.1630	0.1679		2.00	0.0100	3.0	50.0
Diisopropyl ether	Ave	0.2610	0.2554		10.0	0.0500	-2.1	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5370		2.00	0.0100	7.2	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8518		5.00	0.0100	0.5	50.0
Propionitrile	Ave	0.0230	0.0312		4.00	0.0200	35.2	50.0
Ethyl acetate	Ave	0.1697	0.2118		4.00	0.0200	24.8	50.0
Methacrylonitrile	Ave	0.1263	0.1566		2.00	0.0100	24.0	50.0
Isobutyl alcohol	Ave	0.0072	0.0085		50.0	0.200	18.3	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6683		5.00	0.0100	-9.7	50.0
n-Heptane	Ave	0.0634	0.0658		1.00	0.0100	3.9	50.0
n-Butanol	Lin		0.0062		50.0	0.200	-5.5	50.0
Methyl methacrylate	Ave	0.1639	0.2061		2.00	0.0100	25.8	50.0
2-Nitropropane	Ave	0.0170	0.0558		2.00	0.0200	227.6*	50.0
Cyclohexanone	Ave	0.0815	0.0882		20.0	0.100	8.3	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.756		0.0113	0.0100	13.1	50.0
2-Methylnaphthalene	Ave	1.002	0.7453		5.00	0.0200	-25.6	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Lab File ID: UXX6522.D Lab Sample ID: MB 240-96359/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/06/2013 13:55

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-96359/4	UXX6520.D	08/06/2013 13:12
DR-DPT-29-10	240-27487-2	UXX6535.D	08/06/2013 19:43
DR-DPT-29-15	240-27487-3	UXX6536.D	08/06/2013 20:04
DR-DPT-29-20	240-27487-4	UXX6537.D	08/06/2013 20:26
DR-DPT-29-25	240-27487-5	UXX6538.D	08/06/2013 20:47
DR-DPT-29-30	240-27487-6	UXX6539.D	08/06/2013 21:08
DR-DPT-24-60	240-27487-1	UXX6540.D	08/06/2013 21:30
DR-DPT-29-35	240-27487-7	UXX6541.D	08/06/2013 21:51
DR-DPT-29-40	240-27487-8	UXX6542.D	08/06/2013 22:12
	240-27386-A-1 MS	UXX6543.D	08/06/2013 22:34
	240-27386-C-1 MSD	UXX6544.D	08/06/2013 22:55

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96359/6

Matrix: Water Lab File ID: UXX6522.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 13:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	1.51	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96359/6

Matrix: Water Lab File ID: UXX6522.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 13:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96359/6

Matrix: Water Lab File ID: UXX6522.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 13:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96359/6

Matrix: Water Lab File ID: UXX6522.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/06/2013 13:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96359 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6520.D

Lab ID: LCS 240-96359/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.6	116	72-116	
1,1,1-Trichloroethane	10.0	11.0	110	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.33	93	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.6	106	74-151	
1,1-Dichloroethane	10.0	9.56	96	82-115	
1,1-Dichloroethene	10.0	8.87	89	78-131	
1,1-Dichloropropene	10.0	10.0	100	83-114	
1,2,3-Trichlorobenzene	10.0	8.92	89	54-126	
1,2,3-Trichloropropane	10.0	9.32	93	73-129	
1,2,3-Trimethylbenzene	10.0	11.3	113	70-130	
1,2,4-Trichlorobenzene	10.0	9.03	90	48-135	
1,2,4-Trimethylbenzene	10.0	9.96	100	76-120	
1,2-Dibromo-3-Chloropropane	10.0	11.1	111	42-136	
1,2-Dichlorobenzene	10.0	9.88	99	81-110	
1,2-Dichloroethane	10.0	11.4	114	71-127	
1,2-Dichloropropane	10.0	10.3	103	81-115	
1,3-Dichlorobenzene	10.0	9.32	93	80-110	
1,3-Dichloropropane	10.0	10.1	101	79-116	
1,4-Dichlorobenzene	10.0	9.20	92	82-110	
2,2-Dichloropropane	10.0	12.2	122	50-129	
2-Chloroethyl vinyl ether	10.0	9.82 J	98	52-131	
2-Chlorotoluene	10.0	9.03	90	76-116	
2-Hexanone	20.0	21.3	106	55-133	
Bromobenzene	10.0	8.73	87	76-115	
Bromochloromethane	10.0	9.18	92	77-120	
4-Chlorotoluene	10.0	8.94	89	77-115	
p-Isopropyltoluene	10.0	10.4	104	74-120	
Acetone	20.0	23.4	117	43-136	
Benzene	10.0	9.96	100	83-112	
Bromoform	10.0	12.2	122	40-131	
Bromomethane	10.0	6.79	68	11-185	
Carbon disulfide	10.0	9.70	97	62-142	
Carbon tetrachloride	10.0	12.8	128	66-128	
Chlorobenzene	10.0	9.47	95	85-110	
Chloroethane	10.0	6.83	68	25-153	
Chloroform	10.0	9.88	99	79-117	
Chloromethane	10.0	8.21	82	44-126	
cis-1,2-Dichloroethene	10.0	9.18	92	80-113	
cis-1,3-Dichloropropene	10.0	11.3	113	61-115	
Hexachlorobutadiene	10.0	9.14	91	36-134	
Dibromomethane	10.0	10.5	105	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6520.D

Lab ID: LCS 240-96359/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.9	119	72-121	
Dichlorodifluoromethane	10.0	7.57	76	19-129	
Ethylbenzene	10.0	9.60	96	83-112	
1,2-Dibromoethane	10.0	9.66	97	79-113	
Diisopropyl ether	10.0	9.69 J	97	77-118	
Naphthalene	10.0	8.87	89	32-141	
m-Xylene & p-Xylene	20.0	19.0	95	83-113	
n-Butylbenzene	10.0	10.3	103	66-125	
Isopropylbenzene	10.0	9.86	99	75-114	
n-Propylbenzene	10.0	9.44	94	74-121	
2-Butanone	20.0	21.3	107	60-126	
4-Methyl-2-pentanone	20.0	22.2	111	63-128	
sec-Butylbenzene	10.0	9.65	96	70-117	
Methyl tert-butyl ether	10.0	9.76	98	52-144	
Methylene Chloride	10.0	9.42	94	66-131	
o-Xylene	10.0	9.79	98	83-113	
Styrene	10.0	9.28	93	79-114	
tert-Butylbenzene	10.0	9.27	93	71-115	
Tetrachloroethene	10.0	9.63	96	79-114	
Toluene	10.0	9.97	100	84-111	
trans-1,2-Dichloroethene	10.0	9.21	92	83-117	
trans-1,3-Dichloropropene	10.0	11.7	117	58-117	
Trichloroethene	10.0	9.36	94	76-117	
Trichlorofluoromethane	10.0	9.14	91	49-157	
Vinyl acetate	10.0	8.20	82	46-161	
Vinyl chloride	10.0	8.12	81	53-127	
tert-Butyl alcohol	200	196	98	70-130	
Xylenes, Total	30.0	28.8	96	83-112	
Dibromochloromethane	10.0	11.9	119	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6543.D

Lab ID: 240-27386-A-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	1.0 U	11.1	111	68-121	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	9.94	99	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	1.0 U	10.2	102	70-152	
1,1-Dichloroethane	10.0	1.0 U	10.1	101	79-116	
1,1-Dichloroethene	10.0	1.0 U	9.19	92	74-135	
1,2,4-Trichlorobenzene	10.0	1.0 U	7.43	74	38-138	
1,2-Dibromo-3-Chloropropane	10.0	2.0 U	10.6	106	32-139	
1,2-Dichlorobenzene	10.0	1.0 U	9.25	92	75-111	
1,2-Dichloroethane	10.0	1.0 U	11.6	116	68-129	
1,2-Dichloropropane	10.0	1.0 U	10.9	109	78-115	
1,3-Dichlorobenzene	10.0	1.0 U	9.37	94	73-110	
1,4-Dichlorobenzene	10.0	1.0 U	9.24	92	75-110	
2-Hexanone	20.0	10 U	21.0	105	47-139	
Acetone	20.0	1.7 J	23.3	108	33-145	
Benzene	10.0	1.0 U	10.2	102	72-121	
Bromoform	10.0	1.0 U	11.8	118	32-128	
Bromomethane	10.0	1.0 U	7.16	72	10-186	
Carbon disulfide	10.0	1.0 U	10.3	103	57-147	
Carbon tetrachloride	10.0	1.0 U	13.0	130	59-129	F
Chlorobenzene	10.0	1.0 U	9.75	97	80-110	
Chloroethane	10.0	1.0 U	7.32	73	21-165	
Chloroform	10.0	1.0 U	10.5	105	76-118	
Chloromethane	10.0	1.0 U	8.63	86	33-132	
cis-1,2-Dichloroethene	10.0	1.0 U	9.93	99	70-120	
cis-1,3-Dichloropropene	10.0	1.0 U	10.9	109	51-110	
Bromodichloromethane	10.0	1.0 U	12.1	121	67-120	F
Dichlorodifluoromethane	10.0	1.0 U	7.12	71	17-128	
Ethylbenzene	10.0	1.0 U	9.77	98	75-116	
1,2-Dibromoethane	10.0	1.0 U	10.2	102	74-113	
m-Xylene & p-Xylene	20.0	2.0 U	18.8	94	75-117	
Isopropylbenzene	10.0	1.0 U	9.48	95	68-116	
2-Butanone	20.0	10 U	20.0	100	54-129	
4-Methyl-2-pentanone	20.0	10 U	23.2	116	56-131	
Methyl tert-butyl ether	10.0	1.0 U	10.1	101	46-144	
Methylene Chloride	10.0	1.0 U	8.97	90	63-128	
o-Xylene	10.0	1.0 U	9.57	96	76-116	
Styrene	10.0	1.0 U	8.92	89	71-117	
Tetrachloroethene	10.0	1.0 U	9.68	97	70-117	
Toluene	10.0	1.0 U	10.5	105	78-114	
trans-1,2-Dichloroethene	10.0	1.0 U	9.60	96	80-119	
trans-1,3-Dichloropropene	10.0	1.0 U	11.7	117	46-116	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6543.D

Lab ID: 240-27386-A-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Trichloroethene	10.0	1.0 U	9.52	95	66-120	
Trichlorofluoromethane	10.0	1.0 U	9.27	93	46-157	
Vinyl chloride	10.0	1.0 U	8.75	88	49-130	
Xylenes, Total	30.0	2.0 U	28.4	95	76-116	
Dibromochloromethane	10.0	1.0 U	11.7	117	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6544.D

Lab ID: 240-27386-C-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	10.9	109	2	30	68-121	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	1	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.79	98	5	30	70-152	
1,1-Dichloroethane	10.0	9.57	96	5	30	79-116	
1,1-Dichloroethene	10.0	9.17	92	0	30	74-135	
1,2,4-Trichlorobenzene	10.0	7.54	75	2	30	38-138	
1,2-Dibromo-3-Chloropropane	10.0	10.4	104	2	30	32-139	
1,2-Dichlorobenzene	10.0	9.28	93	0	30	75-111	
1,2-Dichloroethane	10.0	11.4	114	2	30	68-129	
1,2-Dichloropropane	10.0	10.7	107	1	30	78-115	
1,3-Dichlorobenzene	10.0	9.35	93	0	30	73-110	
1,4-Dichlorobenzene	10.0	9.24	92	0	30	75-110	
2-Hexanone	20.0	21.4	107	2	30	47-139	
Acetone	20.0	21.7	100	7	30	33-145	
Benzene	10.0	10.1	101	1	30	72-121	
Bromoform	10.0	12.0	120	1	30	32-128	
Bromomethane	10.0	6.29	63	13	30	10-186	
Carbon disulfide	10.0	9.81	98	5	30	57-147	
Carbon tetrachloride	10.0	12.6	126	2	30	59-129	
Chlorobenzene	10.0	9.44	94	3	30	80-110	
Chloroethane	10.0	6.86	69	6	30	21-165	
Chloroform	10.0	9.91	99	6	30	76-118	
Chloromethane	10.0	8.47	85	2	30	33-132	
cis-1,2-Dichloroethene	10.0	9.14	91	8	30	70-120	
cis-1,3-Dichloropropene	10.0	10.5	105	4	30	51-110	
Bromodichloromethane	10.0	11.9	119	1	30	67-120	
Dichlorodifluoromethane	10.0	6.63	66	7	30	17-128	
Ethylbenzene	10.0	9.67	97	1	30	75-116	
1,2-Dibromoethane	10.0	9.96	100	2	30	74-113	
m-Xylene & p-Xylene	20.0	19.5	98	4	30	75-117	
Isopropylbenzene	10.0	9.51	95	0	30	68-116	
2-Butanone	20.0	20.0	100	0	30	54-129	
4-Methyl-2-pentanone	20.0	23.0	115	1	30	56-131	
Methyl tert-butyl ether	10.0	9.62	96	4	30	46-144	
Methylene Chloride	10.0	8.36	84	7	30	63-128	
o-Xylene	10.0	9.69	97	1	30	76-116	
Styrene	10.0	9.03	90	1	30	71-117	
Tetrachloroethene	10.0	9.77	98	1	30	70-117	
Toluene	10.0	10.4	104	1	30	78-114	
trans-1,2-Dichloroethene	10.0	9.13	91	5	30	80-119	
trans-1,3-Dichloropropene	10.0	11.9	119	1	30	46-116	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6544.D

Lab ID: 240-27386-C-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Trichloroethene	10.0	9.56	96	0	30	66-120	
Trichlorofluoromethane	10.0	8.86	89	4	30	46-157	
Vinyl chloride	10.0	8.51	85	3	30	49-130	
Xylenes, Total	30.0	29.2	97	3	30	76-116	
Dibromochloromethane	10.0	11.9	119	1	30	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Sample No.: STD8260 240-92306/4 Date Analyzed: 07/02/2013 13:37

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX5742.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1899526	5.20	1402128	7.87	826109	10.11
UPPER LIMIT		3799052	5.70	2804256	8.37	1652218	10.61
LOWER LIMIT		949763	4.70	701064	7.37	413055	9.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92306/8		1830940	5.20	1292823	7.87	693029	10.11
CCVIS 240-96359/2		1842010	5.20	1302302	7.87	691104	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27487-1

SDG No.:

Sample No.: CCVIS 240-96359/2 Date Analyzed: 08/06/2013 12:29

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX6518.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1842010	5.20	1302302	7.87	691104	10.12
UPPER LIMIT		3684020	5.70	2604604	8.37	1382208	10.62
LOWER LIMIT		921005	4.70	651151	7.37	345552	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-96359/3		1819357	5.20	1261311	7.87	628505	10.12
LCS 240-96359/4		1800678	5.20	1315713	7.87	782833	10.12
MB 240-96359/6		1694136	5.20	1209543	7.87	672293	10.12
240-27487-2	DR-DPT-29-10	1738907	5.20	1213699	7.87	621927	10.12
240-27487-3	DR-DPT-29-15	1703122	5.20	1187894	7.87	622537	10.12
240-27487-4	DR-DPT-29-20	1675572	5.20	1187047	7.87	604155	10.12
240-27487-5	DR-DPT-29-25	1658377	5.20	1173667	7.87	587212	10.12
240-27487-6	DR-DPT-29-30	1661306	5.20	1199064	7.87	605409	10.12
240-27487-1	DR-DPT-24-60	1642104	5.20	1171597	7.87	600494	10.12
240-27487-7	DR-DPT-29-35	1644856	5.20	1159198	7.87	615767	10.12
240-27487-8	DR-DPT-29-40	1629406	5.20	1154881	7.87	581279	10.12
240-27386-A-1 MS		1692556	5.20	1212649	7.87	658021	10.12
240-27386-C-1 MSD		1773262	5.20	1250861	7.87	669556	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

SDG 240-27487-1

SAMPLE ID DR-DPT-24-60

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (NG)	Final Volume (ML)	AVE RRF	CONCENTRATION ug/L
1642104	2	118364	10	5	0.2904	4.96
				Sample Volume (ML)		
				5		

Trichloroethene = 5.0 ug/L

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX10\20130806-22252.b\UXX6540.D
Lims ID: 240-27487-A-1 Client ID: DR-DPT-24-60
Inject. Date: 06-Aug-2013 21:30:30 Dil. Factor: 2.0000
Sample Type: Client
Sample ID: 240-0022252-024
Misc. Info.:
Operator: 1644 Instrument ID: A3UX10
Purge Vol: 5.000 mL ALS Bottle#: 23
Lims Batch ID: 96359 Lims Sample ID: 24
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX10\20130806-22252.b\8260_10.m
Last Update: 07-Aug-2013 10:33:57 Calib Date: 02-Jul-2013 14:41:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX10\20130702-21321.b\UXX5745.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK011

First Level Reviewer: williamsla Date: 07-Aug-2013 10:25:42

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.197	5.197	0.0	98	1642104	10.0	
* 2 Chlorobenzene-d5	117	7.872	7.871	0.001	88	1171597	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.120	10.120	0.0	96	600494	10.0	
$ 5 Dibromofluoromethane (Surr)	113	4.629	4.629	0.0	67	359162	8.80	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.913	4.913	0.0	0	457509	9.33	
$ 7 Toluene-d8 (Surr)	98	6.558	6.558	0.0	94	1410624	8.93	
$ 8 4-Bromofluorobenzene (Surr)	95	8.984	8.984	0.0	87	545506	8.48	
12 Dichlorodifluoromethane	85		1.576					
13 Chloromethane	50		1.695					9
14 Vinyl chloride	62		1.801					9
16 Bromomethane	94		2.097					
17 Chloroethane	64		2.180					
19 Trichlorofluoromethane	101		2.393					
23 1,1-Dichloroethene	96		2.807					9
24 Acetone	43	2.819	2.819	0.0	91	181014	15.5	
25 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.830					
27 Carbon disulfide	76	2.996	3.008	-0.012	91	40418	0.2706	
31 Methylene Chloride	84	3.186	3.197	-0.011	93	179189	2.10	
32 2-Methyl-2-propanol	59	3.257	3.256	0.001	36	15621	12.9	
35 Methyl tert-butyl ether	73		3.422					
34 trans-1,2-Dichloroethene	96		3.434					9
37 1,1-Dichloroethane	63		3.765					9
38 Vinyl acetate	86		3.789					
39 Isopropyl ether	87		3.824					
41 Tert-butyl ethyl ether	59		4.120					9
42 2-Butanone (MEK)	43	4.239	4.239	0.0	98	53793	3.28	
43 cis-1,2-Dichloroethene	96	4.239	4.239	0.0	83	150942	2.72	
44 2,2-Dichloropropane	77		4.250					9
48 Chlorobromomethane	128		4.440					
50 Chloroform	83	4.499	4.499	0.0	83	37094	0.4579	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
51 1,1,1-Trichloroethane	97		4.676					
53 1,1-Dichloropropene	75		4.807					
54 Carbon tetrachloride	117		4.818					
56 1,2-Dichloroethane	62	4.973	4.972	0.001	77	115895	2.03	
57 Benzene	78	4.984	4.984	0.0	46	55367	0.2994	
58 Tert-amyl methyl ether	73		5.055					
61 Trichloroethene	130	5.517	5.517	0.0	97	118364	2.48	
64 1,2-Dichloropropane	63		5.694					
66 Dibromomethane	93		5.801					
68 Dichlorobromomethane	83		5.919					
70 2-Chloroethyl vinyl ether	63		6.167					
71 cis-1,3-Dichloropropene	75		6.309					9
72 4-Methyl-2-pentanone (MIBK)	43		6.439					9
73 Toluene	91	6.617	6.617	0.0	86	93755	0.4924	
74 trans-1,3-Dichloropropene	75		6.794					
77 1,3-Dichloropropane	76		7.114					
78 Tetrachloroethene	164		7.126					
79 2-Hexanone	43		7.173					9
81 Chlorodibromomethane	129		7.327					
83 Ethylene Dibromide	107		7.445					
85 Chlorobenzene	112	7.907	7.895	0.012	67	16082	0.1247	
86 1,1,1,2-Tetrachloroethane	131		7.966					
87 Ethylbenzene	106		8.001					
88 m-Xylene & p-Xylene	106		8.108					
89 o-Xylene	106		8.487					9
90 Styrene	104		8.498					9
91 Bromoform	173		8.676					
92 Isopropylbenzene	105		8.842					9
95 1,1,2,2-Tetrachloroethane	83		9.102					
96 Bromobenzene	156		9.137					
97 1,2,3-Trichloropropane	110		9.149					
99 N-Propylbenzene	120		9.232					9
100 2-Chlorotoluene	126		9.327					
102 4-Chlorotoluene	126		9.421					9
103 tert-Butylbenzene	119		9.729					
104 1,2,4-Trimethylbenzene	105		9.776					9
105 sec-Butylbenzene	105		9.942					
106 1,3-Dichlorobenzene	146		10.048					
107 4-Isopropyltoluene	119		10.084					
108 1,4-Dichlorobenzene	146		10.143					
109 1,2,3-Trimethylbenzene	105		10.190					9
110 n-Butylbenzene	91		10.486					9
111 1,2-Dichlorobenzene	146		10.510					
112 1,2-Dibromo-3-Chloropropane	157		11.279					
114 1,2,4-Trichlorobenzene	180		12.119					
115 Hexachlorobutadiene	225		12.297					
116 Naphthalene	128		12.356					9
117 1,2,3-Trichlorobenzene	180		12.616					
S 122 Xylenes, Total	106		16.530					7

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. AVANAVAGE** **DATE:** **NOVEMBER 7, 2013**

FROM: **A. COGNETTI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOC**
DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-27547-1

SAMPLES: 5/Aqueous/VOC

DR-DPT-28-15	DR-DPT-28-30	DR-DPT-28-35
DR-DPT-28-40	TB-080213	

Overview

The sample set for Dump Road Source Areas, SDG 240-27547-1 consisted of four (4) aqueous environmental samples and a trip blank analyzed for volatile organic compounds (VOCs).

The samples were collected on August 2, 2013 and analyzed by Test America Laboratories Inc. All analyses were conducted in accordance with SW-846 Methods 8260B for VOCs analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate, internal standard recoveries, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major

- The VOC initial calibration relative response factors (RRFs) for tert-butyl alcohol and vinyl acetate were less than the 0.05 quality control limit on July 2, 2013 for instrument A3UX10 and the continuing calibration on August 8, 2013 @ 11:51. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR).

- The VOC initial calibration RRFs for tert-butyl alcohol and vinyl acetate were less than 0.05 quality control limit on July 2, 2013 for instrument A3UX17 and the continuing calibrations on August 13, 2013 @ 11:57 and August 14, 2013 @ 12:38. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR) in the trip blank.

- Tentatively identified compound (TIC) containing silanol was detected in the trip blank. This compound is indicative of column bleed and was qualified as rejected (R).

Minor

- The continuing calibration percent difference (%D) for naphthalene exceeded 50% on August 13, 2013 @ 11:57 and August 14, 2013 @ 12:38 on instrument A3UX17. The nondetected naphthalene results were qualified as estimated (UJ) in the affected samples DR-DPT-28-30, DR-DPT-28-35, DR-DPT-28-40 and TB-080213.

- Contamination was detected in the VOC laboratory method blank associated with batch 240-97250/6 analyzed on August 13, 2013 on instrument A3UX17.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Methylene chloride	0.394	3.94

An action level of 10X the maximum concentration of common laboratory contaminant, methylene chloride, was established in order to evaluate samples for blank contamination. Sample aliquot, and dilution factors were taken into account when applying the action level. Detected results less than the action level were qualified as (B) in the affected samples DR-DPT-28-30 and DR-DPT-28-35.

- Contamination was detected in the VOC laboratory method blank associated with batch 240-97431/5 analyzed on August 14, 2013 on instrument A3UX17 affecting sample DR-DPT-28-40.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
1,2,3-trichlorobenzene	0.928	4.64
1,2,4-trichlorobenzene	1.06	5.3
Hexachlorobutadiene	1.14	5.7
Naphthalene	0.678	3.39
Methylene chloride	0.872	8.72

An action level of 10X the maximum concentration of common laboratory contaminant, methylene chloride, and 5X the maximum concentration of other contaminants was established in order to evaluate samples for blank contamination. Sample aliquot, and dilution factors were taken into account when applying the action level. Detected results less than the action level were qualified as (B) in the affected sample DR-DPT-28-40.

- The trip blank contained acetone.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Acetone	1.2	12

An action level of 10X the maximum concentration of common laboratory contaminant, acetone, was established in order to evaluate samples for blank contamination. Sample aliquot, and dilution factors were taken into account when applying the action level. Detected results less than the action level were qualified as (B) in the affected samples.

- The matrix spike/ matrix spike duplicate (MS/MSD) percent recoveries of cis-1,2-dichloroethene were both below and above quality control limits in sample DR-DPT-28-30. The detected cis-1,2-dichloroethene result was qualified as estimated (J) in sample DR-DPT-28-30.

- TICs were detected in several samples and qualified as presumptively present (NJ).

- Positive results reported below the quantitation limit but above the method detection limit (MDL) were qualified as estimated, (J).

Notes

Contamination was detected in the VOC laboratory method blank associated with batch 240-96742 analyzed on August 28, 2013 on instrument A3UX10 affecting sample DR-DPT-28-15.

Contaminant	Maximum Concentration (ug/L)
Methylene chloride	0.712

No action was taken on the nondetected result in sample DR-DPT-28-15.

The continuing calibration percent differences (%Ds) for several compounds were greater than the 20% quality control limit and less than 50% on August 8, 2013 @ 11:51 on instrument A3UX10 affecting sample DR-DPT-28-15. The compounds were bromomethane, chloroethane, acetone, 2,2-dichloropropane, 1,1,1-trichloroethane, carbon tetrachloride, 1,2-dichloroethane, bromodichloromethane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, dibromochloromethane, 1,1,1,2-tetrachloroethane, bromoform, hexachlorobutadiene, naphthalene and 1,2,3-trichlorobenzene. The detected acetone result in sample DR-DPT-28-15 was qualified due to trip blank contamination. No action was taken on the nondetected results of the aforementioned compounds.

The continuing calibration %Ds for several compounds were greater than the 20% quality control limit and less than 50% on August 13, 2013 @ 11:57 and 12:20 on instrument A3UX17. The compounds were bromomethane, chloroethane, trichlorofluoromethane, 1,1,2-trichlorotrifluoroethane, carbon tetrachloride, 2-chloroethyl vinyl ether, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, hexachlorobutadiene, 1,2,3-trichlorobenzene, and ethyl-t-butyl ether. No action was taken on the nondetected results of the aforementioned compounds in the affected samples DR-DPT-28-30, DR-DPT-28=35 and TB-080213.

The continuing calibration %Ds for several compounds were greater than the 20% quality control limit and less than 50% on August 14, 2013 @ 12:38 and 13:01 on instrument A3UX17. The compounds were bromomethane, chloroethane, trichlorofluoromethane, 2-chloroethyl vinyl ether, 4-methyl-2-pentanone, 2-hexanone, 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane, 1,2-dibromo-3-chloropropane, 1,2,3-trichlorobenzene and tert-amyl-methyl ether. No action was taken on the nondetected results of the aforementioned compounds in the affected sample DR-DPT-28-40.

The laboratory control sample (LCS) percent recoveries (%Rs) of 2,2-dichloropropane, bromoform, carbon tetrachloride, cis-1,3-dichloropropene, bromodichloromethane, trans-1,3-dichloropropene and dibromochloromethane were greater than the upper quality control limit in batch 240-96742/4 affecting sample DR-DPT-28-15. No action was taken on the nondetected results of the aforementioned compounds in the affected sample.

Several compounds had MS/MSD %Rs outside quality control limits in sample 240-27430-3. The compounds were bromodichloromethane, tetrachloroethene, dibromochloromethane, carbon tetrachloride, cis-1,3-dichloropropene, and trans-1,3-dichloropropene. No action was taken since this sample is not included in this SDG.

Sample DR-DPT-28-15 was not properly preserved (pH>2). However, because the sample was analyzed within seven days, no action was taken.

Nondetected results were reported to the MDL.

Executive Summary

Laboratory Performance: The VOC RRFs for tert-butyl alcohol and vinyl acetate were less than the quality control limit resulting in the rejection of nondetected results. Contamination was detected in laboratory blanks. The continuing calibration %Ds for acetone and naphthalene exceeded quality control limits resulting in the qualification of results.

Other Factors Affecting Data Quality: TICs were detected in several samples. The MS/MSD percent recoveries for cis-1,2-dichloroethene were outside the quality control limits in sample DR-DPT-28-30. Trip blank contained acetone. Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

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Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-28-15			DR-DPT-28-30			DR-DPT-28-35					
SDG: 240-27547-1	LAB_ID	240-27547-1			240-27547-2			240-27547-3					
FRACTION: OV	SAMP_DATE	8/2/2013			8/2/2013			8/2/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		19	U		3.3	U				
1,1,1-TRICHLOROETHANE		0.22	U		18	U		3.1	U				
1,1,2,2-TETRACHLOROETHANE		0.18	U		15	U		2.6	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		23	U		4	U				
1,1-DICHLOROETHANE		0.15	U		12	U		2.1	U				
1,1-DICHLOROETHENE		0.19	U		32	J	P	2.7	U				
1,1-DICHLOROPROPENE		0.13	U		11	U		1.9	U				
1,2,3-TRICHLOROBENZENE		0.17	U		14	U		2.4	U				
1,2,3-TRICHLOROPROPANE		0.43	U		36	U		6.1	U				
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.49	U		0.084	U				
1,2,4-TRICHLOROBENZENE		0.15	U		12	U		2.1	U				
1,2,4-TRIMETHYLBENZENE		0.12	U		10	U		1.7	U				
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		56	U		9.6	U				
1,2-DIBROMOETHANE		0.24	U		20	U		3.4	U				
1,2-DICHLOROBENZENE		0.13	U		11	U		1.9	U				
1,2-DICHLOROETHANE		0.22	U		20	J	P	3.5	J	P			
1,2-DICHLOROPROPANE		0.18	U		15	U		2.6	U				
1,3-DICHLOROBENZENE		0.14	U		12	U		2	U				
1,3-DICHLOROPROPANE		0.16	U		13	U		2.3	U				
1,4-DICHLOROBENZENE		0.13	U		11	U		1.9	U				
1-PENTENE											26	NJ	Z1
2,2-DICHLOROPROPANE		0.13	U		11	U		1.9	U				
2-BUTANONE		0.57	U		47	U		8.1	U				
2-CHLOROETHYL VINYL ETHER		0.99	U		82	U		14	U				
2-CHLOROTOLUENE		0.11	U		9.2	U		1.6	U				
2-HEXANONE		0.41	U		34	U		5.9	U				
4-CHLOROTOLUENE		0.18	U		15	U		2.6	U				
4-ISOPROPYLTOLUENE		0.12	U		10	U		1.7	U				
4-METHYL-2-PENTANONE		0.32	U		27	U		4.6	U				
ACETONE		3.9	B	B	92	U		20	B	B			
BENZENE		0.13	U		12	J	P	2.3	J	P			
BROMOBENZENE		0.13	U		11	U		1.9	U				
BROMOCHLOROMETHANE		0.29	U		24	U		4.1	U				
BROMODICHLOROMETHANE		0.15	U		12	U		2.1	U				
BROMOFORM		0.64	U		53	U		9.1	U				
BROMOMETHANE		0.41	U		34	U		5.9	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-28-40			TB-080213		
SDG: 240-27547-1	LAB_ID	240-27547-4			240-27547-5		
FRACTION: OV	SAMP_DATE	8/2/2013			8/2/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		3.8	U		0.23	U	
1,1,1-TRICHLOROETHANE		3.7	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		3	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		4.7	U		0.28	U	
1,1-DICHLOROETHANE		2.5	U		0.15	U	
1,1-DICHLOROETHENE		3.2	U		0.19	U	
1,1-DICHLOROPROPENE		2.2	U		0.13	U	
1,2,3-TRICHLOROBENZENE		2.8	U		0.17	U	
1,2,3-TRICHLOROPROPANE		7.2	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.098	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		2.5	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		2	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		11	U		0.67	U	
1,2-DIBROMOETHANE		4	U		0.24	U	
1,2-DICHLOROBENZENE		2.2	U		0.13	U	
1,2-DICHLOROETHANE		3.7	U		0.22	U	
1,2-DICHLOROPROPANE		3	U		0.18	U	
1,3-DICHLOROBENZENE		2.3	U		0.14	U	
1,3-DICHLOROPROPANE		2.7	U		0.16	U	
1,4-DICHLOROBENZENE		2.2	U		0.13	U	
1-PENTENE							
2,2-DICHLOROPROPANE		2.2	U		0.13	U	
2-BUTANONE		9.5	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		17	U		0.99	U	
2-CHLOROTOLUENE		1.8	U		0.11	U	
2-HEXANONE		6.8	U		0.41	U	
4-CHLOROTOLUENE		3	U		0.18	U	
4-ISOPROPYLTOLUENE		2	U		0.12	U	
4-METHYL-2-PENTANONE		5.3	U		0.32	U	
ACETONE		18	U		1.2	J	P
BENZENE		2.2	U		0.13	U	
BROMOBENZENE		2.2	U		0.13	U	
BROMOCHLOROMETHANE		4.8	U		0.29	U	
BROMODICHLOROMETHANE		2.5	U		0.15	U	
BROMOFORM		11	U		0.64	U	
BROMOMETHANE		6.8	U		0.41	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-28-15			DR-DPT-28-30			DR-DPT-28-35					
SDG: 240-27547-1	LAB_ID	240-27547-1			240-27547-2			240-27547-3					
FRACTION: OV	SAMP_DATE	8/2/2013			8/2/2013			8/2/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U		11	U		1.9	U				
CARBON TETRACHLORIDE		0.13	U		11	U		1.9	U				
CHLOROBENZENE		0.15	U		12	U		2.1	U				
CHLORODIBROMOMETHANE		0.18	U		15	U		2.6	U				
CHLOROETHANE		0.29	U		24	U		4.1	U				
CHLOROFORM		0.16	U		13	U		2.3	U				
CHLOROMETHANE		0.3	U		25	U		4.3	U				
CIS-1,2-DICHLOROETHENE		2.2			3000	J	D	300					
CIS-1,3-DICHLOROPROPENE		0.14	U		12	U		2	U				
DIBROMOMETHANE		0.28	U		23	U		4	U				
DICHLORODIFLUOROMETHANE		0.31	U		26	U		4.4	U				
DIISOPROPYL ETHER		1.5	U		120	U		21	U				
ETHYL TERT-BUTYL ETHER		0.11	U		9.2	U		1.6	U				
ETHYLBENZENE		0.17	U		14	U		2.4	U				
HEXACHLOROBUTADIENE		0.3	U		25	U		4.3	U				
ISOPROPYLBENZENE		0.13	U		11	U		1.9	U				
M+P-XYLENES		0.24	U		20	U		3.4	U				
METHYL TERT-BUTYL ETHER		0.17	U		14	U		2.4	U				
METHYLENE CHLORIDE		0.33	U		91	B	A	39	B	A			
NAPHTHALENE		0.24	U		20	UJ	C	3.4	UJ	C			
N-BUTYLBENZENE		0.12	U		10	U		1.7	U				
N-PROPYLBENZENE		0.14	U		12	U		2	U				
O-XYLENE		0.14	U		12	U		2	U				
PENTANE											33	NJ	Z1
PROPYLENE											150	NJ	Z1
SEC-BUTYLBENZENE		0.13	U		11	U		1.9	U				
STYRENE		0.11	U		9.2	U		1.6	U				
TERT-AMYL METHYL ETHER		0.067	U		5.6	U		0.96	U				
TERT-BUTYLBENZENE		0.13	U		11	U		1.9	U				
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	320	UR	C	56	UR	C			
TETRACHLOROETHENE		0.29	U		24	U		4.1	U				
TOLUENE		0.23	J	P	11	U		1.9	U				
TOTAL XYLENES		0.14	U		12	U		2	U				
TRANS-1,2-DICHLOROETHENE		0.19	U		16	U		2.7	U				
TRANS-1,3-DICHLOROPROPENE		0.19	U		16	U		2.7	U				
TRICHLOROETHENE		0.57	J	P	3100			480					

PROJ_NO: 04882	NSAMPLE	DR-DPT-28-40			TB-080213		
SDG: 240-27547-1	LAB_ID	240-27547-4			240-27547-5		
FRACTION: OV	SAMP_DATE	8/2/2013			8/2/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		2.2	U		0.13	U	
CARBON TETRACHLORIDE		2.2	U		0.13	U	
CHLOROBENZENE		2.5	U		0.15	U	
CHLORODIBROMOMETHANE		3	U		0.18	U	
CHLOROETHANE		4.8	U		0.29	U	
CHLOROFORM		2.7	U		0.16	U	
CHLOROMETHANE		5	U		0.3	U	
CIS-1,2-DICHLOROETHENE		85			0.17	U	
CIS-1,3-DICHLOROPROPENE		2.3	U		0.14	U	
DIBROMOMETHANE		4.7	U		0.28	U	
DICHLORODIFLUOROMETHANE		5.2	U		0.31	U	
DIISOPROPYL ETHER		25	U		1.5	U	
ETHYL TERT-BUTYL ETHER		1.8	U		0.11	U	
ETHYLBENZENE		2.8	U		0.17	U	
HEXACHLOROBUTADIENE		5	U		0.3	U	
ISOPROPYLBENZENE		2.2	U		0.13	U	
M+P-XYLENES		4	U		0.24	U	
METHYL TERT-BUTYL ETHER		2.8	U		0.17	U	
METHYLENE CHLORIDE		27	B	A	0.33	U	
NAPHTHALENE		4	UJ	C	0.24	UJ	C
N-BUTYLBENZENE		2	U		0.12	U	
N-PROPYLBENZENE		2.3	U		0.14	U	
O-XYLENE		2.3	U		0.14	U	
PENTANE							
PROPYLENE							
SEC-BUTYLBENZENE		2.2	U		0.13	U	
STYRENE		1.8	U		0.11	U	
TERT-AMYL METHYL ETHER		1.1	U		0.067	U	
TERT-BUTYLBENZENE		2.2	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		65	UR	C	3.9	UR	C
TETRACHLOROETHENE		4.8	U		0.29	U	
TOLUENE		2.2	U		0.13	U	
TOTAL XYLENES		2.3	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		3.2	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		3.2	U		0.19	U	
TRICHLOROETHENE		460			0.17	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-28-15			DR-DPT-28-30			DR-DPT-28-35					
SDG: 240-27547-1	LAB_ID	240-27547-1			240-27547-2			240-27547-3					
FRACTION: OV	SAMP_DATE	8/2/2013			8/2/2013			8/2/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.21	U		17	U		3	U				
VINYL ACETATE		0.19	UR	C	16	UR	C	2.7	UR	C			
VINYL CHLORIDE		0.22	U		280			16					

PROJ_NO: 04882	NSAMPLE	DR-DPT-28-40			TB-080213		
SDG: 240-27547-1	LAB_ID	240-27547-4			240-27547-5		
FRACTION: OV	SAMP_DATE	8/2/2013			8/2/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		3.5	U		0.21	U	
VINYL ACETATE		3.2	UR	C	0.19	UR	C
VINYL CHLORIDE		5	J	P	0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-28-35			TB-080213		
SDG: 240-27547-1	LAB_ID	240-27547-3			240-27547-5		
FRACTION: TICOV	SAMP_DATE	8/2/2013			8/2/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-BUTENE		17	NJ	Z1			
SILANOL, TRIMETHYL-					1.3	R	Z2

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-15 | Lab Sample ID: 240-27547-1

Matrix: Water | Lab File ID: UXX6584.D

Analysis Method: 8260B | Date Collected: 08/02/2013 09:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/08/2013 16:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 96742 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U *	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	3.9	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U *	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U *	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-15 Lab Sample ID: 240-27547-1

Matrix: Water Lab File ID: UXX6584.D

Analysis Method: 8260B Date Collected: 08/02/2013 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/08/2013 16:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96742 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	2.2		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U *	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U *	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.23	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.19
79-01-6	Trichloroethene	0.57	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-15 Lab Sample ID: 240-27547-1

Matrix: Water Lab File ID: UXX6584.D

Analysis Method: 8260B Date Collected: 08/02/2013 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/08/2013 16:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96742 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	86		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-15 Lab Sample ID: 240-27547-1

Matrix: Water Lab File ID: UXX6584.D

Analysis Method: 8260B Date Collected: 08/02/2013 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/08/2013 16:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96742 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-30 Lab Sample ID: 240-27547-2

Matrix: Water Lab File ID: UXR6890.D

Analysis Method: 8260B Date Collected: 08/02/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 15:25

Soil Aliquot Vol: Dilution Factor: 83.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	83	U	83	19
71-55-6	1,1,1-Trichloroethane	83	U	83	18
79-34-5	1,1,2,2-Tetrachloroethane	83	U	83	15
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	83	U	83	23
75-34-3	1,1-Dichloroethane	83	U	83	12
75-35-4	1,1-Dichloroethene	32	J	83	16
563-58-6	1,1-Dichloropropene	83	U	83	11
87-61-6	1,2,3-Trichlorobenzene	83	U	83	14
96-18-4	1,2,3-Trichloropropane	83	U	83	36
526-73-8	1,2,3-Trimethylbenzene	420	U	420	0.49
120-82-1	1,2,4-Trichlorobenzene	83	U	83	12
95-63-6	1,2,4-Trimethylbenzene	83	U	83	10
96-12-8	1,2-Dibromo-3-Chloropropane	170	U	170	56
95-50-1	1,2-Dichlorobenzene	83	U	83	11
107-06-2	1,2-Dichloroethane	20	J	83	18
78-87-5	1,2-Dichloropropane	83	U	83	15
541-73-1	1,3-Dichlorobenzene	83	U	83	12
142-28-9	1,3-Dichloropropane	83	U	83	13
106-46-7	1,4-Dichlorobenzene	83	U	83	11
594-20-7	2,2-Dichloropropane	83	U	83	11
110-75-8	2-Chloroethyl vinyl ether	830	U	830	82
95-49-8	2-Chlorotoluene	83	U	83	9.2
591-78-6	2-Hexanone	830	U	830	34
108-86-1	Bromobenzene	83	U	83	11
74-97-5	Bromochloromethane	83	U	83	24
106-43-4	4-Chlorotoluene	83	U	83	15
99-87-6	p-Isopropyltoluene	83	U	83	10
67-64-1	Acetone	830	U	830	92
71-43-2	Benzene	12	J	83	11
75-25-2	Bromoform	83	U	83	53
74-83-9	Bromomethane	83	U	83	34
75-15-0	Carbon disulfide	83	U	83	11
56-23-5	Carbon tetrachloride	83	U	83	11
108-90-7	Chlorobenzene	83	U	83	12
75-00-3	Chloroethane	83	U	83	24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-30 | Lab Sample ID: 240-27547-2

Matrix: Water | Lab File ID: UXR6890.D

Analysis Method: 8260B | Date Collected: 08/02/2013 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/13/2013 15:25

Soil Aliquot Vol: | Dilution Factor: 83.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97250 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	83	U	83	13
74-87-3	Chloromethane	83	U	83	25
156-59-2	cis-1,2-Dichloroethene	3000		83	14
10061-01-5	cis-1,3-Dichloropropene	83	U	83	12
87-68-3	Hexachlorobutadiene	83	U	83	25
74-95-3	Dibromomethane	83	U	83	23
75-27-4	Bromodichloromethane	83	U	83	12
75-71-8	Dichlorodifluoromethane	83	U	83	26
100-41-4	Ethylbenzene	83	U	83	14
106-93-4	1,2-Dibromoethane	83	U	83	20
108-20-3	Diisopropyl ether	830	U	830	120
91-20-3	Naphthalene	83	U	83	20
179601-23-1	m-Xylene & p-Xylene	170	U	170	20
104-51-8	n-Butylbenzene	83	U	83	10
98-82-8	Isopropylbenzene	83	U	83	11
103-65-1	n-Propylbenzene	83	U	83	12
78-93-3	2-Butanone	830	U	830	47
108-10-1	4-Methyl-2-pentanone	830	U	830	27
135-98-8	sec-Butylbenzene	83	U	83	11
1634-04-4	Methyl tert-butyl ether	83	U	83	14
994-05-8	Tert-amyl-methyl ether (TAME)	420	U	420	5.6
75-09-2	Methylene Chloride	91	B	83	27
95-47-6	o-Xylene	83	U	83	12
100-42-5	Styrene	83	U	83	9.2
637-92-3	Ethyl-t-butyl ether (ETBE)	420	U	420	9.2
98-06-6	tert-Butylbenzene	83	U	83	11
127-18-4	Tetrachloroethene	83	U	83	24
108-88-3	Toluene	83	U	83	11
156-60-5	trans-1,2-Dichloroethene	83	U	83	16
10061-02-6	trans-1,3-Dichloropropene	83	U	83	16
79-01-6	Trichloroethene	3100		83	14
75-69-4	Trichlorofluoromethane	83	U	83	17
108-05-4	Vinyl acetate	170	U	170	16
75-01-4	Vinyl chloride	280		83	18
75-65-0	tert-Butyl alcohol	4200	U	4200	320
1330-20-7	Xylenes, Total	170	U	170	12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-30 Lab Sample ID: 240-27547-2

Matrix: Water Lab File ID: UXR6890.D

Analysis Method: 8260B Date Collected: 08/02/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 15:25

Soil Aliquot Vol: Dilution Factor: 83.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	83	U	83	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	81		74-115
1868-53-7	Dibromofluoromethane (Surr)	99		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-30 Lab Sample ID: 240-27547-2

Matrix: Water Lab File ID: UXR6890.D

Analysis Method: 8260B Date Collected: 08/02/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 15:25

Soil Aliquot Vol: Dilution Factor: 83.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-35 Lab Sample ID: 240-27547-3

Matrix: Water Lab File ID: UXR6891.D

Analysis Method: 8260B Date Collected: 08/02/2013 13:15

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 15:48

Soil Aliquot Vol: Dilution Factor: 14.28

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	14	U	14	3.3
71-55-6	1,1,1-Trichloroethane	14	U	14	3.1
79-34-5	1,1,2,2-Tetrachloroethane	14	U	14	2.6
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	14	U	14	4.0
75-34-3	1,1-Dichloroethane	14	U	14	2.1
75-35-4	1,1-Dichloroethene	14	U	14	2.7
563-58-6	1,1-Dichloropropene	14	U	14	1.9
87-61-6	1,2,3-Trichlorobenzene	14	U	14	2.4
96-18-4	1,2,3-Trichloropropane	14	U	14	6.1
526-73-8	1,2,3-Trimethylbenzene	71	U	71	0.084
120-82-1	1,2,4-Trichlorobenzene	14	U	14	2.1
95-63-6	1,2,4-Trimethylbenzene	14	U	14	1.7
96-12-8	1,2-Dibromo-3-Chloropropane	29	U	29	9.6
95-50-1	1,2-Dichlorobenzene	14	U	14	1.9
107-06-2	1,2-Dichloroethane	3.5	J	14	3.1
78-87-5	1,2-Dichloropropane	14	U	14	2.6
541-73-1	1,3-Dichlorobenzene	14	U	14	2.0
142-28-9	1,3-Dichloropropane	14	U	14	2.3
106-46-7	1,4-Dichlorobenzene	14	U	14	1.9
594-20-7	2,2-Dichloropropane	14	U	14	1.9
110-75-8	2-Chloroethyl vinyl ether	140	U	140	14
95-49-8	2-Chlorotoluene	14	U	14	1.6
591-78-6	2-Hexanone	140	U	140	5.9
108-86-1	Bromobenzene	14	U	14	1.9
74-97-5	Bromochloromethane	14	U	14	4.1
106-43-4	4-Chlorotoluene	14	U	14	2.6
99-87-6	p-Isopropyltoluene	14	U	14	1.7
67-64-1	Acetone	20	J	140	16
71-43-2	Benzene	2.3	J	14	1.9
75-25-2	Bromoform	14	U	14	9.1
74-83-9	Bromomethane	14	U	14	5.9
75-15-0	Carbon disulfide	14	U	14	1.9
56-23-5	Carbon tetrachloride	14	U	14	1.9
108-90-7	Chlorobenzene	14	U	14	2.1
75-00-3	Chloroethane	14	U	14	4.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-35 Lab Sample ID: 240-27547-3

Matrix: Water Lab File ID: UXR6891.D

Analysis Method: 8260B Date Collected: 08/02/2013 13:15

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 15:48

Soil Aliquot Vol: Dilution Factor: 14.28

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	14	U	14	2.3
74-87-3	Chloromethane	14	U	14	4.3
156-59-2	cis-1,2-Dichloroethene	300		14	2.4
10061-01-5	cis-1,3-Dichloropropene	14	U	14	2.0
87-68-3	Hexachlorobutadiene	14	U	14	4.3
74-95-3	Dibromomethane	14	U	14	4.0
75-27-4	Bromodichloromethane	14	U	14	2.1
75-71-8	Dichlorodifluoromethane	14	U	14	4.4
100-41-4	Ethylbenzene	14	U	14	2.4
106-93-4	1,2-Dibromoethane	14	U	14	3.4
108-20-3	Diisopropyl ether	140	U	140	21
91-20-3	Naphthalene	14	U	14	3.4
179601-23-1	m-Xylene & p-Xylene	29	U	29	3.4
104-51-8	n-Butylbenzene	14	U	14	1.7
98-82-8	Isopropylbenzene	14	U	14	1.9
103-65-1	n-Propylbenzene	14	U	14	2.0
78-93-3	2-Butanone	140	U	140	8.1
108-10-1	4-Methyl-2-pentanone	140	U	140	4.6
135-98-8	sec-Butylbenzene	14	U	14	1.9
1634-04-4	Methyl tert-butyl ether	14	U	14	2.4
994-05-8	Tert-amyl-methyl ether (TAME)	71	U	71	0.96
75-09-2	Methylene Chloride	39	B	14	4.7
95-47-6	o-Xylene	14	U	14	2.0
100-42-5	Styrene	14	U	14	1.6
637-92-3	Ethyl-t-butyl ether (ETBE)	71	U	71	1.6
98-06-6	tert-Butylbenzene	14	U	14	1.9
127-18-4	Tetrachloroethene	14	U	14	4.1
108-88-3	Toluene	14	U	14	1.9
156-60-5	trans-1,2-Dichloroethene	14	U	14	2.7
10061-02-6	trans-1,3-Dichloropropene	14	U	14	2.7
79-01-6	Trichloroethene	480		14	2.4
75-69-4	Trichlorofluoromethane	14	U	14	3.0
108-05-4	Vinyl acetate	29	U	29	2.7
75-01-4	Vinyl chloride	16		14	3.1
75-65-0	tert-Butyl alcohol	710	U	710	56
1330-20-7	Xylenes, Total	29	U	29	2.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-35 | Lab Sample ID: 240-27547-3

Matrix: Water | Lab File ID: UXR6891.D

Analysis Method: 8260B | Date Collected: 08/02/2013 13:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/13/2013 15:48

Soil Aliquot Vol: | Dilution Factor: 14.28

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97250 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	14	U	14	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	106		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-35 Lab Sample ID: 240-27547-3

Matrix: Water Lab File ID: UXR6891.D

Analysis Method: 8260B Date Collected: 08/02/2013 13:15

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 15:48

Soil Aliquot Vol: Dilution Factor: 14.28

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

Number TICs Found: 4 TIC Result Total: 226

CAS NO.	COMPOUND NAME	RT	RESULT	Q
115-7-1	Propene	1.60	150	T J N
106-98-9	1-Butene	2.14	17	T J N
109-67-1	1-Pentene	2.68	26	T J N
109-66-0	Pentane	2.75	33	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-40 Lab Sample ID: 240-27547-4

Matrix: Water Lab File ID: UXR6965.D

Analysis Method: 8260B Date Collected: 08/02/2013 14:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 00:05

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97431 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	17	U	17	3.8
71-55-6	1,1,1-Trichloroethane	17	U	17	3.7
79-34-5	1,1,2,2-Tetrachloroethane	17	U	17	3.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	17	U	17	4.7
75-34-3	1,1-Dichloroethane	17	U	17	2.5
75-35-4	1,1-Dichloroethene	17	U	17	3.2
563-58-6	1,1-Dichloropropene	17	U	17	2.2
87-61-6	1,2,3-Trichlorobenzene	17	U	17	2.8
96-18-4	1,2,3-Trichloropropane	17	U	17	7.2
526-73-8	1,2,3-Trimethylbenzene	83	U	83	0.098
120-82-1	1,2,4-Trichlorobenzene	17	U	17	2.5
95-63-6	1,2,4-Trimethylbenzene	17	U	17	2.0
96-12-8	1,2-Dibromo-3-Chloropropane	33	U	33	11
95-50-1	1,2-Dichlorobenzene	17	U	17	2.2
107-06-2	1,2-Dichloroethane	17	U	17	3.7
78-87-5	1,2-Dichloropropane	17	U	17	3.0
541-73-1	1,3-Dichlorobenzene	17	U	17	2.3
142-28-9	1,3-Dichloropropane	17	U	17	2.7
106-46-7	1,4-Dichlorobenzene	17	U	17	2.2
594-20-7	2,2-Dichloropropane	17	U	17	2.2
110-75-8	2-Chloroethyl vinyl ether	170	U	170	17
95-49-8	2-Chlorotoluene	17	U	17	1.8
591-78-6	2-Hexanone	170	U	170	6.8
108-86-1	Bromobenzene	17	U	17	2.2
74-97-5	Bromochloromethane	17	U	17	4.8
106-43-4	4-Chlorotoluene	17	U	17	3.0
99-87-6	p-Isopropyltoluene	17	U	17	2.0
67-64-1	Acetone	170	U	170	18
71-43-2	Benzene	17	U	17	2.2
75-25-2	Bromoform	17	U	17	11
74-83-9	Bromomethane	17	U	17	6.8
75-15-0	Carbon disulfide	17	U	17	2.2
56-23-5	Carbon tetrachloride	17	U	17	2.2
108-90-7	Chlorobenzene	17	U	17	2.5
75-00-3	Chloroethane	17	U	17	4.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-40 | Lab Sample ID: 240-27547-4

Matrix: Water | Lab File ID: UXR6965.D

Analysis Method: 8260B | Date Collected: 08/02/2013 14:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 00:05

Soil Aliquot Vol: | Dilution Factor: 16.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97431 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	17	U	17	2.7
74-87-3	Chloromethane	17	U	17	5.0
156-59-2	cis-1,2-Dichloroethene	85		17	2.8
10061-01-5	cis-1,3-Dichloropropene	17	U	17	2.3
87-68-3	Hexachlorobutadiene	17	U	17	5.0
74-95-3	Dibromomethane	17	U	17	4.7
75-27-4	Bromodichloromethane	17	U	17	2.5
75-71-8	Dichlorodifluoromethane	17	U	17	5.2
100-41-4	Ethylbenzene	17	U	17	2.8
106-93-4	1,2-Dibromoethane	17	U	17	4.0
108-20-3	Diisopropyl ether	170	U	170	25
91-20-3	Naphthalene	17	U	17	4.0
179601-23-1	m-Xylene & p-Xylene	33	U	33	4.0
104-51-8	n-Butylbenzene	17	U	17	2.0
98-82-8	Isopropylbenzene	17	U	17	2.2
103-65-1	n-Propylbenzene	17	U	17	2.3
78-93-3	2-Butanone	170	U	170	9.5
108-10-1	4-Methyl-2-pentanone	170	U	170	5.3
135-98-8	sec-Butylbenzene	17	U	17	2.2
1634-04-4	Methyl tert-butyl ether	17	U	17	2.8
994-05-8	Tert-amyl-methyl ether (TAME)	83	U	83	1.1
75-09-2	Methylene Chloride	27	B	17	5.5
95-47-6	o-Xylene	17	U	17	2.3
100-42-5	Styrene	17	U	17	1.8
637-92-3	Ethyl-t-butyl ether (ETBE)	83	U	83	1.8
98-06-6	tert-Butylbenzene	17	U	17	2.2
127-18-4	Tetrachloroethene	17	U	17	4.8
108-88-3	Toluene	17	U	17	2.2
156-60-5	trans-1,2-Dichloroethene	17	U	17	3.2
10061-02-6	trans-1,3-Dichloropropene	17	U	17	3.2
79-01-6	Trichloroethene	460		17	2.8
75-69-4	Trichlorofluoromethane	17	U	17	3.5
108-05-4	Vinyl acetate	33	U	33	3.2
75-01-4	Vinyl chloride	5.0	J	17	3.7
75-65-0	tert-Butyl alcohol	830	U	830	65
1330-20-7	Xylenes, Total	33	U	33	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-40 Lab Sample ID: 240-27547-4

Matrix: Water Lab File ID: UXR6965.D

Analysis Method: 8260B Date Collected: 08/02/2013 14:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 00:05

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97431 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	17	U	17	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	124		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	81		74-115
1868-53-7	Dibromofluoromethane (Surr)	114		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-40 Lab Sample ID: 240-27547-4

Matrix: Water Lab File ID: UXR6965.D

Analysis Method: 8260B Date Collected: 08/02/2013 14:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 00:05

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97431 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: TB-080213 Lab Sample ID: 240-27547-5

Matrix: Water Lab File ID: UXR6893.D

Analysis Method: 8260B Date Collected: 08/02/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 16:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	1.2	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: TB-080213 Lab Sample ID: 240-27547-5

Matrix: Water Lab File ID: UXR6893.D

Analysis Method: 8260B Date Collected: 08/02/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 16:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: TB-080213 Lab Sample ID: 240-27547-5

Matrix: Water Lab File ID: UXR6893.D

Analysis Method: 8260B Date Collected: 08/02/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 16:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	112		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: TB-080213 Lab Sample ID: 240-27547-5

Matrix: Water Lab File ID: UXR6893.D

Analysis Method: 8260B Date Collected: 08/02/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 16:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

Number TICs Found: 1 TIC Result Total: 1.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.68	1.3	T J N

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: DUMP ROAD SOURCE AREAS

Report Number: 240-27547-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT
The samples were received on 08/03/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.6 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples DR-DPT-28-15 (240-27547-1), DR-DPT-28-30 (240-27547-2), DR-DPT-28-35 (240-27547-3), DR-DPT-28-40 (240-27547-4) and TB-080213 (240-27547-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/08/2013, 08/13/2013 and 08/15/2013.

Methylene Chloride was detected in method blank MB 240-96742/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Methylene Chloride was detected in method blank MB 240-97250/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,2,4-Trichlorobenzene and Hexachlorobutadiene were detected in method blank MB 240-97431/5 at levels exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,2,3-Trichlorobenzene, Methylene Chloride and Naphthalene were detected in method blank MB 240-97431/5 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-28-30 (240-27547-2)[83.33X], DR-DPT-28-35 (240-27547-3)[14.28X] and DR-DPT-28-40 (240-27547-4)[16.67X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample(s) submitted for volatiles analysis was received with insufficient preservation (pH >2): DR-DPT-28-15 (240-27547-1).

The laboratory control sample (LCS) for batch 96742 recovered outside control limits for several analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

There was an MS/MSD analyzed in batch 97431 but could not be reported because the associated sample needed reanalyzed in a different batch.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27547-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27547-1	DR-DPT-28-15	Water	08/02/2013 0925	08/03/2013 0945
240-27547-2	DR-DPT-28-30	Water	08/02/2013 1140	08/03/2013 0945
240-27547-3	DR-DPT-28-35	Water	08/02/2013 1315	08/03/2013 0945
240-27547-4	DR-DPT-28-40	Water	08/02/2013 1405	08/03/2013 0945
240-27547-5TB	TB-080213	Water	08/02/2013 0000	08/03/2013 0945

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27547-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/2/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			112IC04882
(301) 528-3021 Phone	TAT if different from Below 5 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			Sampler: S. Cameron
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT-28-15 ✓	8/2/2013	0925	GW	Water	3		x	
DR-DPT-28-30 ✓	8/2/2013	1140	GW	Water	3		x	
DR-DPT-28-35 ✓	8/2/2013	1315	GW	Water	3		x	
DR-DPT-28-40 ✓	8/2/2013	1405	GW	Water	3		x	
DR-DPT-	8/2/2013		GW	Water	3		x	
DR-DPT-	8/2/2013		GW	Water	3		x	
DR-DPT-	8/2/2013		GW	Water	3		x	
DR-DPT-	8/2/2013		GW	Water	3		x	
DR-DPT-	8/2/2013		GW	Water	3		x	
DR-DPT-	8/2/2013		GW	Water	3		x	
DR-DPT-	8/2/2013		GW	Water	3		x	
TB-080213 ✓	8/2/2013	—	GW	Water	2		x	

240-27547 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: 5 day TAT

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8-2-13/1600		TestAmerica	8/2/13 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	8/2/13/1650		TA	8-3-13 945
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 27547
Canton Facility

Client Vera Tech Site Name _____ Cooler unpacked by: Derek W. Green

Cooler Received on 8-3-13 Opened on 8-3-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. 2.6 °C	Corrected Cooler Temp. 2.6 °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC376062**
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Ref: SOP NC-SC-0005, Sample Receiving

\\Canton\0\public\QADC\SOPS\Work Instructions\WI-NC-099-061413, Rev 1 Cooler Receipt Form.doc rls

HOLDTIME

SDG 240-27547-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-080213	240-27547-5	TB	08/02/2013	08/13/2013	08/13/2013	11	0	11
OV	UG/L	DR-DPT-28-40	240-27547-4	NM	08/02/2013	08/15/2013	08/15/2013	13	0	13
OV	UG/L	DR-DPT-28-35	240-27547-3	NM	08/02/2013	08/13/2013	08/13/2013	11	0	11
OV	UG/L	DR-DPT-28-30	240-27547-2	NM	08/02/2013	08/13/2013	08/13/2013	11	0	11
OV	UG/L	DR-DPT-28-15	240-27547-1	NM	08/02/2013	08/08/2013	08/08/2013	6	0	6

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab File ID: BFB5262.D BFB Injection Date: 05/28/2013

Instrument ID: A3UX10 BFB Injection Time: 13:16

Analysis Batch No.: 87495

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	52.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	98.2	
175	5.0 - 9.0 % of mass 174	6.7	(6.9)1
176	95.0 - 101.0 % of mass 174	93.5	(95.2)1
177	5.0 - 9.0 % of mass 176	6.1	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-87495/8	UXX4658.D	05/28/2013	15:50
	STDA9 240-87495/9	UXX4659.D	05/28/2013	16:11
	STDA9 240-87495/10	UXX4660.D	05/28/2013	16:32
	STDA9 240-87495/11	UXX4661.D	05/28/2013	16:53
	STDA9 240-87495/12	UXX4662.D	05/28/2013	17:15
	STDA9 240-87495/13	UXX4663.D	05/28/2013	17:36

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-87495/13	UXX4663.D
Level 2	STDA9 240-87495/12	UXX4662.D
Level 3	STDA9 240-87495/11	UXX4661.D
Level 4	STDA9 240-87495/10	UXX4660.D
Level 5	STDA9 240-87495/9	UXX4659.D
Level 6	STDA9 240-87495/8	UXX4658.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.9351 0.7200	0.8183	0.9669	0.7435	0.8522	Ave		0.8393				12.0		15.0			
Ethyl ether	0.3526 0.2524	0.2870	0.3279	0.2696	0.3339	Ave		0.3039				13.0		15.0			
3-Chloro-1-propene	0.1632 0.1612	0.1539	0.1609	0.1639	0.1752	Ave		0.1630				4.2		15.0			
Diisopropyl ether	0.2436 0.2941	0.2470	0.2427	0.2569	0.2816	Ave		0.2610				8.3		15.0			
2-Chloro-1,3-butadiene	0.4470 0.5692	0.4651	0.4677	0.4894	0.5665	Ave		0.5008				11.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.7474 0.9445	0.7998	0.8028	0.8547	0.9344	Ave		0.8473				9.3		15.0			
Propionitrile	0.0183 0.0231	0.0204	0.0273	0.0252	0.0240	Ave		0.0230				14.0		15.0			
Ethyl acetate	0.1590 0.1647	0.1524	0.2142	0.1705	0.1575	Ave		0.1697				13.0		15.0			
Methacrylonitrile	0.1102 0.1289	0.1319	0.1213	0.1325	0.1332	Ave		0.1263				7.1		15.0			
Isobutyl alcohol	0.0076 0.0057	0.0068	0.0075	0.0083	0.0073	Ave		0.0072				12.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6746 0.8156	0.6951	0.7166	0.7363	0.8000	Ave		0.7397				7.7		15.0			
n-Heptane	0.0683 0.0638	0.0609	0.0626	0.0604	0.0641	Ave		0.0634				4.5		15.0			
n-Butanol	0.0050	0.0051	0.0047	0.0072	0.0067	Lin	-0.083	0.0070							0.9920		0.9900
Methyl methacrylate	0.1815 0.1582	0.1559	0.1663	0.1628	0.1584	Ave		0.1639				5.8		15.0			
2-Nitropropane	0.0181 0.0163	0.0192	0.0150	0.0189	0.0149	Ave		0.0170				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0764 0.0641	0.0838	0.0840	0.0919	0.0886	Ave		0.0815				12.0		15.0			
1,2,3-Trimethylbenzene	2.1912 2.8021	2.2708	2.3128	2.4773	2.5677	Ave		2.4370				9.3		15.0			
2-Methylnaphthalene	1.0000 0.8868	0.9617	1.0575	1.0106	1.0960	Ave		1.0021				7.3		15.0			
n-Butyl acetate	0.1536 0.1805	0.1506	0.1861	0.1673	0.1756	Ave		0.1690				8.6		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab File ID: BFB5311.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX10 BFB Injection Time: 12:26

Analysis Batch No.: 92306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	86.8	
175	5.0 - 9.0 % of mass 174	6.2	(7.1)1
176	95.0 - 101.0 % of mass 174	86.3	(99.4)1
177	5.0 - 9.0 % of mass 176	5.5	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92306/2	UXX5740.D	07/02/2013	12:55
	STD8260 240-92306/3	UXX5741.D	07/02/2013	13:16
	STD8260 240-92306/4	UXX5742.D	07/02/2013	13:37
	STD8260 240-92306/5	UXX5743.D	07/02/2013	13:59
	STD8260 240-92306/6	UXX5744.D	07/02/2013	14:20
	STD8260 240-92306/7	UXX5745.D	07/02/2013	14:41
	ICV 240-92306/8	UXX5746.D	07/02/2013	15:03

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92306/7	UXX5745.D
Level 2	STD8260 240-92306/6	UXX5744.D
Level 3	STD8260 240-92306/5	UXX5743.D
Level 4	STD8260 240-92306/4	UXX5742.D
Level 5	STD8260 240-92306/3	UXX5741.D
Level 6	STD8260 240-92306/2	UXX5740.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2977 0.2838	0.2577	0.2748	0.2528	0.2566	Ave		0.2706				6.6		15.0			
Chloromethane	0.4636 0.3885	0.4208	0.4187	0.3892	0.3928	Ave		0.4122			0.1000	7.1		15.0			
Vinyl chloride	0.3817 0.3523	0.3628	0.3635	0.3478	0.3489	Ave		0.3595				3.6		15.0			
Bromomethane	0.1738 0.1513	0.1661	0.1687	0.1771	0.1716	Ave		0.1681				5.4		15.0			
Chloroethane	0.2457 0.2275	0.2302	0.2304	0.2310	0.2376	Ave		0.2338				2.9		15.0			
Trichlorofluoromethane	0.3575 0.3719	0.3350	0.3525	0.3679	0.3820	Ave		0.3611				4.6		15.0			
Acrolein	0.0359 0.0431	0.0395	0.0411	0.0449	0.0462	Ave		0.0418				9.0		15.0			
1,1-Dichloroethene	0.3190 0.2928	0.2948	0.2913	0.2993	0.3010	Ave		0.2997				3.4		15.0			
Acetone	0.0740 0.0622	0.0776	0.0718	0.0736	0.0689	Ave		0.0713				7.4		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2062 0.2056	0.2022	0.2152	0.2144	0.2141	Ave		0.2096				2.7		15.0			
Iodomethane	0.4548 0.4274	0.4570	0.4317	0.4435	0.4405	Ave		0.4425				2.7		15.0			
Carbon disulfide	0.8923 0.9201	0.8872	0.8823	0.9357	0.9395	Ave		0.9095				2.8		15.0			
Acetonitrile	0.0167 0.0157	0.0178	0.0214	0.0237	0.0177	Qua	0.0061	0.0220	0						0.9940		0.9900
Methyl acetate	0.1969 0.2006	0.2062	0.2102	0.2165	0.2151	Ave		0.2076				3.8		15.0			
Methylene Chloride	0.7288 0.3199	0.5369	0.3954	0.3695	0.3438	Lin1	0.4289	0.3150							0.9990		0.9900

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0095 0.0104	0.0120	0.0145	0.0164	0.0130	Qua	-0.124	0.0171	0						0.9970		0.9900
Acrylonitrile	0.0905 0.1021	0.0983	0.1034	0.1068	0.1082	Ave		0.1016				6.4		15.0			
Methyl tert-butyl ether	0.7590 0.7679	0.7484	0.7512	0.8058	0.8208	Ave		0.7755				3.9		15.0			
trans-1,2-Dichloroethene	0.3358 0.3195	0.3308	0.3296	0.3254	0.3340	Ave		0.3292				1.8		15.0			
Hexane	0.0712 0.0637	0.0646	0.0668	0.0661	0.0671	Ave		0.0666				3.9		15.0			
1,1-Dichloroethane	0.5578 0.5246	0.5449	0.5273	0.5247	0.5369	Ave		0.5360			0.1000	2.5		15.0			
Vinyl acetate	0.0458 0.0460	0.0362	0.0441	0.0416	0.0442	Ave		0.0430				8.6		15.0			
2-Butanone	0.0991 0.0997	0.0968	0.1003	0.0974	0.1064	Ave		0.0999				3.4		15.0			
cis-1,2-Dichloroethene	0.3285 0.3322	0.3571	0.3290	0.3348	0.3453	Ave		0.3378				3.3		15.0			
2,2-Dichloropropane	0.2688 0.2905	0.2819	0.2776	0.2821	0.3040	Ave		0.2842				4.2		15.0			
Bromochloromethane	0.1521 0.1504	0.1506	0.1534	0.1499	0.1524	Ave		0.1515				0.9		15.0			
Tetrahydrofuran	0.0772 0.0698	0.0789	0.0767	0.0752	0.0716	Ave		0.0749				4.7		15.0			
Chloroform	0.4907 0.4900	0.5020	0.4890	0.4920	0.4962	Ave		0.4933				1.0		15.0			
1,1,1-Trichloroethane	0.4106 0.3726	0.3778	0.3695	0.3890	0.3851	Ave		0.3841				3.9		15.0			
Cyclohexane	0.5528 0.5297	0.5227	0.5349	0.5435	0.5429	Ave		0.5378				2.0		15.0			
1,1-Dichloropropene	0.3609 0.3601	0.3698	0.3664	0.3618	0.3692	Ave		0.3647				1.2		15.0			
Carbon tetrachloride	0.2610 0.2765	0.2656	0.2674	0.2761	0.2887	Ave		0.2725				3.7		15.0			
1,2-Dichloroethane	0.3474 0.3376	0.3583	0.3351	0.3500	0.3553	Ave		0.3473				2.7		15.0			
Benzene	1.1681 1.1119	1.1203	1.0964	1.1265	1.1340	Ave		1.1262				2.2		15.0			
Trichloroethene	0.3214 0.2780	0.2821	0.2900	0.2862	0.2843	Ave		0.2904				5.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloropropane	0.2454 0.2502	0.2581	0.2466	0.2561	0.2683	Ave		0.2541				3.4		15.0			
Methylcyclohexane	0.4919 0.4866	0.4934	0.4893	0.5052	0.5090	Ave		0.4959				1.8		15.0			
Dibromomethane	0.1412 0.1445	0.1506	0.1469	0.1502	0.1477	Ave		0.1468				2.4		15.0			
1,4-Dioxane	0.0014 0.0009	0.0011	0.0016	0.0020	0.0013	Ave		0.0014				26.0	*	15.0			
Bromodichloromethane	0.2890 0.3042	0.2800	0.2808	0.2937	0.3002	Ave		0.2913				3.4		15.0			
2-Chloroethyl vinyl ether	0.1328 0.1460	0.1268	0.1340	0.1400	0.1524	Ave		0.1387				6.8		15.0			
cis-1,3-Dichloropropene	0.3136 0.3654	0.2925	0.3234	0.3329	0.3608	Ave		0.3314				8.4		15.0			
4-Methyl-2-pentanone	0.1851 0.2307	0.1947	0.2072	0.2263	0.2356	Ave		0.2133				9.7		15.0			
Toluene	1.5717 1.7749	1.5621	1.5832	1.5919	1.6670	Ave		1.6251				5.1		15.0			
trans-1,3-Dichloropropene	0.3281 0.4436	0.3301	0.3424	0.3783	0.4187	Ave		0.3735				13.0		15.0			
Ethyl methacrylate	0.3469 0.4669	0.3719	0.3886	0.4197	0.4555	Ave		0.4082				12.0		15.0			
1,1,2-Trichloroethane	0.3016 0.3098	0.3088	0.3075	0.2994	0.3063	Ave		0.3056				1.4		15.0			
1,3-Dichloropropane	0.5636 0.5513	0.5066	0.5178	0.5309	0.5453	Ave		0.5359				4.0		15.0			
Tetrachloroethene	0.3249 0.3137	0.3109	0.3123	0.3155	0.3171	Ave		0.3157				1.6		15.0			
2-Hexanone	0.1784 0.2174	0.1735	0.1912	0.2073	0.2193	Ave		0.1979				10.0		15.0			
Dibromochloromethane	0.2360 0.2992	0.2543	0.2535	0.2707	0.2882	Ave		0.2670				8.9		15.0			
1,2-Dibromoethane	0.2969 0.3100	0.2975	0.2857	0.3063	0.3126	Ave		0.3015				3.3		15.0			
Chlorobenzene	1.1153 1.1370	1.1006	1.0569	1.0906	1.1038	Ave		1.1007			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2824 0.3322	0.2829	0.2918	0.3108	0.3194	Ave		0.3032				6.8		15.0			
Ethylbenzene	0.5758 0.6262	0.5863	0.6011	0.6014	0.6212	Ave		0.6020				3.2		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.7270 0.8215	0.7355	0.7415	0.7771	0.8022	Ave		0.7675				5.1		15.0			
o-Xylene	0.6796 0.7942	0.7047	0.7272	0.7639	0.7596	Ave		0.7382				5.7		15.0			
Styrene	1.1077 1.3987	1.1933	1.1883	1.2806	1.3155	Ave		1.2474				8.4		15.0			
Bromoform	0.1365 0.1881	0.1411	0.1461	0.1592	0.1772	Ave		0.1580			0.1000	13.0		15.0			
Isopropylbenzene	1.7511 2.0343	1.7718	1.8148	1.9530	1.9719	Ave		1.8828				6.3		15.0			
1,1,2,2-Tetrachloroethane	0.7449 0.7423	0.7656	0.8018	0.7659	0.7719	Ave		0.7654			0.3000	2.8		15.0			
Bromobenzene	0.8881 0.8401	0.8893	0.8519	0.8109	0.8110	Ave		0.8485				4.1		15.0			
1,2,3-Trichloropropane	0.2528 0.2485	0.2436	0.2471	0.2523	0.2472	Ave		0.2486				1.4		15.0			
trans-1,4-Dichloro-2-butene	0.1594 0.2065	0.1645	0.1863	0.1935	0.1991	Ave		0.1849				10.0		15.0			
n-Propylbenzene	0.8836 0.9348	0.9225	0.9442	0.9060	0.9061	Ave		0.9162				2.4		15.0			
2-Chlorotoluene	0.8471 0.8107	0.8035	0.8145	0.8068	0.8122	Ave		0.8158				1.9		15.0			
1,3,5-Trimethylbenzene	2.5762 2.8611	2.6002	2.7221	2.7556	2.8139	Ave		2.7215				4.2		15.0			
4-Chlorotoluene	0.8988 0.9081	0.8802	0.8823	0.8848	0.8823	Ave		0.8894				1.3		15.0			
tert-Butylbenzene	2.5038 2.4500	2.2239	2.4167	2.3292	2.3560	Ave		2.3799				4.2		15.0			
1,2,4-Trimethylbenzene	2.6043 2.8929	2.6775	2.7491	2.8000	2.8183	Ave		2.7570				3.8		15.0			
sec-Butylbenzene	3.0300 3.4431	3.1666	3.3039	3.3542	3.3916	Ave		3.2816				4.7		15.0			
1,3-Dichlorobenzene	1.5092 1.5056	1.5998	1.5710	1.5273	1.5059	Ave		1.5365				2.6		15.0			
p-Isopropyltoluene	2.4424 2.7807	2.5538	2.6635	2.6618	2.7434	Ave		2.6409				4.7		15.0			
1,4-Dichlorobenzene	1.7229 1.6045	1.6252	1.6225	1.5715	1.5870	Ave		1.6223				3.3		15.0			
n-Butylbenzene	2.0630 2.2382	2.0945	2.2927	2.3221	2.3183	Ave		2.2215				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4074 1.3553	1.4151	1.4245	1.4040	1.3915	Ave		1.3996				1.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0897 0.0915	0.0866	0.1008	0.1037	0.0925	Ave		0.0941				7.1		15.0			
1,3,5-Trichlorobenzene	0.9389 0.8233	0.9547	0.9599	0.9476	0.8670	Ave		0.9152				6.2		15.0			
1,2,4-Trichlorobenzene	0.8510 0.7437	0.8164	0.8427	0.8344	0.7483	Ave		0.8061				5.9		15.0			
Hexachlorobutadiene	0.2820 0.2374	0.2926	0.3073	0.2714	0.2509	Ave		0.2736				9.5		15.0			
Naphthalene	1.9175 1.8952	1.9376	2.0220	2.1068	1.9312	Ave		1.9684				4.1		15.0			
1,2,3-Trichlorobenzene	0.7657 0.6768	0.7464	0.7504	0.7341	0.6861	Ave		0.7266				5.0		15.0			
Dibromofluoromethane (Surr)	0.2502 0.2509	0.2370	0.2459	0.2475	0.2591	Ave		0.2484				2.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3197 0.2982	0.2804	0.2943	0.2970	0.3023	Ave		0.2987				4.3		15.0			
Toluene-d8 (Surr)	1.3686 1.4472	1.2543	1.3081	1.3123	1.3963	Ave		1.3478				5.2		15.0			
4-Bromofluorobenzene (Surr)	0.5086 0.5764	0.5161	0.5353	0.5693	0.5900	Ave		0.5493				6.2		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab File ID: BFB5344.D BFB Injection Date: 08/08/2013

Instrument ID: A3UX10 BFB Injection Time: 11:17

Analysis Batch No.: 96742

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.6	
75	30.0 - 60.0 % of mass 95	51.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.5	(0.7)1
174	50.0 - 120.00 % of mass 95	81.9	
175	5.0 - 9.0 % of mass 174	6.0	(7.3)1
176	95.0 - 101.0 % of mass 174	78.1	(95.2)1
177	5.0 - 9.0 % of mass 176	5.2	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-96742/2	UXX6572.D	08/08/2013	11:51
	LCS 240-96742/4	UXX6573.D	08/08/2013	12:12
	CCV 240-96742/3	UXX6574.D	08/08/2013	12:33
	MB 240-96742/5	UXX6576.D	08/08/2013	13:16
DR-DPT-28-15	240-27547-1	UXX6584.D	08/08/2013	16:08
	240-27430-B-3 MS	UXX6598.D	08/08/2013	21:08
	240-27430-B-3 MSD	UXX6599.D	08/08/2013	21:30

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCVIS 240-96742/2 Calibration Date: 08/08/2013 11:51

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6572.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2816		1.00	0.0100	4.1	50.0
Chloromethane	Ave	0.4122	0.4215	0.1000	1.00	0.0100	2.2	50.0
Vinyl chloride	Ave	0.3595	0.3538		1.00	0.0100	-1.6	20.0
Bromomethane	Ave	0.1681	0.0844		1.00	0.0100	-49.8	50.0
Chloroethane	Ave	0.2338	0.1556		1.00	0.0100	-33.4	50.0
Trichlorofluoromethane	Ave	0.3611	0.3227		1.00	0.0100	-10.7	50.0
Acrolein	Ave	0.0418	0.0334		20.0	0.100	-20.1	50.0
1,1-Dichloroethene	Ave	0.2997	0.2811		1.00	0.0100	-6.2	20.0
Acetone	Ave	0.0713	0.0875		10.0	0.0200	22.6	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2194		1.00	0.0100	4.6	50.0
Iodomethane	Ave	0.4425	0.4128		1.00	0.0100	-6.7	50.0
Carbon disulfide	Ave	0.9095	0.8845		1.00	0.0100	-2.7	50.0
Acetonitrile	Qua		0.0233		20.0	0.100	15.4	50.0
Methyl acetate	Ave	0.2076	0.2141		10.0	0.0200	3.1	50.0
Methylene Chloride	Lin1		0.3939		1.00	0.0100	11.4	50.0
tert-Butyl alcohol	Qua		0.0138		50.0	0.200	-7.7	50.0
Acrylonitrile	Ave	0.1016	0.0987		20.0	0.0200	-2.8	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7972		1.00	0.0100	2.8	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3179		1.00	0.0100	-3.4	50.0
Hexane	Ave	0.0666	0.0756		1.00	0.0100	13.5	20.0
1,1-Dichloroethane	Ave	0.5360	0.5478	0.1000	1.00	0.0100	2.2	50.0
Vinyl acetate	Ave	0.0430	0.0432		2.00	0.0100	0.4	50.0
2-Butanone	Ave	0.0999	0.1064		10.0	0.0200	6.4	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3332		1.00	0.0100	-1.4	50.0
2,2-Dichloropropane	Ave	0.2842	0.3884		1.00	0.0100	36.7	50.0
Bromochloromethane	Ave	0.1515	0.1479		1.00	0.0100	-2.4	50.0
Tetrahydrofuran	Ave	0.0749	0.0741		5.00	0.0100	-1.1	50.0
Chloroform	Ave	0.4933	0.5516		1.00	0.0100	11.8	20.0
1,1,1-Trichloroethane	Ave	0.3841	0.4620		1.00	0.0100	20.3	50.0
Cyclohexane	Ave	0.5378	0.5898		1.00	0.0100	9.7	50.0
1,1-Dichloropropene	Ave	0.3647	0.4034		1.00	0.0100	10.6	50.0
Carbon tetrachloride	Ave	0.2725	0.3823		1.00	0.0100	40.3	50.0
1,2-Dichloroethane	Ave	0.3473	0.4191		1.00	0.0100	20.7	50.0
Benzene	Ave	1.126	1.199		1.00	0.0100	6.4	50.0
Trichloroethene	Ave	0.2904	0.2909		1.00	0.0100	0.2	50.0
1,2-Dichloropropane	Ave	0.2541	0.2827		1.00	0.0100	11.3	20.0
Methylcyclohexane	Ave	0.4959	0.5353		1.00	0.0100	7.9	50.0
1,4-Dioxane	Ave	0.0014	0.0013		50.0	0.500	-3.1	50.0
Dibromomethane	Ave	0.1468	0.1520		1.00	0.0100	3.5	50.0
Bromodichloromethane	Ave	0.2913	0.3803		1.00	0.0100	30.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCVIS 240-96742/2 Calibration Date: 08/08/2013 11:51

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6572.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1469		10.0	0.0200	5.9	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.4145		1.00	0.0100	25.1	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2405		10.0	0.0200	12.8	50.0
Toluene	Ave	1.625	1.849		1.00	0.0100	13.8	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.5273		1.00	0.0100	41.2	50.0
Ethyl methacrylate	Ave	0.4082	0.4650		1.00	0.0100	13.9	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3387		1.00	0.0100	10.8	50.0
1,3-Dichloropropane	Ave	0.5359	0.5882		1.00	0.0100	9.8	50.0
Tetrachloroethene	Ave	0.3157	0.3468		1.00	0.0100	9.8	50.0
2-Hexanone	Ave	0.1979	0.2072		10.0	0.0200	4.7	50.0
Dibromochloromethane	Ave	0.2670	0.3593		1.00	0.0100	34.6	50.0
1,2-Dibromoethane	Ave	0.3015	0.3179		1.00	0.0100	5.4	50.0
Chlorobenzene	Ave	1.101	1.132	0.3000	1.00	0.0100	2.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3977		1.00	0.0100	31.1	50.0
Ethylbenzene	Ave	0.6020	0.6409		1.00	0.0100	6.5	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.8013		2.00	0.0200	4.4	50.0
o-Xylene	Ave	0.7382	0.7726		1.00	0.0100	4.7	50.0
Styrene	Ave	1.247	1.271		1.00	0.0100	1.9	50.0
Bromoform	Ave	0.1580	0.2157	0.1000	1.00	0.0100	36.5	50.0
Isopropylbenzene	Ave	1.883	2.001		1.00	0.0100	6.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7938	0.3000	1.00	0.0100	3.7	50.0
Bromobenzene	Ave	0.8485	0.8801		1.00	0.0100	3.7	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2591		1.00	0.0100	4.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.2148		1.00	0.0100	16.2	50.0
n-Propylbenzene	Ave	0.9162	0.9802		1.00	0.0100	7.0	50.0
2-Chlorotoluene	Ave	0.8158	0.8510		1.00	0.0100	4.3	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.965		1.00	0.0100	8.9	50.0
4-Chlorotoluene	Ave	0.8894	0.8968		1.00	0.0100	0.8	50.0
tert-Butylbenzene	Ave	2.380	2.539		1.00	0.0100	6.7	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.897		1.00	0.0100	5.1	50.0
sec-Butylbenzene	Ave	3.282	3.424		1.00	0.0100	4.3	50.0
1,3-Dichlorobenzene	Ave	1.536	1.558		1.00	0.0100	1.4	50.0
p-Isopropyltoluene	Ave	2.641	2.701		1.00	0.0100	2.3	50.0
1,4-Dichlorobenzene	Ave	1.622	1.635		1.00	0.0100	0.8	50.0
n-Butylbenzene	Ave	2.221	2.280		1.00	0.0100	2.7	50.0
1,2-Dichlorobenzene	Ave	1.400	1.400		1.00	0.0100	0.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.1036		2.00	0.0100	10.0	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.7698		1.00	0.0100	-15.9	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.6609		1.00	0.0100	-18.0	50.0
Hexachlorobutadiene	Ave	0.2736	0.2137		1.00	0.0100	-21.9	50.0
Naphthalene	Ave	1.968	1.520		1.00	0.0100	-22.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCVIS 240-96742/2 Calibration Date: 08/08/2013 11:51

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6572.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.5615		1.00	0.0100	-22.7	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2175		0.00875	0.0100	-12.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2914		0.00976	0.0100	-2.4	50.0
Toluene-d8 (Surr)	Ave	1.348	1.267		0.00940	0.0100	-6.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4802		0.00874	0.0100	-12.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCV 240-96742/3 Calibration Date: 08/08/2013 12:33

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX6574.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.4477		2.00	0.0100	-46.7	50.0
Ethyl ether	Ave	0.3039	0.2567		2.00	0.0100	-15.5	50.0
3-Chloro-1-propene	Ave	0.1630	0.1594		2.00	0.0100	-2.3	50.0
Diisopropyl ether	Ave	0.2610	0.2601		10.0	0.0500	-0.3	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5309		2.00	0.0100	6.0	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8644		5.00	0.0100	2.0	50.0
Ethyl acetate	Ave	0.1697	0.2183		4.00	0.0200	28.6	50.0
Propionitrile	Ave	0.0230	0.0325		4.00	0.0200	41.2	50.0
Methacrylonitrile	Ave	0.1263	0.1636		2.00	0.0100	29.5	50.0
Isobutyl alcohol	Ave	0.0072	0.0097		50.0	0.200	34.4	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.7006		5.00	0.0100	-5.3	50.0
n-Heptane	Ave	0.0634	0.0686		1.00	0.0100	8.3	50.0
n-Butanol	Lin		0.0070		50.0	0.200	5.4	50.0
Methyl methacrylate	Ave	0.1639	0.2164		2.00	0.0100	32.1	50.0
2-Nitropropane	Ave	0.0170	0.0578		2.00	0.0200	239.2*	50.0
Cyclohexanone	Ave	0.0815	0.1023		20.0	0.100	25.6	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.861		0.0117	0.0100	17.4	50.0
2-Methylnaphthalene	Ave	1.002	0.5796		5.00	0.0200	-42.2	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab File ID: UXX6576.D Lab Sample ID: MB 240-96742/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/08/2013 13:16

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-96742/4	UXX6573.D	08/08/2013 12:12
DR-DPT-28-15	240-27547-1	UXX6584.D	08/08/2013 16:08
	240-27430-B-3 MS	UXX6598.D	08/08/2013 21:08
	240-27430-B-3 MSD	UXX6599.D	08/08/2013 21:30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96742/5

Matrix: Water Lab File ID: UXX6576.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/08/2013 13:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96742 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96742/5

Matrix: Water Lab File ID: UXX6576.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/08/2013 13:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96742 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	0.712	J	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-96742/5

Matrix: Water Lab File ID: UXX6576.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/08/2013 13:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 96742 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab File ID: BFB224.D BFB Injection Date: 05/07/2013

Instrument ID: A3UX17 BFB Injection Time: 11:36

Analysis Batch No.: 84979

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.8	
75	30.0 - 60.0 % of mass 95	46.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.6)1
174	50.0 - 120.00 % of mass 95	75.7	
175	5.0 - 9.0 % of mass 174	5.3	(7.0)1
176	95.0 - 101.0 % of mass 174	76.1	(100.5)1
177	5.0 - 9.0 % of mass 176	4.8	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-84979/8	UXR4181.D	05/07/2013	14:13
	STDA9 240-84979/9	UXR4182.D	05/07/2013	14:35
	STDA9 240-84979/10	UXR4183.D	05/07/2013	14:57
	STDA9 240-84979/11	UXR4184.D	05/07/2013	15:20
	STDA9 240-84979/12	UXR4185.D	05/07/2013	15:42
	STDA9 240-84979/13	UXR4186.D	05/07/2013	16:05

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 84979

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2013 14:13 Calibration End Date: 05/07/2013 16:05 Calibration ID: 15038

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-84979/13	UXR4186.D
Level 2	STDA9 240-84979/12	UXR4185.D
Level 3	STDA9 240-84979/11	UXR4184.D
Level 4	STDA9 240-84979/10	UXR4183.D
Level 5	STDA9 240-84979/9	UXR4182.D
Level 6	STDA9 240-84979/8	UXR4181.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4720 0.4666	0.4444	0.4425	0.4216	0.4511	Ave		0.4497				4.0		15.0			
Ethyl ether	0.2660 0.2823	0.2592	0.2598	0.2486	0.2724	Ave		0.2647				4.4		15.0			
3-Chloro-1-propene	0.1359 0.1610	0.1324	0.1370	0.1376	0.1525	Ave		0.1427				7.9		15.0			
Diisopropyl ether	0.2473 0.2740	0.2449	0.2495	0.2413	0.2619	Ave		0.2531				4.9		15.0			
2-Chloro-1,3-butadiene	0.4637 0.5263	0.4684	0.4797	0.4705	0.5114	Ave		0.4867				5.3		15.0			
Ethyl-t-butyl ether (ETBE)	0.9024 1.0209	0.8872	0.9050	0.8908	0.9641	Ave		0.9284				5.7		15.0			
Ethyl acetate	0.2738 0.2913	0.2604	0.2567	0.2603	0.2798	Ave		0.2704				5.0		15.0			
Propionitrile	0.0395 0.0446	0.0399	0.0413	0.0388	0.0444	Ave		0.0414				6.1		15.0			
Methacrylonitrile	0.2320 0.1962	0.2047	0.1845	0.1766	0.1935	Ave		0.1979				9.8		15.0			
Isobutyl alcohol	0.0129 0.0119	0.0118	0.0112	0.0113	0.0120	Ave		0.0118				4.9		15.0			
Tert-amyl-methyl ether (TAME)	0.7464 0.8505	0.7381	0.7539	0.7377	0.8150	Ave		0.7736				6.1		15.0			
n-Heptane	0.0701 0.0767	0.0672	0.0711	0.0682	0.0753	Ave		0.0714				5.4		15.0			
n-Butanol	0.0085 0.0102	0.0089	0.0092	0.0093	0.0103	Ave		0.0094				7.5		15.0			
Methyl methacrylate	0.2379 0.2805	0.2371	0.2462	0.2423	0.2654	Ave		0.2516				7.0		15.0			
2-Nitropropane	0.0556 0.0713	0.0560	0.0523	0.0573	0.0637	Ave		0.0594				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 84979

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2013 14:13 Calibration End Date: 05/07/2013 16:05 Calibration ID: 15038

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1022 0.1284	0.1025	0.1176	0.1228	0.1393	Ave		0.1188				12.0		15.0			
1,2,3-Trimethylbenzene	2.3866 2.6962	2.4621	2.4926	2.4662	2.6461	Ave		2.5250				4.7		15.0			
2-Methylnaphthalene	1.5422	1.4901	1.2024	1.0735	0.7790	Ave		1.2174				26.0	*	15.0			
n-Butyl acetate	0.2099 0.2525	0.2109	0.2217	0.2175	0.2461	Ave		0.2264				8.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab File ID: BFB353.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX17 BFB Injection Time: 09:20

Analysis Batch No.: 92260

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.9	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.6	(0.7)1
174	50.0 - 120.00 % of mass 95	90.4	
175	5.0 - 9.0 % of mass 174	6.3	(7.0)1
176	95.0 - 101.0 % of mass 174	89.1	(98.6)1
177	5.0 - 9.0 % of mass 176	5.3	(5.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92260/2	UXR6124.D	07/02/2013	09:46
	STD8260 240-92260/3	UXR6125.D	07/02/2013	10:08
	STD8260 240-92260/4	UXR6126.D	07/02/2013	10:31
	STD8260 240-92260/5	UXR6127.D	07/02/2013	10:53
	STD8260 240-92260/6	UXR6128.D	07/02/2013	11:15
	STD8260 240-92260/7	UXR6129.D	07/02/2013	11:37
	ICV 240-92260/8	UXR6130.D	07/02/2013	12:00

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92260/7	UXR6129.D
Level 2	STD8260 240-92260/6	UXR6128.D
Level 3	STD8260 240-92260/5	UXR6127.D
Level 4	STD8260 240-92260/4	UXR6126.D
Level 5	STD8260 240-92260/3	UXR6125.D
Level 6	STD8260 240-92260/2	UXR6124.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3223 0.3393	0.3181	0.3024	0.3004	0.3388	Ave		0.3202				5.3		15.0			
Chloromethane	0.4544 0.4578	0.4523	0.3929	0.4056	0.4875	Ave		0.4418			0.1000	8.0		15.0			
Vinyl chloride	0.4102 0.3798	0.3589	0.3503	0.3461	0.3994	Ave		0.3741				7.1		15.0			
Bromomethane	0.1230 0.1142	0.1222	0.0977	0.1057	0.1303	Ave		0.1155				10.0		15.0			
Chloroethane	0.1129 0.1281	0.1159	0.0846	0.1067	0.1312	Ave		0.1132				15.0		15.0			
Trichlorofluoromethane	0.3421 0.3476	0.3140	0.2938	0.3068	0.3554	Ave		0.3266				7.7		15.0			
Acrolein	0.0511 0.0494	0.0454	0.0435	0.0467	0.0511	Ave		0.0479				6.6		15.0			
1,1-Dichloroethene	0.2571 0.2867	0.2790	0.2658	0.2658	0.3037	Ave		0.2763				6.2		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2376 0.2392	0.2346	0.2256	0.2277	0.2502	Ave		0.2358				3.8		15.0			
Acetone	0.1744 0.0914	0.1137	0.0964	0.0931	0.0997	Lin1	0.0810	0.0920							0.9980		0.9900
Iodomethane	0.3498 0.4346	0.3974	0.3967	0.3960	0.4630	Ave		0.4062				9.5		15.0			
Carbon disulfide	0.7196 0.8532	0.7423	0.7167	0.7319	0.8720	Ave		0.7726				9.1		15.0			
Acetonitrile	0.0456 0.0363	0.0399	0.0281	0.0351	0.0309	Lin1	0.0404	0.0341							0.9910		0.9900
Methyl acetate	0.2619 0.2316	0.2391	0.2253	0.2251	0.2463	Ave		0.2382				6.0		15.0			
Methylene Chloride	1.1339 0.3108	0.5024	0.3675	0.3274	0.3357	Lin1	0.4058	0.3018							0.9990		0.9900

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0200 0.0192	0.0202	0.0152	0.0193	0.0162	Ave		0.0184				12.0		15.0			
Acrylonitrile	0.1340 0.1211	0.1183	0.1163	0.1204	0.1315	Ave		0.1236				5.9		15.0			
Methyl tert-butyl ether	0.7215 0.7881	0.7180	0.7115	0.7210	0.8152	Ave		0.7459				5.9		15.0			
trans-1,2-Dichloroethene	0.2980 0.3126	0.2933	0.2935	0.2838	0.3255	Ave		0.3011				5.1		15.0			
Hexane	0.0647 0.0811	0.0684	0.0717	0.0771	0.0870	Ave		0.0750				11.0		15.0			
1,1-Dichloroethane	0.4693 0.5520	0.5186	0.5101	0.5082	0.5741	Ave		0.5220			0.1000	7.0		15.0			
Vinyl acetate	0.0413 0.0541	0.0420	0.0414	0.0446	0.0553	Ave		0.0464				14.0		15.0			
2,2-Dichloropropane	0.2591 0.3070	0.2724	0.2646	0.2756	0.3223	Ave		0.2835				8.9		15.0			
cis-1,2-Dichloroethene	0.2858 0.3181	0.3108	0.2951	0.2946	0.3295	Ave		0.3056				5.4		15.0			
2-Butanone	0.1485 0.1278	0.1310	0.1199	0.1285	0.1339	Ave		0.1316				7.2		15.0			
Bromochloromethane	0.1398 0.1527	0.1469	0.1440	0.1386	0.1587	Ave		0.1468				5.3		15.0			
Tetrahydrofuran	0.0722 0.0804	0.0844	0.0811	0.0775	0.0849	Ave		0.0801				5.9		15.0			
Chloroform	0.4852 0.5245	0.4983	0.4978	0.4775	0.5543	Ave		0.5063				5.6		15.0			
1,1,1-Trichloroethane	0.3690 0.4340	0.3962	0.3904	0.4052	0.4480	Ave		0.4071				7.2		15.0			
Cyclohexane	0.4887 0.6445	0.5424	0.5673	0.5896	0.6635	Ave		0.5827				11.0		15.0			
1,1-Dichloropropene	0.3484 0.4169	0.3664	0.3760	0.3807	0.4327	Ave		0.3869				8.2		15.0			
Carbon tetrachloride	0.3418 0.4159	0.3617	0.3578	0.3669	0.4185	Ave		0.3771				8.5		15.0			
Benzene	1.1898 1.1961	1.1603	1.1274	1.1009	1.2515	Ave		1.1710				4.6		15.0			
1,2-Dichloroethane	0.3930 0.4351	0.4136	0.4178	0.4053	0.4559	Ave		0.4201				5.3		15.0			
Trichloroethene	0.2698 0.3135	0.2986	0.2884	0.2943	0.3227	Ave		0.2979				6.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.4315 0.5318	0.4455	0.4468	0.5032	0.5380	Ave		0.4828				9.8		15.0			
1,2-Dichloropropane	0.2862 0.3044	0.2800	0.2821	0.2832	0.3164	Ave		0.2921				5.1		15.0			
Dibromomethane	0.1395 0.1609	0.1519	0.1489	0.1510	0.1651	Ave		0.1529				5.9		15.0			
1,4-Dioxane	0.0023 0.0025	0.0030	0.0022	0.0030	0.0022	Ave		0.0025				14.0		15.0			
Bromodichloromethane	0.2888 0.3879	0.3306	0.3279	0.3403	0.3820	Ave		0.3429				11.0		15.0			
2-Chloroethyl vinyl ether	0.1405 0.1783	0.1405	0.1501	0.1612	0.1837	Ave		0.1590				12.0		15.0			
cis-1,3-Dichloropropene	0.3115 0.4587	0.3478	0.3667	0.3856	0.4540	Ave		0.3874				15.0		15.0			
4-Methyl-2-pentanone	0.2553 0.2669	0.2545	0.2314	0.2551	0.2782	Ave		0.2569				6.1		15.0			
Toluene	1.3021 1.5660	1.4857	1.5259	1.4959	1.7627	Ave		1.5230				9.7		15.0			
trans-1,3-Dichloropropene	0.3095 0.4917	0.3622	0.4125	0.4256	0.5422	Lin1	-0.156	0.4987							0.9930		0.9900
Ethyl methacrylate	0.2873 0.4520	0.3617	0.3962	0.4120	0.5071	Lin1	-0.128	0.4640							0.9940		0.9900
1,1,2-Trichloroethane	0.2620 0.2919	0.2917	0.3126	0.2924	0.3429	Ave		0.2989				9.0		15.0			
Tetrachloroethene	0.3251 0.3387	0.3449	0.3322	0.3316	0.3809	Ave		0.3422				5.9		15.0			
1,3-Dichloropropane	0.5100 0.5344	0.5403	0.5472	0.5294	0.6145	Ave		0.5460				6.6		15.0			
2-Hexanone	0.2134 0.2235	0.2009	0.2121	0.2203	0.2588	Ave		0.2215				9.0		15.0			
Dibromochloromethane	0.2672 0.3403	0.2767	0.2875	0.3009	0.3614	Ave		0.3056				12.0		15.0			
1,2-Dibromoethane	0.2718 0.3078	0.2933	0.2979	0.2998	0.3406	Ave		0.3019				7.5		15.0			
Chlorobenzene	1.0336 1.0296	1.0736	0.9932	1.0160	1.1012	Ave		1.0412			0.3000	3.8		15.0			
1,1,1,2-Tetrachloroethane	0.3225 0.3679	0.3455	0.3360	0.3498	0.3755	Ave		0.3495				5.6		15.0			
Ethylbenzene	0.4592 0.5652	0.5397	0.5104	0.5432	0.5908	Ave		0.5348				8.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.5523 0.7172	0.6526	0.6529	0.7040	0.7434	Ave		0.6704				10.0		15.0			
o-Xylene	0.5596 0.6746	0.6471	0.5751	0.6530	0.6722	Ave		0.6303				8.0		15.0			
Styrene	0.7832 1.1392	1.0109	0.9596	1.1027	1.1554	Ave		1.0252				14.0		15.0			
Bromoform	0.1587 0.2167	0.1855	0.1679	0.1979	0.2112	Ave		0.1896			0.1000	12.0		15.0			
Isopropylbenzene	1.2975 1.7865	1.6058	1.4021	1.7416	1.6737	Ave		1.5846				12.0		15.0			
1,1,2,2-Tetrachloroethane	0.5949 0.5897	0.6942	0.7135	0.6603	0.7537	Ave		0.6677			0.3000	9.9		15.0			
Bromobenzene	0.7409 0.7971	0.8019	0.8706	0.8037	0.9421	Ave		0.8260				8.5		15.0			
trans-1,4-Dichloro-2-butene	0.1420	0.1606	0.1973	0.1818	0.2574	Ave		0.1878				24.0	*	15.0			
1,2,3-Trichloropropane	0.2483 0.2118	0.2361	0.2538	0.2280	0.2714	Ave		0.2416				8.6		15.0			
n-Propylbenzene	0.6211 0.8461	0.7652	0.8446	0.8150	0.9632	Ave		0.8092				14.0		15.0			
2-Chlorotoluene	0.5766 0.7056	0.6461	0.7207	0.7206	0.8083	Ave		0.6963				11.0		15.0			
1,3,5-Trimethylbenzene	1.7328 2.5501	2.3224	2.4151	2.5420	2.7191	Ave		2.3803				14.0		15.0			
4-Chlorotoluene	0.5810 0.7447	0.7173	0.7968	0.7475	0.8723	Ave		0.7433				13.0		15.0			
tert-Butylbenzene	1.7565 2.2855	2.0708	2.3638	2.2608	2.4174	Ave		2.1925				11.0		15.0			
1,2,4-Trimethylbenzene	1.7940 2.5755	2.3657	2.3673	2.6187	2.6987	Ave		2.4033				14.0		15.0			
sec-Butylbenzene	2.2505 2.9931	2.8678	2.7937	3.0418	3.0878	Ave		2.8391				11.0		15.0			
1,3-Dichlorobenzene	1.5016 1.4651	1.6322	1.5141	1.5531	1.5720	Ave		1.5397				3.8		15.0			
p-Isopropyltoluene	1.9920 2.7142	2.5267	2.3747	2.7364	2.7397	Ave		2.5139				12.0		15.0			
1,4-Dichlorobenzene	1.6614 1.5087	1.6864	1.5588	1.5856	1.6207	Ave		1.6036				4.1		15.0			
n-Butylbenzene	1.9502 2.2067	2.0766	1.8145	2.2005	2.1637	Ave		2.0687				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.5565 1.3566	1.5885	1.3652	1.4847	1.4246	Ave		1.4627				6.7		15.0			
1,2-Dibromo-3-Chloropropane	0.1083 0.0945	0.1134	0.0988	0.1178	0.1139	Ave		0.1078				8.6		15.0			
1,3,5-Trichlorobenzene	1.4227 1.0423	1.1833	0.9899	1.1825	1.1199	Ave		1.1568				13.0		15.0			
1,2,4-Trichlorobenzene	1.3992 0.7944	1.0485	0.9061	0.9889	1.0932	Qua	-0.814	1.3217	-0.013						0.9940		0.9900
Hexachlorobutadiene	0.8577 0.4096	0.5785	0.4643	0.5487	0.5226	Qua	-0.164	0.6234	-0.005						0.9980		0.9900
Naphthalene	2.3471	1.7820	1.7350	1.9088	2.0992	Ave		1.9744				13.0		15.0			
1,2,3-Trichlorobenzene	1.5049	0.9894	0.9304	0.8656	1.0349	Lin1	0.1955	0.9536							0.9900		0.9900
Dibromofluoromethane (Surr)	0.2570 0.2718	0.2401	0.2412	0.2422	0.2860	Ave		0.2564				7.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3673 0.3525	0.3374	0.3278	0.3244	0.3727	Ave		0.3470				5.9		15.0			
Toluene-d8 (Surr)	1.3184 1.3778	1.2295	1.3293	1.2752	1.5607	Ave		1.3485				8.6		15.0			
4-Bromofluorobenzene (Surr)	0.5042 0.5333	0.5117	0.4346	0.5246	0.5224	Ave		0.5052				7.1		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab File ID: BFB407.D BFB Injection Date: 08/13/2013

Instrument ID: A3UX17 BFB Injection Time: 11:32

Analysis Batch No.: 97250

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.5	
75	30.0 - 60.0 % of mass 95	48.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.1	
173	Less than 2.0 % of mass 174	0.5	(0.5)1
174	50.0 - 120.00 % of mass 95	97.0	
175	5.0 - 9.0 % of mass 174	7.8	(8.0)1
176	95.0 - 101.0 % of mass 174	96.1	(99.0)1
177	5.0 - 9.0 % of mass 176	6.2	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97250/2	UXR6882.D	08/13/2013	11:57
	CCV 240-97250/3	UXR6883.D	08/13/2013	12:20
	LCS 240-97250/4	UXR6884.D	08/13/2013	12:42
	MB 240-97250/6	UXR6886.D	08/13/2013	13:27
DR-DPT-28-30	240-27547-2	UXR6890.D	08/13/2013	15:25
DR-DPT-28-35	240-27547-3	UXR6891.D	08/13/2013	15:48
TB-080213	240-27547-5	UXR6893.D	08/13/2013	16:32
DR-DPT-28-30 MS	240-27547-2 MS	UXR6908.D	08/13/2013	22:06
DR-DPT-28-30 MSD	240-27547-2 MSD	UXR6909.D	08/13/2013	22:28

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCVIS 240-97250/2 Calibration Date: 08/13/2013 11:57

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6882.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3202	0.3401		1.00	0.0100	6.2	50.0
Chloromethane	Ave	0.4418	0.4913	0.1000	1.00	0.0100	11.2	50.0
Vinyl chloride	Ave	0.3741	0.4483		1.00	0.0100	19.8	20.0
Bromomethane	Ave	0.1155	0.1560		1.00	0.0100	35.1	50.0
Chloroethane	Ave	0.1132	0.1366		1.00	0.0100	20.6	50.0
Trichlorofluoromethane	Ave	0.3266	0.4114		1.00	0.0100	26.0	50.0
Acrolein	Ave	0.0479	0.0471		20.0	0.100	-1.7	50.0
1,1-Dichloroethene	Ave	0.2763	0.3061		1.00	0.0100	10.8	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2358	0.2864		1.00	0.0100	21.5	50.0
Acetone	Lin1		0.1129		10.0	0.0200	18.3	50.0
Iodomethane	Ave	0.4062	0.4621		1.00	0.0100	13.7	50.0
Carbon disulfide	Ave	0.7726	0.8762		1.00	0.0100	13.4	50.0
Acetonitrile	Lin1		0.0424		20.0	0.100	23.2	50.0
Methyl acetate	Ave	0.2382	0.2477		10.0	0.0200	4.0	50.0
Methylene Chloride	Lin1		0.3922		1.00	0.0100	16.5	50.0
tert-Butyl alcohol	Ave	0.0184	0.0206		50.0	0.200	12.0	50.0
Acrylonitrile	Ave	0.1236	0.1224		20.0	0.0200	-1.0	50.0
Methyl tert-butyl ether	Ave	0.7459	0.8024		1.00	0.0100	7.6	50.0
trans-1,2-Dichloroethene	Ave	0.3011	0.3342		1.00	0.0100	11.0	50.0
Hexane	Ave	0.0750	0.0720		1.00	0.0100	-4.0	20.0
1,1-Dichloroethane	Ave	0.5220	0.5501	0.1000	1.00	0.0100	5.4	50.0
Vinyl acetate	Ave	0.0464	0.0471		2.00	0.0100	1.4	50.0
2,2-Dichloropropane	Ave	0.2835	0.3306		1.00	0.0100	16.6	50.0
cis-1,2-Dichloroethene	Ave	0.3056	0.3103		1.00	0.0100	1.5	50.0
2-Butanone	Ave	0.1316	0.1240		10.0	0.0200	-5.8	50.0
Bromochloromethane	Ave	0.1468	0.1654		1.00	0.0100	12.7	50.0
Tetrahydrofuran	Ave	0.0801	0.0718		5.00	0.0100	-10.4	50.0
Chloroform	Ave	0.5063	0.5618		1.00	0.0100	11.0	20.0
1,1,1-Trichloroethane	Ave	0.4071	0.4736		1.00	0.0100	16.3	50.0
Cyclohexane	Ave	0.5827	0.5331		1.00	0.0100	-8.5	50.0
1,1-Dichloropropene	Ave	0.3869	0.3921		1.00	0.0100	1.3	50.0
Carbon tetrachloride	Ave	0.3771	0.4552		1.00	0.0100	20.7	50.0
Benzene	Ave	1.171	1.106		1.00	0.0100	-5.6	50.0
1,2-Dichloroethane	Ave	0.4201	0.4554		1.00	0.0100	8.4	50.0
Trichloroethene	Ave	0.2979	0.3191		1.00	0.0100	7.1	50.0
Methylcyclohexane	Ave	0.4828	0.4316		1.00	0.0100	-10.6	50.0
1,2-Dichloropropane	Ave	0.2921	0.2601		1.00	0.0100	-10.9	20.0
1,4-Dioxane	Ave	0.0025	0.0024		50.0	0.500	-7.1	50.0
Dibromomethane	Ave	0.1529	0.1559		1.00	0.0100	2.0	50.0
Bromodichloromethane	Ave	0.3429	0.3941		1.00	0.0100	14.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCVIS 240-97250/2 Calibration Date: 08/13/2013 11:57

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6882.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1590	0.1208		10.0	0.0200	-24.1	50.0
cis-1,3-Dichloropropene	Ave	0.3874	0.3656		1.00	0.0100	-5.6	50.0
4-Methyl-2-pentanone	Ave	0.2569	0.2288		10.0	0.0200	-10.9	50.0
Toluene	Ave	1.523	1.427		1.00	0.0100	-6.3	20.0
trans-1,3-Dichloropropene	Lin1		0.4122		1.00	0.0100	-14.2	50.0
Ethyl methacrylate	Lin1		0.3294		1.00	0.0100	-26.2	50.0
1,1,2-Trichloroethane	Ave	0.2989	0.2828		1.00	0.0100	-5.4	50.0
Tetrachloroethene	Ave	0.3422	0.3845		1.00	0.0100	12.3	50.0
1,3-Dichloropropane	Ave	0.5460	0.4873		1.00	0.0100	-10.7	50.0
2-Hexanone	Ave	0.2215	0.1855		10.0	0.0200	-16.3	50.0
Dibromochloromethane	Ave	0.3056	0.3428		1.00	0.0100	12.1	50.0
1,2-Dibromoethane	Ave	0.3019	0.2963		1.00	0.0100	-1.8	50.0
Chlorobenzene	Ave	1.041	0.9742	0.3000	1.00	0.0100	-6.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3495	0.3880		1.00	0.0100	11.0	50.0
Ethylbenzene	Ave	0.5348	0.5048		1.00	0.0100	-5.6	20.0
m-Xylene & p-Xylene	Ave	0.6704	0.6580		2.00	0.0200	-1.9	50.0
o-Xylene	Ave	0.6303	0.6000		1.00	0.0100	-4.8	50.0
Styrene	Ave	1.025	1.001		1.00	0.0100	-2.4	50.0
Bromoform	Ave	0.1896	0.2207	0.1000	1.00	0.0100	16.4	50.0
Isopropylbenzene	Ave	1.585	1.534		1.00	0.0100	-3.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6677	0.5188	0.3000	1.00	0.0100	-22.3	50.0
Bromobenzene	Ave	0.8260	0.7680		1.00	0.0100	-7.0	50.0
1,2,3-Trichloropropane	Ave	0.2416	0.2058		1.00	0.0100	-14.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1878	0.1065		1.00	0.0100	-43.3	50.0
n-Propylbenzene	Ave	0.8092	0.7153		1.00	0.0100	-11.6	50.0
2-Chlorotoluene	Ave	0.6963	0.6623		1.00	0.0100	-4.9	50.0
1,3,5-Trimethylbenzene	Ave	2.380	2.225		1.00	0.0100	-6.5	50.0
4-Chlorotoluene	Ave	0.7433	0.6721		1.00	0.0100	-9.6	50.0
tert-Butylbenzene	Ave	2.192	1.901		1.00	0.0100	-13.3	50.0
1,2,4-Trimethylbenzene	Ave	2.403	2.306		1.00	0.0100	-4.0	50.0
sec-Butylbenzene	Ave	2.839	2.433		1.00	0.0100	-14.3	50.0
1,3-Dichlorobenzene	Ave	1.540	1.375		1.00	0.0100	-10.7	50.0
p-Isopropyltoluene	Ave	2.514	2.268		1.00	0.0100	-9.8	50.0
1,4-Dichlorobenzene	Ave	1.604	1.414		1.00	0.0100	-11.9	50.0
n-Butylbenzene	Ave	2.069	1.669		1.00	0.0100	-19.3	50.0
1,2-Dichlorobenzene	Ave	1.463	1.325		1.00	0.0100	-9.4	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1078	0.0880		2.00	0.0100	-18.3	50.0
1,3,5-Trichlorobenzene	Ave	1.157	0.9885		1.00	0.0100	-14.5	50.0
1,2,4-Trichlorobenzene	Qua		0.6844		1.00	0.0100	-38.5	50.0
Hexachlorobutadiene	Qua		0.4451		1.00	0.0100	-20.7	50.0
Naphthalene	Ave	1.974	0.9162		1.00	0.0100	-53.6*	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCVIS 240-97250/2 Calibration Date: 08/13/2013 11:57

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6882.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Lin1		0.5024		1.00	0.0100	-49.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2564	0.2661		0.00925	0.00891	3.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3470	0.3410		0.00876	0.00891	-1.7	50.0
Toluene-d8 (Surr)	Ave	1.349	1.183		0.00782	0.00891	-12.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5052	0.4772		0.00842	0.00891	-5.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCV 240-97250/3 Calibration Date: 08/13/2013 12:20

Instrument ID: A3UX17 Calib Start Date: 05/07/2013 14:13

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/07/2013 16:05

Lab File ID: UXR6883.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.4497	0.4318		2.00	0.0100	-4.0	50.0
Ethyl ether	Ave	0.2647	0.2365		2.00	0.0100	-10.7	50.0
3-Chloro-1-propene	Ave	0.1427	0.0911		2.00	0.0100	-36.2	50.0
Diisopropyl ether	Ave	0.2531	0.2130		10.0	0.0500	-15.8	50.0
2-Chloro-1,3-butadiene	Ave	0.4867	0.4540		2.00	0.0100	-6.7	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.9284	0.7019		5.00	0.0100	-24.4	50.0
Ethyl acetate	Ave	0.2704	0.2028		4.00	0.0200	-25.0	50.0
Propionitrile	Ave	0.0414	0.0335		4.00	0.0200	-19.2	50.0
Methacrylonitrile	Ave	0.1979	0.1317		2.00	0.0100	-33.5	50.0
Isobutyl alcohol	Ave	0.0118	0.0089		50.0	0.200	-25.2	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7736	0.5631		5.00	0.0100	-27.2	50.0
n-Heptane	Ave	0.0714	0.0645		1.00	0.0100	-9.7	50.0
n-Butanol	Ave	0.0094	0.0074		50.0	0.200	-21.5	50.0
Methyl methacrylate	Ave	0.2516	0.1603		2.00	0.0100	-36.3	50.0
2-Nitropropane	Ave	0.0594	0.0540		2.00	0.0200	-9.1	50.0
Cyclohexanone	Ave	0.1188	0.0912		20.0	0.100	-23.2	50.0
1,2,3-Trimethylbenzene	Ave	2.525	2.193		0.00868	0.0100	-13.2	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab File ID: UXR6886.D Lab Sample ID: MB 240-97250/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/13/2013 13:27

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97250/4	UXR6884.D	08/13/2013 12:42
DR-DPT-28-30	240-27547-2	UXR6890.D	08/13/2013 15:25
DR-DPT-28-35	240-27547-3	UXR6891.D	08/13/2013 15:48
TB-080213	240-27547-5	UXR6893.D	08/13/2013 16:32
DR-DPT-28-30 MS	240-27547-2 MS	UXR6908.D	08/13/2013 22:06
DR-DPT-28-30 MSD	240-27547-2 MSD	UXR6909.D	08/13/2013 22:28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97250/6

Matrix: Water Lab File ID: UXR6886.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 13:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97250/6

Matrix: Water Lab File ID: UXR6886.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 13:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	0.394	J	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97250/6

Matrix: Water Lab File ID: UXR6886.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 13:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	107		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97250/6

Matrix: Water Lab File ID: UXR6886.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 13:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab File ID: BFB410.D BFB Injection Date: 08/14/2013

Instrument ID: A3UX17 BFB Injection Time: 12:14

Analysis Batch No.: 97431

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.3	
75	30.0 - 60.0 % of mass 95	46.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.7	(0.7)1
174	50.0 - 120.00 % of mass 95	100.2	
175	5.0 - 9.0 % of mass 174	7.3	(7.3)1
176	95.0 - 101.0 % of mass 174	101.0	(100.8)1
177	5.0 - 9.0 % of mass 176	7.0	(6.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97431/2	UXR6937.D	08/14/2013	12:38
	CCV 240-97431/3	UXR6938.D	08/14/2013	13:01
	MB 240-97431/5	UXR6940.D	08/14/2013	13:46
	LCS 240-97431/7	UXR6942.D	08/14/2013	14:30
DR-DPT-28-40	240-27547-4	UXR6965.D	08/15/2013	00:05

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCVIS 240-97431/2 Calibration Date: 08/14/2013 12:38

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6937.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3202	0.3026		1.00	0.0100	-5.5	50.0
Chloromethane	Ave	0.4418	0.4360	0.1000	1.00	0.0100	-1.3	50.0
Vinyl chloride	Ave	0.3741	0.4099		1.00	0.0100	9.6	20.0
Bromomethane	Ave	0.1155	0.1618		1.00	0.0100	40.1	50.0
Chloroethane	Ave	0.1132	0.1550		1.00	0.0100	36.9	50.0
Trichlorofluoromethane	Ave	0.3266	0.4152		1.00	0.0100	27.1	50.0
Acrolein	Ave	0.0479	0.0380		20.0	0.100	-20.7	50.0
1,1-Dichloroethene	Ave	0.2763	0.2861		1.00	0.0100	3.5	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2358	0.2699		1.00	0.0100	14.4	50.0
Acetone	Lin1		0.0866		10.0	0.0200	-10.3	50.0
Iodomethane	Ave	0.4062	0.4740		1.00	0.0100	16.7	50.0
Carbon disulfide	Ave	0.7726	0.7934		1.00	0.0100	2.7	50.0
Acetonitrile	Lin1		0.0350		20.0	0.100	1.4	50.0
Methyl acetate	Ave	0.2382	0.2055		10.0	0.0200	-13.7	50.0
Methylene Chloride	Lin1		0.3637		1.00	0.0100	7.1	50.0
tert-Butyl alcohol	Ave	0.0184	0.0169		50.0	0.200	-7.8	50.0
Acrylonitrile	Ave	0.1236	0.1070		20.0	0.0200	-13.4	50.0
Methyl tert-butyl ether	Ave	0.7459	0.6984		1.00	0.0100	-6.4	50.0
trans-1,2-Dichloroethene	Ave	0.3011	0.2973		1.00	0.0100	-1.3	50.0
Hexane	Ave	0.0750	0.0688		1.00	0.0100	-8.2	20.0
1,1-Dichloroethane	Ave	0.5220	0.5242	0.1000	1.00	0.0100	0.4	50.0
Vinyl acetate	Ave	0.0464	0.0402		2.00	0.0100	-13.5	50.0
2,2-Dichloropropane	Ave	0.2835	0.3225		1.00	0.0100	13.8	50.0
cis-1,2-Dichloroethene	Ave	0.3056	0.2944		1.00	0.0100	-3.7	50.0
2-Butanone	Ave	0.1316	0.1085		10.0	0.0200	-17.5	50.0
Bromochloromethane	Ave	0.1468	0.1542		1.00	0.0100	5.0	50.0
Tetrahydrofuran	Ave	0.0801	0.0642		5.00	0.0100	-19.9	50.0
Chloroform	Ave	0.5063	0.5364		1.00	0.0100	6.0	20.0
1,1,1-Trichloroethane	Ave	0.4071	0.4544		1.00	0.0100	11.6	50.0
Cyclohexane	Ave	0.5827	0.5094		1.00	0.0100	-12.6	50.0
1,1-Dichloropropene	Ave	0.3869	0.3904		1.00	0.0100	0.9	50.0
Carbon tetrachloride	Ave	0.3771	0.4330		1.00	0.0100	14.8	50.0
Benzene	Ave	1.171	1.081		1.00	0.0100	-7.7	50.0
1,2-Dichloroethane	Ave	0.4201	0.4516		1.00	0.0100	7.5	50.0
Trichloroethene	Ave	0.2979	0.3077		1.00	0.0100	3.3	50.0
Methylcyclohexane	Ave	0.4828	0.4276		1.00	0.0100	-11.4	50.0
1,2-Dichloropropane	Ave	0.2921	0.2594		1.00	0.0100	-11.2	20.0
1,4-Dioxane	Ave	0.0025	0.0020		50.0	0.500	-20.4	50.0
Dibromomethane	Ave	0.1529	0.1526		1.00	0.0100	-0.2	50.0
Bromodichloromethane	Ave	0.3429	0.3590		1.00	0.0100	4.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCVIS 240-97431/2 Calibration Date: 08/14/2013 12:38

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6937.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1590	0.1150		10.0	0.0200	-27.7	50.0
cis-1,3-Dichloropropene	Ave	0.3874	0.3332		1.00	0.0100	-14.0	50.0
4-Methyl-2-pentanone	Ave	0.2569	0.1773		10.0	0.0200	-31.0	50.0
Toluene	Ave	1.523	1.380		1.00	0.0100	-9.4	20.0
trans-1,3-Dichloropropene	Lin1		0.3896		1.00	0.0100	-18.7	50.0
Ethyl methacrylate	Lin1		0.3288		1.00	0.0100	-26.4	50.0
1,1,2-Trichloroethane	Ave	0.2989	0.2734		1.00	0.0100	-8.5	50.0
Tetrachloroethene	Ave	0.3422	0.3730		1.00	0.0100	9.0	50.0
1,3-Dichloropropane	Ave	0.5460	0.4675		1.00	0.0100	-14.4	50.0
2-Hexanone	Ave	0.2215	0.1546		10.0	0.0200	-30.2	50.0
Dibromochloromethane	Ave	0.3056	0.3172		1.00	0.0100	3.8	50.0
1,2-Dibromoethane	Ave	0.3019	0.2767		1.00	0.0100	-8.3	50.0
Chlorobenzene	Ave	1.041	0.9502	0.3000	1.00	0.0100	-8.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3495	0.3742		1.00	0.0100	7.1	50.0
Ethylbenzene	Ave	0.5348	0.4946		1.00	0.0100	-7.5	20.0
m-Xylene & p-Xylene	Ave	0.6704	0.6394		2.00	0.0200	-4.6	50.0
o-Xylene	Ave	0.6303	0.5928		1.00	0.0100	-5.9	50.0
Styrene	Ave	1.025	0.999		1.00	0.0100	-2.5	50.0
Bromoform	Ave	0.1896	0.2071	0.1000	1.00	0.0100	9.2	50.0
Isopropylbenzene	Ave	1.585	1.533		1.00	0.0100	-3.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6677	0.4634	0.3000	1.00	0.0100	-30.6	50.0
Bromobenzene	Ave	0.8260	0.7811		1.00	0.0100	-5.4	50.0
1,2,3-Trichloropropane	Ave	0.2416	0.1902		1.00	0.0100	-21.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1878	0.0972		1.00	0.0100	-48.2	50.0
n-Propylbenzene	Ave	0.8092	0.6960		1.00	0.0100	-14.0	50.0
2-Chlorotoluene	Ave	0.6963	0.6259		1.00	0.0100	-10.1	50.0
1,3,5-Trimethylbenzene	Ave	2.380	2.149		1.00	0.0100	-9.7	50.0
4-Chlorotoluene	Ave	0.7433	0.6769		1.00	0.0100	-8.9	50.0
tert-Butylbenzene	Ave	2.192	1.875		1.00	0.0100	-14.5	50.0
1,2,4-Trimethylbenzene	Ave	2.403	2.154		1.00	0.0100	-10.4	50.0
sec-Butylbenzene	Ave	2.839	2.422		1.00	0.0100	-14.7	50.0
1,3-Dichlorobenzene	Ave	1.540	1.394		1.00	0.0100	-9.5	50.0
p-Isopropyltoluene	Ave	2.514	2.278		1.00	0.0100	-9.4	50.0
1,4-Dichlorobenzene	Ave	1.604	1.473		1.00	0.0100	-8.2	50.0
n-Butylbenzene	Ave	2.069	1.759		1.00	0.0100	-15.0	50.0
1,2-Dichlorobenzene	Ave	1.463	1.340		1.00	0.0100	-8.4	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1078	0.0786		2.00	0.0100	-27.1	50.0
1,3,5-Trichlorobenzene	Ave	1.157	0.9680		1.00	0.0100	-16.3	50.0
1,2,4-Trichlorobenzene	Qua		0.6895		1.00	0.0100	-38.0	50.0
Hexachlorobutadiene	Qua		0.4291		1.00	0.0100	-23.7	50.0
Naphthalene	Ave	1.974	0.8226		1.00	0.0100	-58.3*	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCVIS 240-97431/2 Calibration Date: 08/14/2013 12:38

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6937.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Lin1		0.5031		1.00	0.0100	-49.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2564	0.2499		0.00869	0.00891	-2.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3470	0.3259		0.00837	0.00891	-6.1	50.0
Toluene-d8 (Surr)	Ave	1.349	1.096		0.00724	0.00891	-18.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5052	0.4471		0.00789	0.00891	-11.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab Sample ID: CCV 240-97431/3 Calibration Date: 08/14/2013 13:01

Instrument ID: A3UX17 Calib Start Date: 05/07/2013 14:13

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/07/2013 16:05

Lab File ID: UXR6938.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.4497	0.5103		2.00	0.0100	13.5	50.0
Ethyl ether	Ave	0.2647	0.2626		2.00	0.0100	-0.8	50.0
3-Chloro-1-propene	Ave	0.1427	0.1189		2.00	0.0100	-16.7	50.0
Diisopropyl ether	Ave	0.2531	0.2437		10.0	0.0500	-3.7	50.0
2-Chloro-1,3-butadiene	Ave	0.4867	0.5302		2.00	0.0100	8.9	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.9284	0.8106		5.00	0.0100	-12.7	50.0
Ethyl acetate	Ave	0.2704	0.2215		4.00	0.0200	-18.1	50.0
Propionitrile	Ave	0.0414	0.0352		4.00	0.0200	-15.0	50.0
Methacrylonitrile	Ave	0.1979	0.1553		2.00	0.0100	-21.6	50.0
Isobutyl alcohol	Ave	0.0118	0.0090		50.0	0.200	-24.3	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7736	0.6048		5.00	0.0100	-21.8	50.0
n-Heptane	Ave	0.0714	0.0749		1.00	0.0100	4.9	50.0
n-Butanol	Ave	0.0094	0.0060		50.0	0.200	-35.8	50.0
Methyl methacrylate	Ave	0.2516	0.1652		2.00	0.0100	-34.3	50.0
2-Nitropropane	Ave	0.0594	0.0440		2.00	0.0200	-25.8	50.0
Cyclohexanone	Ave	0.1188	0.0805		20.0	0.100	-32.2	50.0
1,2,3-Trimethylbenzene	Ave	2.525	2.175		0.00861	0.0100	-13.9	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Lab File ID: UXR6940.D Lab Sample ID: MB 240-97431/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/14/2013 13:46

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97431/7	UXR6942.D	08/14/2013 14:30
DR-DPT-28-40	240-27547-4	UXR6965.D	08/15/2013 00:05

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97431/5

Matrix: Water Lab File ID: UXR6940.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2013 13:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97431 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	0.928	J	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.06		1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27547-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97431/5

Matrix: Water | Lab File ID: UXR6940.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2013 13:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97431 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.14		1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	0.678	J	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	0.872	J	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97431/5

Matrix: Water Lab File ID: UXR6940.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2013 13:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97431 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	80		74-115
1868-53-7	Dibromofluoromethane (Surr)	100		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97431/5

Matrix: Water Lab File ID: UXR6940.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2013 13:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97431 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-28-15	240-27547-1	86	95	93	82
DR-DPT-28-30	240-27547-2	99	98	81	78
DR-DPT-28-35	240-27547-3	106	108	86	77
DR-DPT-28-40	240-27547-4	114	124	81	84
TB-080213	240-27547-5	112	112	93	79
	MB 240-96742/5	88	94	91	83
	MB 240-97250/6	107	106	87	83
	MB 240-97431/5	100	101	80	78
	LCS 240-96742/4	86	97	93	89
	LCS 240-97250/4	97	101	92	95
	LCS 240-97431/7	103	101	93	96
DR-DPT-28-30 MS	240-27547-2 MS	91	92	83	99
	240-27430-B-3 MS	86	97	91	91
DR-DPT-28-30 MSD	240-27547-2 MSD	106	101	77	87
	240-27430-B-3 MSD	87	92	92	93

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6573.D

Lab ID: LCS 240-96742/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	12.6	126	72-116	*
1,1,1-Trichloroethane	10.0	11.4	114	74-118	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.9	109	74-151	
1,1-Dichloroethane	10.0	10.1	101	82-115	
1,1-Dichloroethene	10.0	9.11	91	78-131	
1,1-Dichloropropene	10.0	10.4	104	83-114	
1,2,3-Trichlorobenzene	10.0	8.97	90	54-126	
1,2,3-Trichloropropane	10.0	10.9	109	73-129	
1,2,3-Trimethylbenzene	10.0	11.5	115	70-130	
1,2,4-Trichlorobenzene	10.0	8.54	85	48-135	
1,2,4-Trimethylbenzene	10.0	10.6	106	76-120	
1,2-Dibromo-3-Chloropropane	10.0	12.3	123	42-136	
1,2-Dichlorobenzene	10.0	10.3	103	81-110	
1,2-Dichloroethane	10.0	11.6	116	71-127	
1,2-Dichloropropane	10.0	11.0	110	81-115	
1,3-Dichlorobenzene	10.0	9.92	99	80-110	
1,3-Dichloropropane	10.0	10.9	109	79-116	
1,4-Dichlorobenzene	10.0	9.81	98	82-110	
2,2-Dichloropropane	10.0	13.1	131	50-129	*
2-Chloroethyl vinyl ether	10.0	10.4	104	52-131	
2-Chlorotoluene	10.0	10.1	101	76-116	
2-Hexanone	20.0	23.2	116	55-133	
Bromobenzene	10.0	9.58	96	76-115	
Bromochloromethane	10.0	9.67	97	77-120	
4-Chlorotoluene	10.0	9.79	98	77-115	
p-Isopropyltoluene	10.0	10.6	106	74-120	
Acetone	20.0	24.0	120	43-136	
Benzene	10.0	10.2	102	83-112	
Bromoform	10.0	13.8	138	40-131	*
Bromomethane	10.0	6.67	67	11-185	
Carbon disulfide	10.0	10.1	101	62-142	
Carbon tetrachloride	10.0	13.4	134	66-128	*
Chlorobenzene	10.0	10.2	102	85-110	
Chloroethane	10.0	6.76	68	25-153	
Chloroform	10.0	10.5	105	79-117	
Chloromethane	10.0	8.52	85	44-126	
cis-1,2-Dichloroethene	10.0	9.67	97	80-113	
cis-1,3-Dichloropropene	10.0	12.0	120	61-115	*
Hexachlorobutadiene	10.0	7.63	76	36-134	
Dibromomethane	10.0	10.7	107	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6573.D

Lab ID: LCS 240-96742/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	12.4	124	72-121	*
Dichlorodifluoromethane	10.0	7.28	73	19-129	
Ethylbenzene	10.0	10.4	104	83-112	
1,2-Dibromoethane	10.0	10.6	106	79-113	
Diisopropyl ether	10.0	9.88 J	99	77-118	
Naphthalene	10.0	8.83	88	32-141	
m-Xylene & p-Xylene	20.0	20.0	100	83-113	
n-Butylbenzene	10.0	10.5	105	66-125	
Isopropylbenzene	10.0	10.3	103	75-114	
n-Propylbenzene	10.0	10.4	104	74-121	
2-Butanone	20.0	22.7	114	60-126	
4-Methyl-2-pentanone	20.0	23.1	115	63-128	
sec-Butylbenzene	10.0	10.2	102	70-117	
Methyl tert-butyl ether	10.0	10.1	101	52-144	
Methylene Chloride	10.0	10.3	103	66-131	
o-Xylene	10.0	10.0	100	83-113	
Styrene	10.0	9.84	98	79-114	
tert-Butylbenzene	10.0	9.87	99	71-115	
Tetrachloroethene	10.0	10.3	103	79-114	
Toluene	10.0	10.7	107	84-111	
trans-1,2-Dichloroethene	10.0	9.51	95	83-117	
trans-1,3-Dichloropropene	10.0	12.8	128	58-117	*
Trichloroethene	10.0	9.64	96	76-117	
Trichlorofluoromethane	10.0	9.31	93	49-157	
Vinyl acetate	10.0	9.22	92	46-161	
Vinyl chloride	10.0	8.22	82	53-127	
tert-Butyl alcohol	200	202	101	70-130	
Xylenes, Total	30.0	30.0	100	83-112	
Dibromochloromethane	10.0	13.2	132	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6884.D

Lab ID: LCS 240-97250/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.5	105	72-116	
1,1,1-Trichloroethane	10.0	11.2	112	74-118	
1,1,2,2-Tetrachloroethane	10.0	7.26	73	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.1	111	74-151	
1,1-Dichloroethane	10.0	10.5	105	82-115	
1,1-Dichloroethene	10.0	9.73	97	78-131	
1,1-Dichloropropene	10.0	10.0	100	83-114	
1,2,3-Trichlorobenzene	10.0	5.58	56	54-126	
1,2,3-Trichloropropane	10.0	8.21	82	73-129	
1,2,3-Trimethylbenzene	10.0	9.38	94	70-130	
1,2,4-Trichlorobenzene	10.0	6.53	65	48-135	
1,2,4-Trimethylbenzene	10.0	9.07	91	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.53	85	42-136	
1,2-Dichlorobenzene	10.0	8.87	89	81-110	
1,2-Dichloroethane	10.0	10.7	107	71-127	
1,2-Dichloropropane	10.0	9.02	90	81-115	
1,3-Dichlorobenzene	10.0	9.00	90	80-110	
1,3-Dichloropropane	10.0	9.32	93	79-116	
1,4-Dichlorobenzene	10.0	8.58	86	82-110	
2,2-Dichloropropane	10.0	10.9	109	50-129	
2-Chloroethyl vinyl ether	10.0	7.01 J	70	52-131	
2-Chlorotoluene	10.0	8.87	89	76-116	
2-Hexanone	20.0	16.8	84	55-133	
Bromobenzene	10.0	9.28	93	76-115	
Bromochloromethane	10.0	10.8	108	77-120	
4-Chlorotoluene	10.0	8.98	90	77-115	
p-Isopropyltoluene	10.0	9.22	92	74-120	
Acetone	20.0	18.0	90	43-136	
Benzene	10.0	9.33	93	83-112	
Bromoform	10.0	10.2	102	40-131	
Bromomethane	10.0	12.1	121	11-185	
Carbon disulfide	10.0	9.69	97	62-142	
Carbon tetrachloride	10.0	11.5	115	66-128	
Chlorobenzene	10.0	9.21	92	85-110	
Chloroethane	10.0	10.3	103	25-153	
Chloroform	10.0	10.9	109	79-117	
Chloromethane	10.0	10.4	104	44-126	
cis-1,2-Dichloroethene	10.0	9.62	96	80-113	
cis-1,3-Dichloropropene	10.0	9.43	94	61-115	
Hexachlorobutadiene	10.0	7.01	70	36-134	
Dibromomethane	10.0	10.8	108	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6884.D

Lab ID: LCS 240-97250/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.6	116	72-121	
Dichlorodifluoromethane	10.0	9.43	94	19-129	
Ethylbenzene	10.0	9.48	95	83-112	
1,2-Dibromoethane	10.0	9.74	97	79-113	
Diisopropyl ether	10.0	9.64 J	96	77-118	
Naphthalene	10.0	4.62	46	32-141	
m-Xylene & p-Xylene	20.0	19.2	96	83-113	
n-Butylbenzene	10.0	7.92	79	66-125	
Isopropylbenzene	10.0	9.10	91	75-114	
n-Propylbenzene	10.0	9.18	92	74-121	
2-Butanone	20.0	16.8	84	60-126	
4-Methyl-2-pentanone	20.0	20.2	101	63-128	
sec-Butylbenzene	10.0	8.24	82	70-117	
Methyl tert-butyl ether	10.0	10.9	109	52-144	
Methylene Chloride	10.0	9.84	98	66-131	
o-Xylene	10.0	9.28	93	83-113	
Styrene	10.0	9.29	93	79-114	
tert-Butylbenzene	10.0	8.43	84	71-115	
Tetrachloroethene	10.0	10.2	102	79-114	
Toluene	10.0	9.73	97	84-111	
trans-1,2-Dichloroethene	10.0	10.6	106	83-117	
trans-1,3-Dichloropropene	10.0	8.34	83	58-117	
Trichloroethene	10.0	10.9	109	76-117	
Trichlorofluoromethane	10.0	11.0	110	49-157	
Vinyl acetate	10.0	8.89	89	46-161	
Vinyl chloride	10.0	11.1	111	53-127	
tert-Butyl alcohol	200	215	108	70-130	
Xylenes, Total	30.0	28.5	95	83-112	
Dibromochloromethane	10.0	10.6	106	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6942.D

Lab ID: LCS 240-97431/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.8	108	72-116	
1,1,1-Trichloroethane	10.0	11.6	116	74-118	
1,1,2,2-Tetrachloroethane	10.0	7.59	76	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	12.8	128	74-151	
1,1-Dichloroethane	10.0	10.3	103	82-115	
1,1-Dichloroethene	10.0	10.5	105	78-131	
1,1-Dichloropropene	10.0	9.88	99	83-114	
1,2,3-Trichlorobenzene	10.0	5.40	54	54-126	
1,2,3-Trichloropropane	10.0	8.05	80	73-129	
1,2,3-Trimethylbenzene	10.0	8.68	87	70-130	
1,2,4-Trichlorobenzene	10.0	6.12	61	48-135	
1,2,4-Trimethylbenzene	10.0	10.0	100	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.67	77	42-136	
1,2-Dichlorobenzene	10.0	8.78	88	81-110	
1,2-Dichloroethane	10.0	11.0	110	71-127	
1,2-Dichloropropane	10.0	9.16	92	81-115	
1,3-Dichlorobenzene	10.0	9.12	91	80-110	
1,3-Dichloropropane	10.0	9.46	95	79-116	
1,4-Dichlorobenzene	10.0	8.69	87	82-110	
2,2-Dichloropropane	10.0	11.4	114	50-129	
2-Chloroethyl vinyl ether	10.0	7.60 J	76	52-131	
2-Chlorotoluene	10.0	8.58	86	76-116	
2-Hexanone	20.0	15.9	79	55-133	
Bromobenzene	10.0	9.59	96	76-115	
Bromochloromethane	10.0	10.7	107	77-120	
4-Chlorotoluene	10.0	9.15	92	77-115	
p-Isopropyltoluene	10.0	9.34	93	74-120	
Acetone	20.0	19.9	100	43-136	
Benzene	10.0	9.49	95	83-112	
Bromoform	10.0	10.9	109	40-131	
Bromomethane	10.0	13.0	130	11-185	
Carbon disulfide	10.0	10.7	107	62-142	
Carbon tetrachloride	10.0	12.0	120	66-128	
Chlorobenzene	10.0	9.39	94	85-110	
Chloroethane	10.0	12.4	124	25-153	
Chloroform	10.0	10.8	108	79-117	
Chloromethane	10.0	9.83	98	44-126	
cis-1,2-Dichloroethene	10.0	10.0	100	80-113	
cis-1,3-Dichloropropene	10.0	9.39	94	61-115	
Hexachlorobutadiene	10.0	7.60	76	36-134	
Dibromomethane	10.0	11.1	111	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6942.D

Lab ID: LCS 240-97431/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.2	112	72-121	
Dichlorodifluoromethane	10.0	9.85	98	19-129	
Ethylbenzene	10.0	9.31	93	83-112	
1,2-Dibromoethane	10.0	9.82	98	79-113	
Diisopropyl ether	10.0	9.72 J	97	77-118	
Naphthalene	10.0	4.53	45	32-141	
m-Xylene & p-Xylene	20.0	19.9	100	83-113	
n-Butylbenzene	10.0	8.32	83	66-125	
Isopropylbenzene	10.0	9.64	96	75-114	
n-Propylbenzene	10.0	9.06	91	74-121	
2-Butanone	20.0	17.3	86	60-126	
4-Methyl-2-pentanone	20.0	16.8	84	63-128	
sec-Butylbenzene	10.0	8.92	89	70-117	
Methyl tert-butyl ether	10.0	9.79	98	52-144	
Methylene Chloride	10.0	10.6	106	66-131	
o-Xylene	10.0	10.0	100	83-113	
Styrene	10.0	10.7	107	79-114	
tert-Butylbenzene	10.0	9.42	94	71-115	
Tetrachloroethene	10.0	11.2	112	79-114	
Toluene	10.0	9.96	100	84-111	
trans-1,2-Dichloroethene	10.0	10.2	102	83-117	
trans-1,3-Dichloropropene	10.0	8.41	84	58-117	
Trichloroethene	10.0	10.8	108	76-117	
Trichlorofluoromethane	10.0	12.7	127	49-157	
Vinyl acetate	10.0	8.95	89	46-161	
Vinyl chloride	10.0	10.6	106	53-127	
tert-Butyl alcohol	200	206	103	70-130	
Xylenes, Total	30.0	29.9	100	83-112	
Dibromochloromethane	10.0	10.8	108	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6908.D

Lab ID: 240-27547-2 MS Client ID: DR-DPT-28-30 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	833	83 U	903	108	64-118	
1,1,1-Trichloroethane	833	83 U	864	104	68-121	
1,1,2,2-Tetrachloroethane	833	83 U	638	77	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	833	83 U	921	111	70-152	
1,1-Dichloroethane	833	83 U	751	90	79-116	
1,1-Dichloroethene	833	32 J	808	93	74-135	
1,1-Dichloropropene	833	83 U	740	89	80-114	
1,2,3-Trichlorobenzene	833	83 U	404	49	45-129	
1,2,3-Trichloropropane	833	83 U	673	81	67-132	
1,2,3-Trimethylbenzene	833	420 U	680	82	70-130	
1,2,4-Trichlorobenzene	833	83 U	461	55	38-138	
1,2,4-Trimethylbenzene	833	83 U	725	87	67-124	
1,2-Dibromo-3-Chloropropane	833	170 U	661	79	32-139	
1,2-Dichlorobenzene	833	83 U	779	94	75-111	
1,2-Dichloroethane	833	20 J	859	101	68-129	
1,2-Dichloropropane	833	83 U	690	83	78-115	
1,3-Dichlorobenzene	833	83 U	714	86	73-110	
1,3-Dichloropropane	833	83 U	826	99	74-118	
1,4-Dichlorobenzene	833	83 U	710	85	75-110	
2,2-Dichloropropane	833	83 U	840	101	38-127	
2-Chloroethyl vinyl ether	833	830 U	373 J	45	10-150	
2-Chlorotoluene	833	83 U	734	88	69-117	
2-Hexanone	1670	830 U	1440	87	47-139	
Bromobenzene	833	83 U	751	90	71-116	
Bromochloromethane	833	83 U	817	98	73-121	
4-Chlorotoluene	833	83 U	715	86	71-116	
p-Isopropyltoluene	833	83 U	722	87	64-122	
Acetone	1670	830 U	1290	77	33-145	
Benzene	833	12 J	716	84	72-121	
Bromoform	833	83 U	868	104	32-128	
Bromomethane	833	83 U	1090	131	10-186	
Carbon disulfide	833	83 U	761	91	57-147	
Carbon tetrachloride	833	83 U	898	108	59-129	
Chlorobenzene	833	83 U	762	91	80-110	
Chloroethane	833	83 U	1170	141	21-165	
Chloroform	833	83 U	827	99	76-118	
Chloromethane	833	83 U	802	96	33-132	
cis-1,2-Dichloroethene	833	3000	3550	66	70-120	E F
cis-1,3-Dichloropropene	833	83 U	707	85	51-110	
Hexachlorobutadiene	833	83 U	551	66	27-132	
Dibromomethane	833	83 U	935	112	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6908.D

Lab ID: 240-27547-2 MS Client ID: DR-DPT-28-30 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	833	83 U	916	110	67-120	
Dichlorodifluoromethane	833	83 U	677	81	17-128	
Ethylbenzene	833	83 U	783	94	75-116	
1,2-Dibromoethane	833	83 U	859	103	74-113	
Diisopropyl ether	833	830 U	713 J	86	73-118	
Naphthalene	833	83 U	320	38	15-158	
m-Xylene & p-Xylene	1670	170 U	1570	94	75-117	
n-Butylbenzene	833	83 U	619	74	56-127	
Isopropylbenzene	833	83 U	805	97	68-116	
n-Propylbenzene	833	83 U	731	88	64-124	
2-Butanone	1670	830 U	1180	71	54-129	
4-Methyl-2-pentanone	1670	830 U	1120	67	56-131	
sec-Butylbenzene	833	83 U	637	76	60-119	
Methyl tert-butyl ether	833	83 U	689	83	46-144	
Methylene Chloride	833	91	727	76	63-128	
o-Xylene	833	83 U	796	96	76-116	
Styrene	833	83 U	900	108	71-117	
tert-Butylbenzene	833	83 U	656	79	61-119	
Tetrachloroethene	833	83 U	869	104	70-117	
Toluene	833	83 U	762	91	78-114	
trans-1,2-Dichloroethene	833	83 U	740	89	80-119	
trans-1,3-Dichloropropene	833	83 U	614	74	46-116	
Trichloroethene	833	3100	3780	79	66-120	E
Trichlorofluoromethane	833	83 U	992	119	46-157	
Vinyl acetate	833	170 U	653	78	43-157	
Vinyl chloride	833	280	1100	99	49-130	
tert-Butyl alcohol	16700	4200 U	14300	86	70-130	
Xylenes, Total	2500	170 U	2370	95	76-116	
Dibromochloromethane	833	83 U	876	105	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6909.D

Lab ID: 240-27547-2 MSD Client ID: DR-DPT-28-30 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	833	816	98	10	30	64-118	
1,1,1-Trichloroethane	833	1000	120	15	30	68-121	
1,1,2,2-Tetrachloroethane	833	616	74	3	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	833	1050	126	13	30	70-152	
1,1-Dichloroethane	833	949	114	23	30	79-116	
1,1-Dichloroethene	833	949	110	16	30	74-135	
1,1-Dichloropropene	833	845	101	13	30	80-114	
1,2,3-Trichlorobenzene	833	529	63	27	30	45-129	
1,2,3-Trichloropropane	833	675	81	0	30	67-132	
1,2,3-Trimethylbenzene	833	724	87	6	30	70-130	
1,2,4-Trichlorobenzene	833	533	64	14	30	38-138	
1,2,4-Trimethylbenzene	833	752	90	4	30	67-124	
1,2-Dibromo-3-Chloropropane	833	621	75	6	30	32-139	
1,2-Dichlorobenzene	833	741	89	5	30	75-111	
1,2-Dichloroethane	833	909	107	6	30	68-129	
1,2-Dichloropropane	833	707	85	3	30	78-115	
1,3-Dichlorobenzene	833	749	90	5	30	73-110	
1,3-Dichloropropane	833	626	75	28	30	74-118	
1,4-Dichlorobenzene	833	716	86	1	30	75-110	
2,2-Dichloropropane	833	978	117	15	30	38-127	
2-Chloroethyl vinyl ether	833	375 J	45	0	30	10-150	
2-Chlorotoluene	833	704	84	4	30	69-117	
2-Hexanone	1670	1200	72	19	30	47-139	
Bromobenzene	833	764	92	2	30	71-116	
Bromochloromethane	833	926	111	12	30	73-121	
4-Chlorotoluene	833	769	92	7	30	71-116	
p-Isopropyltoluene	833	759	91	5	30	64-122	
Acetone	1670	1620	97	23	30	33-145	
Benzene	833	773	91	8	30	72-121	
Bromoform	833	768	92	12	30	32-128	
Bromomethane	833	1200	144	9	30	10-186	
Carbon disulfide	833	963	116	23	30	57-147	
Carbon tetrachloride	833	1010	121	11	30	59-129	
Chlorobenzene	833	751	90	1	30	80-110	
Chloroethane	833	1310	157	11	30	21-165	
Chloroform	833	938	113	13	30	76-118	
Chloromethane	833	912	109	13	30	33-132	
cis-1,2-Dichloroethene	833	4180	142	16	30	70-120	E F
cis-1,3-Dichloropropene	833	734	88	4	30	51-110	
Hexachlorobutadiene	833	663	80	19	30	27-132	
Dibromomethane	833	862	103	8	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6909.D

Lab ID: 240-27547-2 MSD Client ID: DR-DPT-28-30 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	833	890	107	3	30	67-120	
Dichlorodifluoromethane	833	761	91	12	30	17-128	
Ethylbenzene	833	717	86	9	30	75-116	
1,2-Dibromoethane	833	728	87	17	30	74-113	
Diisopropyl ether	833	859	103	19	30	73-118	
Naphthalene	833	433	52	30	30	15-158	
m-Xylene & p-Xylene	1670	1500	90	5	30	75-117	
n-Butylbenzene	833	682	82	10	30	56-127	
Isopropylbenzene	833	810	97	1	30	68-116	
n-Propylbenzene	833	727	87	0	30	64-124	
2-Butanone	1670	1470	88	22	30	54-129	
4-Methyl-2-pentanone	1670	1260	75	12	30	56-131	
sec-Butylbenzene	833	765	92	18	30	60-119	
Methyl tert-butyl ether	833	855	103	22	30	46-144	
Methylene Chloride	833	925	100	24	30	63-128	
o-Xylene	833	713	86	11	30	76-116	
Styrene	833	743	89	19	30	71-117	
tert-Butylbenzene	833	709	85	8	30	61-119	
Tetrachloroethene	833	777	93	11	30	70-117	
Toluene	833	699	84	9	30	78-114	
trans-1,2-Dichloroethene	833	884	106	18	30	80-119	
trans-1,3-Dichloropropene	833	632	76	3	30	46-116	
Trichloroethene	833	3930	96	4	30	66-120	E
Trichlorofluoromethane	833	1080	129	8	30	46-157	
Vinyl acetate	833	784	94	18	30	43-157	
Vinyl chloride	833	1230	114	11	30	49-130	
tert-Butyl alcohol	16700	17900	108	23	30	70-130	
Xylenes, Total	2500	2210	89	7	30	76-116	
Dibromochloromethane	833	736	88	17	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6598.D

Lab ID: 240-27430-B-3 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	1000	100 U	1130	113	68-121	
1,1,2,2-Tetrachloroethane	1000	100 U	961	96	63-122	
1,1-Dichloroethane	1000	100 U	998	100	79-116	
1,1-Dichloroethene	1000	100 U	928	93	74-135	
1,2,4-Trichlorobenzene	1000	100 U	916	92	38-138	
1,2-Dibromo-3-Chloropropane	1000	200 U	1040	104	32-139	
1,2-Dichlorobenzene	1000	100 U	1010	101	75-111	
1,2-Dichloroethane	1000	100 U	1150	115	68-129	
1,2-Dichloropropane	1000	100 U	1070	107	78-115	
1,3-Dichlorobenzene	1000	100 U	956	96	73-110	
1,4-Dichlorobenzene	1000	100 U	924	92	75-110	
2-Hexanone	2000	1000 U	2030	101	47-139	
Acetone	2000	1000 U	1570	79	33-145	
Benzene	1000	100 U	1020	102	72-121	
Bromoform	1000	100 U	1230	123	32-128	
Bromomethane	1000	100 U	584	58	10-186	
Carbon disulfide	1000	100 U	1010	101	57-147	
Carbon tetrachloride	1000	100 U	1270	127	59-129	
Chlorobenzene	1000	100 U	974	97	80-110	
Chloroethane	1000	100 U	649	65	21-165	
Chloroform	1000	100 U	1020	102	76-118	
Chloromethane	1000	100 U	847	85	33-132	
cis-1,2-Dichloroethene	1000	200	1160	96	70-120	
cis-1,3-Dichloropropene	1000	100 U	1100	110	51-110	
Bromodichloromethane	1000	100 U	1240	124	67-120	F
Dichlorodifluoromethane	1000	100 U	644	64	17-128	
Ethylbenzene	1000	100 U	960	96	75-116	
1,2-Dibromoethane	1000	100 U	1000	100	74-113	
m-Xylene & p-Xylene	2000	200 U	1910	96	75-117	
Isopropylbenzene	1000	100 U	978	98	68-116	
2-Butanone	2000	1000 U	1860	93	54-129	
4-Methyl-2-pentanone	2000	1000 U	2170	109	56-131	
Methyl tert-butyl ether	1000	100 U	950	95	46-144	
Methylene Chloride	1000	110	1090	97	63-128	
o-Xylene	1000	100 U	990	99	76-116	
Styrene	1000	100 U	964	96	71-117	
Tetrachloroethene	1000	3900	4470	58	70-117	E F
Toluene	1000	100 U	1040	104	78-114	
trans-1,2-Dichloroethene	1000	100 U	924	92	80-119	
trans-1,3-Dichloropropene	1000	100 U	1160	116	46-116	
Trichloroethene	1000	300	1250	95	66-120	
Trichlorofluoromethane	1000	100 U	895	89	46-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6598.D

Lab ID: 240-27430-B-3 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Vinyl chloride	1000	100 U	853	85	49-130	
Xylenes, Total	3000	200 U	2900	97	76-116	
Dibromochloromethane	1000	100 U	1240	124	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water . Level: Low Lab File ID: UXX6599.D

Lab ID: 240-27430-B-3 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	1000	1130	113	1	30	68-121	
1,1,2,2-Tetrachloroethane	1000	946	95	2	30	63-122	
1,1-Dichloroethane	1000	1030	103	3	30	79-116	
1,1-Dichloroethene	1000	918	92	1	30	74-135	
1,2,4-Trichlorobenzene	1000	907	91	1	30	38-138	
1,2-Dibromo-3-Chloropropane	1000	1030	103	0	30	32-139	
1,2-Dichlorobenzene	1000	993	99	1	30	75-111	
1,2-Dichloroethane	1000	1140	114	1	30	68-129	
1,2-Dichloropropane	1000	1110	111	3	30	78-115	
1,3-Dichlorobenzene	1000	954	95	0	30	73-110	
1,4-Dichlorobenzene	1000	945	95	2	30	75-110	
2-Hexanone	2000	2040	102	0	30	47-139	
Acetone	2000	1800	90	13	30	33-145	
Benzene	1000	1020	102	0	30	72-121	
Bromoform	1000	1260	126	3	30	32-128	
Bromomethane	1000	608	61	4	30	10-186	
Carbon disulfide	1000	1020	102	1	30	57-147	
Carbon tetrachloride	1000	1300	130	2	30	59-129	F
Chlorobenzene	1000	974	97	0	30	80-110	
Chloroethane	1000	667	67	3	30	21-165	
Chloroform	1000	1030	103	1	30	76-118	
Chloromethane	1000	859	86	1	30	33-132	
cis-1,2-Dichloroethene	1000	1160	95	1	30	70-120	
cis-1,3-Dichloropropene	1000	1140	114	4	30	51-110	F
Bromodichloromethane	1000	1240	124	1	30	67-120	F
Dichlorodifluoromethane	1000	644	64	0	30	17-128	
Ethylbenzene	1000	984	98	2	30	75-116	
1,2-Dibromoethane	1000	1010	101	1	30	74-113	
m-Xylene & p-Xylene	2000	1910	96	0	30	75-117	
Isopropylbenzene	1000	999	100	2	30	68-116	
2-Butanone	2000	1900	95	2	30	54-129	
4-Methyl-2-pentanone	2000	2170	109	0	30	56-131	
Methyl tert-butyl ether	1000	983	98	3	30	46-144	
Methylene Chloride	1000	1110	99	2	30	63-128	
o-Xylene	1000	992	99	0	30	76-116	
Styrene	1000	956	96	1	30	71-117	
Tetrachloroethene	1000	4410	52	1	30	70-117	E F
Toluene	1000	1040	104	0	30	78-114	
trans-1,2-Dichloroethene	1000	963	96	4	30	80-119	
trans-1,3-Dichloropropene	1000	1190	119	2	30	46-116	F
Trichloroethene	1000	1240	94	1	30	66-120	
Trichlorofluoromethane	1000	888	89	1	30	46-157	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6599.D

Lab ID: 240-27430-B-3 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Vinyl chloride	1000	851	85	0	30	49-130	
Xylenes, Total	3000	2900	97	0	30	76-116	
Dibromochloromethane	1000	1250	125	1	30	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Sample No.: STD8260 240-92306/4 Date Analyzed: 07/02/2013 13:37

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX5742.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1899526	5.20	1402128	7.87	826109	10.11
UPPER LIMIT		3799052	5.70	2804256	8.37	1652218	10.61
LOWER LIMIT		949763	4.70	701064	7.37	413055	9.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92306/8		1830940	5.20	1292823	7.87	693029	10.11
CCVIS 240-96742/2		1989050	5.20	1378963	7.87	733918	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Sample No.: CCVIS 240-96742/2 Date Analyzed: 08/08/2013 11:51

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX6572.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1989050	5.20	1378963	7.87	733918	10.12
UPPER LIMIT		3978100	5.70	2757926	8.37	1467836	10.62
LOWER LIMIT		994525	4.70	689482	7.37	366959	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-96742/4		1886920	5.20	1334693	7.87	738085	10.12
CCV 240-96742/3		1914909	5.20	1315539	7.87	640698	10.12
MB 240-96742/5		1757282	5.20	1224852	7.87	648599	10.11
240-27547-1	DR-DPT-28-15	1723862	5.20	1161106	7.87	588430	10.11
240-27430-B-3 MS		1725932	5.20	1243931	7.87	711947	10.12
240-27430-B-3 MSD		1729217	5.20	1249541	7.88	725542	10.11

FB = Fluorobenzene
FB = Fluorobenzene
CBZ = Chlorobenzene-d5
CBZ = Chlorobenzene-d5
Area Limit = 50%-200% of internal standard area
DCB = 1,4-Dichlorobenzene-d4
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Sample No.: STD8260 240-92260/4 Date Analyzed: 07/02/2013 10:31

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR6126.D Heated Purge: (Y/N) N

Calibration ID: 16141

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1341606	5.76	1090840	8.48	658450	10.72
UPPER LIMIT		2683212	6.26	2181680	8.98	1316900	11.22
LOWER LIMIT		670803	5.26	545420	7.98	329225	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92260/8		1263222	5.76	971310	8.48	471339	10.72
CCVIS 240-97250/2		854103	5.76	707726	8.48	462183	10.72
CCVIS 240-97431/2		1069782	5.76	850447	8.48	545086	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Sample No.: CCVIS 240-97250/2 Date Analyzed: 08/13/2013 11:57

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR6882.D Heated Purge: (Y/N) N

Calibration ID: 16141

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		854103	5.76	707726	8.48	462183	10.72
UPPER LIMIT		1708206	6.26	1415452	8.98	924366	11.22
LOWER LIMIT		427052	5.26	353863	7.98	231092	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-97250/3		966256	5.76	719666	8.48	404155	10.72
LCS 240-97250/4		864114	5.76	760587	8.48	469437	10.72
MB 240-97250/6		880374	5.76	656607	8.48	356400	10.72
240-27547-2	DR-DPT-28-30	918669	5.76	737614	8.48	399021	10.72
240-27547-3	DR-DPT-28-35	837458	5.76	675753	8.48	374996	10.72
240-27547-5	TB-080213	772641	5.76	644601	8.48	386252	10.72
240-27547-2 MS	DR-DPT-28-30 MS	837808	5.78	685632	8.48	457636	10.72
240-27547-2 MSD	DR-DPT-28-30 MSD	827426	5.76	761361	8.48	459649	10.72

FB = Fluorobenzene
FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4
Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Sample No.: CCVIS 240-97431/2 Date Analyzed: 08/14/2013 12:38

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): UXR6937.D Heated Purge: (Y/N) N

Calibration ID: 16141

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1069782	5.76	850447	8.48	545086	10.72
UPPER LIMIT		2139564	6.26	1700894	8.98	1090172	11.22
LOWER LIMIT		534891	5.26	425224	7.98	272543	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-97431/3		1022179	5.76	810908	8.48	436391	10.72
MB 240-97431/5		1021735	5.76	843697	8.48	449809	10.72
LCS 240-97431/7		1020520	5.76	818870	8.48	539764	10.72
240-27547-4	DR-DPT-28-40	736237	5.76	683049	8.48	373165	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

SAMPLE ID	DR-DPT-28-30	

SAMPLE CALC for trichloroethene

IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (ug/L)	Final Extract Volume (mL)	AVE RRF	CONCENTRATION PF
918669	83.33	1027582	10	5	0.2979	3128.88
				Sample Volume (mL)		
				5		

Sample Calculation

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27547-1

SDG No.:

Client Sample ID: DR-DPT-28-30 Lab Sample ID: 240-27547-2

Matrix: Water Lab File ID: UXR6890.D

Analysis Method: 8260B Date Collected: 08/02/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 15:25

Soil Aliquot Vol: Dilution Factor: 83.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	83	U	83	13
74-87-3	Chloromethane	83	U	83	25
156-59-2	cis-1,2-Dichloroethene	3000		83	14
10061-01-5	cis-1,3-Dichloropropene	83	U	83	12
87-68-3	Hexachlorobutadiene	83	U	83	25
74-95-3	Dibromomethane	83	U	83	23
75-27-4	Bromodichloromethane	83	U	83	12
75-71-8	Dichlorodifluoromethane	83	U	83	26
100-41-4	Ethylbenzene	83	U	83	14
106-93-4	1,2-Dibromoethane	83	U	83	20
108-20-3	Diisopropyl ether	830	U	830	120
91-20-3	Naphthalene	83	U	83	20
179601-23-1	m-Xylene & p-Xylene	170	U	170	20
104-51-8	n-Butylbenzene	83	U	83	10
98-82-8	Isopropylbenzene	83	U	83	11
103-65-1	n-Propylbenzene	83	U	83	12
78-93-3	2-Butanone	830	U	830	47
108-10-1	4-Methyl-2-pentanone	830	U	830	27
135-98-8	sec-Butylbenzene	83	U	83	11
1634-04-4	Methyl tert-butyl ether	83	U	83	14
994-05-8	Tert-amyl-methyl ether (TAME)	420	U	420	5.6
75-09-2	Methylene Chloride	91	B	83	27
95-47-6	o-Xylene	83	U	83	12
100-42-5	Styrene	83	U	83	9.2
637-92-3	Ethyl-t-butyl ether (ETBE)	420	U	420	9.2
98-06-6	tert-Butylbenzene	83	U	83	11
127-18-4	Tetrachloroethene	83	U	83	24
108-88-3	Toluene	83	U	83	11
156-60-5	trans-1,2-Dichloroethene	83	U	83	16
10061-02-6	trans-1,3-Dichloropropene	83	U	83	16
79-01-6	Trichloroethene	3100		83	14
75-69-4	Trichlorofluoromethane	83	U	83	17
108-05-4	Vinyl acetate	170	U	170	16
75-01-4	Vinyl chloride	280		83	18
75-65-0	tert-Butyl alcohol	4200	U	4200	320
1330-20-7	Xylenes, Total	170	U	170	12

Report Date: 14-Aug-2013 10:07:21 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton
Target Compound Quantitation Report

Sample Calculation

Data File: \\NCCHROM\ChromData\A3UX17\20130813-22439.b\UXR6890.D
Lims ID: 240-27547-B-2 Client ID: DR-DPT-28-30
Inject. Date: 13-Aug-2013 15:25:30 Dil. Factor: 83.3300
Sample Type: Client
Sample ID: 240-0022439-010
Misc. Info.:
Operator: 1644 Instrument ID: A3UX17
Purge Vol: 5.000 mL ALS Bottle#: 9
Lims Batch ID: 97250 Lims Sample ID: 10
Detector: MS SCAN

Method: \\NCCHROM\ChromData\A3UX17\20130813-22439.b\8260_17.m
Last Update: 14-Aug-2013 10:07:17 Calib Date: 02-Jul-2013 11:37:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCCHROM\ChromData\A3UX17\20130702-21310.b\UXR6129.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK004

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.763	5.763	0.0	99	918669	10.0	
* 2 Chlorobenzene-d5	117	8.479	8.479	0.0	86	737614	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.0	95	399021	10.0	
$ 6 Dibromofluoromethane (Surr)	113	5.194	5.194	0.0	59	207921	8.83	
$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.491	5.490	0.001	0	279692	8.77	
$ 8 Toluene-d8 (Surr)	98	7.151	7.151	0.0	93	721559	7.25	
$ 9 4-Bromofluorobenzene (Surr)	95	9.582	9.582	0.0	95	258984	6.95	
14 Dichlorodifluoromethane	85		1.648					
15 Chloromethane	50		1.826					9
17 Vinyl chloride	62	1.957	1.957	0.0	92	113429	3.30	
18 Bromomethane	94		2.312					
19 Chloroethane	64		2.419					
21 Trichlorofluoromethane	101		2.668					
25 1,1-Dichloroethene	96	3.178	3.178	0.0	64	9800	0.3860	
26 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.190					
27 Acetone	43	3.249	3.237	0.012	78	12212	0.5647	
29 Carbon disulfide	76		3.391					9
33 Methylene Chloride	84	3.641	3.641	0.0	93	67499	1.09	
34 2-Methyl-2-propanol	59		3.735					
35 Methyl tert-butyl ether	73		3.878					
37 trans-1,2-Dichloroethene	96		3.890					9
39 1,1-Dichloroethane	63		4.269					9
40 Vinyl acetate	86		4.305					
41 Isopropyl ether	87		4.305					
43 Tert-butyl ethyl ether	59		4.625					9
45 cis-1,2-Dichloroethene	96	4.779	4.779	0.0	69	1011228	36.0	
44 2,2-Dichloropropane	77		4.779					9
46 2-Butanone (MEK)	43		4.791					
50 Chlorobromomethane	128		4.992					
52 Chloroform	83		5.052					9
53 1,1,1-Trichloroethane	97		5.206					
55 Carbon tetrachloride	117		5.348					

Sample Calculation

Report Date: 14-Aug-2013 10:07:21 Chrom Revision: 2.0 01-Apr-2013 21:16:10
Data File: \\NCCHROM\ChromData\A3UX17\20130813-22439.b\UXR6890.D

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
56 1,1-Dichloropropene	75		5.348					
58 Benzene	78	5.538	5.538	0.0	33	16003	0.1488	
59 1,2-Dichloroethane	62	5.550	5.550	0.0	23	9393	0.2434	
60 Tert-amyl methyl ether	73		5.609					
63 Trichloroethene	130	6.083	6.083	0.0	93	1027582	37.6	
66 1,2-Dichloropropane	63		6.285					
69 Dibromomethane	93		6.392					
70 Dichlorobromomethane	83		6.522					
72 2-Chloroethyl vinyl ether	63		6.759					
73 cis-1,3-Dichloropropene	75		6.902					
74 4-Methyl-2-pentanone (MIBK)	43		7.032					
75 Toluene	91	7.210	7.210	0.0	62	13632	0.1213	
76 trans-1,3-Dichloropropene	75		7.400					
79 Tetrachloroethene	164	7.696	7.696	0.0	56	3268	0.1295	
81 1,3-Dichloropropane	76		7.732					
82 2-Hexanone	43		7.779					
84 Chlorodibromomethane	129		7.933					
85 Ethylene Dibromide	107		8.052					
87 Chlorobenzene	112		8.503					
88 1,1,1,2-Tetrachloroethane	131		8.574					
89 Ethylbenzene	106		8.586					9
90 m-Xylene & p-Xylene	106		8.692					9
91 o-Xylene	106		9.084					9
92 Styrene	104		9.095					
93 Bromoform	173		9.285					
95 Isopropylbenzene	105		9.427					
97 1,1,2,2-Tetrachloroethane	83		9.724					
98 Bromobenzene	156		9.748					
100 1,2,3-Trichloropropane	110		9.771					
101 N-Propylbenzene	120		9.831					
102 2-Chlorotoluene	126		9.926					
104 4-Chlorotoluene	126		10.032					
105 tert-Butylbenzene	119		10.317					
106 1,2,4-Trimethylbenzene	105		10.364					9
107 sec-Butylbenzene	105		10.530					
108 1,3-Dichlorobenzene	146		10.661					
109 4-Isopropyltoluene	119		10.673					
110 1,4-Dichlorobenzene	146		10.744					
111 1,2,3-Trimethylbenzene	105		10.791					9
112 n-Butylbenzene	91		11.076					
113 1,2-Dichlorobenzene	146		11.123					
114 1,2-Dibromo-3-Chloropropane	157		11.906					
116 1,2,4-Trichlorobenzene	180		12.724					
117 Hexachlorobutadiene	225		12.890					
118 Naphthalene	128		12.997					
119 1,2,3-Trichlorobenzene	180		13.258					
S 124 Xylenes, Total	106		16.530					7

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Sample Calculation

Lab Name: TestAmerica Canton Job No.: 240-27547-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0200 0.0192	0.0202	0.0152	0.0193	0.0162	Ave		0.0184				12.0		15.0			
Acrylonitrile	0.1340 0.1211	0.1183	0.1163	0.1204	0.1315	Ave		0.1236				5.9		15.0			
Methyl tert-butyl ether	0.7215 0.7881	0.7180	0.7115	0.7210	0.8152	Ave		0.7459				5.9		15.0			
trans-1,2-Dichloroethene	0.2980 0.3126	0.2933	0.2935	0.2838	0.3255	Ave		0.3011				5.1		15.0			
Hexane	0.0647 0.0811	0.0684	0.0717	0.0771	0.0870	Ave		0.0750				11.0		15.0			
1,1-Dichloroethane	0.4693 0.5520	0.5186	0.5101	0.5082	0.5741	Ave		0.5220			0.1000	7.0		15.0			
Vinyl acetate	0.0413 0.0541	0.0420	0.0414	0.0446	0.0553	Ave		0.0464				14.0		15.0			
2,2-Dichloropropane	0.2591 0.3070	0.2724	0.2646	0.2756	0.3223	Ave		0.2835				8.9		15.0			
cis-1,2-Dichloroethene	0.2858 0.3181	0.3108	0.2951	0.2946	0.3295	Ave		0.3056				5.4		15.0			
2-Butanone	0.1485 0.1278	0.1310	0.1199	0.1285	0.1339	Ave		0.1316				7.2		15.0			
Bromochloromethane	0.1398 0.1527	0.1469	0.1440	0.1386	0.1587	Ave		0.1468				5.3		15.0			
Tetrahydrofuran	0.0722 0.0804	0.0844	0.0811	0.0775	0.0849	Ave		0.0801				5.9		15.0			
Chloroform	0.4852 0.5245	0.4983	0.4978	0.4775	0.5543	Ave		0.5063				5.6		15.0			
1,1,1-Trichloroethane	0.3690 0.4340	0.3962	0.3904	0.4052	0.4480	Ave		0.4071				7.2		15.0			
Cyclohexane	0.4887 0.6445	0.5424	0.5673	0.5896	0.6635	Ave		0.5827				11.0		15.0			
1,1-Dichloropropene	0.3484 0.4169	0.3664	0.3760	0.3807	0.4327	Ave		0.3869				8.2		15.0			
Carbon tetrachloride	0.3418 0.4159	0.3617	0.3578	0.3669	0.4185	Ave		0.3771				8.5		15.0			
Benzene	1.1898 1.1961	1.1603	1.1274	1.1009	1.2515	Ave		1.1710				4.6		15.0			
1,2-Dichloroethane	0.3930 0.4351	0.4136	0.4178	0.4053	0.4559	Ave		0.4201				5.3		15.0			
Trichloroethene	0.2698 0.3135	0.2986	0.2884	0.2943	0.3227	Ave		0.2979				6.3		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**SEPTEMBER 23, 2013**
FROM:	**EDWARD SEDLMYER**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN – MARTIN STATE ARIPORT (MSA) – DUMP ROAD SOURCE AREAS
SDG 240-27585-1

SAMPLES: 4/Aqueous/VOC

DR-DPT-27-20 DR-DPT-27-25 DR-DPT-27-30
TB-080513

Overview

The sample set for Lockheed Martin – MSA Dump Road Source Areas, SDG 240-27585-1 consists of four (4) aqueous environmental samples. The samples were analyzed for volatile organic compounds (VOCs).

The samples were collected by Tetra Tech on August 5, 2013 and analyzed by Test America (North Canton). All analyses were conducted in accordance with SW-846 Method 8260B analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, internal standard recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

- The VOC initial calibration and associated continuing calibration relative response factors (RRFs) were less than the 0.05 quality control limit for tert-butyl alcohol and vinyl acetate on instrument A3UX15. The non-detected results reported for tert-butyl alcohol and vinyl acetate were rejected (UR).

- The matrix spike / matrix spike duplicate (MS/MSD) performed on sample DR-DPT-27-20 had a zero percent recovery in the MS/MSD for 2-chloroethyl vinyl ether. The nondetected 2-chloroethyl vinyl ether result for sample DR-DPT-27-20 was rejected (UR).

Minor

- Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

Notes

The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for

bromomethane, acetone, 2-chloroethyl vinyl ether, 2-hexanone, and naphthalene, for instrument A3UX15 on 08/12/13 @ 10:18. No action was taken on this basis because the affected sample results were nondetected for the aforementioned compounds.

Samples DR-DPT-27-20, DR-DPT-27-25, and DR-DPT-27-30 were diluted due to concentrations for cis-1,2-dichloroethene and trichloroethene greater than the linear calibration range of the instrument. This accounts for the elevated detection limits for the nondetected compounds.

Executive Summary

Laboratory Performance: Two VOC compounds had RRF noncompliances resulting in the rejection of data.

Other Factors Affecting Data Quality: Positive results less than the reporting limit (RL) were qualified due to uncertainty near the detection limit. Matrix spike percent recovery noncompliance resulted in the rejection of data for one compound for one sample.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Edward Sedlmyer
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-27-20			DR-DPT-27-25			DR-DPT-27-30			TB-080513		
SDG: 240-27585-1	LAB_ID	240-27585-1			240-27585-2			240-27585-3			240-27585-4		
FRACTION: OV	SAMP_DATE	8/5/2013			8/5/2013			8/5/2013			8/5/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	7.7	U		77	U		9.2	U		0.23	U	
1,1,1-TRICHLOROETHANE	7.3	U		73	U		8.8	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	6	U		60	U		7.2	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	9.3	U		93	U		11	U		0.28	U	
1,1-DICHLOROETHANE	5	U		50	U		6	U		0.15	U	
1,1-DICHLOROETHENE	6.3	U		63	U		9.6	J	P	0.19	U	
1,1-DICHLOROPROPENE	4.3	U		43	U		5.2	U		0.13	U	
1,2,3-TRICHLOROBENZENE	5.7	U		57	U		6.8	U		0.17	U	
1,2,3-TRICHLOROPROPANE	14	U		140	U		17	U		0.43	U	
1,2,3-TRIMETHYLBENZENE	0.2	U		2	U		0.24	U		0.0059	U	
1,2,4-TRICHLOROBENZENE	5	U		50	U		6	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	4	U		40	U		4.8	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	22	U		220	U		27	U		0.67	U	
1,2-DIBROMOETHANE	8	U		80	U		9.6	U		0.24	U	
1,2-DICHLOROBENZENE	4.3	U		43	U		5.2	U		0.13	U	
1,2-DICHLOROETHANE	7.3	U		73	U		8.8	U		0.22	U	
1,2-DICHLOROPROPANE	6	U		60	U		7.2	U		0.18	U	
1,3-DICHLOROBENZENE	4.7	U		47	U		5.6	U		0.14	U	
1,3-DICHLOROPROPANE	5.3	U		53	U		6.4	U		0.16	U	
1,4-DICHLOROBENZENE	4.3	U		43	U		5.2	U		0.13	U	
2,2-DICHLOROPROPANE	4.3	U		43	U		5.2	U		0.13	U	
2-BUTANONE	19	U		190	U		23	U		0.57	U	
2-CHLOROETHYL VINYL ETHER	33	UR	D	330	U		40	U		0.99	U	
2-CHLOROTOLUENE	3.7	U		37	U		4.4	U		0.11	U	
2-HEXANONE	14	U		140	U		16	U		0.41	U	
4-CHLOROTOLUENE	6	U		60	U		7.2	U		0.18	U	
4-ISOPROPYLTOLUENE	4	U		40	U		4.8	U		0.12	U	
4-METHYL-2-PENTANONE	11	U		110	U		13	U		0.32	U	
ACETONE	37	U		370	U		44	U		1.1	U	
BENZENE	4.3	U		43	U		5.2	U		0.13	U	
BROMOBENZENE	4.3	U		43	U		5.2	U		0.13	U	
BROMOCHLOROMETHANE	9.7	U		97	U		12	U		0.29	U	
BROMODICHLOROMETHANE	5	U		50	U		6	U		0.15	U	
BROMOFORM	21	U		210	U		26	U		0.64	U	
BROMOMETHANE	14	U		140	U		16	U		0.41	U	
CARBON DISULFIDE	4.3	U		43	U		5.2	U		0.13	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-27-20			DR-DPT-27-25			DR-DPT-27-30			TB-080513		
SDG: 240-27585-1	LAB_ID	240-27585-1			240-27585-2			240-27585-3			240-27585-4		
FRACTION: OV	SAMP_DATE	8/5/2013			8/5/2013			8/5/2013			8/5/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON TETRACHLORIDE	4.3	U		43	U		5.2	U		0.13	U	
CHLOROBENZENE	5	U		50	U		6	U		0.15	U	
CHLORODIBROMOMETHANE	6	U		60	U		7.2	U		0.18	U	
CHLOROETHANE	9.7	U		97	U		12	U		0.29	U	
CHLOROFORM	5.3	U		53	U		6.4	U		0.16	U	
CHLOROMETHANE	10	U		100	U		12	U		0.3	U	
CIS-1,2-DICHLOROETHENE	410			1700			300			0.17	U	
CIS-1,3-DICHLOROPROPENE	4.7	U		47	U		5.6	U		0.14	U	
DIBROMOMETHANE	9.3	U		93	U		11	U		0.28	U	
DICHLORODIFLUOROMETHANE	10	U		100	U		12	U		0.31	U	
DIISOPROPYL ETHER	50	U		500	U		60	U		1.5	U	
ETHYL TERT-BUTYL ETHER	3.7	U		37	U		4.4	U		0.11	U	
ETHYLBENZENE	5.7	U		57	U		6.8	U		0.17	U	
HEXACHLOROBUTADIENE	10	U		100	U		12	U		0.3	U	
ISOPROPYLBENZENE	4.3	U		43	U		5.2	U		0.13	U	
M+P-XYLENES	8	U		80	U		9.6	U		0.24	U	
METHYL TERT-BUTYL ETHER	5.7	U		57	U		6.8	U		0.17	U	
METHYLENE CHLORIDE	11	U		110	U		13	U		0.33	U	
NAPHTHALENE	8	U		80	U		9.6	U		0.24	U	
N-BUTYLBENZENE	4	U		40	U		4.8	U		0.12	U	
N-PROPYLBENZENE	4.7	U		47	U		5.6	U		0.14	U	
O-XYLENE	4.7	U		47	U		5.6	U		0.14	U	
SEC-BUTYLBENZENE	4.3	U		43	U		5.2	U		0.13	U	
STYRENE	3.7	U		37	U		4.4	U		0.11	U	
TERT-AMYL METHYL ETHER	2.2	U		22	U		2.7	U		0.067	U	
TERT-BUTYLBENZENE	4.3	U		43	U		5.2	U		0.13	U	
TERTIARY-BUTYL ALCOHOL	130	UR	C	1300	UR	C	160	UR	C	3.9	UR	C
TETRACHLOROETHENE	9.7	U		97	U		12	U		0.29	U	
TOLUENE	4.3	U		43	U		5.2	U		0.13	U	
TOTAL XYLENES	4.7	U		47	U		5.6	U		0.14	U	
TRANS-1,2-DICHLOROETHENE	6.3	U		63	U		7.6	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE	6.3	U		63	U		7.6	U		0.19	U	
TRICHLOROETHENE	650			7000			950			0.17	U	
TRICHLOROFLUOROMETHANE	7	U		70	U		8.4	U		0.21	U	
VINYL ACETATE	6.3	UR	C	63	UR	C	7.6	UR	C	0.19	UR	C
VINYL CHLORIDE	81			91	J	P	56			0.22	U	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-20 | Lab Sample ID: 240-27585-1

Matrix: Water | Lab File ID: UXC3883.D

Analysis Method: 8260B | Date Collected: 08/05/2013 10:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 13:19

Soil Aliquot Vol: | Dilution Factor: 33.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	33	U	33	7.7
71-55-6	1,1,1-Trichloroethane	33	U	33	7.3
79-34-5	1,1,2,2-Tetrachloroethane	33	U	33	6.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	33	U	33	9.3
75-34-3	1,1-Dichloroethane	33	U	33	5.0
75-35-4	1,1-Dichloroethene	33	U	33	6.3
563-58-6	1,1-Dichloropropene	33	U	33	4.3
87-61-6	1,2,3-Trichlorobenzene	33	U	33	5.7
96-18-4	1,2,3-Trichloropropane	33	U	33	14
526-73-8	1,2,3-Trimethylbenzene	170	U	170	0.20
120-82-1	1,2,4-Trichlorobenzene	33	U	33	5.0
95-63-6	1,2,4-Trimethylbenzene	33	U	33	4.0
96-12-8	1,2-Dibromo-3-Chloropropane	67	U	67	22
95-50-1	1,2-Dichlorobenzene	33	U	33	4.3
107-06-2	1,2-Dichloroethane	33	U	33	7.3
78-87-5	1,2-Dichloropropane	33	U	33	6.0
541-73-1	1,3-Dichlorobenzene	33	U	33	4.7
142-28-9	1,3-Dichloropropane	33	U	33	5.3
106-46-7	1,4-Dichlorobenzene	33	U	33	4.3
594-20-7	2,2-Dichloropropane	33	U	33	4.3
110-75-8	2-Chloroethyl vinyl ether	330	U	330	33
95-49-8	2-Chlorotoluene	33	U	33	3.7
591-78-6	2-Hexanone	330	U	330	14
108-86-1	Bromobenzene	33	U	33	4.3
74-97-5	Bromochloromethane	33	U	33	9.7
106-43-4	4-Chlorotoluene	33	U	33	6.0
99-87-6	p-Isopropyltoluene	33	U	33	4.0
67-64-1	Acetone	330	U	330	37
71-43-2	Benzene	33	U	33	4.3
75-25-2	Bromoform	33	U	33	21
74-83-9	Bromomethane	33	U	33	14
75-15-0	Carbon disulfide	33	U	33	4.3
56-23-5	Carbon tetrachloride	33	U	33	4.3
108-90-7	Chlorobenzene	33	U	33	5.0
75-00-3	Chloroethane	33	U	33	9.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-20 Lab Sample ID: 240-27585-1

Matrix: Water Lab File ID: UXC3883.D

Analysis Method: 8260B Date Collected: 08/05/2013 10:20

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 13:19

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	33	U	33	5.3
74-87-3	Chloromethane	33	U	33	10
156-59-2	cis-1,2-Dichloroethene	410		33	5.7
10061-01-5	cis-1,3-Dichloropropene	33	U	33	4.7
87-68-3	Hexachlorobutadiene	33	U	33	10
74-95-3	Dibromomethane	33	U	33	9.3
75-27-4	Bromodichloromethane	33	U	33	5.0
75-71-8	Dichlorodifluoromethane	33	U	33	10
100-41-4	Ethylbenzene	33	U	33	5.7
106-93-4	1,2-Dibromoethane	33	U	33	8.0
108-20-3	Diisopropyl ether	330	U	330	50
91-20-3	Naphthalene	33	U	33	8.0
179601-23-1	m-Xylene & p-Xylene	67	U	67	8.0
104-51-8	n-Butylbenzene	33	U	33	4.0
98-82-8	Isopropylbenzene	33	U	33	4.3
103-65-1	n-Propylbenzene	33	U	33	4.7
78-93-3	2-Butanone	330	U	330	19
108-10-1	4-Methyl-2-pentanone	330	U	330	11
135-98-8	sec-Butylbenzene	33	U	33	4.3
1634-04-4	Methyl tert-butyl ether	33	U	33	5.7
994-05-8	Tert-amyl-methyl ether (TAME)	170	U	170	2.2
75-09-2	Methylene Chloride	33	U	33	11
95-47-6	o-Xylene	33	U	33	4.7
100-42-5	Styrene	33	U	33	3.7
637-92-3	Ethyl-t-butyl ether (ETBE)	170	U	170	3.7
98-06-6	tert-Butylbenzene	33	U	33	4.3
127-18-4	Tetrachloroethene	33	U	33	9.7
108-88-3	Toluene	33	U	33	4.3
156-60-5	trans-1,2-Dichloroethene	33	U	33	6.3
10061-02-6	trans-1,3-Dichloropropene	33	U	33	6.3
79-01-6	Trichloroethene	650		33	5.7
75-69-4	Trichlorofluoromethane	33	U	33	7.0
108-05-4	Vinyl acetate	67	U	67	6.3
75-01-4	Vinyl chloride	81		33	7.3
75-65-0	tert-Butyl alcohol	1700	U	1700	130
1330-20-7	Xylenes, Total	67	U	67	4.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-20 | Lab Sample ID: 240-27585-1

Matrix: Water | Lab File ID: UXC3883.D

Analysis Method: 8260B | Date Collected: 08/05/2013 10:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 13:19

Soil Aliquot Vol: | Dilution Factor: 33.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	33	U	33	6.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	82		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-20 Lab Sample ID: 240-27585-1

Matrix: Water Lab File ID: UXC3883.D

Analysis Method: 8260B Date Collected: 08/05/2013 10:20

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 13:19

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-25 | Lab Sample ID: 240-27585-2

Matrix: Water | Lab File ID: UXC3884.D

Analysis Method: 8260B | Date Collected: 08/05/2013 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 13:41

Soil Aliquot Vol: | Dilution Factor: 333.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	330	U	330	77
71-55-6	1,1,1-Trichloroethane	330	U	330	73
79-34-5	1,1,2,2-Tetrachloroethane	330	U	330	60
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	330	U	330	93
75-34-3	1,1-Dichloroethane	330	U	330	50
75-35-4	1,1-Dichloroethene	330	U	330	63
563-58-6	1,1-Dichloropropene	330	U	330	43
87-61-6	1,2,3-Trichlorobenzene	330	U	330	57
96-18-4	1,2,3-Trichloropropane	330	U	330	140
526-73-8	1,2,3-Trimethylbenzene	1700	U	1700	2.0
120-82-1	1,2,4-Trichlorobenzene	330	U	330	50
95-63-6	1,2,4-Trimethylbenzene	330	U	330	40
96-12-8	1,2-Dibromo-3-Chloropropane	670	U	670	220
95-50-1	1,2-Dichlorobenzene	330	U	330	43
107-06-2	1,2-Dichloroethane	330	U	330	73
78-87-5	1,2-Dichloropropane	330	U	330	60
541-73-1	1,3-Dichlorobenzene	330	U	330	47
142-28-9	1,3-Dichloropropane	330	U	330	53
106-46-7	1,4-Dichlorobenzene	330	U	330	43
594-20-7	2,2-Dichloropropane	330	U	330	43
110-75-8	2-Chloroethyl vinyl ether	3300	U	3300	330
95-49-8	2-Chlorotoluene	330	U	330	37
591-78-6	2-Hexanone	3300	U	3300	140
108-86-1	Bromobenzene	330	U	330	43
74-97-5	Bromochloromethane	330	U	330	97
106-43-4	4-Chlorotoluene	330	U	330	60
99-87-6	p-Isopropyltoluene	330	U	330	40
67-64-1	Acetone	3300	U	3300	370
71-43-2	Benzene	330	U	330	43
75-25-2	Bromoform	330	U	330	210
74-83-9	Bromomethane	330	U	330	140
75-15-0	Carbon disulfide	330	U	330	43
56-23-5	Carbon tetrachloride	330	U	330	43
108-90-7	Chlorobenzene	330	U	330	50
75-00-3	Chloroethane	330	U	330	97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-25 | Lab Sample ID: 240-27585-2

Matrix: Water | Lab File ID: UXC3884.D

Analysis Method: 8260B | Date Collected: 08/05/2013 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 13:41

Soil Aliquot Vol: | Dilution Factor: 333.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	330	U	330	53
74-87-3	Chloromethane	330	U	330	100
156-59-2	cis-1,2-Dichloroethene	1700		330	57
10061-01-5	cis-1,3-Dichloropropene	330	U	330	47
87-68-3	Hexachlorobutadiene	330	U	330	100
74-95-3	Dibromomethane	330	U	330	93
75-27-4	Bromodichloromethane	330	U	330	50
75-71-8	Dichlorodifluoromethane	330	U	330	100
100-41-4	Ethylbenzene	330	U	330	57
106-93-4	1,2-Dibromoethane	330	U	330	80
108-20-3	Diisopropyl ether	3300	U	3300	500
91-20-3	Naphthalene	330	U	330	80
179601-23-1	m-Xylene & p-Xylene	670	U	670	80
104-51-8	n-Butylbenzene	330	U	330	40
98-82-8	Isopropylbenzene	330	U	330	43
103-65-1	n-Propylbenzene	330	U	330	47
78-93-3	2-Butanone	3300	U	3300	190
108-10-1	4-Methyl-2-pentanone	3300	U	3300	110
135-98-8	sec-Butylbenzene	330	U	330	43
1634-04-4	Methyl tert-butyl ether	330	U	330	57
994-05-8	Tert-amyl-methyl ether (TAME)	1700	U	1700	22
75-09-2	Methylene Chloride	330	U	330	110
95-47-6	o-Xylene	330	U	330	47
100-42-5	Styrene	330	U	330	37
637-92-3	Ethyl-t-butyl ether (ETBE)	1700	U	1700	37
98-06-6	tert-Butylbenzene	330	U	330	43
127-18-4	Tetrachloroethene	330	U	330	97
108-88-3	Toluene	330	U	330	43
156-60-5	trans-1,2-Dichloroethene	330	U	330	63
10061-02-6	trans-1,3-Dichloropropene	330	U	330	63
79-01-6	Trichloroethene	7000		330	57
75-69-4	Trichlorofluoromethane	330	U	330	70
108-05-4	Vinyl acetate	670	U	670	63
75-01-4	Vinyl chloride	91	J	330	73
75-65-0	tert-Butyl alcohol	17000	U	17000	1300
1330-20-7	Xylenes, Total	670	U	670	47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-25 Lab Sample ID: 240-27585-2

Matrix: Water Lab File ID: UXC3884.D

Analysis Method: 8260B Date Collected: 08/05/2013 10:45

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 13:41

Soil Aliquot Vol: Dilution Factor: 333.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	330	U	330	60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	86		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-25 | Lab Sample ID: 240-27585-2

Matrix: Water | Lab File ID: UXC3884.D

Analysis Method: 8260B | Date Collected: 08/05/2013 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 13:41

Soil Aliquot Vol: | Dilution Factor: 333.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-30 Lab Sample ID: 240-27585-3

Matrix: Water Lab File ID: UXC3885.D

Analysis Method: 8260B Date Collected: 08/05/2013 11:10

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 14:04

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	40	U	40	9.2
71-55-6	1,1,1-Trichloroethane	40	U	40	8.8
79-34-5	1,1,2,2-Tetrachloroethane	40	U	40	7.2
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	40	U	40	11
75-34-3	1,1-Dichloroethane	40	U	40	6.0
75-35-4	1,1-Dichloroethene	9.6	J	40	7.6
563-58-6	1,1-Dichloropropene	40	U	40	5.2
87-61-6	1,2,3-Trichlorobenzene	40	U	40	6.8
96-18-4	1,2,3-Trichloropropane	40	U	40	17
526-73-8	1,2,3-Trimethylbenzene	200	U	200	0.24
120-82-1	1,2,4-Trichlorobenzene	40	U	40	6.0
95-63-6	1,2,4-Trimethylbenzene	40	U	40	4.8
96-12-8	1,2-Dibromo-3-Chloropropane	80	U	80	27
95-50-1	1,2-Dichlorobenzene	40	U	40	5.2
107-06-2	1,2-Dichloroethane	40	U	40	8.8
78-87-5	1,2-Dichloropropane	40	U	40	7.2
541-73-1	1,3-Dichlorobenzene	40	U	40	5.6
142-28-9	1,3-Dichloropropane	40	U	40	6.4
106-46-7	1,4-Dichlorobenzene	40	U	40	5.2
594-20-7	2,2-Dichloropropane	40	U	40	5.2
110-75-8	2-Chloroethyl vinyl ether	400	U	400	40
95-49-8	2-Chlorotoluene	40	U	40	4.4
591-78-6	2-Hexanone	400	U	400	16
108-86-1	Bromobenzene	40	U	40	5.2
74-97-5	Bromochloromethane	40	U	40	12
106-43-4	4-Chlorotoluene	40	U	40	7.2
99-87-6	p-Isopropyltoluene	40	U	40	4.8
67-64-1	Acetone	400	U	400	44
71-43-2	Benzene	40	U	40	5.2
75-25-2	Bromoform	40	U	40	26
74-83-9	Bromomethane	40	U	40	16
75-15-0	Carbon disulfide	40	U	40	5.2
56-23-5	Carbon tetrachloride	40	U	40	5.2
108-90-7	Chlorobenzene	40	U	40	6.0
75-00-3	Chloroethane	40	U	40	12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-30 Lab Sample ID: 240-27585-3

Matrix: Water Lab File ID: UXC3885.D

Analysis Method: 8260B Date Collected: 08/05/2013 11:10

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 14:04

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	40	U	40	6.4
74-87-3	Chloromethane	40	U	40	12
156-59-2	cis-1,2-Dichloroethene	300		40	6.8
10061-01-5	cis-1,3-Dichloropropene	40	U	40	5.6
87-68-3	Hexachlorobutadiene	40	U	40	12
74-95-3	Dibromomethane	40	U	40	11
75-27-4	Bromodichloromethane	40	U	40	6.0
75-71-8	Dichlorodifluoromethane	40	U	40	12
100-41-4	Ethylbenzene	40	U	40	6.8
106-93-4	1,2-Dibromoethane	40	U	40	9.6
108-20-3	Diisopropyl ether	400	U	400	60
91-20-3	Naphthalene	40	U	40	9.6
179601-23-1	m-Xylene & p-Xylene	80	U	80	9.6
104-51-8	n-Butylbenzene	40	U	40	4.8
98-82-8	Isopropylbenzene	40	U	40	5.2
103-65-1	n-Propylbenzene	40	U	40	5.6
78-93-3	2-Butanone	400	U	400	23
108-10-1	4-Methyl-2-pentanone	400	U	400	13
135-98-8	sec-Butylbenzene	40	U	40	5.2
1634-04-4	Methyl tert-butyl ether	40	U	40	6.8
994-05-8	Tert-amyl-methyl ether (TAME)	200	U	200	2.7
75-09-2	Methylene Chloride	40	U	40	13
95-47-6	o-Xylene	40	U	40	5.6
100-42-5	Styrene	40	U	40	4.4
637-92-3	Ethyl-t-butyl ether (ETBE)	200	U	200	4.4
98-06-6	tert-Butylbenzene	40	U	40	5.2
127-18-4	Tetrachloroethene	40	U	40	12
108-88-3	Toluene	40	U	40	5.2
156-60-5	trans-1,2-Dichloroethene	40	U	40	7.6
10061-02-6	trans-1,3-Dichloropropene	40	U	40	7.6
79-01-6	Trichloroethene	950		40	6.8
75-69-4	Trichlorofluoromethane	40	U	40	8.4
108-05-4	Vinyl acetate	80	U	80	7.6
75-01-4	Vinyl chloride	56		40	8.8
75-65-0	tert-Butyl alcohol	2000	U	2000	160
1330-20-7	Xylenes, Total	80	U	80	5.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-30 Lab Sample ID: 240-27585-3

Matrix: Water Lab File ID: UXC3885.D

Analysis Method: 8260B Date Collected: 08/05/2013 11:10

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 14:04

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	40	U	40	7.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	96		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-30 Lab Sample ID: 240-27585-3

Matrix: Water Lab File ID: UXC3885.D

Analysis Method: 8260B Date Collected: 08/05/2013 11:10

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 14:04

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: TB-080513 Lab Sample ID: 240-27585-4

Matrix: Water Lab File ID: UXC3886.D

Analysis Method: 8260B Date Collected: 08/05/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 14:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27585-1

SDG No.:

Client Sample ID: TB-080513 | Lab Sample ID: 240-27585-4

Matrix: Water | Lab File ID: UXC3886.D

Analysis Method: 8260B | Date Collected: 08/05/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 14:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27585-1

SDG No.:

Client Sample ID: TB-080513 | Lab Sample ID: 240-27585-4

Matrix: Water | Lab File ID: UXC3886.D

Analysis Method: 8260B | Date Collected: 08/05/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 14:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	73		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	86		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: TB-080513 Lab Sample ID: 240-27585-4

Matrix: Water Lab File ID: UXC3886.D

Analysis Method: 8260B Date Collected: 08/05/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 14:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

Appendix C

Support Documentation

HOLDTIME

SDG 240-27585-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-080513	240-27585-4	TB	08/05/2013	08/12/2013	08/12/2013	7	0	7
OV	UG/L	DR-DPT-27-30	240-27585-3	NM	08/05/2013	08/12/2013	08/12/2013	7	0	7
OV	UG/L	DR-DPT-27-25	240-27585-2	NM	08/05/2013	08/12/2013	08/12/2013	7	0	7
OV	UG/L	DR-DPT-27-20	240-27585-1	NM	08/05/2013	08/12/2013	08/12/2013	7	0	7

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-27585-1

Job Description: Dump Road Source Areas

For:
Tetra Tech, Inc
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Approved for release.
Mark J Loeb
Project Manager II
8/14/2013 3:13 PM

Designee for
John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
08/14/2013

cc: Samantha Brenner
Ms. Kelly Carper
Vanessa Good
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Laboratories, Inc.
TestAmerica Canton 4101 Shuffel Street NW, North Canton, OH 44720
Tel (330) 497-9396 Fax (330) 497-0772 www.testamericainc.com

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Areas

Report Number: 240-27585-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/06/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.6 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-27-20 (240-27585-1), DR-DPT-27-25 (240-27585-2), DR-DPT-27-30 (240-27585-3)and TB-080513 (240-27585-4) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/12/2013.

2-Chloroethyl vinyl ether failed the recovery criteria low for the MS/MSD of sample DR-DPT-27-20MS/MSD (240-27585-1) in batch 240-97045. Refer to the QC report for details.

Samples DR-DPT-27-20 (240-27585-1)[33.33X], DR-DPT-27-25 (240-27585-2)[333.33X] and DR-DPT-27-30 (240-27585-3)[40X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27585-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27585-1	DR-DPT-27-20	Water	08/05/2013 1020	08/06/2013 0920
240-27585-2	DR-DPT-27-25	Water	08/05/2013 1045	08/06/2013 0920
240-27585-3	DR-DPT-27-30	Water	08/05/2013 1110	08/06/2013 0920
240-27585-4TB	TB-080513	Water	08/05/2013 0000	08/06/2013 0920

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27585-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/5/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	[ ] of [ ] COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below 5 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			Sampler: S. Cameron
Site: MSA	☐ 2 days			
P O #	☐ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs
DR-DPT-27-20	8/5/2013	1020	GW	Water	3		x
DR-DPT-27-25	8/5/2013	1045	GW	Water	3		x
DR-DPT-27-30	8/5/2013	1110	GW	Water	3		x
DR-DPT-	8/5/2013		GW	Water	3		x
DR-DPT-	8/5/2013		GW	Water	3		x
DR-DPT-	8/5/2013		GW	Water	3		x
DR-DPT-	8/5/2013		GW	Water	3		x
DR-DPT-	8/5/2013		GW	Water	3		x
DR-DPT-	8/5/2013		GW	Water	3		x
DR-DPT-	8/5/2013		GW	Water	3		x
DR-DPT-	8/5/2013		GW	Water	3		x
TB-080513	8/5/2013	—	GW	Water	2		x

240-27585 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: 5 day TAT

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
	Tetra Tech	8-5-13/1500		TestAmerica	8/5/13/1500
Relinquished by	Company: TestAmerica	Date/Time: 8/5/13/1700	Received by	Company: TAC	Date/Time: 8/6/13 920
Relinquished by	Company:	Date/Time	Received by	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 27585**
Canton Facility

Client TETRA TECH Site Name _____ Cooler unpacked by:

Cooler Received on 6-6-13 Opened on 6-6-13

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. 2.6 °C	Corrected Cooler Temp. 3.6 °C	
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____	Yes (No)	
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No (NA)	
-Were custody seals on the bottle(s)?	Yes (No)	
3. Shippers' packing slip attached to the cooler(s)?	(Yes) No	
4. Did custody papers accompany the sample(s)?	(Yes) No	
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes) No	
6. Did all bottles arrive in good condition (Unbroken)?	(Yes) No	
7. Could all bottle labels be reconciled with the COC?	(Yes) No	
8. Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
9. Sufficient quantity received to perform indicated analyses?	(Yes) No	
10. Were sample(s) at the correct pH upon receipt?	(Yes) No (NA)	pH Strip Lot# HC376062
11. Were VOAs on the COC?	(Yes) No	
12. Were air bubbles >6 mm in any VOA vials?	Yes (No) NA	
13. Was a trip blank present in the cooler(s)?	(Yes) No	

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preserved(s) added/Lot number(s): _____

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-27-20	240-27585-1	82	95	93	74
DR-DPT-27-25	240-27585-2	86	97	93	75
DR-DPT-27-30	240-27585-3	87	96	96	78
TB-080513	240-27585-4	86	96	90	73
	MB 240-97045/6	82	89	89	74
	LCS 240-97045/5	85	85	98	90
DR-DPT-27-20 MS	240-27585-1 MS	82	87	101	87
DR-DPT-27-20 MSD	240-27585-1 MSD	86	95	103	89

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Instrument ID: A3UX15 Start Date: 07/08/2013 10:21

Analysis Batch Number: 92812 End Date: 07/08/2013 22:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-92812/1		07/08/2013 10:21	1	BFB173A.D	DB-624 0.18(mm)
STD8260 240-92812/2 IC		07/08/2013 10:52	1	UXC2911.D	DB-624 0.18(mm)
STD8260 240-92812/3 IC		07/08/2013 11:14	1	UXC2912.D	DB-624 0.18(mm)
STD8260 240-92812/4 ICIS		07/08/2013 11:37	1	UXC2913.D	DB-624 0.18(mm)
STD8260 240-92812/5 IC		07/08/2013 12:00	1	UXC2914.D	DB-624 0.18(mm)
STD8260 240-92812/6 IC		07/08/2013 12:22	1	UXC2915.D	DB-624 0.18(mm)
STD8260 240-92812/7 IC		07/08/2013 12:44	1	UXC2916.D	DB-624 0.18(mm)
STD 240-92812/8 IC		07/08/2013 13:07	1	UXC2917.D	DB-624 0.18(mm)
STD 240-92812/9 IC		07/08/2013 13:29	1	UXC2918.D	DB-624 0.18(mm)
STD 240-92812/10 IC		07/08/2013 13:51	1	UXC2919.D	DB-624 0.18(mm)
STD 240-92812/11 IC		07/08/2013 14:13	1	UXC2920.D	DB-624 0.18(mm)
STD 240-92812/12 IC		07/08/2013 14:35	1	UXC2921.D	DB-624 0.18(mm)
STD 240-92812/13 IC		07/08/2013 14:58	1	UXC2922.D	DB-624 0.18(mm)
ICV 240-92812/14		07/08/2013 15:20	1	UXC2923.D	DB-624 0.18(mm)
ZZZZZ		07/08/2013 15:43	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 16:28	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 16:51	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 17:14	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 17:36	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 17:59	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 18:21	2		DB-624 0.18(mm)
ZZZZZ		07/08/2013 18:43	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 19:05	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 19:28	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 19:50	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 20:12	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 20:35	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 20:57	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 21:20	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 21:42	1		DB-624 0.18(mm)
ZZZZZ		07/08/2013 22:04	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab File ID: BFB173A.D BFB Injection Date: 07/08/2013

Instrument ID: A3UX15 BFB Injection Time: 10:21

Analysis Batch No.: 92812

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.1	
75	30.0 - 60.0 % of mass 95	47.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.3	(0.3)1
174	50.0 - 120.00 % of mass 95	96.0	
175	5.0 - 9.0 % of mass 174	6.4	(6.7)1
176	95.0 - 101.0 % of mass 174	93.2	(97.1)1
177	5.0 - 9.0 % of mass 176	5.8	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92812/2	UXC2911.D	07/08/2013	10:52
	STD8260 240-92812/3	UXC2912.D	07/08/2013	11:14
	STD8260 240-92812/4	UXC2913.D	07/08/2013	11:37
	STD8260 240-92812/5	UXC2914.D	07/08/2013	12:00
	STD8260 240-92812/6	UXC2915.D	07/08/2013	12:22
	STD8260 240-92812/7	UXC2916.D	07/08/2013	12:44
	STD 240-92812/8	UXC2917.D	07/08/2013	13:07
	STD 240-92812/9	UXC2918.D	07/08/2013	13:29
	STD 240-92812/10	UXC2919.D	07/08/2013	13:51
	STD 240-92812/11	UXC2920.D	07/08/2013	14:13
	STD 240-92812/12	UXC2921.D	07/08/2013	14:35
	STD 240-92812/13	UXC2922.D	07/08/2013	14:58
	ICV 240-92812/14	UXC2923.D	07/08/2013	15:20

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92812/7	UXC2916.D
Level 2	STD8260 240-92812/6	UXC2915.D
Level 3	STD8260 240-92812/5	UXC2914.D
Level 4	STD8260 240-92812/4	UXC2913.D
Level 5	STD8260 240-92812/3	UXC2912.D
Level 6	STD8260 240-92812/2	UXC2911.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.5517 0.5431	0.5051	0.4539	0.5046	0.5080	Ave		0.5111				6.8		15.0			
Chloromethane	0.7450 0.6078	0.6497	0.6272	0.5942	0.5817	Ave		0.6343			0.1000	9.4		15.0			
Vinyl chloride	0.8030 0.6798	0.7214	0.6604	0.6526	0.6540	Ave		0.6952				8.4		15.0			
Bromomethane	0.5746 0.5308	0.4785	0.4688	0.4632	0.4829	Ave		0.4998				8.8		15.0			
Chloroethane	0.5536 0.5359	0.4716	0.4489	0.4640	0.4739	Ave		0.4913				8.7		15.0			
Trichlorofluoromethane	0.9233 0.8028	0.7744	0.7276	0.7273	0.7510	Ave		0.7844				9.4		15.0			
Acrolein	0.0426 0.0387	0.0358	0.0348	0.0356	0.0360	Ave		0.0372				7.9		15.0			
1,1-Dichloroethene	0.4686 0.4313	0.4266	0.4022	0.3797	0.4119	Ave		0.4201				7.2		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.4291 0.3900	0.3806	0.3656	0.3555	0.3814	Ave		0.3837				6.6		15.0			
Acetone	0.2006 0.0841	0.1382	0.0934	0.0847	0.0841	Lin1	0.2253	0.0790							0.9970		0.9900
Iodomethane	0.7728 0.7228	0.7056	0.7167	0.6829	0.7180	Ave		0.7198				4.1		15.0			
Carbon disulfide	1.1103 1.1775	0.9795	1.0058	0.9941	1.1084	Ave		1.0626				7.6		15.0			
Acetonitrile	0.0342 0.0342	0.0344	0.0328	0.0324	0.0327	Ave		0.0334				2.7		15.0			
Methyl acetate	0.2068 0.1691	0.1960	0.1770	0.1680	0.1705	Ave		0.1812				9.0		15.0			
Methylene Chloride	1.3018 0.4640	0.8657	0.5983	0.4874	0.4776	Lin1	0.8447	0.4351							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0167 0.0156	0.0170	0.0161	0.0153	0.0155	Ave		0.0160				4.3		15.0			
Acrylonitrile	0.1144 0.0990	0.1062	0.0933	0.0939	0.0950	Ave		0.1003				8.4		15.0			
Methyl tert-butyl ether	0.8988 0.8964	0.7996	0.8241	0.8106	0.8768	Ave		0.8510				5.3		15.0			
trans-1,2-Dichloroethene	0.5206 0.4591	0.4298	0.4522	0.4206	0.4474	Ave		0.4549				7.7		15.0			
Hexane	0.0826 0.0692	0.0610	0.0650	0.0617	0.0686	Ave		0.0680				12.0		15.0			
1,1-Dichloroethane	0.7726 0.6663	0.6701	0.6652	0.6184	0.6702	Ave		0.6771			0.1000	7.5		15.0			
Vinyl acetate	0.0312 0.0345	0.0260	0.0280	0.0315	0.0344	Ave		0.0309				11.0		15.0			
2,2-Dichloropropane	0.4965 0.4770	0.4469	0.4435	0.4389	0.4822	Ave		0.4642				5.2		15.0			
cis-1,2-Dichloroethene	0.5059 0.4495	0.4464	0.4459	0.4253	0.4531	Ave		0.4543				6.0		15.0			
2-Butanone	0.1047 0.0853	0.0958	0.0799	0.0835	0.0868	Ave		0.0893				10.0		15.0			
Bromochloromethane	0.2137 0.2094	0.2110	0.2139	0.2003	0.2155	Ave		0.2106				2.6		15.0			
Tetrahydrofuran	0.0820 0.0504	0.0877	0.0604	0.0549	0.0551	Lin1	0.0463	0.0506							0.9950		0.9900
Chloroform	0.7726 0.6762	0.6773	0.6628	0.6440	0.6882	Ave		0.6868				6.5		15.0			
1,1,1-Trichloroethane	0.5883 0.6385	0.5832	0.5660	0.5646	0.6191	Ave		0.5933				5.0		15.0			
Cyclohexane	0.6105 0.6777	0.5785	0.5956	0.5731	0.6557	Ave		0.6152				6.9		15.0			
1,1-Dichloropropene	0.4465 0.4830	0.4353	0.4599	0.4414	0.4857	Ave		0.4586				4.7		15.0			
Carbon tetrachloride	0.4691 0.5361	0.4385	0.4786	0.4573	0.5111	Ave		0.4818				7.5		15.0			
Benzene	1.5031 1.4845	1.3669	1.3945	1.3561	1.4893	Ave		1.4324				4.7		15.0			
1,2-Dichloroethane	0.4384 0.4122	0.3982	0.3916	0.3855	0.4305	Ave		0.4094				5.2		15.0			
Trichloroethene	0.3782 0.4038	0.3773	0.3795	0.3721	0.4146	Ave		0.3876				4.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.6050 0.6664	0.5487	0.5594	0.5573	0.6399	Ave		0.5961				8.2		15.0			
1,2-Dichloropropane	0.3150 0.3126	0.2790	0.2830	0.2797	0.3123	Ave		0.2969				6.1		15.0			
Dibromomethane	0.1632 0.1783	0.1660	0.1764	0.1763	0.1854	Ave		0.1743				4.7		15.0			
1,4-Dioxane	0.0025 0.0022	0.0028	0.0024	0.0025	0.0027	Ave		0.0025				8.7		15.0			
Bromodichloromethane	0.3275 0.3923	0.3087	0.3198	0.3427	0.3839	Ave		0.3458				10.0		15.0			
2-Chloroethyl vinyl ether	0.0932 0.1100	0.0988	0.0935	0.0938	0.1125	Ave		0.1003				8.7		15.0			
cis-1,3-Dichloropropene	0.2597 0.4059	0.2989	0.3472	0.3560	0.4259	Lin1	-0.201	0.4117							0.9970		0.9900
4-Methyl-2-pentanone	0.1492 0.1802	0.1596	0.1554	0.1612	0.1759	Ave		0.1636				7.4		15.0			
Toluene	1.5958 1.9404	1.5432	1.6684	1.7318	1.9078	Ave		1.7312				9.4		15.0			
trans-1,3-Dichloropropene	0.3515 0.4226	0.3318	0.3839	0.3842	0.4401	Ave		0.3857				11.0		15.0			
Ethyl methacrylate	0.2342 0.3141	0.2449	0.2575	0.2812	0.3201	Ave		0.2753				13.0		15.0			
1,1,2-Trichloroethane	0.2625 0.2847	0.2562	0.2761	0.2713	0.3014	Ave		0.2754				5.9		15.0			
Tetrachloroethene	0.4046 0.4299	0.3997	0.4074	0.3949	0.4298	Ave		0.4110				3.7		15.0			
1,3-Dichloropropane	0.4835 0.4883	0.4652	0.4874	0.4690	0.4964	Ave		0.4816				2.5		15.0			
2-Hexanone	0.1237 0.1355	0.1336	0.1336	0.1363	0.1361	Ave		0.1331				3.6		15.0			
Dibromochloromethane	0.2255 0.3382	0.2420	0.2722	0.2787	0.3325	Lin1	-0.167	0.3339							0.9960		0.9900
1,2-Dibromoethane	0.2963 0.2895	0.2929	0.3004	0.2862	0.3057	Ave		0.2952				2.4		15.0			
Chlorobenzene	1.2736 1.3032	1.2051	1.2413	1.2067	1.3099	Ave		1.2566			0.3000	3.7		15.0			
1,1,1,2-Tetrachloroethane	0.4105 0.5095	0.3735	0.4211	0.4480	0.4955	Ave		0.4430				12.0		15.0			
Ethylbenzene	0.5758 0.7453	0.6099	0.6588	0.6554	0.7276	Ave		0.6621				9.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	1.4003 1.8959	1.3982	1.5803	1.6215	1.7988	Ave		1.6158				13.0		15.0			
o-Xylene	0.7653 0.9894	0.7310	0.8658	0.8492	0.9562	Ave		0.8595				12.0		15.0			
Styrene	1.0640 1.5189	1.1029	1.2664	1.3028	1.4583	Ave		1.2856				14.0		15.0			
Bromoform	0.1573 0.2170	0.1331	0.1702	0.1725	0.2121	Lin1	-0.115	0.2130			0.1000				0.9940		0.9900
Isopropylbenzene	1.8485 2.6148	1.8208	2.1481	2.1625	2.4574	Ave		2.1753				15.0		15.0			
1,1,2,2-Tetrachloroethane	0.5862 0.5798	0.5197	0.5495	0.5317	0.6073	Ave		0.5624			0.3000	6.1		15.0			
Bromobenzene	0.8419 0.8711	0.8006	0.8406	0.8276	0.9336	Ave		0.8526				5.4		15.0			
1,2,3-Trichloropropane	0.2096 0.1794	0.1975	0.1917	0.1847	0.1966	Ave		0.1932				5.5		15.0			
trans-1,4-Dichloro-2-butene	0.1251 0.1372	0.1220	0.1205	0.1195	0.1439	Ave		0.1280				7.9		15.0			
n-Propylbenzene	0.7734 0.9144	0.7493	0.8306	0.8038	0.9589	Ave		0.8384				9.8		15.0			
2-Chlorotoluene	0.7242 0.8478	0.7031	0.7968	0.7776	0.8846	Ave		0.7890				8.8		15.0			
1,3,5-Trimethylbenzene	2.1015 2.9558	2.1539	2.5175	2.5267	2.9870	Ave		2.5404				15.0		15.0			
4-Chlorotoluene	2.2590 2.6734	2.3259	2.5418	2.4182	2.7891	Ave		2.5012				8.2		15.0			
tert-Butylbenzene	1.6393 2.5942	1.8353	2.1170	2.1085	2.5263	Lin1	-1.339	2.5552							0.9960		0.9900
1,2,4-Trimethylbenzene	2.1545 3.0175	2.2373	2.5961	2.6094	3.0293	Ave		2.6074				14.0		15.0			
sec-Butylbenzene	2.6277 3.5591	2.6935	3.0641	2.9629	3.5696	Ave		3.0795				13.0		15.0			
1,3-Dichlorobenzene	1.7337 1.7818	1.6648	1.7289	1.6465	1.8604	Ave		1.7360				4.5		15.0			
p-Isopropyltoluene	2.2077 3.1387	2.2763	2.6231	2.6903	3.1222	Ave		2.6764				15.0		15.0			
1,4-Dichlorobenzene	1.8225 1.8367	1.7585	1.8284	1.7499	1.9331	Ave		1.8215				3.6		15.0			
n-Butylbenzene	1.8985 2.6104	1.9824	2.1389	2.1783	2.5811	Ave		2.2316				13.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.7374 1.7368	1.6448	1.6874	1.6099	1.7724	Ave		1.6981				3.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0882 0.1050	0.0823	0.0767	0.0836	0.1009	Ave		0.0895				12.0		15.0			
1,3,5-Trichlorobenzene	1.1990 1.2803	1.1454	1.1673	1.1696	1.3286	Ave		1.2150				6.0		15.0			
1,2,4-Trichlorobenzene	0.8485 0.9941	0.7453	0.8730	0.8702	1.0111	Ave		0.8904				11.0		15.0			
Hexachlorobutadiene	0.6139 0.5599	0.5582	0.5947	0.5505	0.6095	Ave		0.5811				4.9		15.0			
Naphthalene	1.2492 1.8418	1.2054	1.4209	1.5345	1.8430	Lin1	-1.002	1.8289							0.9950		0.9900
1,2,3-Trichlorobenzene	0.7587 0.7995	0.6968	0.7984	0.7726	0.8675	Ave		0.7822				7.2		15.0			
Dibromofluoromethane (Surr)	0.3853 0.3609	0.3389	0.3362	0.3395	0.3573	Ave		0.3530				5.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3605 0.3426	0.3332	0.3332	0.3318	0.3472	Ave		0.3414				3.3		15.0			
Toluene-d8 (Surr)	1.4119 1.6935	1.3902	1.4468	1.5099	1.6289	Ave		1.5135				8.1		15.0			
4-Bromofluorobenzene (Surr)	0.6075 0.6406	0.5598	0.6052	0.6044	0.6263	Ave		0.6073				4.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92812/7	UXC2916.D
Level 2	STD8260 240-92812/6	UXC2915.D
Level 3	STD8260 240-92812/5	UXC2914.D
Level 4	STD8260 240-92812/4	UXC2913.D
Level 5	STD8260 240-92812/3	UXC2912.D
Level 6	STD8260 240-92812/2	UXC2911.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	54731 2493075	107397	253685	584278	1236869	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	73905 2790138	138143	350550	688000	1416362	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	79659 3120828	153379	369083	755720	1592565	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	57000 2436426	101732	262038	536310	1175787	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	54920 2459978	100274	250897	537271	1153926	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	91595 3685413	164646	406674	842130	1828709	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	42252 1777158	76123	194600	411944	875415	10.0 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	46484 1979973	90696	224807	439700	1003003	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	42567 1790075	80918	204323	411612	928702	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Lin1	39808 772030	58761	104412	196207	409624	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	76666 3318070	150023	400557	790719	1748268	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	110152 5405336	208254	562162	1151108	2698965	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Ave	33888 1567860	73207	183336	374761	796059	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	41022 1552567	83344	197827	388969	830221	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	129141 2129799	184062	334374	564401	1162994	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	33139 1428305	72083	180255	354178	756050	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	22696 908509	45155	104270	217445	462870	2.00 80.0	4.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	89167 4114830	170012	460569	938601	2134935	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	51643 2107444	91377	252723	487010	1089287	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	8196 317689	12976	36313	71449	167030	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	76642 3058467	142482	371753	716112	1631785	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	3091 158533	5533	15639	36511	83859	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	49260 2189620	95013	247898	508238	1174079	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	50188 2063453	94917	249194	492506	1103189	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	20773 783144	40750	89316	193344	422668	2.00 80.0	4.00	10.0	20.0	40.0
Bromochloromethane	FB	Ave	21203 961032	44869	119556	231972	524609	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Lin1	8136 231234	18656	33780	63626	134286	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	76647 3103986	144001	370426	745755	1675698	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	58359 2930877	124007	316351	653801	1507583	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	60568 3110913	122994	332887	663572	1596602	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	44293 2217062	92544	257050	511139	1182584	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	46533 2460866	93241	267496	529530	1244546	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	149120 6814482	290620	779407	1570259	3626379	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	43487 1892077	84671	218863	446397	1048338	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	37519 1853589	80226	212121	430860	1009518	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	60017 3058894	116655	312665	645317	1557994	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	31246 1435068	59324	158149	323874	760522	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	16189 818261	35288	98591	204141	451431	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	12294 494098	29631	68010	141965	323616	50.0 2000	100	250	500	1000
Bromodichloromethane	FB	Ave	32486 1800675	65626	178757	396836	934758	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	18490 1009502	42025	104496	217236	547619	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Lin1	25763 1863413	63556	194060	412225	1037103	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	29606 1654656	67874	173659	373424	856505	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	125916 7115919	267653	734167	1581264	3736863	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	27736 1549700	57544	168928	350846	861967	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	18478 1151696	42467	113326	256782	627029	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	20715 1043937	44432	121508	247744	590440	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	31925 1576654	69330	179268	360545	841782	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	38151 1790668	80677	214451	428285	972384	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	19520 993640	46334	117563	248848	533158	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Lin1	17796 1240370	41981	119770	254500	651276	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	23381 1061671	50809	132203	261368	598769	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	100493 4779097	209014	546194	1101809	2565700	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	32389 1868447	64785	185295	409045	970524	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	45430 2733117	105789	289885	598425	1425242	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	220977 13905058	485014	1390731	2961223	7046742	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	60386 3628249	126782	380976	775390	1872841	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	83953 5570266	191282	557273	1189568	2856474	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Lin1	12410 795932	23090	74878	157539	415405	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	145851 9588850	315801	945249	1974601	4813302	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	33960 1595060	65192	177593	361044	832713	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	48772 2396320	100415	271673	561952	1280197	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	12141 493392	24778	61952	125436	269534	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	7246 377556	15304	38950	81118	197362	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	44806 2515451	93984	268412	545818	1314918	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	41954 2332069	88187	257514	528032	1212999	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	121746 8131141	270171	813584	1715740	4095967	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	130869 7354235	291742	821436	1642052	3824591	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Lin1	94967 7136342	230203	684166	1431741	3464307	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	124817 8300866	280632	838974	1771873	4154072	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	152229 9790601	337853	990221	2011935	4894989	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	100437 4901475	208816	558730	1118025	2551127	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	127896 8634331	285527	847705	1826849	4281363	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	105582 5052542	220571	590901	1188277	2650769	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	109985 7180941	248653	691234	1479167	3539393	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	100653 4777654	206305	545314	1093180	2430500	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	5111 288972	10322	24790	56760	138415	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	69460 3521892	143671	377226	794189	1821934	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	49157 2734799	93489	282121	590880	1386522	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Ave	35566 1540200	70011	192177	373796	835837	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Lin1	72371 5066631	151195	459179	1041993	2527309	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	43953 2199279	87401	258036	524601	1189548	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	38222 1656837	72048	187924	393167	870103	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	35762 1572671	70845	186200	384148	845296	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	111404 6210247	241121	636637	1378636	3190446	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	47938 2349106	97086	266293	551844	1226777	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 13:07 Calibration End Date: 07/08/2013 14:58 Calibration ID: 16194

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-92812/13	UXC2922.D
Level 2	STD 240-92812/12	UXC2921.D
Level 3	STD 240-92812/11	UXC2920.D
Level 4	STD 240-92812/10	UXC2919.D
Level 5	STD 240-92812/9	UXC2918.D
Level 6	STD 240-92812/8	UXC2917.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	1.2261 1.1211	1.2094	1.1113	1.0897	1.1354	Ave		1.1488				4.8		15.0			
Ethyl ether	0.3304 0.2512	0.2858	0.2556	0.2506	0.2677	Ave		0.2735				11.0		15.0			
3-Chloro-1-propene	0.2172 0.2304	0.2036	0.2039	0.2060	0.2257	Ave		0.2145				5.5		15.0			
Diisopropyl ether	0.3236 0.3838	0.3274	0.3261	0.3330	0.3669	Ave		0.3435				7.4		15.0			
2-Chloro-1,3-butadiene	0.5351 0.6018	0.5589	0.5603	0.5387	0.5994	Ave		0.5657				5.1		15.0			
Ethyl-t-butyl ether (ETBE)	0.8582 0.9609	0.8535	0.8617	0.8572	0.9334	Ave		0.8875				5.3		15.0			
Ethyl acetate	0.1542 0.1275	0.1119	0.1182	0.1260	0.1275	Ave		0.1275				11.0		15.0			
Propionitrile	0.0338 0.0301	0.0327	0.0299	0.0313	0.0320	Ave		0.0316				4.8		15.0			
Methacrylonitrile	0.1131 0.1096	0.1268	0.0925	0.1079	0.1069	Ave		0.1095				10.0		15.0			
Isobutyl alcohol	0.0065 0.0053	0.0054	0.0056	0.0055	0.0056	Ave		0.0057				7.9		15.0			
Tert-amyl-methyl ether (TAME)	0.6887 0.8144	0.6554	0.6837	0.7149	0.7935	Ave		0.7251				8.9		15.0			
n-Heptane	0.0663 0.0740	0.0610	0.0614	0.0626	0.0725	Ave		0.0663				8.6		15.0			
n-Butanol	0.0040 0.0039	0.0042	0.0039	0.0038	0.0044	Ave		0.0040				5.3		15.0			
Methyl methacrylate	0.1153 0.1230	0.1139	0.1082	0.1170	0.1242	Ave		0.1169				5.1		15.0			
2-Nitropropane	0.0227 0.0180	0.0222	0.0169	0.0160	0.0182	Ave		0.0190				15.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 13:07 Calibration End Date: 07/08/2013 14:58 Calibration ID: 16194

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0652 0.0864	0.0660	0.0690	0.0787	0.0888	Ave		0.0757				14.0		15.0			
1,2,3-Trimethylbenzene	2.3950 3.3870	2.5386	2.6503	2.9593	3.2397	Ave		2.8616				14.0		15.0			
2-Methylnaphthalene	0.3447 0.8433	0.3991	0.4672	0.6032	0.8046	Qua	-1.896	0.7545	0.0014						0.9980		0.9900
n-Butyl acetate	0.2221 0.2535	0.2088	0.2092	0.2235	0.2530	Ave		0.2284				8.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 13:07 Calibration End Date: 07/08/2013 14:58 Calibration ID: 16194

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-92812/13	UXC2922.D
Level 2	STD 240-92812/12	UXC2921.D
Level 3	STD 240-92812/11	UXC2920.D
Level 4	STD 240-92812/10	UXC2919.D
Level 5	STD 240-92812/9	UXC2918.D
Level 6	STD 240-92812/8	UXC2917.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	121732 4961953	249637	584891	1203634	2520371	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	32803 1111933	58989	134533	276781	594226	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	21569 1019660	42029	107316	227533	500923	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	160655 8494126	337912	858137	1838987	4071848	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	53132 2663716	115359	294924	594998	1330618	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	85209 4252765	176171	453564	946870	2072021	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl acetate	FB	Ave	30619 1128285	46177	124436	278365	566109	2.00 80.0	4.00	10.0	20.0	40.0
Propionitrile	FB	Ave	6712 266288	13488	31512	69132	142127	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	11234 484936	26173	48671	119154	237292	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	12950 469040	22089	59363	122001	249972	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	68375 3604586	135289	359869	789696	1761463	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	6587 327395	12599	32332	69110	160951	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	FB	Ave	8039 343782	17235	41394	83992	194745	20.0 800	40.0	100	200	400
Methyl methacrylate	FB	Ave	11451 544319	23509	56972	129203	275626	1.00 40.0	2.00	5.00	10.0	20.0
2-Nitropropane	FB	Ave	4514 159655	9152	17742	35302	80940	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	32624 1973919	66201	178587	424081	1001659	10.0 400	20.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-27585-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 13:07 Calibration End Date: 07/08/2013 14:58 Calibration ID: 16194

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Ave	119841 7737553	254479	685463	1593713	3654761	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Qua	34501 3853167	80022	241671	649756	1815429	2.00 80.0	4.00	10.0	20.0	40.0
n-Butyl acetate	FB	Ave	44102 2244179	86186	220235	493786	1123308	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab Sample ID: ICV 240-92812/14 Calibration Date: 07/08/2013 15:20

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC2923.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.5111	0.3480		1.00	0.0100	-31.9	50.0
Chloromethane	Ave	0.6343	0.4884	0.1000	1.00	0.0100	-23.0	50.0
Vinyl chloride	Ave	0.6952	0.5384		1.00	0.0100	-22.6*	20.0
Bromomethane	Ave	0.4998	0.3589		1.00	0.0100	-28.2	50.0
Chloroethane	Ave	0.4913	0.3797		1.00	0.0100	-22.7	50.0
Trichlorofluoromethane	Ave	0.7844	0.7094		1.00	0.0100	-9.6	50.0
Acrolein	Ave	0.0372	0.0353		20.0	0.0300	-5.1	50.0
1,1-Dichloroethene	Ave	0.4201	0.4067		1.00	0.0100	-3.2	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.3837	0.4057		1.00	0.0100	5.8	50.0
Acetone	Lin1		0.0730		10.0	0.0200	-21.9	50.0
Iodomethane	Ave	0.7198	0.6939		1.00	0.0100	-3.6	50.0
Carbon disulfide	Ave	1.063	1.125		1.00	0.0100	5.9	50.0
Acetonitrile	Ave	0.0334	0.0328		20.0	0.0300	-1.9	50.0
Methyl acetate	Ave	0.1812	0.1613		10.0	0.0100	-11.0	50.0
Methylene Chloride	Lin1		0.4756		1.00	0.0100	-10.1	50.0
tert-Butyl alcohol	Ave	0.0160	0.0139		50.0	0.200	-13.1	50.0
Acrylonitrile	Ave	0.1003	0.0886		20.0	0.0300	-11.6	50.0
Methyl tert-butyl ether	Ave	0.8510	0.7886		1.00	0.0100	-7.3	50.0
trans-1,2-Dichloroethene	Ave	0.4549	0.4207		1.00	0.0100	-7.5	50.0
Hexane	Ave	0.0680	0.0712		1.00	0.0100	4.7	20.0
1,1-Dichloroethane	Ave	0.6771	0.6483	0.1000	1.00	0.0100	-4.3	50.0
Vinyl acetate	Ave	0.0309	0.0382		2.00	0.0100	23.4	50.0
2,2-Dichloropropane	Ave	0.4642	0.4084		1.00	0.0100	-12.0	50.0
cis-1,2-Dichloroethene	Ave	0.4543	0.4223		1.00	0.0100	-7.1	50.0
2-Butanone	Ave	0.0893	0.0782		10.0	0.0200	-12.5	50.0
Bromochloromethane	Ave	0.2106	0.1974		1.00	0.0100	-6.3	50.0
Tetrahydrofuran	Lin1		0.0513		5.00	0.0100	-7.9	50.0
Chloroform	Ave	0.6868	0.6364		1.00	0.0100	-7.3	20.0
1,1,1-Trichloroethane	Ave	0.5933	0.5492		1.00	0.0100	-7.4	50.0
Cyclohexane	Ave	0.6152	0.6028		1.00	0.0100	-2.0	50.0
1,1-Dichloropropene	Ave	0.4586	0.4561		1.00	0.0100	-0.6	50.0
Carbon tetrachloride	Ave	0.4818	0.4449		1.00	0.0100	-7.7	50.0
Benzene	Ave	1.432	1.445		1.00	0.0100	0.9	50.0
1,2-Dichloroethane	Ave	0.4094	0.4145		1.00	0.0100	1.2	50.0
Trichloroethene	Ave	0.3876	0.3847		1.00	0.0100	-0.7	50.0
Methylcyclohexane	Ave	0.5961	0.5476		1.00	0.0100	-8.1	50.0
1,2-Dichloropropane	Ave	0.2969	0.2955		1.00	0.0100	-0.5	20.0
Dibromomethane	Ave	0.1743	0.1820		1.00	0.0100	4.5	50.0
Bromodichloromethane	Ave	0.3458	0.3427		1.00	0.0100	-0.9	50.0
2-Chloroethyl vinyl ether	Ave	0.1003	0.0999		10.0	0.0100	-0.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab Sample ID: ICV 240-92812/14 Calibration Date: 07/08/2013 15:20

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC2923.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Lin1		0.3643		1.00	0.0100	-6.6	50.0
4-Methyl-2-pentanone	Ave	0.1636	0.1595		10.0	0.0200	-2.5	50.0
Toluene	Ave	1.731	1.813		1.00	0.0100	4.7	20.0
trans-1,3-Dichloropropene	Ave	0.3857	0.3915		1.00	0.0100	1.5	50.0
1,1,2-Trichloroethane	Ave	0.2754	0.2976		1.00	0.0100	8.1	50.0
Tetrachloroethene	Ave	0.4110	0.4130		1.00	0.0100	0.5	50.0
1,3-Dichloropropane	Ave	0.4816	0.5035		1.00	0.0100	4.5	50.0
2-Hexanone	Ave	0.1331	0.1314		10.0	0.0200	-1.3	50.0
Dibromochloromethane	Lin1		0.2789		1.00	0.0100	-11.5	50.0
1,2-Dibromoethane	Ave	0.2952	0.3097		1.00	0.0100	4.9	50.0
Chlorobenzene	Ave	1.257	1.263	0.3000	1.00	0.0100	0.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4430	0.4302		1.00	0.0100	-2.9	50.0
Ethylbenzene	Ave	0.6621	0.6863		1.00	0.0100	3.7	20.0
m-Xylene & p-Xylene	Ave	1.616	1.648		2.00	0.0200	2.0	50.0
o-Xylene	Ave	0.8595	0.8536		1.00	0.0100	-0.7	50.0
Styrene	Ave	1.286	1.379		1.00	0.0100	7.3	50.0
Bromoform	Lin1		0.1716	0.1000	1.00	0.0100	-14.0	50.0
Isopropylbenzene	Ave	2.175	2.138		1.00	0.0100	-1.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5624	0.5665	0.3000	1.00	0.0100	0.7	50.0
Bromobenzene	Ave	0.8526	0.8607		1.00	0.0100	1.0	50.0
1,2,3-Trichloropropane	Ave	0.1932	0.1892		1.00	0.0100	-2.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1280	0.1247		1.00	0.0200	-2.6	50.0
n-Propylbenzene	Ave	0.8384	0.8930		1.00	0.0100	6.5	50.0
2-Chlorotoluene	Ave	0.7890	0.8235		1.00	0.0100	4.4	50.0
1,3,5-Trimethylbenzene	Ave	2.540	2.615		1.00	0.0100	2.9	50.0
4-Chlorotoluene	Ave	2.501	2.541		1.00	0.0100	1.6	50.0
tert-Butylbenzene	Lin1		2.138		1.00	0.0100	-11.1	50.0
1,2,4-Trimethylbenzene	Ave	2.607	2.701		1.00	0.0100	3.6	50.0
sec-Butylbenzene	Ave	3.079	3.060		1.00	0.0100	-0.6	50.0
1,3-Dichlorobenzene	Ave	1.736	1.688		1.00	0.0100	-2.7	50.0
p-Isopropyltoluene	Ave	2.676	2.823		1.00	0.0100	5.5	50.0
1,4-Dichlorobenzene	Ave	1.822	1.740		1.00	0.0100	-4.5	50.0
n-Butylbenzene	Ave	2.232	2.264		1.00	0.0100	1.4	50.0
1,2-Dichlorobenzene	Ave	1.698	1.656		1.00	0.0100	-2.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0895	0.0831		2.00	0.0100	-7.1	50.0
1,2,4-Trichlorobenzene	Ave	0.8904	0.8391		1.00	0.0100	-5.8	50.0
Hexachlorobutadiene	Ave	0.5811	0.5037		1.00	0.0100	-13.3	50.0
Naphthalene	Lin1		1.456		1.00	0.0100	-14.9	50.0
1,2,3-Trichlorobenzene	Ave	0.7822	0.7415		1.00	0.0100	-5.2	50.0
Dibromofluoromethane (Surr)	Ave	0.3530	0.3073		0.00775	0.00890	-13.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3414	0.3108		0.00810	0.00890	-9.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab Sample ID: ICV 240-92812/14 Calibration Date: 07/08/2013 15:20

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC2923.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.514	1.456		0.00856	0.00890	-3.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6073	0.5579		0.00818	0.00890	-8.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab Sample ID: ICV 240-92812/14 Calibration Date: 07/08/2013 15:20

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 13:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 14:58

Lab File ID: UXC2923.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2735	0.2541		2.00	0.0100	-7.1	50.0
Diisopropyl ether	Ave	0.3435	0.3001		10.0	0.0100	-12.6	50.0
Isobutyl alcohol	Ave	0.0057	0.0055		50.0	0.500	-2.1	50.0
Cyclohexanone	Ave	0.0757	0.0134		20.0	0.200	-82.3*	50.0
1,2,3-Trimethylbenzene	Ave	2.862	2.829		0.00989	0.0100	-1.1	50.0

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Instrument ID: A3UX15 Start Date: 08/12/2013 09:49

Analysis Batch Number: 97045 End Date: 08/12/2013 20:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-97045/1		08/12/2013 09:49	1	BFB198.D	DB-624 0.18(mm)
CCVIS 240-97045/2		08/12/2013 10:18	1	UXC3875.D	DB-624 0.18(mm)
LCS 240-97045/5		08/12/2013 10:41	1	UXC3876.D	DB-624 0.18(mm)
CCV 240-97045/3		08/12/2013 11:03	1	UXC3877.D	DB-624 0.18(mm)
CCV 240-97045/4		08/12/2013 11:26	1	UXC3878.D	DB-624 0.18(mm)
MB 240-97045/6		08/12/2013 11:48	1	UXC3879.D	DB-624 0.18(mm)
ZZZZZ		08/12/2013 12:11	25		DB-624 0.18(mm)
ZZZZZ		08/12/2013 12:34	1		DB-624 0.18(mm)
ZZZZZ		08/12/2013 12:56	1		DB-624 0.18(mm)
240-27585-1	DR-DPT-27-20	08/12/2013 13:19	33.33	UXC3883.D	DB-624 0.18(mm)
240-27585-2	DR-DPT-27-25	08/12/2013 13:41	333.33	UXC3884.D	DB-624 0.18(mm)
240-27585-3	DR-DPT-27-30	08/12/2013 14:04	40	UXC3885.D	DB-624 0.18(mm)
240-27585-4	TB-080513	08/12/2013 14:26	1	UXC3886.D	DB-624 0.18(mm)
ZZZZZ		08/12/2013 14:49	1		DB-624 0.18(mm)
ZZZZZ		08/12/2013 15:11	1		DB-624 0.18(mm)
ZZZZZ		08/12/2013 15:34	1		DB-624 0.18(mm)
ZZZZZ		08/12/2013 15:57	33.33		DB-624 0.18(mm)
ZZZZZ		08/12/2013 16:41	16.67		DB-624 0.18(mm)
ZZZZZ		08/12/2013 18:10	1		DB-624 0.18(mm)
ZZZZZ		08/12/2013 18:33	1		DB-624 0.18(mm)
ZZZZZ		08/12/2013 18:55	1		DB-624 0.18(mm)
ZZZZZ		08/12/2013 19:17	16.67		DB-624 0.18(mm)
240-27585-1 MS	DR-DPT-27-20 MS	08/12/2013 19:39	33.33	UXC3900.D	DB-624 0.18(mm)
240-27585-1 MSD	DR-DPT-27-20 MSD	08/12/2013 20:01	33.33	UXC3901.D	DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab File ID: BFB198.D BFB Injection Date: 08/12/2013

Instrument ID: A3UX15 BFB Injection Time: 09:49

Analysis Batch No.: 97045

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.3	
75	30.0 - 60.0 % of mass 95	48.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.4)1
174	50.0 - 120.00 % of mass 95	95.1	
175	5.0 - 9.0 % of mass 174	5.9	(6.2)1
176	95.0 - 101.0 % of mass 174	91.1	(95.8)1
177	5.0 - 9.0 % of mass 176	5.9	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97045/2	UXC3875.D	08/12/2013	10:18
	LCS 240-97045/5	UXC3876.D	08/12/2013	10:41
	CCV 240-97045/3	UXC3877.D	08/12/2013	11:03
	CCV 240-97045/4	UXC3878.D	08/12/2013	11:26
	MB 240-97045/6	UXC3879.D	08/12/2013	11:48
DR-DPT-27-20	240-27585-1	UXC3883.D	08/12/2013	13:19
DR-DPT-27-25	240-27585-2	UXC3884.D	08/12/2013	13:41
DR-DPT-27-30	240-27585-3	UXC3885.D	08/12/2013	14:04
TB-080513	240-27585-4	UXC3886.D	08/12/2013	14:26
DR-DPT-27-20 MS	240-27585-1 MS	UXC3900.D	08/12/2013	19:39
DR-DPT-27-20 MSD	240-27585-1 MSD	UXC3901.D	08/12/2013	20:01

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab Sample ID: CCVIS 240-97045/2 Calibration Date: 08/12/2013 10:18

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3875.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.5111	0.4136		1.00	0.0100	-19.1	50.0
Chloromethane	Ave	0.6343	0.5493	0.1000	1.00	0.0100	-13.4	50.0
Vinyl chloride	Ave	0.6952	0.6346		1.00	0.0100	-8.7	20.0
Bromomethane	Ave	0.4998	0.3989		1.00	0.0100	-20.2	50.0
Chloroethane	Ave	0.4913	0.4052		1.00	0.0100	-17.5	50.0
Trichlorofluoromethane	Ave	0.7844	0.7465		1.00	0.0100	-4.8	50.0
Acrolein	Ave	0.0372	0.0265		20.0	0.100	-28.9	50.0
1,1-Dichloroethene	Ave	0.4201	0.3854		1.00	0.0100	-8.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.3837	0.3386		1.00	0.0100	-11.8	50.0
Acetone	Lin1		0.0740		10.0	0.0200	-20.5	50.0
Iodomethane	Ave	0.7198	0.6686		1.00	0.0100	-7.1	50.0
Carbon disulfide	Ave	1.063	1.105		1.00	0.0100	3.9	50.0
Acetonitrile	Ave	0.0334	0.0321		20.0	0.100	-4.1	50.0
Methyl acetate	Ave	0.1812	0.1776		10.0	0.0200	-2.0	50.0
Methylene Chloride	Lin1		0.4812		1.00	0.0100	-8.8	50.0
tert-Butyl alcohol	Ave	0.0160	0.0160		50.0	0.200	-0.4	50.0
Acrylonitrile	Ave	0.1003	0.0985		20.0	0.0200	-1.7	50.0
Methyl tert-butyl ether	Ave	0.8510	0.8276		1.00	0.0100	-2.8	50.0
trans-1,2-Dichloroethene	Ave	0.4549	0.4035		1.00	0.0100	-11.3	50.0
Hexane	Ave	0.0680	0.0694		1.00	0.0100	2.0	20.0
1,1-Dichloroethane	Ave	0.6771	0.6445	0.1000	1.00	0.0100	-4.8	50.0
Vinyl acetate	Ave	0.0309	0.0331		2.00	0.0100	7.0	50.0
2,2-Dichloropropane	Ave	0.4642	0.4558		1.00	0.0100	-1.8	50.0
cis-1,2-Dichloroethene	Ave	0.4543	0.4163		1.00	0.0100	-8.4	50.0
2-Butanone	Ave	0.0893	0.0884		10.0	0.0200	-1.1	50.0
Bromochloromethane	Ave	0.2106	0.1935		1.00	0.0100	-8.2	50.0
Tetrahydrofuran	Lin1		0.0540		5.00	0.0100	-2.5	50.0
Chloroform	Ave	0.6868	0.6270		1.00	0.0100	-8.7	20.0
1,1,1-Trichloroethane	Ave	0.5933	0.5564		1.00	0.0100	-6.2	50.0
Cyclohexane	Ave	0.6152	0.6321		1.00	0.0100	2.8	50.0
1,1-Dichloropropene	Ave	0.4586	0.4575		1.00	0.0100	-0.2	50.0
Carbon tetrachloride	Ave	0.4818	0.4830		1.00	0.0100	0.2	50.0
Benzene	Ave	1.432	1.409		1.00	0.0100	-1.7	50.0
1,2-Dichloroethane	Ave	0.4094	0.3911		1.00	0.0100	-4.5	50.0
Trichloroethene	Ave	0.3876	0.3695		1.00	0.0100	-4.7	50.0
Methylcyclohexane	Ave	0.5961	0.5850		1.00	0.0100	-1.9	50.0
1,2-Dichloropropane	Ave	0.2969	0.3110		1.00	0.0100	4.7	20.0
Dibromomethane	Ave	0.1743	0.1688		1.00	0.0100	-3.1	50.0
1,4-Dioxane	Ave	0.0025	0.0026		50.0	0.500	2.8	50.0
Bromodichloromethane	Ave	0.3458	0.3630		1.00	0.0100	5.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab Sample ID: CCVIS 240-97045/2 Calibration Date: 08/12/2013 10:18

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3875.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1003	0.1338		10.0	0.0200	33.5	50.0
cis-1,3-Dichloropropene	Lin1		0.4094		1.00	0.0100	4.3	50.0
4-Methyl-2-pentanone	Ave	0.1636	0.1901		10.0	0.0200	16.2	50.0
Toluene	Ave	1.731	1.894		1.00	0.0100	9.4	20.0
trans-1,3-Dichloropropene	Ave	0.3857	0.4378		1.00	0.0100	13.5	50.0
Ethyl methacrylate	Ave	0.2753	0.3668		1.00	0.0100	33.2	50.0
1,1,2-Trichloroethane	Ave	0.2754	0.3034		1.00	0.0100	10.2	50.0
Tetrachloroethene	Ave	0.4110	0.3947		1.00	0.0100	-4.0	50.0
1,3-Dichloropropane	Ave	0.4816	0.5616		1.00	0.0100	16.6	50.0
2-Hexanone	Ave	0.1331	0.1605		10.0	0.0200	20.6	50.0
Dibromochloromethane	Lin1		0.3135		1.00	0.0100	-1.1	50.0
1,2-Dibromoethane	Ave	0.2952	0.3121		1.00	0.0100	5.7	50.0
Chlorobenzene	Ave	1.257	1.277	0.3000	1.00	0.0100	1.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4430	0.4139		1.00	0.0100	-6.6	50.0
Ethylbenzene	Ave	0.6621	0.6866		1.00	0.0100	3.7	20.0
m-Xylene & p-Xylene	Ave	1.616	1.727		2.00	0.0200	6.9	50.0
o-Xylene	Ave	0.8595	0.8451		1.00	0.0100	-1.7	50.0
Styrene	Ave	1.286	1.378		1.00	0.0100	7.2	50.0
Bromoform	Lin1		0.1909	0.1000	1.00	0.0100	-5.0	50.0
Isopropylbenzene	Ave	2.175	2.128		1.00	0.0100	-2.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5624	0.6435	0.3000	1.00	0.0100	14.4	50.0
Bromobenzene	Ave	0.8526	0.9799		1.00	0.0100	14.9	50.0
1,2,3-Trichloropropane	Ave	0.1932	0.1993		1.00	0.0100	3.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1280	0.0918		1.00	0.0100	-28.3	50.0
n-Propylbenzene	Ave	0.8384	0.9678		1.00	0.0100	15.4	50.0
2-Chlorotoluene	Ave	0.7890	0.9135		1.00	0.0100	15.8	50.0
1,3,5-Trimethylbenzene	Ave	2.540	2.915		1.00	0.0100	14.7	50.0
4-Chlorotoluene	Ave	2.501	2.904		1.00	0.0100	16.1	50.0
tert-Butylbenzene	Lin1		2.341		1.00	0.0100	-3.1	50.0
1,2,4-Trimethylbenzene	Ave	2.607	2.987		1.00	0.0100	14.6	50.0
sec-Butylbenzene	Ave	3.079	3.495		1.00	0.0100	13.5	50.0
1,3-Dichlorobenzene	Ave	1.736	1.784		1.00	0.0100	2.8	50.0
p-Isopropyltoluene	Ave	2.676	2.998		1.00	0.0100	12.0	50.0
1,4-Dichlorobenzene	Ave	1.822	1.829		1.00	0.0100	0.4	50.0
n-Butylbenzene	Ave	2.232	2.450		1.00	0.0100	9.8	50.0
1,2-Dichlorobenzene	Ave	1.698	1.717		1.00	0.0100	1.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0895	0.0938		2.00	0.0100	4.8	50.0
1,3,5-Trichlorobenzene	Ave	1.215	1.092		1.00	0.0100	-10.1	50.0
1,2,4-Trichlorobenzene	Ave	0.8904	0.7841		1.00	0.0100	-11.9	50.0
Hexachlorobutadiene	Ave	0.5811	0.4848		1.00	0.0100	-16.6	50.0
Naphthalene	Lin1		1.302		1.00	0.0100	-23.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab Sample ID: CCVIS 240-97045/2 Calibration Date: 08/12/2013 10:18

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3875.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7822	0.6543		1.00	0.0100	-16.4	50.0
Dibromofluoromethane (Surr)	Ave	0.3530	0.3005		0.00757	0.00890	-14.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3414	0.2926		0.00763	0.00890	-14.3	50.0
Toluene-d8 (Surr)	Ave	1.514	1.475		0.00867	0.00890	-2.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6073	0.5325		0.00780	0.00890	-12.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab Sample ID: CCV 240-97045/3 Calibration Date: 08/12/2013 11:03

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 13:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 14:58

Lab File ID: UXC3877.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	1.149	0.9406		2.00	0.0100	-18.1	50.0
Ethyl ether	Ave	0.2735	0.2631		2.00	0.0100	-3.8	50.0
3-Chloro-1-propene	Ave	0.2145	0.1773		2.00	0.0100	-17.3	50.0
Diisopropyl ether	Ave	0.3435	0.3217		10.0	0.0500	-6.3	50.0
2-Chloro-1,3-butadiene	Ave	0.5657	0.5103		2.00	0.0100	-9.8	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8875	0.8676		5.00	0.0100	-2.2	50.0
Ethyl acetate	Ave	0.1275	0.1641		4.00	0.0200	28.7	50.0
Propionitrile	Ave	0.0316	0.0335		4.00	0.0200	5.9	50.0
Methacrylonitrile	Ave	0.1095	0.1124		2.00	0.0100	2.7	50.0
Isobutyl alcohol	Ave	0.0057	0.0060		50.0	0.200	5.6	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7251	0.7178		5.00	0.0100	-1.0	50.0
n-Heptane	Ave	0.0663	0.0737		1.00	0.0100	11.1	50.0
n-Butanol	Ave	0.0040	0.0043		50.0	0.200	7.3	50.0
Methyl methacrylate	Ave	0.1169	0.1532		2.00	0.0100	31.0	50.0
2-Nitropropane	Ave	0.0190	0.0259		2.00	0.0200	36.3	50.0
Cyclohexanone	Ave	0.0757	0.0834		20.0	0.100	10.1	50.0
1,2,3-Trimethylbenzene	Ave	2.862	3.207		0.0112	0.0100	12.1	50.0
2-Methylnaphthalene	Qua		0.3294		5.00	0.0200	-44.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab Sample ID: CCV 240-97045/4 Calibration Date: 08/12/2013 11:26

Instrument ID: A3UX15 Calib Start Date: 07/19/2012 22:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/20/2012 00:15

Lab File ID: UXC3878.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrothiophene	Qua		0.2363		2.00	0.0100	17.5	50.0
1,4-Dichlorobutane	Ave	0.6007	0.4902		1.00	0.0100	-18.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab Sample ID: CCV 240-97045/4 Calibration Date: 08/12/2013 11:26

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3878.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.3530	0.2895		0.00730	0.00890	-18.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3414	0.3103		0.00809	0.00890	-9.1	50.0
Toluene-d8 (Surr)	Ave	1.514	1.383		0.00814	0.00890	-8.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6073	0.4933		0.00723	0.00890	-18.8	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Lab File ID: UXC3879.D Lab Sample ID: MB 240-97045/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 08/12/2013 11:48

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97045/5	UXC3876.D	08/12/2013 10:41
DR-DPT-27-20	240-27585-1	UXC3883.D	08/12/2013 13:19
DR-DPT-27-25	240-27585-2	UXC3884.D	08/12/2013 13:41
DR-DPT-27-30	240-27585-3	UXC3885.D	08/12/2013 14:04
TB-080513	240-27585-4	UXC3886.D	08/12/2013 14:26
DR-DPT-27-20 MS	240-27585-1 MS	UXC3900.D	08/12/2013 19:39
DR-DPT-27-20 MSD	240-27585-1 MSD	UXC3901.D	08/12/2013 20:01

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97045/6

Matrix: Water Lab File ID: UXC3879.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97045/6

Matrix: Water Lab File ID: UXC3879.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27585-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97045/6

Matrix: Water | Lab File ID: UXC3879.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 11:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	82		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97045/6

Matrix: Water Lab File ID: UXC3879.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3876.D

Lab ID: LCS 240-97045/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.03	90	72-116	
1,1,1-Trichloroethane	10.0	9.12	91	74-118	
1,1,2,2-Tetrachloroethane	10.0	10.5	105	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.38	94	74-151	
1,1-Dichloroethane	10.0	9.04	90	82-115	
1,1-Dichloroethene	10.0	9.23	92	78-131	
1,1-Dichloropropene	10.0	9.16	92	83-114	
1,2,3-Trichlorobenzene	10.0	7.98	80	54-126	
1,2,3-Trichloropropane	10.0	9.71	97	73-129	
1,2,3-Trimethylbenzene	10.0	10.0	100	70-130	
1,2,4-Trichlorobenzene	10.0	8.08	81	48-135	
1,2,4-Trimethylbenzene	10.0	10.7	107	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.42	84	42-136	
1,2-Dichlorobenzene	10.0	9.26	93	81-110	
1,2-Dichloroethane	10.0	9.02	90	71-127	
1,2-Dichloropropane	10.0	10.0	100	81-115	
1,3-Dichlorobenzene	10.0	9.48	95	80-110	
1,3-Dichloropropane	10.0	10.6	106	79-116	
1,4-Dichlorobenzene	10.0	9.30	93	82-110	
2,2-Dichloropropane	10.0	9.48	95	50-129	
2-Chloroethyl vinyl ether	10.0	11.4	114	52-131	
2-Chlorotoluene	10.0	10.6	106	76-116	
2-Hexanone	20.0	22.6	113	55-133	
Bromobenzene	10.0	10.2	102	76-115	
Bromochloromethane	10.0	8.66	87	77-120	
4-Chlorotoluene	10.0	10.5	105	77-115	
p-Isopropyltoluene	10.0	10.6	106	74-120	
Acetone	20.0	15.1	75	43-136	
Benzene	10.0	9.56	96	83-112	
Bromoform	10.0	8.27	83	40-131	
Bromomethane	10.0	6.18	62	11-185	
Carbon disulfide	10.0	11.7	117	62-142	
Carbon tetrachloride	10.0	9.45	94	66-128	
Chlorobenzene	10.0	9.48	95	85-110	
Chloroethane	10.0	7.46	75	25-153	
Chloroform	10.0	8.54	85	79-117	
Chloromethane	10.0	8.09	81	44-126	
cis-1,2-Dichloroethene	10.0	8.88	89	80-113	
cis-1,3-Dichloropropene	10.0	9.46	95	61-115	
Hexachlorobutadiene	10.0	7.94	79	36-134	
Dibromomethane	10.0	9.72	97	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3876.D

Lab ID: LCS 240-97045/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.2	102	72-121	
Dichlorodifluoromethane	10.0	6.77	68	19-129	
Ethylbenzene	10.0	9.66	97	83-112	
1,2-Dibromoethane	10.0	9.34	93	79-113	
Diisopropyl ether	10.0	8.86 J	89	77-118	
Naphthalene	10.0	7.05	70	32-141	
m-Xylene & p-Xylene	20.0	19.7	99	83-113	
n-Butylbenzene	10.0	10.3	103	66-125	
Isopropylbenzene	10.0	9.25	93	75-114	
n-Propylbenzene	10.0	10.7	107	74-121	
2-Butanone	20.0	18.1	91	60-126	
4-Methyl-2-pentanone	20.0	22.9	114	63-128	
sec-Butylbenzene	10.0	10.3	103	70-117	
Methyl tert-butyl ether	10.0	9.43	94	52-144	
Methylene Chloride	10.0	8.79	88	66-131	
o-Xylene	10.0	9.33	93	83-113	
Styrene	10.0	9.97	100	79-114	
tert-Butylbenzene	10.0	8.98	90	71-115	
Tetrachloroethene	10.0	9.12	91	79-114	
Toluene	10.0	10.3	103	84-111	
trans-1,2-Dichloroethene	10.0	8.65	87	83-117	
trans-1,3-Dichloropropene	10.0	10.0	100	58-117	
Trichloroethene	10.0	9.08	91	76-117	
Trichlorofluoromethane	10.0	8.11	81	49-157	
Vinyl acetate	10.0	10.9	109	46-161	
Vinyl chloride	10.0	8.15	81	53-127	
tert-Butyl alcohol	200	183	92	70-130	
Xylenes, Total	30.0	29.0	97	83-112	
Dibromochloromethane	10.0	8.94	89	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3900.D

Lab ID: 240-27585-1 MS Client ID: DR-DPT-27-20 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	333	33 U	327	98	64-118	
1,1,1-Trichloroethane	333	33 U	277	83	68-121	
1,1,2,2-Tetrachloroethane	333	33 U	373	112	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	333	33 U	284	85	70-152	
1,1-Dichloroethane	333	33 U	310	93	79-116	
1,1-Dichloroethene	333	33 U	287	86	74-135	
1,1-Dichloropropene	333	33 U	322	97	80-114	
1,2,3-Trichlorobenzene	333	33 U	266	80	45-129	
1,2,3-Trichloropropane	333	33 U	330	99	67-132	
1,2,3-Trimethylbenzene	333	170 U	338	101	70-130	
1,2,4-Trichlorobenzene	333	33 U	251	75	38-138	
1,2,4-Trimethylbenzene	333	33 U	355	107	67-124	
1,2-Dibromo-3-Chloropropane	333	67 U	302	91	32-139	
1,2-Dichlorobenzene	333	33 U	315	94	75-111	
1,2-Dichloroethane	333	33 U	329	99	68-129	
1,2-Dichloropropane	333	33 U	337	101	78-115	
1,3-Dichlorobenzene	333	33 U	309	93	73-110	
1,3-Dichloropropane	333	33 U	380	114	74-118	
1,4-Dichlorobenzene	333	33 U	306	92	75-110	
2,2-Dichloropropane	333	33 U	271	81	38-127	
2-Chloroethyl vinyl ether	333	330 U	330 U	0	10-150	F
2-Chlorotoluene	333	33 U	343	103	69-117	
2-Hexanone	667	330 U	838	126	47-139	
Bromobenzene	333	33 U	335	101	71-116	
Bromochloromethane	333	33 U	282	85	73-121	
4-Chlorotoluene	333	33 U	340	102	71-116	
p-Isopropyltoluene	333	33 U	340	102	64-122	
Acetone	667	330 U	463	69	33-145	
Benzene	333	33 U	331	99	72-121	
Bromoform	333	33 U	278	83	32-128	
Bromomethane	333	33 U	190	57	10-186	
Carbon disulfide	333	33 U	361	108	57-147	
Carbon tetrachloride	333	33 U	283	85	59-129	
Chlorobenzene	333	33 U	327	98	80-110	
Chloroethane	333	33 U	231	69	21-165	
Chloroform	333	33 U	294	88	76-118	
Chloromethane	333	33 U	265	79	33-132	
cis-1,2-Dichloroethene	333	410	709	89	70-120	
cis-1,3-Dichloropropene	333	33 U	285	85	51-110	
Hexachlorobutadiene	333	33 U	248	74	27-132	
Dibromomethane	333	33 U	328	98	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3900.D

Lab ID: 240-27585-1 MS Client ID: DR-DPT-27-20 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	333	33 U	334	100	67-120	
Dichlorodifluoromethane	333	33 U	193	58	17-128	
Ethylbenzene	333	33 U	328	99	75-116	
1,2-Dibromoethane	333	33 U	333	100	74-113	
Diisopropyl ether	333	330 U	281 J	84	73-118	
Naphthalene	333	33 U	235	70	15-158	
m-Xylene & p-Xylene	667	67 U	684	103	75-117	
n-Butylbenzene	333	33 U	328	98	56-127	
Isopropylbenzene	333	33 U	318	95	68-116	
n-Propylbenzene	333	33 U	346	104	64-124	
2-Butanone	667	330 U	644	97	54-129	
4-Methyl-2-pentanone	667	330 U	746	112	56-131	
sec-Butylbenzene	333	33 U	334	100	60-119	
Methyl tert-butyl ether	333	33 U	295	88	46-144	
Methylene Chloride	333	33 U	281	84	63-128	
o-Xylene	333	33 U	327	98	76-116	
Styrene	333	33 U	336	101	71-117	
tert-Butylbenzene	333	33 U	297	89	61-119	
Tetrachloroethene	333	33 U	324	97	70-117	
Toluene	333	33 U	374	112	78-114	
trans-1,2-Dichloroethene	333	33 U	289	87	80-119	
trans-1,3-Dichloropropene	333	33 U	344	103	46-116	
Trichloroethene	333	650	925	82	66-120	
Trichlorofluoromethane	333	33 U	245	74	46-157	
Vinyl acetate	333	67 U	386	116	43-157	
Vinyl chloride	333	81	333	75	49-130	
tert-Butyl alcohol	6670	1700 U	6150	92	70-130	
Xylenes, Total	1000	67 U	1010	101	76-116	
Dibromochloromethane	333	33 U	300	90	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3901.D

Lab ID: 240-27585-1 MSD Client ID: DR-DPT-27-20 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	333	334	100	2	30	64-118	
1,1,1-Trichloroethane	333	299	90	8	30	68-121	
1,1,2,2-Tetrachloroethane	333	377	113	1	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	333	312	94	9	30	70-152	
1,1-Dichloroethane	333	333	100	7	30	79-116	
1,1-Dichloroethene	333	321	96	11	30	74-135	
1,1-Dichloropropene	333	326	98	1	30	80-114	
1,2,3-Trichlorobenzene	333	273	82	3	30	45-129	
1,2,3-Trichloropropane	333	324	97	2	30	67-132	
1,2,3-Trimethylbenzene	333	340	102	1	30	70-130	
1,2,4-Trichlorobenzene	333	264	79	5	30	38-138	
1,2,4-Trimethylbenzene	333	350	105	1	30	67-124	
1,2-Dibromo-3-Chloropropane	333	321	96	6	30	32-139	
1,2-Dichlorobenzene	333	316	95	0	30	75-111	
1,2-Dichloroethane	333	348	104	6	30	68-129	
1,2-Dichloropropane	333	363	109	8	30	78-115	
1,3-Dichlorobenzene	333	316	95	2	30	73-110	
1,3-Dichloropropane	333	376	113	1	30	74-118	
1,4-Dichlorobenzene	333	312	94	2	30	75-110	
2,2-Dichloropropane	333	288	86	6	30	38-127	
2-Chloroethyl vinyl ether	333	330 U	0	NC	30	10-150	F
2-Chlorotoluene	333	337	101	2	30	69-117	
2-Hexanone	667	884	133	5	30	47-139	
Bromobenzene	333	335	101	0	30	71-116	
Bromochloromethane	333	308	92	9	30	73-121	
4-Chlorotoluene	333	348	104	2	30	71-116	
p-Isopropyltoluene	333	342	103	1	30	64-122	
Acetone	667	527	79	13	30	33-145	
Benzene	333	346	104	4	30	72-121	
Bromoform	333	281	84	1	30	32-128	
Bromomethane	333	232	69	20	30	10-186	
Carbon disulfide	333	389	117	8	30	57-147	
Carbon tetrachloride	333	311	93	9	30	59-129	
Chlorobenzene	333	327	98	0	30	80-110	
Chloroethane	333	260	78	12	30	21-165	
Chloroform	333	311	93	6	30	76-118	
Chloromethane	333	289	87	9	30	33-132	
cis-1,2-Dichloroethene	333	762	105	7	30	70-120	
cis-1,3-Dichloropropene	333	308	92	8	30	51-110	
Hexachlorobutadiene	333	258	77	4	30	27-132	
Dibromomethane	333	341	102	4	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3901.D

Lab ID: 240-27585-1 MSD Client ID: DR-DPT-27-20 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	333	355	107	6	30	67-120	
Dichlorodifluoromethane	333	216	65	11	30	17-128	
Ethylbenzene	333	335	100	2	30	75-116	
1,2-Dibromoethane	333	348	104	4	30	74-113	
Diisopropyl ether	333	303 J	91	8	30	73-118	
Naphthalene	333	246	74	4	30	15-158	
m-Xylene & p-Xylene	667	681	102	0	30	75-117	
n-Butylbenzene	333	330	99	1	30	56-127	
Isopropylbenzene	333	319	96	1	30	68-116	
n-Propylbenzene	333	342	103	1	30	64-124	
2-Butanone	667	712	107	10	30	54-129	
4-Methyl-2-pentanone	667	796	119	7	30	56-131	
sec-Butylbenzene	333	328	98	2	30	60-119	
Methyl tert-butyl ether	333	325	98	10	30	46-144	
Methylene Chloride	333	305	92	8	30	63-128	
o-Xylene	333	331	99	1	30	76-116	
Styrene	333	349	105	4	30	71-117	
tert-Butylbenzene	333	288	87	3	30	61-119	
Tetrachloroethene	333	314	94	3	30	70-117	
Toluene	333	375	113	0	30	78-114	
trans-1,2-Dichloroethene	333	303	91	5	30	80-119	
trans-1,3-Dichloropropene	333	357	107	4	30	46-116	
Trichloroethene	333	992	102	7	30	66-120	
Trichlorofluoromethane	333	270	81	10	30	46-157	
Vinyl acetate	333	376	113	3	30	43-157	
Vinyl chloride	333	368	86	10	30	49-130	
tert-Butyl alcohol	6670	6830	102	10	30	70-130	
Xylenes, Total	1000	1010	101	0	30	76-116	
Dibromochloromethane	333	319	96	6	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Sample No.: STD8260 240-92812/4 Date Analyzed: 07/08/2013 11:37

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC2913.D Heated Purge: (Y/N) N

Calibration ID: 16192

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1157942	5.21	913091	7.89	679041	10.12
UPPER LIMIT		2315884	5.71	1826182	8.39	1358082	10.62
LOWER LIMIT		578971	4.71	456546	7.39	339521	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92812/14		1203057	5.21	925992	7.89	661092	10.12
CCVIS 240-97045/2		2087197	5.21	1697654	7.89	1021220	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Sample No.: CCVIS 240-97045/2 Date Analyzed: 08/12/2013 10:18

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): UXC3875.D Heated Purge: (Y/N) N

Calibration ID: 16194

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2087197	5.21	1697654	7.89	1021220	10.12
UPPER LIMIT		4174394	5.71	3395308	8.39	2042440	10.62
LOWER LIMIT		1043599	4.71	848827	7.39	510610	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-97045/5		1891325	5.21	1566405	7.89	965410	10.12
CCV 240-97045/3		2059608	5.21	1646018	7.89	850443	10.12
CCV 240-97045/4		1932503	5.21	1605495	7.89	795831	10.12
MB 240-97045/6		1857174	5.21	1487954	7.89	768071	10.12
240-27585-1	DR-DPT-27-20	1948282	5.21	1454561	7.89	714727	10.12
240-27585-2	DR-DPT-27-25	1686633	5.21	1255554	7.89	685245	10.12
240-27585-3	DR-DPT-27-30	1780577	5.21	1297823	7.89	653297	10.12
240-27585-4	TB-080513	1725443	5.21	1270087	7.89	685526	10.12
240-27585-1 MS	DR-DPT-27-20 MS	1830524	5.21	1277039	7.89	848043	10.12
240-27585-1 MSD	DR-DPT-27-20 MSD	1733279	5.21	1269844	7.89	865539	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

SDG 240-27585-1

SAMPLE ID DR-DPT-27-25

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (NG)	Final Volume (ML)	AVE RRF	CONCENTRATION ug/L
1686633	333.33	1363158	10	5	0.3876	6950.50
				Sample Volume (ML)		
				5		

Trichloroethene = 7,000 ug/L

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27585-1

SDG No.:

Client Sample ID: DR-DPT-27-25 Lab Sample ID: 240-27585-2

Matrix: Water Lab File ID: UXC3884.D

Analysis Method: 8260B Date Collected: 08/05/2013 10:45

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 13:41

Soil Aliquot Vol: Dilution Factor: 333.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	330	U	330	53
74-87-3	Chloromethane	330	U	330	100
156-59-2	cis-1,2-Dichloroethene	1700		330	57
10061-01-5	cis-1,3-Dichloropropene	330	U	330	47
87-68-3	Hexachlorobutadiene	330	U	330	100
74-95-3	Dibromomethane	330	U	330	93
75-27-4	Bromodichloromethane	330	U	330	50
75-71-8	Dichlorodifluoromethane	330	U	330	100
100-41-4	Ethylbenzene	330	U	330	57
106-93-4	1,2-Dibromoethane	330	U	330	80
108-20-3	Diisopropyl ether	3300	U	3300	500
91-20-3	Naphthalene	330	U	330	80
179601-23-1	m-Xylene & p-Xylene	670	U	670	80
104-51-8	n-Butylbenzene	330	U	330	40
98-82-8	Isopropylbenzene	330	U	330	43
103-65-1	n-Propylbenzene	330	U	330	47
78-93-3	2-Butanone	3300	U	3300	190
108-10-1	4-Methyl-2-pentanone	3300	U	3300	110
135-98-8	sec-Butylbenzene	330	U	330	43
1634-04-4	Methyl tert-butyl ether	330	U	330	57
994-05-8	Tert-amyl-methyl ether (TAME)	1700	U	1700	22
75-09-2	Methylene Chloride	330	U	330	110
95-47-6	o-Xylene	330	U	330	47
100-42-5	Styrene	330	U	330	37
637-92-3	Ethyl-t-butyl ether (ETBE)	1700	U	1700	37
98-06-6	tert-Butylbenzene	330	U	330	43
127-18-4	Tetrachloroethene	330	U	330	97
108-88-3	Toluene	330	U	330	43
156-60-5	trans-1,2-Dichloroethene	330	U	330	63
10061-02-6	trans-1,3-Dichloropropene	330	U	330	63
79-01-6	Trichloroethene	7000		330	57
75-69-4	Trichlorofluoromethane	330	U	330	70
108-05-4	Vinyl acetate	670	U	670	63
75-01-4	Vinyl chloride	91	J	330	73
75-65-0	tert-Butyl alcohol	17000	U	17000	1300
1330-20-7	Xylenes, Total	670	U	670	47

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A3UX15\20130812-22391.b\UXC3884.D		
Lims ID:	240-27585-B-2	Client ID:	DR-DPT-27-25
Inject. Date:	12-Aug-2013 13:41:30	Dil. Factor:	333.3300
Sample Type:	Client		
Sample ID:	240-0022391-011		
Misc. Info.:	C30812A,8260LLUX15,,43582		
Operator:	43582	Instrument ID:	A3UX15
Purge Vol:	5.000 mL	ALS Bottle#:	10
Lims Batch ID:	97045	Lims Sample ID:	11
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A3UX15\20130812-22391.b\8260_15.m		
Last Update:	13-Aug-2013 09:11:18	Calib Date:	08-Jul-2013 14:58:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A3UX15\20130708-21455.b\UXC2922.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK032		
First Level Reviewer: stillert		Date:	13-Aug-2013 20:02:13

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.209	5.210	-0.001	99	1686633	10.0	
* 2 Chlorobenzene-d5	117	7.889	7.890	-0.001	84	1255554	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.119	10.119	0.0	92	685245	10.0	
$ 5 Dibromofluoromethane (Surr)	113	4.640	4.640	0.0	59	454106	7.63	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.925	4.925	0.0	0	495659	8.61	
$ 7 Toluene-d8 (Surr)	98	6.585	6.585	0.0	93	1573064	8.28	
$ 131 4-Bromofluorobenzene (Surr)	95	8.992	8.992	0.0	96	511605	6.71	
12 Dichlorodifluoromethane	85		1.379					
13 Chloromethane	50		1.521					
14 Vinyl chloride	62	1.616	1.616	0.0	70	31952	0.2725	
15 Bromomethane	94		1.913					9
16 Chloroethane	64		1.996					
18 Trichlorofluoromethane	101		2.245					
21 1,1-Dichloroethene	96		2.707					
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.719					
22 Acetone	43		2.755					
26 Carbon disulfide	76		2.897					9
30 Methylene Chloride	84		3.134					
31 2-Methyl-2-propanol	59		3.241					
34 Methyl tert-butyl ether	73		3.371					
33 trans-1,2-Dichloroethene	96		3.371					
36 1,1-Dichloroethane	63		3.739					9
37 Vinyl acetate	86		3.786					9
38 Isopropyl ether	87		3.798					
40 Tert-butyl ethyl ether	59		4.107					9
43 2,2-Dichloropropane	77		4.237					9
42 cis-1,2-Dichloroethene	96	4.237	4.237	0.0	66	390932	5.10	
41 2-Butanone (MEK)	43		4.249					9
47 Chlorobromomethane	128		4.439					9
49 Chloroform	83		4.510					9

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
50 1,1,1-Trichloroethane	97		4.664					9
52 1,1-Dichloropropene	75		4.794					9
53 Carbon tetrachloride	117		4.806					9
55 Benzene	78		4.984					9
56 1,2-Dichloroethane	62		4.996					
57 Tert-amyl methyl ether	73		5.067					
60 Trichloroethene	130	5.530	5.530	0.0	93	1363158	20.9	
62 1,2-Dichloropropane	63		5.719					
65 Dibromomethane	93		5.826					
67 Dichlorobromomethane	83		5.957					
69 2-Chloroethyl vinyl ether	63		6.206					
70 cis-1,3-Dichloropropene	75		6.336					9
71 4-Methyl-2-pentanone (MIBK)	43		6.478					9
72 Toluene	91		6.644					
73 trans-1,3-Dichloropropene	75		6.834					
77 Tetrachloroethene	164		7.131					
76 1,3-Dichloropropane	76		7.154					9
78 2-Hexanone	43		7.214					
79 Chlorodibromomethane	129		7.356					
123 Ethylene Dibromide	107		7.463					
82 Chlorobenzene	112		7.913					9
83 1,1,1,2-Tetrachloroethane	131		7.984					
84 Ethylbenzene	106		8.008					
10 m-Xylene & p-Xylene	91		8.115					9
85 o-Xylene	106		8.494					
86 Styrene	104		8.506					9
87 Bromoform	173		8.696					
88 Isopropylbenzene	105		8.838					
90 1,1,2,2-Tetrachloroethane	83		9.135					
91 Bromobenzene	156		9.146					
92 1,2,3-Trichloropropane	110		9.182					
94 N-Propylbenzene	120		9.241					
95 2-Chlorotoluene	126		9.324					
104 4-Chlorotoluene	91		9.431					9
97 tert-Butylbenzene	119		9.728					
98 1,2,4-Trimethylbenzene	105		9.775					9
99 sec-Butylbenzene	105		9.941					9
100 1,3-Dichlorobenzene	146		10.048					
101 4-Isopropyltoluene	119		10.083					
102 1,4-Dichlorobenzene	146		10.143					
103 1,2,3-Trimethylbenzene	105		10.190					9
105 n-Butylbenzene	91		10.486					
106 1,2-Dichlorobenzene	146		10.510					
107 1,2-Dibromo-3-Chloropropane	157		11.281					
109 1,2,4-Trichlorobenzene	180		12.099					
110 Hexachlorobutadiene	225		12.265					
111 Naphthalene	128		12.348					
112 1,2,3-Trichlorobenzene	180		12.585					
S 114 Xylenes, Total	106		16.530					

Tetra Tech INC **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**NOVEMBER 7, 2013**
FROM:	**J. KALINYAK**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MIDDLE STATE AIRPORT (MSA) DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-27624-1

SAMPLES: 6 / Aqueous / VOC

DR-DPT-27-35	DR-DPT-27-40	DR-DPT-27-45
DR-DPT-27-49	DR-DPT-41-25	TB-080613

Overview

The sample set for Lockheed MSA Dump Road Source Areas, SDG 240-27624-1, consisted of six (6) aqueous samples including one (1) aqueous trip blank sample. All aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. No field duplicate sample pairs were included in the sample delivery group (SDG).

The samples were collected by Tetra Tech on August 6, 2013 and analyzed by TestAmerica Laboratories, Inc., North Canton OH for the analyses. All analyses were conducted in accordance with EPA SW-846 Methods 8260B for VOCs, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank/preparation results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate results, internal standard recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- The VOC initial calibration average relative response factors (RRF) were less than the 0.05 criteria for tert-butyl alcohol and vinyl acetate on instrument A3UX15 on 07/08/13 and instrument A3UX17 on 07/02/13. Additionally, all continuing calibration verification (CCV) RRFs for tert-butyl alcohol and vinyl acetate were less than the 0.05 criteria for both instrument A3UX15 and instrument A3UX17.
  Affected Samples: All samples
  Action: The affected sample non-detected results for tert-butyl alcohol and vinyl acetate were qualified rejected, (UR).

Minor Problems

- Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

- The VOC CCV %D was greater than the 20% and greater than the 50% quality control limit for naphthalene for instrument A3UX17 on 08/13/13 @ 11:57.
  Affected Samples: DR-DPT-27-40, DR-DPT-27-49, and DR-DPT-41-25
  Actions: The samples had non-detected results naphthalene which were qualified estimated, (UJ).

- The following laboratory VOC contaminant was detected in a method blank at the maximum concentration indicated below.

Analytes	Maximum Conc. µg/l	Action Level µg/l
Methylene chloride [1]	0.394	3.94

[1] Method blank MB 240-97250/6 affecting samples DR-DPT-27-40, DR-DPT-27-49, and DR-DPT-41-25.

An action level of ten times the maximum level for methylene chloride has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results less than the action level were qualified non-detected, (B), for blank contamination.

- Samples DR-DPT-27-45, DR-DPT-27-49, and TB-080613 contained tentatively identified compounds (TICs).
  Actions: TIC results were qualified as presumptively present, (NJ).

Notes

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for bromomethane, acetone, 2-chloroethyl vinyl ether, 2-hexanone, and naphthalene for instrument A3UX15 on 08/12/13 @ 10:18.
Affected Samples: DR-DPT-27-35 and DR-DPT-27-45
Actions: The samples had non-detected results for bromomethane, acetone, 2-chloroethyl vinyl ether, 2-hexanone, and naphthalene which were not qualified.

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for bromomethane, carbon disulfide, 2-chloroethyl vinyl ether, 4-methyl-2-pentanone, 2-hexanone, 1,2,4-trichlorobenzene, naphthalene, and 1,2,3-trichlorobenzene for instrument A3UX15 on 08/13/13 @ 10:26.
Affected Sample: TB-080613
Actions: The sample had non-detected results for bromomethane, carbon disulfide, 2-chloroethyl vinyl ether, 4-methyl-2-pentanone, 2-hexanone, 1,2,4-trichlorobenzene, naphthalene, and 1,2,3-trichlorobenzene which were not qualified.

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for bromomethane, chloroethane, trichlorofluoromethane, 1,1,2-trichlorotrifluoroethane, carbon tetrachloride, 2-chloroethyl vinyl ether, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, hexachlorobutadiene, 1,2,3-trichlorobenzene, ethyl-t-butyl ether, and tert-amyl-methyl ether for instrument A3UX17 on 08/13/13 @ 11:57 and @ 12:20.
Affected Samples: DR-DPT-27-40, DR-DPT-27-49, and DR-DPT-41-25
Actions: The samples had non-detected results for bromomethane, chloroethane, trichlorofluoromethane, 1,1,2-trichlorotrifluoroethane, carbon tetrachloride, 2-chloroethyl vinyl ether, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, hexachlorobutadiene, 1,2,3-trichlorobenzene, ethyl-t-butyl ether, and tert-amyl-methyl ether which were not qualified.

The MS and MSD %Rs were non-compliant for many VOC analytes for spiked samples from other SDGs (SDG samples 240-27585-B-1, 240-27504-B-6, and 240-27547-B-2). No validation action was taken as the samples were not from this SDG.

Samples were analyzed at dilutions for VOCs, as listed below, resulting in elevated levels for non-detected VOC analytes.

Sample	Dilution
DR-DPT-27-35	33.33X
DR-DPT-27-40	16.67X
DR-DPT-27-45	16.67X
DR-DPT-27-49	10X
DR-DPT-41-25	1250X

The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC tert-butyl alcohol and vinyl acetate non-detected sample results were rejected due to initial calibration average RRF and CCV RRF criteria non-compliances. Sample non-detected naphthalene results were qualified for a CCV %D non-compliance. Sample VOC results were qualified for blank contamination.

Other Factors Affecting Data Quality: Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to EPA SW-846 Methods 8260B and the Region III EPA Functional Guidelines for Organic Data Validation (9/94).

Tetra Tech
Joseph Kalinyak
Data Validator/Environmental Scientist

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	DR-DPT-27-35			DR-DPT-27-40			DR-DPT-27-45					
SDG: 240-27624-1	LAB_ID	240-27624-1			240-27624-2			240-27624-3					
FRACTION: OV	SAMP_DATE	8/6/2013			8/6/2013			8/6/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		7.7	U		3.8	U		3.8	U				
1,1,1-TRICHLOROETHANE		7.3	U		3.7	U		3.7	U				
1,1,2,2-TETRACHLOROETHANE		6	U		3	U		3	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		9.3	U		4.7	U		4.7	U				
1,1-DICHLOROETHANE		5	U		2.5	U		2.5	U				
1,1-DICHLOROETHENE		6.3	U		3.2	U		3.2	U				
1,1-DICHLOROPROPENE		4.3	U		2.2	U		2.2	U				
1,2,3-TRICHLOROBENZENE		5.7	U		2.8	U		2.8	U				
1,2,3-TRICHLOROPROPANE		14	U		7.2	U		7.2	U				
1,2,3-TRIMETHYLBENZENE		0.2	U		0.098	U		0.098	U				
1,2,4-TRICHLOROBENZENE		5	U		2.5	U		2.5	U				
1,2,4-TRIMETHYLBENZENE		4	U		2	U		2	U				
1,2-DIBROMO-3-CHLOROPROPANE		22	U		11	U		11	U				
1,2-DIBROMOETHANE		8	U		4	U		4	U				
1,2-DICHLOROBENZENE		4.3	U		2.2	U		2.2	U				
1,2-DICHLOROETHANE		7.3	U		3.7	U		3.7	U				
1,2-DICHLOROPROPANE		6	U		3	U		3	U				
1,3-DICHLOROBENZENE		4.7	U		2.3	U		2.3	U				
1,3-DICHLOROPROPANE		5.3	U		2.7	U		2.7	U				
1,4-DICHLOROBENZENE		4.3	U		2.2	U		2.2	U				
1-PENTENE													
2,2-DICHLOROPROPANE		4.3	U		2.2	U		2.2	U				
2-BUTANONE		19	U		9.5	U		9.5	U				
2-CHLOROETHYL VINYL ETHER		33	U		17	U		17	U				
2-CHLOROTOLUENE		3.7	U		1.8	U		1.8	U				
2-HEXANONE		14	U		6.8	U		6.8	U				
2-METHYL-1-BUTENE													
2-METHYLBUTANE											42	NJ	Z1
4-CHLOROTOLUENE		6	U		3	U		3	U				
4-ISOPROPYLTOLUENE		4	U		2	U		2	U				
4-METHYL-2-PENTANONE		11	U		5.3	U		5.3	U				
ACETONE		37	U		18	U		18	U				
BENZENE		4.3	U		2.2	U		2.2	U				
BROMOBENZENE		4.3	U		2.2	U		2.2	U				
BROMOCHLOROMETHANE		9.7	U		4.8	U		4.8	U				
BROMODICHLOROMETHANE		5	U		2.5	U		2.5	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-27-49						DR-DPT-41-25			TB-080613		
SDG: 240-27624-1	LAB_ID	240-27624-4						240-27624-5			240-27624-6		
FRACTION: OV	SAMP_DATE	8/6/2013						8/6/2013			8/6/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	2.3	U					290	U		0.23	U	
1,1,1-TRICHLOROETHANE	2.2	U					280	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	1.8	U					230	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	2.8	U					350	U		0.28	U	
1,1-DICHLOROETHANE	1.5	U					190	U		0.15	U	
1,1-DICHLOROETHENE	1.9	U					240	U		0.19	U	
1,1-DICHLOROPROPENE	1.3	U					160	U		0.13	U	
1,2,3-TRICHLOROBENZENE	1.7	U					210	U		0.17	U	
1,2,3-TRICHLOROPROPANE	4.3	U					540	U		0.43	U	
1,2,3-TRIMETHYLBENZENE	0.059	U					7.4	U		0.0059	U	
1,2,4-TRICHLOROBENZENE	1.5	U					190	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	1.2	U					150	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	6.7	U					840	U		0.67	U	
1,2-DIBROMOETHANE	2.4	U					300	U		0.24	U	
1,2-DICHLOROBENZENE	1.3	U					160	U		0.13	U	
1,2-DICHLOROETHANE	2.3	J	P				280	U		0.22	U	
1,2-DICHLOROPROPANE	1.8	U					230	U		0.18	U	
1,3-DICHLOROBENZENE	1.4	U					180	U		0.14	U	
1,3-DICHLOROPROPANE	1.6	U					200	U		0.16	U	
1,4-DICHLOROBENZENE	1.3	U					160	U		0.13	U	
1-PENTENE				13	NJ	Z1						
2,2-DICHLOROPROPANE	1.3	U					160	U		0.13	U	
2-BUTANONE	5.7	U					710	U		0.57	U	
2-CHLOROETHYL VINYL ETHER	9.9	U					1200	U		0.99	U	
2-CHLOROTOLUENE	1.1	U					140	U		0.11	U	
2-HEXANONE	4.1	U					510	U		0.41	U	
2-METHYL-1-BUTENE				17	NJ	Z1						
2-METHYLBUTANE												
4-CHLOROTOLUENE	1.8	U					230	U		0.18	U	
4-ISOPROPYLTOLUENE	1.2	U					150	U		0.12	U	
4-METHYL-2-PENTANONE	3.2	U					400	U		0.32	U	
ACETONE	19	J	P				1400	U		1.1	U	
BENZENE	1.6	J	P				160	U		0.13	U	
BROMOBENZENE	1.3	U					160	U		0.13	U	
BROMOCHLOROMETHANE	2.9	U					360	U		0.29	U	
BROMODICHLOROMETHANE	1.5	U					190	U		0.15	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-27-35			DR-DPT-27-40			DR-DPT-27-45					
SDG: 240-27624-1	LAB_ID	240-27624-1			240-27624-2			240-27624-3					
FRACTION: OV	SAMP_DATE	8/6/2013			8/6/2013			8/6/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM	21	U		11	U		11	U				
BROMOMETHANE	14	U		6.8	U		6.8	U				
CARBON DISULFIDE	4.3	U		2.2	U		2.2	U				
CARBON TETRACHLORIDE	4.3	U		2.2	U		2.2	U				
CHLOROBENZENE	5	U		2.5	U		2.5	U				
CHLORODIBROMOMETHANE	6	U		3	U		3	U				
CHLOROETHANE	9.7	U		4.8	U		4.8	U				
CHLOROFORM	5.3	U		2.7	U		2.7	U				
CHLOROMETHANE	10	U		5	U		5	U				
CIS-1,2-DICHLOROETHENE	200			160			220					
CIS-1,3-DICHLOROPROPENE	4.7	U		2.3	U		2.3	U				
DIBROMOMETHANE	9.3	U		4.7	U		4.7	U				
DICHLORODIFLUOROMETHANE	10	U		5.2	U		5.2	U				
DIISOPROPYL ETHER	50	U		25	U		25	U				
ETHYL TERT-BUTYL ETHER	3.7	U		1.8	U		1.8	U				
ETHYLBENZENE	5.7	U		2.8	U		2.8	U				
HEXACHLOROBUTADIENE	10	U		5	U		5	U				
HEXANE										7.5	J	P
ISOPROPYLBENZENE	4.3	U		2.2	U		2.2	U				
M+P-XYLENES	8	U		4	U		4	U				
METHYL TERT-BUTYL ETHER	5.7	U		2.8	U		2.8	U				
METHYLENE CHLORIDE	11	U		5.5	U		5.5	U				
NAPHTHALENE	8	U		4	UJ	C	4	U				
N-BUTYLBENZENE	4	U		2	U		2	U				
N-PROPYLBENZENE	4.7	U		2.3	U		2.3	U				
O-XYLENE	4.7	U		2.3	U		2.3	U				
PENTANE										49	NJ	Z1
SEC-BUTYLBENZENE	4.3	U		2.2	U		2.2	U				
STYRENE	3.7	U		1.8	U		1.8	U				
TERT-AMYL METHYL ETHER	2.2	U		1.1	U		1.1	U				
TERT-BUTYLBENZENE	4.3	U		2.2	U		2.2	U				
TERTIARY-BUTYL ALCOHOL	130	UR	C	65	UR	C	65	UR	C			
TETRACHLOROETHENE	9.7	U		4.8	U		4.8	U				
TOLUENE	4.3	U		2.2	U		2.2	U				
TOTAL XYLENES	4.7	U		2.3	U		2.3	U				
TRANS-1,2-DICHLOROETHENE	6.3	U		5.2	J	P	7.4	J	P			

PROJ_NO: 04882	NSAMPLE	DR-DPT-27-49						DR-DPT-41-25			TB-080613		
SDG: 240-27624-1	LAB_ID	240-27624-4						240-27624-5			240-27624-6		
FRACTION: OV	SAMP_DATE	8/6/2013						8/6/2013			8/6/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM	6.4	U					800	U		0.64	U	
BROMOMETHANE	4.1	U					510	U		0.41	U	
CARBON DISULFIDE	1.3	U					160	U		0.13	U	
CARBON TETRACHLORIDE	1.3	U					160	U		0.13	U	
CHLOROBENZENE	1.5	U					190	U		0.15	U	
CHLORODIBROMOMETHANE	1.8	U					230	U		0.18	U	
CHLOROETHANE	2.9	U					360	U		0.29	U	
CHLOROFORM	1.6	U					200	U		0.16	U	
CHLOROMETHANE	3	U					380	U		0.3	U	
CIS-1,2-DICHLOROETHENE	130						17000			0.17	U	
CIS-1,3-DICHLOROPROPENE	1.4	U					180	U		0.14	U	
DIBROMOMETHANE	2.8	U					350	U		0.28	U	
DICHLORODIFLUOROMETHANE	3.1	U					390	U		0.31	U	
DIISOPROPYL ETHER	15	U					1900	U		1.5	U	
ETHYL TERT-BUTYL ETHER	1.1	U					140	U		0.11	U	
ETHYLBENZENE	1.7	U					210	U		0.17	U	
HEXACHLOROBUTADIENE	3	U					380	U		0.3	U	
HEXANE												
ISOPROPYLBENZENE	1.3	U					160	U		0.13	U	
M+P-XYLENES	2.4	U					300	U		0.24	U	
METHYL TERT-BUTYL ETHER	1.7	U					210	U		0.17	U	
METHYLENE CHLORIDE	3.3	U					1600	B	A	0.33	U	
NAPHTHALENE	2.4	UJ	C				300	UJ	C	0.24	U	
N-BUTYLBENZENE	1.2	U					150	U		0.12	U	
N-PROPYLBENZENE	1.4	U					180	U		0.14	U	
O-XYLENE	1.4	U					180	U		0.14	U	
PENTANE												
SEC-BUTYLBENZENE	1.3	U					160	U		0.13	U	
STYRENE	1.1	U					140	U		0.11	U	
TERT-AMYL METHYL ETHER	0.67	U					84	U		0.067	U	
TERT-BUTYLBENZENE	1.3	U					160	U		0.13	U	
TERTIARY-BUTYL ALCOHOL	39	UR	C				4900	UR	C	3.9	UR	C
TETRACHLOROETHENE	2.9	U					360	U		0.29	U	
TOLUENE	1.3	U					1700			0.13	U	
TOTAL XYLENES	1.4	U					180	U		0.14	U	
TRANS-1,2-DICHLOROETHENE	1.9	U					240	U		0.19	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-27-35			DR-DPT-27-40			DR-DPT-27-45					
SDG: 240-27624-1	LAB_ID	240-27624-1			240-27624-2			240-27624-3					
FRACTION: OV	SAMP_DATE	8/6/2013			8/6/2013			8/6/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRANS-1,3-DICHLOROPROPENE		6.3	U		3.2	U		3.2	U				
TRICHLOROETHENE		710			450			390					
TRICHLOROFLUOROMETHANE		7	U		3.5	U		3.5	U				
VINYL ACETATE		6.3	UR	C	3.2	UR	C	3.2	UR	C			
VINYL CHLORIDE		35			17			15	J	P			

PROJ_NO: 04882	NSAMPLE	DR-DPT-27-49						DR-DPT-41-25			TB-080613		
SDG: 240-27624-1	LAB_ID	240-27624-4						240-27624-5			240-27624-6		
FRACTION: OV	SAMP_DATE	8/6/2013						8/6/2013			8/6/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRANS-1,3-DICHLOROPROPENE		1.9	U					240	U		0.19	U	
TRICHLOROETHENE		120						23000			0.17	U	
TRICHLOROFLUOROMETHANE		2.1	U					260	U		0.21	U	
VINYL ACETATE		1.9	UR	C				240	UR	C	0.19	UR	C
VINYL CHLORIDE		2.2	U					280	U		0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-27-45			DR-DPT-27-49			TB-080613		
SDG: 240-27624-1	LAB_ID	240-27624-3			240-27624-4			240-27624-6		
FRACTION: TICOV	SAMP_DATE	8/6/2013			8/6/2013			8/6/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-BUTENE		40	NJ	Z1						
1-PROPENE, 2-METHYL-					11	NJ	Z1			
2(3H)-FURANONE, DIHYDRO-3,5-DIMETHYL-		36	NJ	Z1						
PROPANOIC ACID, 2-METHYL-, TERT-BUTYLDIM								1.1	NJ	Z1

PROJ_NO: 04882	NSAMPLE	DR-DPT-27-45			DR-DPT-27-49			TB-080613		
SDG: 240-27624-1	LAB_ID	240-27624-3			240-27624-4			240-27624-6		
FRACTION: TICOV	SAMP_DATE	8/6/2013			8/6/2013			8/6/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-BUTENE		40	NJ	Z1						
1-PROPENE, 2-METHYL-					11	NJ	Z1			
2(3H)-FURANONE, DIHYDRO-3,5-DIMETHYL-		36	NJ	Z1						
PROPANOIC ACID, 2-METHYL-, TERT-BUTYLDIM								1.1	NJ	Z1

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-35 | Lab Sample ID: 240-27624-1

Matrix: Water | Lab File ID: UXC3890.D

Analysis Method: 8260B | Date Collected: 08/06/2013 09:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 15:57

Soil Aliquot Vol: | Dilution Factor: 33.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	33	U	33	7.7
71-55-6	1,1,1-Trichloroethane	33	U	33	7.3
79-34-5	1,1,2,2-Tetrachloroethane	33	U	33	6.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	33	U	33	9.3
75-34-3	1,1-Dichloroethane	33	U	33	5.0
75-35-4	1,1-Dichloroethene	33	U	33	6.3
563-58-6	1,1-Dichloropropene	33	U	33	4.3
87-61-6	1,2,3-Trichlorobenzene	33	U	33	5.7
96-18-4	1,2,3-Trichloropropane	33	U	33	14
526-73-8	1,2,3-Trimethylbenzene	170	U	170	0.20
120-82-1	1,2,4-Trichlorobenzene	33	U	33	5.0
95-63-6	1,2,4-Trimethylbenzene	33	U	33	4.0
96-12-8	1,2-Dibromo-3-Chloropropane	67	U	67	22
95-50-1	1,2-Dichlorobenzene	33	U	33	4.3
107-06-2	1,2-Dichloroethane	33	U	33	7.3
78-87-5	1,2-Dichloropropane	33	U	33	6.0
541-73-1	1,3-Dichlorobenzene	33	U	33	4.7
142-28-9	1,3-Dichloropropane	33	U	33	5.3
106-46-7	1,4-Dichlorobenzene	33	U	33	4.3
594-20-7	2,2-Dichloropropane	33	U	33	4.3
110-75-8	2-Chloroethyl vinyl ether	330	U	330	33
95-49-8	2-Chlorotoluene	33	U	33	3.7
591-78-6	2-Hexanone	330	U	330	14
108-86-1	Bromobenzene	33	U	33	4.3
74-97-5	Bromochloromethane	33	U	33	9.7
106-43-4	4-Chlorotoluene	33	U	33	6.0
99-87-6	p-Isopropyltoluene	33	U	33	4.0
67-64-1	Acetone	330	U	330	37
71-43-2	Benzene	33	U	33	4.3
75-25-2	Bromoform	33	U	33	21
74-83-9	Bromomethane	33	U	33	14
75-15-0	Carbon disulfide	33	U	33	4.3
56-23-5	Carbon tetrachloride	33	U	33	4.3
108-90-7	Chlorobenzene	33	U	33	5.0
75-00-3	Chloroethane	33	U	33	9.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-35 Lab Sample ID: 240-27624-1

Matrix: Water Lab File ID: UXC3890.D

Analysis Method: 8260B Date Collected: 08/06/2013 09:40

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 15:57

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	33	U	33	5.3
74-87-3	Chloromethane	33	U	33	10
156-59-2	cis-1,2-Dichloroethene	200		33	5.7
10061-01-5	cis-1,3-Dichloropropene	33	U	33	4.7
87-68-3	Hexachlorobutadiene	33	U	33	10
74-95-3	Dibromomethane	33	U	33	9.3
75-27-4	Bromodichloromethane	33	U	33	5.0
75-71-8	Dichlorodifluoromethane	33	U	33	10
100-41-4	Ethylbenzene	33	U	33	5.7
106-93-4	1,2-Dibromoethane	33	U	33	8.0
108-20-3	Diisopropyl ether	330	U	330	50
91-20-3	Naphthalene	33	U	33	8.0
179601-23-1	m-Xylene & p-Xylene	67	U	67	8.0
104-51-8	n-Butylbenzene	33	U	33	4.0
98-82-8	Isopropylbenzene	33	U	33	4.3
103-65-1	n-Propylbenzene	33	U	33	4.7
78-93-3	2-Butanone	330	U	330	19
108-10-1	4-Methyl-2-pentanone	330	U	330	11
135-98-8	sec-Butylbenzene	33	U	33	4.3
1634-04-4	Methyl tert-butyl ether	33	U	33	5.7
994-05-8	Tert-amyl-methyl ether (TAME)	170	U	170	2.2
75-09-2	Methylene Chloride	33	U	33	11
95-47-6	o-Xylene	33	U	33	4.7
100-42-5	Styrene	33	U	33	3.7
637-92-3	Ethyl-t-butyl ether (ETBE)	170	U	170	3.7
98-06-6	tert-Butylbenzene	33	U	33	4.3
127-18-4	Tetrachloroethene	33	U	33	9.7
108-88-3	Toluene	33	U	33	4.3
156-60-5	trans-1,2-Dichloroethene	33	U	33	6.3
10061-02-6	trans-1,3-Dichloropropene	33	U	33	6.3
79-01-6	Trichloroethene	710		33	5.7
75-69-4	Trichlorofluoromethane	33	U	33	7.0
108-05-4	Vinyl acetate	67	U	67	6.3
75-01-4	Vinyl chloride	35		33	7.3
75-65-0	tert-Butyl alcohol	1700	U	1700	130
1330-20-7	Xylenes, Total	67	U	67	4.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-35 Lab Sample ID: 240-27624-1

Matrix: Water Lab File ID: UXC3890.D

Analysis Method: 8260B Date Collected: 08/06/2013 09:40

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 15:57

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	33	U	33	6.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-35 Lab Sample ID: 240-27624-1

Matrix: Water Lab File ID: UXC3890.D

Analysis Method: 8260B Date Collected: 08/06/2013 09:40

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 15:57

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-40 | Lab Sample ID: 240-27624-2

Matrix: Water | Lab File ID: UXR6901.D

Analysis Method: 8260B | Date Collected: 08/06/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/13/2013 19:30

Soil Aliquot Vol: | Dilution Factor: 16.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97250 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	17	U	17	3.8
71-55-6	1,1,1-Trichloroethane	17	U	17	3.7
79-34-5	1,1,2,2-Tetrachloroethane	17	U	17	3.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	17	U	17	4.7
75-34-3	1,1-Dichloroethane	17	U	17	2.5
75-35-4	1,1-Dichloroethene	17	U	17	3.2
563-58-6	1,1-Dichloropropene	17	U	17	2.2
87-61-6	1,2,3-Trichlorobenzene	17	U	17	2.8
96-18-4	1,2,3-Trichloropropane	17	U	17	7.2
526-73-8	1,2,3-Trimethylbenzene	83	U	83	0.098
120-82-1	1,2,4-Trichlorobenzene	17	U	17	2.5
95-63-6	1,2,4-Trimethylbenzene	17	U	17	2.0
96-12-8	1,2-Dibromo-3-Chloropropane	33	U	33	11
95-50-1	1,2-Dichlorobenzene	17	U	17	2.2
107-06-2	1,2-Dichloroethane	17	U	17	3.7
78-87-5	1,2-Dichloropropane	17	U	17	3.0
541-73-1	1,3-Dichlorobenzene	17	U	17	2.3
142-28-9	1,3-Dichloropropane	17	U	17	2.7
106-46-7	1,4-Dichlorobenzene	17	U	17	2.2
594-20-7	2,2-Dichloropropane	17	U	17	2.2
110-75-8	2-Chloroethyl vinyl ether	170	U	170	17
95-49-8	2-Chlorotoluene	17	U	17	1.8
591-78-6	2-Hexanone	170	U	170	6.8
108-86-1	Bromobenzene	17	U	17	2.2
74-97-5	Bromochloromethane	17	U	17	4.8
106-43-4	4-Chlorotoluene	17	U	17	3.0
99-87-6	p-Isopropyltoluene	17	U	17	2.0
67-64-1	Acetone	170	U	170	18
71-43-2	Benzene	17	U	17	2.2
75-25-2	Bromoform	17	U	17	11
74-83-9	Bromomethane	17	U	17	6.8
75-15-0	Carbon disulfide	17	U	17	2.2
56-23-5	Carbon tetrachloride	17	U	17	2.2
108-90-7	Chlorobenzene	17	U	17	2.5
75-00-3	Chloroethane	17	U	17	4.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-40 Lab Sample ID: 240-27624-2

Matrix: Water Lab File ID: UXR6901.D

Analysis Method: 8260B Date Collected: 08/06/2013 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 19:30

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	17	U	17	2.7
74-87-3	Chloromethane	17	U	17	5.0
156-59-2	cis-1,2-Dichloroethene	160		17	2.8
10061-01-5	cis-1,3-Dichloropropene	17	U	17	2.3
87-68-3	Hexachlorobutadiene	17	U	17	5.0
74-95-3	Dibromomethane	17	U	17	4.7
75-27-4	Bromodichloromethane	17	U	17	2.5
75-71-8	Dichlorodifluoromethane	17	U	17	5.2
100-41-4	Ethylbenzene	17	U	17	2.8
106-93-4	1,2-Dibromoethane	17	U	17	4.0
108-20-3	Diisopropyl ether	170	U	170	25
91-20-3	Naphthalene	17	U	17	4.0
179601-23-1	m-Xylene & p-Xylene	33	U	33	4.0
104-51-8	n-Butylbenzene	17	U	17	2.0
98-82-8	Isopropylbenzene	17	U	17	2.2
103-65-1	n-Propylbenzene	17	U	17	2.3
78-93-3	2-Butanone	170	U	170	9.5
108-10-1	4-Methyl-2-pentanone	170	U	170	5.3
135-98-8	sec-Butylbenzene	17	U	17	2.2
1634-04-4	Methyl tert-butyl ether	17	U	17	2.8
994-05-8	Tert-amyl-methyl ether (TAME)	83	U	83	1.1
75-09-2	Methylene Chloride	17	U	17	5.5
95-47-6	o-Xylene	17	U	17	2.3
100-42-5	Styrene	17	U	17	1.8
637-92-3	Ethyl-t-butyl ether (ETBE)	83	U	83	1.8
98-06-6	tert-Butylbenzene	17	U	17	2.2
127-18-4	Tetrachloroethene	17	U	17	4.8
108-88-3	Toluene	17	U	17	2.2
156-60-5	trans-1,2-Dichloroethene	5.2	J	17	3.2
10061-02-6	trans-1,3-Dichloropropene	17	U	17	3.2
79-01-6	Trichloroethene	450		17	2.8
75-69-4	Trichlorofluoromethane	17	U	17	3.5
108-05-4	Vinyl acetate	33	U	33	3.2
75-01-4	Vinyl chloride	17		17	3.7
75-65-0	tert-Butyl alcohol	830	U	830	65
1330-20-7	Xylenes, Total	33	U	33	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-40 Lab Sample ID: 240-27624-2

Matrix: Water Lab File ID: UXR6901.D

Analysis Method: 8260B Date Collected: 08/06/2013 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 19:30

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	17	U	17	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-117
2037-26-5	Toluene-d8 (Surr)	83		74-115
1868-53-7	Dibromofluoromethane (Surr)	104		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-40 Lab Sample ID: 240-27624-2

Matrix: Water Lab File ID: UXR6901.D

Analysis Method: 8260B Date Collected: 08/06/2013 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 19:30

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-45 | Lab Sample ID: 240-27624-3

Matrix: Water | Lab File ID: UXC3892.D

Analysis Method: 8260B | Date Collected: 08/06/2013 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 16:41

Soil Aliquot Vol: | Dilution Factor: 16.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	17	U	17	3.8
71-55-6	1,1,1-Trichloroethane	17	U	17	3.7
79-34-5	1,1,2,2-Tetrachloroethane	17	U	17	3.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	17	U	17	4.7
75-34-3	1,1-Dichloroethane	17	U	17	2.5
75-35-4	1,1-Dichloroethene	17	U	17	3.2
563-58-6	1,1-Dichloropropene	17	U	17	2.2
87-61-6	1,2,3-Trichlorobenzene	17	U	17	2.8
96-18-4	1,2,3-Trichloropropane	17	U	17	7.2
526-73-8	1,2,3-Trimethylbenzene	83	U	83	0.098
120-82-1	1,2,4-Trichlorobenzene	17	U	17	2.5
95-63-6	1,2,4-Trimethylbenzene	17	U	17	2.0
96-12-8	1,2-Dibromo-3-Chloropropane	33	U	33	11
95-50-1	1,2-Dichlorobenzene	17	U	17	2.2
107-06-2	1,2-Dichloroethane	17	U	17	3.7
78-87-5	1,2-Dichloropropane	17	U	17	3.0
541-73-1	1,3-Dichlorobenzene	17	U	17	2.3
142-28-9	1,3-Dichloropropane	17	U	17	2.7
106-46-7	1,4-Dichlorobenzene	17	U	17	2.2
594-20-7	2,2-Dichloropropane	17	U	17	2.2
110-75-8	2-Chloroethyl vinyl ether	170	U	170	17
95-49-8	2-Chlorotoluene	17	U	17	1.8
591-78-6	2-Hexanone	170	U	170	6.8
108-86-1	Bromobenzene	17	U	17	2.2
74-97-5	Bromochloromethane	17	U	17	4.8
106-43-4	4-Chlorotoluene	17	U	17	3.0
99-87-6	p-Isopropyltoluene	17	U	17	2.0
67-64-1	Acetone	170	U	170	18
71-43-2	Benzene	17	U	17	2.2
75-25-2	Bromoform	17	U	17	11
74-83-9	Bromomethane	17	U	17	6.8
75-15-0	Carbon disulfide	17	U	17	2.2
56-23-5	Carbon tetrachloride	17	U	17	2.2
108-90-7	Chlorobenzene	17	U	17	2.5
75-00-3	Chloroethane	17	U	17	4.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-45 Lab Sample ID: 240-27624-3

Matrix: Water Lab File ID: UXC3892.D

Analysis Method: 8260B Date Collected: 08/06/2013 10:35

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 16:41

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	17	U	17	2.7
74-87-3	Chloromethane	17	U	17	5.0
156-59-2	cis-1,2-Dichloroethene	220		17	2.8
10061-01-5	cis-1,3-Dichloropropene	17	U	17	2.3
87-68-3	Hexachlorobutadiene	17	U	17	5.0
74-95-3	Dibromomethane	17	U	17	4.7
75-27-4	Bromodichloromethane	17	U	17	2.5
75-71-8	Dichlorodifluoromethane	17	U	17	5.2
100-41-4	Ethylbenzene	17	U	17	2.8
106-93-4	1,2-Dibromoethane	17	U	17	4.0
108-20-3	Diisopropyl ether	170	U	170	25
91-20-3	Naphthalene	17	U	17	4.0
179601-23-1	m-Xylene & p-Xylene	33	U	33	4.0
104-51-8	n-Butylbenzene	17	U	17	2.0
98-82-8	Isopropylbenzene	17	U	17	2.2
103-65-1	n-Propylbenzene	17	U	17	2.3
78-93-3	2-Butanone	170	U	170	9.5
108-10-1	4-Methyl-2-pentanone	170	U	170	5.3
135-98-8	sec-Butylbenzene	17	U	17	2.2
1634-04-4	Methyl tert-butyl ether	17	U	17	2.8
994-05-8	Tert-amyl-methyl ether (TAME)	83	U	83	1.1
75-09-2	Methylene Chloride	17	U	17	5.5
95-47-6	o-Xylene	17	U	17	2.3
100-42-5	Styrene	17	U	17	1.8
637-92-3	Ethyl-t-butyl ether (ETBE)	83	U	83	1.8
98-06-6	tert-Butylbenzene	17	U	17	2.2
127-18-4	Tetrachloroethene	17	U	17	4.8
108-88-3	Toluene	17	U	17	2.2
156-60-5	trans-1,2-Dichloroethene	7.4	J	17	3.2
10061-02-6	trans-1,3-Dichloropropene	17	U	17	3.2
79-01-6	Trichloroethene	390		17	2.8
75-69-4	Trichlorofluoromethane	17	U	17	3.5
108-05-4	Vinyl acetate	33	U	33	3.2
75-01-4	Vinyl chloride	15	J	17	3.7
75-65-0	tert-Butyl alcohol	830	U	830	65
1330-20-7	Xylenes, Total	33	U	33	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-45 | Lab Sample ID: 240-27624-3

Matrix: Water | Lab File ID: UXC3892.D

Analysis Method: 8260B | Date Collected: 08/06/2013 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 16:41

Soil Aliquot Vol: | Dilution Factor: 16.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	17	U	17	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	85		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-45 | Lab Sample ID: 240-27624-3

Matrix: Water | Lab File ID: UXC3892.D

Analysis Method: 8260B | Date Collected: 08/06/2013 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 16:41

Soil Aliquot Vol: | Dilution Factor: 16.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

Number TICs Found: 6 | TIC Result Total: 198.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
106-98-9	1-Butene	1.76	40	T J N
	Unknown	1.96	24	T J
78-78-4	Butane, 2-methyl-	2.08	42	T J N
5145-1-7	2(3H)-Furanone, dihydro-3,5-dimethyl-	2.25	36	T J N
109-66-0	Pentane	2.30	49	T J N
110-54-3	Hexane	3.61	7.5	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-49 | Lab Sample ID: 240-27624-4

Matrix: Water | Lab File ID: UXR6902.D

Analysis Method: 8260B | Date Collected: 08/06/2013 11:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/13/2013 19:53

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97250 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	10	U	10	2.3
71-55-6	1,1,1-Trichloroethane	10	U	10	2.2
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	1.8
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	10	U	10	2.8
75-34-3	1,1-Dichloroethane	10	U	10	1.5
75-35-4	1,1-Dichloroethene	10	U	10	1.9
563-58-6	1,1-Dichloropropene	10	U	10	1.3
87-61-6	1,2,3-Trichlorobenzene	10	U	10	1.7
96-18-4	1,2,3-Trichloropropane	10	U	10	4.3
526-73-8	1,2,3-Trimethylbenzene	50	U	50	0.059
120-82-1	1,2,4-Trichlorobenzene	10	U	10	1.5
95-63-6	1,2,4-Trimethylbenzene	10	U	10	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	20	U	20	6.7
95-50-1	1,2-Dichlorobenzene	10	U	10	1.3
107-06-2	1,2-Dichloroethane	2.3	J	10	2.2
78-87-5	1,2-Dichloropropane	10	U	10	1.8
541-73-1	1,3-Dichlorobenzene	10	U	10	1.4
142-28-9	1,3-Dichloropropane	10	U	10	1.6
106-46-7	1,4-Dichlorobenzene	10	U	10	1.3
594-20-7	2,2-Dichloropropane	10	U	10	1.3
110-75-8	2-Chloroethyl vinyl ether	100	U	100	9.9
95-49-8	2-Chlorotoluene	10	U	10	1.1
591-78-6	2-Hexanone	100	U	100	4.1
108-86-1	Bromobenzene	10	U	10	1.3
74-97-5	Bromochloromethane	10	U	10	2.9
106-43-4	4-Chlorotoluene	10	U	10	1.8
99-87-6	p-Isopropyltoluene	10	U	10	1.2
67-64-1	Acetone	19	J	100	11
71-43-2	Benzene	1.6	J	10	1.3
75-25-2	Bromoform	10	U	10	6.4
74-83-9	Bromomethane	10	U	10	4.1
75-15-0	Carbon disulfide	10	U	10	1.3
56-23-5	Carbon tetrachloride	10	U	10	1.3
108-90-7	Chlorobenzene	10	U	10	1.5
75-00-3	Chloroethane	10	U	10	2.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-49 Lab Sample ID: 240-27624-4

Matrix: Water Lab File ID: UXR6902.D

Analysis Method: 8260B Date Collected: 08/06/2013 11:20

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 19:53

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	10	U	10	1.6
74-87-3	Chloromethane	10	U	10	3.0
156-59-2	cis-1,2-Dichloroethene	130		10	1.7
10061-01-5	cis-1,3-Dichloropropene	10	U	10	1.4
87-68-3	Hexachlorobutadiene	10	U	10	3.0
74-95-3	Dibromomethane	10	U	10	2.8
75-27-4	Bromodichloromethane	10	U	10	1.5
75-71-8	Dichlorodifluoromethane	10	U	10	3.1
100-41-4	Ethylbenzene	10	U	10	1.7
106-93-4	1,2-Dibromoethane	10	U	10	2.4
108-20-3	Diisopropyl ether	100	U	100	15
91-20-3	Naphthalene	10	U	10	2.4
179601-23-1	m-Xylene & p-Xylene	20	U	20	2.4
104-51-8	n-Butylbenzene	10	U	10	1.2
98-82-8	Isopropylbenzene	10	U	10	1.3
103-65-1	n-Propylbenzene	10	U	10	1.4
78-93-3	2-Butanone	100	U	100	5.7
108-10-1	4-Methyl-2-pentanone	100	U	100	3.2
135-98-8	sec-Butylbenzene	10	U	10	1.3
1634-04-4	Methyl tert-butyl ether	10	U	10	1.7
994-05-8	Tert-amyl-methyl ether (TAME)	50	U	50	0.67
75-09-2	Methylene Chloride	10	U	10	3.3
95-47-6	o-Xylene	10	U	10	1.4
100-42-5	Styrene	10	U	10	1.1
637-92-3	Ethyl-t-butyl ether (ETBE)	50	U	50	1.1
98-06-6	tert-Butylbenzene	10	U	10	1.3
127-18-4	Tetrachloroethene	10	U	10	2.9
108-88-3	Toluene	10	U	10	1.3
156-60-5	trans-1,2-Dichloroethene	10	U	10	1.9
10061-02-6	trans-1,3-Dichloropropene	10	U	10	1.9
79-01-6	Trichloroethene	120		10	1.7
75-69-4	Trichlorofluoromethane	10	U	10	2.1
108-05-4	Vinyl acetate	20	U	20	1.9
75-01-4	Vinyl chloride	10	U	10	2.2
75-65-0	tert-Butyl alcohol	500	U	500	39
1330-20-7	Xylenes, Total	20	U	20	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-49 Lab Sample ID: 240-27624-4

Matrix: Water Lab File ID: UXR6902.D

Analysis Method: 8260B Date Collected: 08/06/2013 11:20

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 19:53

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	10	U	10	1.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		63-129
460-00-4	4-Bromofluorobenzene (Surr)	72		66-117
2037-26-5	Toluene-d8 (Surr)	80		74-115
1868-53-7	Dibromofluoromethane (Surr)	109		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-27-49 | Lab Sample ID: 240-27624-4

Matrix: Water | Lab File ID: UXR6902.D

Analysis Method: 8260B | Date Collected: 08/06/2013 11:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/13/2013 19:53

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97250 | Units: ug/L

Number TICs Found: 3 | TIC Result Total: 41

CAS NO.	COMPOUND NAME	RT	RESULT	Q
115-11-7	1-Propene, 2-methyl-	2.14	11	T J N
109-67-1	1-Pentene	2.68	13	T J N
563-46-2	1-Butene, 2-methyl-	2.75	17	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-41-25 | Lab Sample ID: 240-27624-5

Matrix: Water | Lab File ID: UXR6903.D

Analysis Method: 8260B | Date Collected: 08/06/2013 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/13/2013 20:15

Soil Aliquot Vol: | Dilution Factor: 1250

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97250 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1300	U	1300	290
71-55-6	1,1,1-Trichloroethane	1300	U	1300	280
79-34-5	1,1,2,2-Tetrachloroethane	1300	U	1300	230
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1300	U	1300	350
75-34-3	1,1-Dichloroethane	1300	U	1300	190
75-35-4	1,1-Dichloroethene	1300	U	1300	240
563-58-6	1,1-Dichloropropene	1300	U	1300	160
87-61-6	1,2,3-Trichlorobenzene	1300	U	1300	210
96-18-4	1,2,3-Trichloropropane	1300	U	1300	540
526-73-8	1,2,3-Trimethylbenzene	6300	U	6300	7.4
120-82-1	1,2,4-Trichlorobenzene	1300	U	1300	190
95-63-6	1,2,4-Trimethylbenzene	1300	U	1300	150
96-12-8	1,2-Dibromo-3-Chloropropane	2500	U	2500	840
95-50-1	1,2-Dichlorobenzene	1300	U	1300	160
107-06-2	1,2-Dichloroethane	1300	U	1300	280
78-87-5	1,2-Dichloropropane	1300	U	1300	230
541-73-1	1,3-Dichlorobenzene	1300	U	1300	180
142-28-9	1,3-Dichloropropane	1300	U	1300	200
106-46-7	1,4-Dichlorobenzene	1300	U	1300	160
594-20-7	2,2-Dichloropropane	1300	U	1300	160
110-75-8	2-Chloroethyl vinyl ether	13000	U	13000	1200
95-49-8	2-Chlorotoluene	1300	U	1300	140
591-78-6	2-Hexanone	13000	U	13000	510
108-86-1	Bromobenzene	1300	U	1300	160
74-97-5	Bromochloromethane	1300	U	1300	360
106-43-4	4-Chlorotoluene	1300	U	1300	230
99-87-6	p-Isopropyltoluene	1300	U	1300	150
67-64-1	Acetone	13000	U	13000	1400
71-43-2	Benzene	1300	U	1300	160
75-25-2	Bromoform	1300	U	1300	800
74-83-9	Bromomethane	1300	U	1300	510
75-15-0	Carbon disulfide	1300	U	1300	160
56-23-5	Carbon tetrachloride	1300	U	1300	160
108-90-7	Chlorobenzene	1300	U	1300	190
75-00-3	Chloroethane	1300	U	1300	360

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-41-25 Lab Sample ID: 240-27624-5

Matrix: Water Lab File ID: UXR6903.D

Analysis Method: 8260B Date Collected: 08/06/2013 14:50

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 20:15

Soil Aliquot Vol: Dilution Factor: 1250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1300	U	1300	200
74-87-3	Chloromethane	1300	U	1300	380
156-59-2	cis-1,2-Dichloroethene	17000		1300	210
10061-01-5	cis-1,3-Dichloropropene	1300	U	1300	180
87-68-3	Hexachlorobutadiene	1300	U	1300	380
74-95-3	Dibromomethane	1300	U	1300	350
75-27-4	Bromodichloromethane	1300	U	1300	190
75-71-8	Dichlorodifluoromethane	1300	U	1300	390
100-41-4	Ethylbenzene	1300	U	1300	210
106-93-4	1,2-Dibromoethane	1300	U	1300	300
108-20-3	Diisopropyl ether	13000	U	13000	1900
91-20-3	Naphthalene	1300	U	1300	300
179601-23-1	m-Xylene & p-Xylene	2500	U	2500	300
104-51-8	n-Butylbenzene	1300	U	1300	150
98-82-8	Isopropylbenzene	1300	U	1300	160
103-65-1	n-Propylbenzene	1300	U	1300	180
78-93-3	2-Butanone	13000	U	13000	710
108-10-1	4-Methyl-2-pentanone	13000	U	13000	400
135-98-8	sec-Butylbenzene	1300	U	1300	160
1634-04-4	Methyl tert-butyl ether	1300	U	1300	210
994-05-8	Tert-amyl-methyl ether (TAME)	6300	U	6300	84
75-09-2	Methylene Chloride	1600	B	1300	410
95-47-6	o-Xylene	1300	U	1300	180
100-42-5	Styrene	1300	U	1300	140
637-92-3	Ethyl-t-butyl ether (ETBE)	6300	U	6300	140
98-06-6	tert-Butylbenzene	1300	U	1300	160
127-18-4	Tetrachloroethene	1300	U	1300	360
108-88-3	Toluene	1700		1300	160
156-60-5	trans-1,2-Dichloroethene	1300	U	1300	240
10061-02-6	trans-1,3-Dichloropropene	1300	U	1300	240
79-01-6	Trichloroethene	23000		1300	210
75-69-4	Trichlorofluoromethane	1300	U	1300	260
108-05-4	Vinyl acetate	2500	U	2500	240
75-01-4	Vinyl chloride	1300	U	1300	280
75-65-0	tert-Butyl alcohol	63000	U	63000	4900
1330-20-7	Xylenes, Total	2500	U	2500	180

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-41-25 Lab Sample ID: 240-27624-5

Matrix: Water Lab File ID: UXR6903.D

Analysis Method: 8260B Date Collected: 08/06/2013 14:50

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 20:15

Soil Aliquot Vol: Dilution Factor: 1250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1300	U	1300	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	80		74-115
1868-53-7	Dibromofluoromethane (Surr)	105		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-41-25 Lab Sample ID: 240-27624-5

Matrix: Water Lab File ID: UXR6903.D

Analysis Method: 8260B Date Collected: 08/06/2013 14:50

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 20:15

Soil Aliquot Vol: Dilution Factor: 1250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: TB-080613 Lab Sample ID: 240-27624-6

Matrix: Water Lab File ID: UXC3937.D

Analysis Method: 8260B Date Collected: 08/06/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 12:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97217 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: TB-080613 Lab Sample ID: 240-27624-6

Matrix: Water Lab File ID: UXC3937.D

Analysis Method: 8260B Date Collected: 08/06/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 12:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97217 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: TB-080613 Lab Sample ID: 240-27624-6

Matrix: Water Lab File ID: UXC3937.D

Analysis Method: 8260B Date Collected: 08/06/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 12:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97217 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	105		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: TB-080613 Lab Sample ID: 240-27624-6

Matrix: Water Lab File ID: UXC3937.D

Analysis Method: 8260B Date Collected: 08/06/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 12:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97217 Units: ug/L

Number TICs Found: 2 TIC Result Total: 2.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	1.93	1.1	T J
1000221-67-3	Propanoic acid, 2-methyl-, tert-butyldim	4.18	1.1	T J N

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 240-27624-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-080613	240-27624-6	TB	08/06/2013	08/13/2013	08/13/2013	7	0	7
OV	UG/L	DR-DPT-41-25	240-27624-5	NM	08/06/2013	08/13/2013	08/13/2013	7	0	7
OV	UG/L	DR-DPT-27-49	240-27624-4	NM	08/06/2013	08/13/2013	08/13/2013	7	0	7
OV	UG/L	DR-DPT-27-45	240-27624-3	NM	08/06/2013	08/12/2013	08/12/2013	6	0	6
OV	UG/L	DR-DPT-27-40	240-27624-2	NM	08/06/2013	08/13/2013	08/13/2013	7	0	7
OV	UG/L	DR-DPT-27-35	240-27624-1	NM	08/06/2013	08/12/2013	08/12/2013	6	0	6

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/6/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			112IC04882
(301) 528-3021 Phone	TAT if different from Below 5 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			Sampler: S. Cameron
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT-27-35	8/6/2013	0940	GW	Water	3		x	
DR-DPT-27-40	8/6/2013	1010	GW	Water	3		x	
DR-DPT-27-45	8/6/2013	1035	GW	Water	3		x	
DR-DPT-27-49	8/6/2013	1120	GW	Water	3		x	
DR-DPT-41-25	8/6/2013	1450	GW	Water	3		x	
DR-DPT-	8/6/2013		GW	Water	3		x	
DR-DPT-	8/6/2013		GW	Water	3		x	
DR-DPT-	8/6/2013		GW	Water	3		x	
DR-DPT-	8/6/2013		GW	Water	3		x	
DR-DPT-	8/6/2013		GW	Water	3		x	
DR-DPT-	8/6/2013		GW	Water	3		x	
TB-080613	8/6/2013	—	GW	Water	2		x	

240-27624 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: 5 day TAT

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8-6-13/1530	[signature]	TestAmerica	8/6/13 1530
Relinquished by: [signature]	Company: TestAmerica	Date/Time: 8/6/13/1640	Received by: [signature]	Company: TAL	Date/Time: 8/7 920
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 27624**
Canton Facility

Client TETRA TECH Site Name MSA Cooler unpacked by: Lance Hall

Cooler Received on 8/7/13 Opened on _____

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # BACT Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam (Plastic Bag) None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF −1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. 2.2 °C	Corrected Cooler Temp. 2.2 °C	

2. Were custody seals on the outside of the cooler(s)? (Yes) Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC376062**
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: APS

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Areas

Report Number: 240-27624-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/07/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.2 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-27-35 (240-27624-1), DR-DPT-27-40 (240-27624-2), DR-DPT-27-45 (240-27624-3), DR-DPT-27-49 (240-27624-4), DR-DPT-41-25 (240-27624-5) and TB-080613 (240-27624-6) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/12/2013 and 08/13/2013.

Methylene Chloride was detected in method blank MB 240-97250/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Xylenes, Total failed the recovery criteria low for MRL 240-97217/10.

Samples DR-DPT-27-35 (240-27624-1)[33.33X], DR-DPT-27-40 (240-27624-2)[16.67X], DR-DPT-27-45 (240-27624-3)[16.67X], DR-DPT-27-49 (240-27624-4)[10X] and DR-DPT-41-25 (240-27624-5)[1250X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27624-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27624-1	DR-DPT-27-35	Water	08/06/2013 0940	08/07/2013 0920
240-27624-2	DR-DPT-27-40	Water	08/06/2013 1010	08/07/2013 0920
240-27624-3	DR-DPT-27-45	Water	08/06/2013 1035	08/07/2013 0920
240-27624-4	DR-DPT-27-49	Water	08/06/2013 1120	08/07/2013 0920
240-27624-5	DR-DPT-41-25	Water	08/06/2013 1450	08/07/2013 0920
240-27624-6TB	TB-080613	Water	08/06/2013 0000	08/07/2013 0920

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27624-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-27624-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	E	Result exceeded calibration range.
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab File ID: BFB173A.D BFB Injection Date: 07/08/2013

Instrument ID: A3UX15 BFB Injection Time: 10:21

Analysis Batch No.: 92812

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.1	
75	30.0 - 60.0 % of mass 95	47.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.3	(0.3)1
174	50.0 - 120.00 % of mass 95	96.0	
175	5.0 - 9.0 % of mass 174	6.4	(6.7)1
176	95.0 - 101.0 % of mass 174	93.2	(97.1)1
177	5.0 - 9.0 % of mass 176	5.8	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92812/2	UXC2911.D	07/08/2013	10:52
	STD8260 240-92812/3	UXC2912.D	07/08/2013	11:14
	STD8260 240-92812/4	UXC2913.D	07/08/2013	11:37
	STD8260 240-92812/5	UXC2914.D	07/08/2013	12:00
	STD8260 240-92812/6	UXC2915.D	07/08/2013	12:22
	STD8260 240-92812/7	UXC2916.D	07/08/2013	12:44
	STD 240-92812/8	UXC2917.D	07/08/2013	13:07
	STD 240-92812/9	UXC2918.D	07/08/2013	13:29
	STD 240-92812/10	UXC2919.D	07/08/2013	13:51
	STD 240-92812/11	UXC2920.D	07/08/2013	14:13
	STD 240-92812/12	UXC2921.D	07/08/2013	14:35
	STD 240-92812/13	UXC2922.D	07/08/2013	14:58
	ICV 240-92812/14	UXC2923.D	07/08/2013	15:20

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-27624-1 | Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 | Calibration End Date: 07/08/2013 12:44 | Calibration ID: 16192

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92812/7	UXC2916.D
Level 2	STD8260 240-92812/6	UXC2915.D
Level 3	STD8260 240-92812/5	UXC2914.D
Level 4	STD8260 240-92812/4	UXC2913.D
Level 5	STD8260 240-92812/3	UXC2912.D
Level 6	STD8260 240-92812/2	UXC2911.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.5517 0.5431	0.5051	0.4539	0.5046	0.5080	Ave		0.5111				6.8		15.0			
Chloromethane	0.7450 0.6078	0.6497	0.6272	0.5942	0.5817	Ave		0.6343			0.1000	9.4		15.0			
Vinyl chloride	0.8030 0.6798	0.7214	0.6604	0.6526	0.6540	Ave		0.6952				8.4		15.0			
Bromomethane	0.5746 0.5308	0.4785	0.4688	0.4632	0.4829	Ave		0.4998				8.8		15.0			
Chloroethane	0.5536 0.5359	0.4716	0.4489	0.4640	0.4739	Ave		0.4913				8.7		15.0			
Trichlorofluoromethane	0.9233 0.8028	0.7744	0.7276	0.7273	0.7510	Ave		0.7844				9.4		15.0			
~~Acrolein~~	0.0426 0.0387	0.0358	0.0348	0.0356	0.0360	Ave		~~0.0372~~				7.9		15.0			
1,1-Dichloroethene	0.4686 0.4313	0.4266	0.4022	0.3797	0.4119	Ave		0.4201				7.2		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.4291 0.3900	0.3806	0.3656	0.3555	0.3814	Ave		0.3837				6.6		15.0			
Acetone	0.2006 0.0841	0.1382	0.0934	0.0847	0.0841	Lin1	0.2253	0.0790							0.9970		0.9900
Iodomethane	0.7728 0.7228	0.7056	0.7167	0.6829	0.7180	Ave		0.7198				4.1		15.0			
Carbon disulfide	1.1103 1.1775	0.9795	1.0058	0.9941	1.1084	Ave		1.0626				7.6		15.0			
~~Acetonitrile~~	0.0342 0.0342	0.0344	0.0328	0.0324	0.0327	Ave		~~0.0334~~				2.7		15.0			
Methyl acetate	0.2068 0.1691	0.1960	0.1770	0.1680	0.1705	Ave		0.1812				9.0		15.0			
Methylene Chloride	1.3018 0.4640	0.8657	0.5983	0.4874	0.4776	Lin1	0.8447	0.4351							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0167 0.0156	0.0170	0.0161	0.0153	0.0155	Ave		0.0160				4.3		15.0			
Acrylonitrile	0.1144 0.0990	0.1062	0.0933	0.0939	0.0950	Ave		0.1003				8.4		15.0			
Methyl tert-butyl ether	0.8988 0.8964	0.7996	0.8241	0.8106	0.8768	Ave		0.8510				5.3		15.0			
trans-1,2-Dichloroethene	0.5206 0.4591	0.4298	0.4522	0.4206	0.4474	Ave		0.4549				7.7		15.0			
Hexane	0.0826 0.0692	0.0610	0.0650	0.0617	0.0686	Ave		0.0680				12.0		15.0			
1,1-Dichloroethane	0.7726 0.6663	0.6701	0.6652	0.6184	0.6702	Ave		0.6771			0.1000	7.5		15.0			
Vinyl acetate	0.0312 0.0345	0.0260	0.0280	0.0315	0.0344	Ave		0.0309				11.0		15.0			
2,2-Dichloropropane	0.4965 0.4770	0.4469	0.4435	0.4389	0.4822	Ave		0.4642				5.2		15.0			
cis-1,2-Dichloroethene	0.5059 0.4495	0.4464	0.4459	0.4253	0.4531	Ave		0.4543				6.0		15.0			
2-Butanone	0.1047 0.0853	0.0958	0.0799	0.0835	0.0868	Ave		0.0893				10.0		15.0			
Bromochloromethane	0.2137 0.2094	0.2110	0.2139	0.2003	0.2155	Ave		0.2106				2.6		15.0			
Tetrahydrofuran	0.0820 0.0504	0.0877	0.0604	0.0549	0.0551	Lin1	0.0463	0.0506							0.9950		0.9900
Chloroform	0.7726 0.6762	0.6773	0.6628	0.6440	0.6882	Ave		0.6868				6.5		15.0			
1,1,1-Trichloroethane	0.5883 0.6385	0.5832	0.5660	0.5646	0.6191	Ave		0.5933				5.0		15.0			
Cyclohexane	0.6105 0.6777	0.5785	0.5956	0.5731	0.6557	Ave		0.6152				6.9		15.0			
1,1-Dichloropropene	0.4465 0.4830	0.4353	0.4599	0.4414	0.4857	Ave		0.4586				4.7		15.0			
Carbon tetrachloride	0.4691 0.5361	0.4385	0.4786	0.4573	0.5111	Ave		0.4818				7.5		15.0			
Benzene	1.5031 1.4845	1.3669	1.3945	1.3561	1.4893	Ave		1.4324				4.7		15.0			
1,2-Dichloroethane	0.4384 0.4122	0.3982	0.3916	0.3855	0.4305	Ave		0.4094				5.2		15.0			
Trichloroethene	0.3782 0.4038	0.3773	0.3795	0.3721	0.4146	Ave		0.3876				4.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.6050 0.6664	0.5487	0.5594	0.5573	0.6399	Ave		0.5961				8.2		15.0			
1,2-Dichloropropane	0.3150 0.3126	0.2790	0.2830	0.2797	0.3123	Ave		0.2969				6.1		15.0			
Dibromomethane	0.1632 0.1783	0.1660	0.1764	0.1763	0.1854	Ave		0.1743				4.7		15.0			
~~1,4-Dioxane~~	0.0025 0.0022	0.0028	0.0024	0.0025	0.0027	Ave		~~0.0025~~				8.7		15.0			
Bromodichloromethane	0.3275 0.3923	0.3087	0.3198	0.3427	0.3839	Ave		0.3458				10.0		15.0			
2-Chloroethyl vinyl ether	0.0932 0.1100	0.0988	0.0935	0.0938	0.1125	Ave		0.1003				8.7		15.0			
cis-1,3-Dichloropropene	0.2597 0.4059	0.2989	0.3472	0.3560	0.4259	Lin1	-0.201	0.4117							0.9970		0.9900
4-Methyl-2-pentanone	0.1492 0.1802	0.1596	0.1554	0.1612	0.1759	Ave		0.1636				7.4		15.0			
Toluene	1.5958 1.9404	1.5432	1.6684	1.7318	1.9078	Ave		1.7312				9.4		15.0			
trans-1,3-Dichloropropene	0.3515 0.4226	0.3318	0.3839	0.3842	0.4401	Ave		0.3857				11.0		15.0			
Ethyl methacrylate	0.2342 0.3141	0.2449	0.2575	0.2812	0.3201	Ave		0.2753				13.0		15.0			
1,1,2-Trichloroethane	0.2625 0.2847	0.2562	0.2761	0.2713	0.3014	Ave		0.2754				5.9		15.0			
Tetrachloroethene	0.4046 0.4299	0.3997	0.4074	0.3949	0.4298	Ave		0.4110				3.7		15.0			
1,3-Dichloropropane	0.4835 0.4883	0.4652	0.4874	0.4690	0.4964	Ave		0.4816				2.5		15.0			
2-Hexanone	0.1237 0.1355	0.1336	0.1336	0.1363	0.1361	Ave		0.1331				3.6		15.0			
Dibromochloromethane	0.2255 0.3382	0.2420	0.2722	0.2787	0.3325	Lin1	-0.167	0.3339							0.9960		0.9900
1,2-Dibromoethane	0.2963 0.2895	0.2929	0.3004	0.2862	0.3057	Ave		0.2952				2.4		15.0			
Chlorobenzene	1.2736 1.3032	1.2051	1.2413	1.2067	1.3099	Ave		1.2566			0.3000	3.7		15.0			
1,1,1,2-Tetrachloroethane	0.4105 0.5095	0.3735	0.4211	0.4480	0.4955	Ave		0.4430				12.0		15.0			
Ethylbenzene	0.5758 0.7453	0.6099	0.6588	0.6554	0.7276	Ave		0.6621				9.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	1.4003 1.8959	1.3982	1.5803	1.6215	1.7988	Ave		1.6158				13.0		15.0			
o-Xylene	0.7653 0.9894	0.7310	0.8658	0.8492	0.9562	Ave		0.8595				12.0		15.0			
Styrene	1.0640 1.5189	1.1029	1.2664	1.3028	1.4583	Ave		1.2856				14.0		15.0			
Bromoform	0.1573 0.2170	0.1331	0.1702	0.1725	0.2121	Lin1	-0.115	0.2130			0.1000				0.9940		0.9900
Isopropylbenzene	1.8485 2.6148	1.8208	2.1481	2.1625	2.4574	Ave		2.1753				15.0		15.0			
1,1,2,2-Tetrachloroethane	0.5862 0.5798	0.5197	0.5495	0.5317	0.6073	Ave		0.5624			0.3000	6.1		15.0			
Bromobenzene	0.8419 0.8711	0.8006	0.8406	0.8276	0.9336	Ave		0.8526				5.4		15.0			
1,2,3-Trichloropropane	0.2096 0.1794	0.1975	0.1917	0.1847	0.1966	Ave		0.1932				5.5		15.0			
trans-1,4-Dichloro-2-butene	0.1251 0.1372	0.1220	0.1205	0.1195	0.1439	Ave		0.1280				7.9		15.0			
n-Propylbenzene	0.7734 0.9144	0.7493	0.8306	0.8038	0.9589	Ave		0.8384				9.8		15.0			
2-Chlorotoluene	0.7242 0.8478	0.7031	0.7968	0.7776	0.8846	Ave		0.7890				8.8		15.0			
1,3,5-Trimethylbenzene	2.1015 2.9558	2.1539	2.5175	2.5267	2.9870	Ave		2.5404				15.0		15.0			
4-Chlorotoluene	2.2590 2.6734	2.3259	2.5418	2.4182	2.7891	Ave		2.5012				8.2		15.0			
tert-Butylbenzene	1.6393 2.5942	1.8353	2.1170	2.1085	2.5263	Lin1	-1.339	2.5552							0.9960		0.9900
1,2,4-Trimethylbenzene	2.1545 3.0175	2.2373	2.5961	2.6094	3.0293	Ave		2.6074				14.0		15.0			
sec-Butylbenzene	2.6277 3.5591	2.6935	3.0641	2.9629	3.5696	Ave		3.0795				13.0		15.0			
1,3-Dichlorobenzene	1.7337 1.7818	1.6648	1.7289	1.6465	1.8604	Ave		1.7360				4.5		15.0			
p-Isopropyltoluene	2.2077 3.1387	2.2763	2.6231	2.6903	3.1222	Ave		2.6764				15.0		15.0			
1,4-Dichlorobenzene	1.8225 1.8367	1.7585	1.8284	1.7499	1.9331	Ave		1.8215				3.6		15.0			
n-Butylbenzene	1.8985 2.6104	1.9824	2.1389	2.1783	2.5811	Ave		2.2316				13.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 10:52 Calibration End Date: 07/08/2013 12:44 Calibration ID: 16192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.7374 1.7368	1.6448	1.6874	1.6099	1.7724	Ave		1.6981				3.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0882 0.1050	0.0823	0.0767	0.0836	0.1009	Ave		0.0895				12.0		15.0			
1,3,5-Trichlorobenzene	1.1990 1.2803	1.1454	1.1673	1.1696	1.3286	Ave		1.2150				6.0		15.0			
1,2,4-Trichlorobenzene	0.8485 0.9941	0.7453	0.8730	0.8702	1.0111	Ave		0.8904				11.0		15.0			
Hexachlorobutadiene	0.6139 0.5599	0.5582	0.5947	0.5505	0.6095	Ave		0.5811				4.9		15.0			
Naphthalene	1.2492 1.8418	1.2054	1.4209	1.5345	1.8430	Lin1	-1.002	1.8289							0.9950		0.9900
1,2,3-Trichlorobenzene	0.7587 0.7995	0.6968	0.7984	0.7726	0.8675	Ave		0.7822				7.2		15.0			
Dibromofluoromethane (Surr)	0.3853 0.3609	0.3389	0.3362	0.3395	0.3573	Ave		0.3530				5.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3605 0.3426	0.3332	0.3332	0.3318	0.3472	Ave		0.3414				3.3		15.0			
Toluene-d8 (Surr)	1.4119 1.6935	1.3902	1.4468	1.5099	1.6289	Ave		1.5135				8.1		15.0			
4-Bromofluorobenzene (Surr)	0.6075 0.6406	0.5598	0.6052	0.6044	0.6263	Ave		0.6073				4.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 13:07 Calibration End Date: 07/08/2013 14:58 Calibration ID: 16194

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-92812/13	UXC2922.D
Level 2	STD 240-92812/12	UXC2921.D
Level 3	STD 240-92812/11	UXC2920.D
Level 4	STD 240-92812/10	UXC2919.D
Level 5	STD 240-92812/9	UXC2918.D
Level 6	STD 240-92812/8	UXC2917.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	1.2261 1.1211	1.2094	1.1113	1.0897	1.1354	Ave		1.1488				4.8		15.0			
Ethyl ether	0.3304 0.2512	0.2858	0.2556	0.2506	0.2677	Ave		0.2735				11.0		15.0			
3-Chloro-1-propene	0.2172 0.2304	0.2036	0.2039	0.2060	0.2257	Ave		0.2145				5.5		15.0			
Diisopropyl ether	0.3236 0.3838	0.3274	0.3261	0.3330	0.3669	Ave		0.3435				7.4		15.0			
2-Chloro-1,3-butadiene	0.5351 0.6018	0.5589	0.5603	0.5387	0.5994	Ave		0.5657				5.1		15.0			
Ethyl-t-butyl ether (ETBE)	0.8582 0.9609	0.8535	0.8617	0.8572	0.9334	Ave		0.8875				5.3		15.0			
Ethyl acetate	0.1542 0.1275	0.1119	0.1182	0.1260	0.1275	Ave		0.1275				11.0		15.0			
~~Propionitrile~~	0.0338 0.0301	0.0327	0.0299	0.0313	0.0320	Ave		~~0.0316~~				4.8		15.0			
Methacrylonitrile	0.1131 0.1096	0.1268	0.0925	0.1079	0.1069	Ave		0.1095				10.0		15.0			
~~Isobutyl alcohol~~	0.0065 0.0053	0.0054	0.0056	0.0055	0.0056	Ave		~~0.0057~~				7.9		15.0			
Tert-amyl-methyl ether (TAME)	0.6887 0.8144	0.6554	0.6837	0.7149	0.7935	Ave		0.7251				8.9		15.0			
n-Heptane	0.0663 0.0740	0.0610	0.0614	0.0626	0.0725	Ave		0.0663				8.6		15.0			
~~n-Butanol~~	0.0040 0.0039	0.0042	0.0039	0.0038	0.0044	Ave		~~0.0040~~				5.3		15.0			
Methyl methacrylate	0.1153 0.1230	0.1139	0.1082	0.1170	0.1242	Ave		0.1169				5.1		15.0			
~~2-Nitropropane~~	0.0227 0.0180	0.0222	0.0169	0.0160	0.0182	Ave		~~0.0190~~				15.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92812

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2013 13:07 Calibration End Date: 07/08/2013 14:58 Calibration ID: 16194

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0652 0.0864	0.0660	0.0690	0.0787	0.0888	Ave		0.0757				14.0		15.0			
1,2,3-Trimethylbenzene	2.3950 3.3870	2.5386	2.6503	2.9593	3.2397	Ave		2.8616				14.0		15.0			
2-Methylnaphthalene	0.3447 0.8433	0.3991	0.4672	0.6032	0.8046	Qua	-1.896	0.7545	0.0014						0.9980		0.9900
n-Butyl acetate	0.2221 0.2535	0.2088	0.2092	0.2235	0.2530	Ave		0.2284				8.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: ICV 240-92812/14 Calibration Date: 07/08/2013 15:20

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC2923.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.5111	0.3480		1.00	0.0100	-31.9	50.0
Chloromethane	Ave	0.6343	0.4884	0.1000	1.00	0.0100	-23.0	50.0
Vinyl chloride	Ave	0.6952	0.5384		1.00	0.0100	-22.6*	20.0
Bromomethane	Ave	0.4998	0.3589		1.00	0.0100	-28.2	50.0
Chloroethane	Ave	0.4913	0.3797		1.00	0.0100	-22.7	50.0
Trichlorofluoromethane	Ave	0.7844	0.7094		1.00	0.0100	-9.6	50.0
Acrolein	Ave	0.0372	0.0353		20.0	0.0300	-5.1	50.0
1,1-Dichloroethene	Ave	0.4201	0.4067		1.00	0.0100	-3.2	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.3837	0.4057		1.00	0.0100	5.8	50.0
Acetone	Lin1		0.0730		10.0	0.0200	-21.9	50.0
Iodomethane	Ave	0.7198	0.6939		1.00	0.0100	-3.6	50.0
Carbon disulfide	Ave	1.063	1.125		1.00	0.0100	5.9	50.0
Acetonitrile	Ave	0.0334	0.0328		20.0	0.0300	-1.9	50.0
Methyl acetate	Ave	0.1812	0.1613		10.0	0.0100	-11.0	50.0
Methylene Chloride	Lin1		0.4756		1.00	0.0100	-10.1	50.0
tert-Butyl alcohol	Ave	0.0160	0.0139		50.0	0.200	-13.1	50.0
Acrylonitrile	Ave	0.1003	0.0886		20.0	0.0300	-11.6	50.0
Methyl tert-butyl ether	Ave	0.8510	0.7886		1.00	0.0100	-7.3	50.0
trans-1,2-Dichloroethene	Ave	0.4549	0.4207		1.00	0.0100	-7.5	50.0
Hexane	Ave	0.0680	0.0712		1.00	0.0100	4.7	20.0
1,1-Dichloroethane	Ave	0.6771	0.6483	0.1000	1.00	0.0100	-4.3	50.0
Vinyl acetate	Ave	0.0309	0.0382		2.00	0.0100	23.4	50.0
2,2-Dichloropropane	Ave	0.4642	0.4084		1.00	0.0100	-12.0	50.0
cis-1,2-Dichloroethene	Ave	0.4543	0.4223		1.00	0.0100	-7.1	50.0
2-Butanone	Ave	0.0893	0.0782		10.0	0.0200	-12.5	50.0
Bromochloromethane	Ave	0.2106	0.1974		1.00	0.0100	-6.3	50.0
Tetrahydrofuran	Lin1		0.0513		5.00	0.0100	-7.9	50.0
Chloroform	Ave	0.6868	0.6364		1.00	0.0100	-7.3	20.0
1,1,1-Trichloroethane	Ave	0.5933	0.5492		1.00	0.0100	-7.4	50.0
Cyclohexane	Ave	0.6152	0.6028		1.00	0.0100	-2.0	50.0
1,1-Dichloropropene	Ave	0.4586	0.4561		1.00	0.0100	-0.6	50.0
Carbon tetrachloride	Ave	0.4818	0.4449		1.00	0.0100	-7.7	50.0
Benzene	Ave	1.432	1.445		1.00	0.0100	0.9	50.0
1,2-Dichloroethane	Ave	0.4094	0.4145		1.00	0.0100	1.2	50.0
Trichloroethene	Ave	0.3876	0.3847		1.00	0.0100	-0.7	50.0
Methylcyclohexane	Ave	0.5961	0.5476		1.00	0.0100	-8.1	50.0
1,2-Dichloropropane	Ave	0.2969	0.2955		1.00	0.0100	-0.5	20.0
Dibromomethane	Ave	0.1743	0.1820		1.00	0.0100	4.5	50.0
Bromodichloromethane	Ave	0.3458	0.3427		1.00	0.0100	-0.9	50.0
2-Chloroethyl vinyl ether	Ave	0.1003	0.0999		10.0	0.0100	-0.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: ICV 240-92812/14 Calibration Date: 07/08/2013 15:20

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC2923.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Lin1		0.3643		1.00	0.0100	-6.6	50.0
4-Methyl-2-pentanone	Ave	0.1636	0.1595		10.0	0.0200	-2.5	50.0
Toluene	Ave	1.731	1.813		1.00	0.0100	4.7	20.0
trans-1,3-Dichloropropene	Ave	0.3857	0.3915		1.00	0.0100	1.5	50.0
1,1,2-Trichloroethane	Ave	0.2754	0.2976		1.00	0.0100	8.1	50.0
Tetrachloroethene	Ave	0.4110	0.4130		1.00	0.0100	0.5	50.0
1,3-Dichloropropane	Ave	0.4816	0.5035		1.00	0.0100	4.5	50.0
2-Hexanone	Ave	0.1331	0.1314		10.0	0.0200	-1.3	50.0
Dibromochloromethane	Lin1		0.2789		1.00	0.0100	-11.5	50.0
1,2-Dibromoethane	Ave	0.2952	0.3097		1.00	0.0100	4.9	50.0
Chlorobenzene	Ave	1.257	1.263	0.3000	1.00	0.0100	0.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4430	0.4302		1.00	0.0100	-2.9	50.0
Ethylbenzene	Ave	0.6621	0.6863		1.00	0.0100	3.7	20.0
m-Xylene & p-Xylene	Ave	1.616	1.648		2.00	0.0200	2.0	50.0
o-Xylene	Ave	0.8595	0.8536		1.00	0.0100	-0.7	50.0
Styrene	Ave	1.286	1.379		1.00	0.0100	7.3	50.0
Bromoform	Lin1		0.1716	0.1000	1.00	0.0100	-14.0	50.0
Isopropylbenzene	Ave	2.175	2.138		1.00	0.0100	-1.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5624	0.5665	0.3000	1.00	0.0100	0.7	50.0
Bromobenzene	Ave	0.8526	0.8607		1.00	0.0100	1.0	50.0
1,2,3-Trichloropropane	Ave	0.1932	0.1892		1.00	0.0100	-2.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1280	0.1247		1.00	0.0200	-2.6	50.0
n-Propylbenzene	Ave	0.8384	0.8930		1.00	0.0100	6.5	50.0
2-Chlorotoluene	Ave	0.7890	0.8235		1.00	0.0100	4.4	50.0
1,3,5-Trimethylbenzene	Ave	2.540	2.615		1.00	0.0100	2.9	50.0
4-Chlorotoluene	Ave	2.501	2.541		1.00	0.0100	1.6	50.0
tert-Butylbenzene	Lin1		2.138		1.00	0.0100	-11.1	50.0
1,2,4-Trimethylbenzene	Ave	2.607	2.701		1.00	0.0100	3.6	50.0
sec-Butylbenzene	Ave	3.079	3.060		1.00	0.0100	-0.6	50.0
1,3-Dichlorobenzene	Ave	1.736	1.688		1.00	0.0100	-2.7	50.0
p-Isopropyltoluene	Ave	2.676	2.823		1.00	0.0100	5.5	50.0
1,4-Dichlorobenzene	Ave	1.822	1.740		1.00	0.0100	-4.5	50.0
n-Butylbenzene	Ave	2.232	2.264		1.00	0.0100	1.4	50.0
1,2-Dichlorobenzene	Ave	1.698	1.656		1.00	0.0100	-2.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0895	0.0831		2.00	0.0100	-7.1	50.0
1,2,4-Trichlorobenzene	Ave	0.8904	0.8391		1.00	0.0100	-5.8	50.0
Hexachlorobutadiene	Ave	0.5811	0.5037		1.00	0.0100	-13.3	50.0
Naphthalene	Lin1		1.456		1.00	0.0100	-14.9	50.0
1,2,3-Trichlorobenzene	Ave	0.7822	0.7415		1.00	0.0100	-5.2	50.0
Dibromofluoromethane (Surr)	Ave	0.3530	0.3073		0.00775	0.00890	-13.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3414	0.3108		0.00810	0.00890	-9.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: ICV 240-92812/14 Calibration Date: 07/08/2013 15:20

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC2923.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.514	1.456		0.00856	0.00890	-3.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6073	0.5579		0.00818	0.00890	-8.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: ICV 240-92812/14 Calibration Date: 07/08/2013 15:20

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 13:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 14:58

Lab File ID: UXC2923.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2735	0.2541		2.00	0.0100	-7.1	50.0
Diisopropyl ether	Ave	0.3435	0.3001		10.0	0.0100	-12.6	50.0
Isobutyl alcohol	Ave	0.0057	0.0055		50.0	0.500	-2.1	50.0
Cyclohexanone	Ave	0.0757	0.0134		20.0	0.200	-82.3*	50.0
1,2,3-Trimethylbenzene	Ave	2.862	2.829		0.00989	0.0100	-1.1	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab File ID: BFB198.D BFB Injection Date: 08/12/2013

Instrument ID: A3UX15 BFB Injection Time: 09:49

Analysis Batch No.: 97045

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.3	
75	30.0 - 60.0 % of mass 95	48.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.4)1
174	50.0 - 120.00 % of mass 95	95.1	
175	5.0 - 9.0 % of mass 174	5.9	(6.2)1
176	95.0 - 101.0 % of mass 174	91.1	(95.8)1
177	5.0 - 9.0 % of mass 176	5.9	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97045/2	UXC3875.D	08/12/2013	10:18
	LCS 240-97045/5	UXC3876.D	08/12/2013	10:41
	CCV 240-97045/3	UXC3877.D	08/12/2013	11:03
	CCV 240-97045/4	UXC3878.D	08/12/2013	11:26
	MB 240-97045/6	UXC3879.D	08/12/2013	11:48
DR-DPT-27-35	240-27624-1	UXC3890.D	08/12/2013	15:57
DR-DPT-27-45	240-27624-3	UXC3892.D	08/12/2013	16:41
	240-27585-B-1 MS	UXC3900.D	08/12/2013	19:39
	240-27585-B-1 MSD	UXC3901.D	08/12/2013	20:01

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCVIS 240-97045/2 Calibration Date: 08/12/2013 10:18

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3875.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.5111	0.4136		1.00	0.0100	-19.1	50.0
Chloromethane	Ave	0.6343	0.5493	0.1000	1.00	0.0100	-13.4	50.0
Vinyl chloride	Ave	0.6952	0.6346		1.00	0.0100	-8.7	20.0
Bromomethane	Ave	0.4998	0.3989		1.00	0.0100	-20.2	50.0
Chloroethane	Ave	0.4913	0.4052		1.00	0.0100	-17.5	50.0
Trichlorofluoromethane	Ave	0.7844	0.7465		1.00	0.0100	-4.8	50.0
Acrolein	Ave	0.0372	0.0265		20.0	0.100	-28.9	50.0
1,1-Dichloroethene	Ave	0.4201	0.3854		1.00	0.0100	-8.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.3837	0.3386		1.00	0.0100	-11.8	50.0
Acetone	Lin1		0.0740		10.0	0.0200	-20.5	50.0
Iodomethane	Ave	0.7198	0.6686		1.00	0.0100	-7.1	50.0
Carbon disulfide	Ave	1.063	1.105		1.00	0.0100	3.9	50.0
Acetonitrile	Ave	0.0334	0.0321		20.0	0.100	-4.1	50.0
Methyl acetate	Ave	0.1812	0.1776		10.0	0.0200	-2.0	50.0
Methylene Chloride	Lin1		0.4812		1.00	0.0100	-8.8	50.0
tert-Butyl alcohol	Ave	0.0160	0.0160		50.0	0.200	-0.4	50.0
Acrylonitrile	Ave	0.1003	0.0985		20.0	0.0200	-1.7	50.0
Methyl tert-butyl ether	Ave	0.8510	0.8276		1.00	0.0100	-2.8	50.0
trans-1,2-Dichloroethene	Ave	0.4549	0.4035		1.00	0.0100	-11.3	50.0
Hexane	Ave	0.0680	0.0694		1.00	0.0100	2.0	20.0
1,1-Dichloroethane	Ave	0.6771	0.6445	0.1000	1.00	0.0100	-4.8	50.0
Vinyl acetate	Ave	0.0309	0.0331		2.00	0.0100	7.0	50.0
2,2-Dichloropropane	Ave	0.4642	0.4558		1.00	0.0100	-1.8	50.0
cis-1,2-Dichloroethene	Ave	0.4543	0.4163		1.00	0.0100	-8.4	50.0
2-Butanone	Ave	0.0893	0.0884		10.0	0.0200	-1.1	50.0
Bromochloromethane	Ave	0.2106	0.1935		1.00	0.0100	-8.2	50.0
Tetrahydrofuran	Lin1		0.0540		5.00	0.0100	-2.5	50.0
Chloroform	Ave	0.6868	0.6270		1.00	0.0100	-8.7	20.0
1,1,1-Trichloroethane	Ave	0.5933	0.5564		1.00	0.0100	-6.2	50.0
Cyclohexane	Ave	0.6152	0.6321		1.00	0.0100	2.8	50.0
1,1-Dichloropropene	Ave	0.4586	0.4575		1.00	0.0100	-0.2	50.0
Carbon tetrachloride	Ave	0.4818	0.4830		1.00	0.0100	0.2	50.0
Benzene	Ave	1.432	1.409		1.00	0.0100	-1.7	50.0
1,2-Dichloroethane	Ave	0.4094	0.3911		1.00	0.0100	-4.5	50.0
Trichloroethene	Ave	0.3876	0.3695		1.00	0.0100	-4.7	50.0
Methylcyclohexane	Ave	0.5961	0.5850		1.00	0.0100	-1.9	50.0
1,2-Dichloropropane	Ave	0.2969	0.3110		1.00	0.0100	4.7	20.0
Dibromomethane	Ave	0.1743	0.1688		1.00	0.0100	-3.1	50.0
1,4-Dioxane	Ave	0.0025	0.0026		50.0	0.500	2.8	50.0
Bromodichloromethane	Ave	0.3458	0.3630		1.00	0.0100	5.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCVIS 240-97045/2 Calibration Date: 08/12/2013 10:18

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3875.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1003	0.1338		10.0	0.0200	33.5	50.0
cis-1,3-Dichloropropene	Lin1		0.4094		1.00	0.0100	4.3	50.0
4-Methyl-2-pentanone	Ave	0.1636	0.1901		10.0	0.0200	16.2	50.0
Toluene	Ave	1.731	1.894		1.00	0.0100	9.4	20.0
trans-1,3-Dichloropropene	Ave	0.3857	0.4378		1.00	0.0100	13.5	50.0
~~Ethyl methacrylate~~	Ave	0.2753	0.3668		1.00	0.0100	~~33.2~~	50.0
1,1,2-Trichloroethane	Ave	0.2754	0.3034		1.00	0.0100	10.2	50.0
Tetrachloroethene	Ave	0.4110	0.3947		1.00	0.0100	-4.0	50.0
1,3-Dichloropropane	Ave	0.4816	0.5616		1.00	0.0100	16.6	50.0
2-Hexanone	Ave	0.1331	0.1605		10.0	0.0200	20.6	50.0
Dibromochloromethane	Lin1		0.3135		1.00	0.0100	-1.1	50.0
1,2-Dibromoethane	Ave	0.2952	0.3121		1.00	0.0100	5.7	50.0
Chlorobenzene	Ave	1.257	1.277	0.3000	1.00	0.0100	1.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4430	0.4139		1.00	0.0100	-6.6	50.0
Ethylbenzene	Ave	0.6621	0.6866		1.00	0.0100	3.7	20.0
m-Xylene & p-Xylene	Ave	1.616	1.727		2.00	0.0200	6.9	50.0
o-Xylene	Ave	0.8595	0.8451		1.00	0.0100	-1.7	50.0
Styrene	Ave	1.286	1.378		1.00	0.0100	7.2	50.0
Bromoform	Lin1		0.1909	0.1000	1.00	0.0100	-5.0	50.0
Isopropylbenzene	Ave	2.175	2.128		1.00	0.0100	-2.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5624	0.6435	0.3000	1.00	0.0100	14.4	50.0
Bromobenzene	Ave	0.8526	0.9799		1.00	0.0100	14.9	50.0
1,2,3-Trichloropropane	Ave	0.1932	0.1993		1.00	0.0100	3.1	50.0
~~trans-1,4-Dichloro-2-butene~~	Ave	0.1280	0.0918		1.00	0.0100	~~-28.3~~	50.0
n-Propylbenzene	Ave	0.8384	0.9678		1.00	0.0100	15.4	50.0
2-Chlorotoluene	Ave	0.7890	0.9135		1.00	0.0100	15.8	50.0
1,3,5-Trimethylbenzene	Ave	2.540	2.915		1.00	0.0100	14.7	50.0
4-Chlorotoluene	Ave	2.501	2.904		1.00	0.0100	16.1	50.0
tert-Butylbenzene	Lin1		2.341		1.00	0.0100	-3.1	50.0
1,2,4-Trimethylbenzene	Ave	2.607	2.987		1.00	0.0100	14.6	50.0
sec-Butylbenzene	Ave	3.079	3.495		1.00	0.0100	13.5	50.0
1,3-Dichlorobenzene	Ave	1.736	1.784		1.00	0.0100	2.8	50.0
p-Isopropyltoluene	Ave	2.676	2.998		1.00	0.0100	12.0	50.0
1,4-Dichlorobenzene	Ave	1.822	1.829		1.00	0.0100	0.4	50.0
n-Butylbenzene	Ave	2.232	2.450		1.00	0.0100	9.8	50.0
1,2-Dichlorobenzene	Ave	1.698	1.717		1.00	0.0100	1.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0895	0.0938		2.00	0.0100	4.8	50.0
1,3,5-Trichlorobenzene	Ave	1.215	1.092		1.00	0.0100	-10.1	50.0
1,2,4-Trichlorobenzene	Ave	0.8904	0.7841		1.00	0.0100	-11.9	50.0
Hexachlorobutadiene	Ave	0.5811	0.4848		1.00	0.0100	-16.6	50.0
Naphthalene	Lin1		1.302		1.00	0.0100	-23.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCVIS 240-97045/2 Calibration Date: 08/12/2013 10:18

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3875.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7822	0.6543		1.00	0.0100	-16.4	50.0
Dibromofluoromethane (Surr)	Ave	0.3530	0.3005		0.00757	0.00890	-14.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3414	0.2926		0.00763	0.00890	-14.3	50.0
Toluene-d8 (Surr)	Ave	1.514	1.475		0.00867	0.00890	-2.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6073	0.5325		0.00780	0.00890	-12.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCV 240-97045/3 Calibration Date: 08/12/2013 11:03

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 13:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 14:58

Lab File ID: UXC3877.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	1.149	0.9406		2.00	0.0100	-18.1	50.0
Ethyl ether	Ave	0.2735	0.2631		2.00	0.0100	-3.8	50.0
3-Chloro-1-propene	Ave	0.2145	0.1773		2.00	0.0100	-17.3	50.0
Diisopropyl ether	Ave	0.3435	0.3217		10.0	0.0500	-6.3	50.0
2-Chloro-1,3-butadiene	Ave	0.5657	0.5103		2.00	0.0100	-9.8	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8875	0.8676		5.00	0.0100	-2.2	50.0
Ethyl acetate	Ave	0.1275	0.1641		4.00	0.0200	28.7	50.0
Propionitrile	Ave	0.0316	0.0335		4.00	0.0200	5.9	50.0
Methacrylonitrile	Ave	0.1095	0.1124		2.00	0.0100	2.7	50.0
Isobutyl alcohol	Ave	0.0057	0.0060		50.0	0.200	5.6	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7251	0.7178		5.00	0.0100	-1.0	50.0
n-Heptane	Ave	0.0663	0.0737		1.00	0.0100	11.1	50.0
n-Butanol	Ave	0.0040	0.0043		50.0	0.200	7.3	50.0
Methyl methacrylate	Ave	0.1169	0.1532		2.00	0.0100	31.0	50.0
2-Nitropropane	Ave	0.0190	0.0259		2.00	0.0200	36.3	50.0
Cyclohexanone	Ave	0.0757	0.0834		20.0	0.100	10.1	50.0
1,2,3-Trimethylbenzene	Ave	2.862	3.207		0.0112	0.0100	12.1	50.0
2-Methylnaphthalene	Qua		0.3294		5.00	0.0200	-44.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCV 240-97045/4 Calibration Date: 08/12/2013 11:26

Instrument ID: A3UX15 Calib Start Date: 07/19/2012 22:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/20/2012 00:15

Lab File ID: UXC3878.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrothiophene	Qua		0.2363		2.00	0.0100	17.5	50.0
1,4-Dichlorobutane	Ave	0.6007	0.4902		1.00	0.0100	-18.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCV 240-97045/4 Calibration Date: 08/12/2013 11:26

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3878.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.3530	0.2895		0.00730	0.00890	-18.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3414	0.3103		0.00809	0.00890	-9.1	50.0
Toluene-d8 (Surr)	Ave	1.514	1.383		0.00814	0.00890	-8.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6073	0.4933		0.00723	0.00890	-18.8	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab File ID: BFB199.D BFB Injection Date: 08/13/2013

Instrument ID: A3UX15 BFB Injection Time: 10:01

Analysis Batch No.: 97217

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.0	
75	30.0 - 60.0 % of mass 95	52.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.4	(0.4)1
174	50.0 - 120.00 % of mass 95	93.2	
175	5.0 - 9.0 % of mass 174	6.8	(7.3)1
176	95.0 - 101.0 % of mass 174	93.2	(100.0)1
177	5.0 - 9.0 % of mass 176	6.9	(7.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97217/2	UXC3931.D	08/13/2013	10:26
	LCS 240-97217/4	UXC3932.D	08/13/2013	10:49
	CCV 240-97217/3	UXC3933.D	08/13/2013	11:12
	MB 240-97217/5	UXC3935.D	08/13/2013	11:57
	MRL 240-97217/10	UXC3936.D	08/13/2013	12:20
TB-080613	240-27624-6	UXC3937.D	08/13/2013	12:42
	240-27504-B-6 MS	UXC3943.D	08/13/2013	15:02
	240-27504-B-6 MSD	UXC3944.D	08/13/2013	15:24

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCVIS 240-97217/2 Calibration Date: 08/13/2013 10:26

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3931.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.5111	0.4144		1.00	0.0100	-18.9	50.0
Chloromethane	Ave	0.6343	0.6135	0.1000	1.00	0.0100	-3.3	50.0
Vinyl chloride	Ave	0.6952	0.6891		1.00	0.0100	-0.9	20.0
Bromomethane	Ave	0.4998	0.3906		1.00	0.0100	-21.8	50.0
Chloroethane	Ave	0.4913	0.4182		1.00	0.0100	-14.9	50.0
Trichlorofluoromethane	Ave	0.7844	0.7059		1.00	0.0100	-10.0	50.0
~~Acrolein~~	Ave	0.0372	~~0.0431~~		20.0	0.100	15.8	50.0
1,1-Dichloroethene	Ave	0.4201	0.4387		1.00	0.0100	4.4	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.3837	0.3830		1.00	0.0100	-0.2	50.0
Acetone	Lin1		0.0850		10.0	0.0200	-6.7	50.0
Iodomethane	Ave	0.7198	0.7219		1.00	0.0100	0.3	50.0
Carbon disulfide	Ave	1.063	1.358		1.00	0.0100	27.8	50.0
~~Acetonitrile~~	Ave	0.0334	~~0.0369~~		20.0	0.100	10.2	50.0
Methyl acetate	Ave	0.1812	0.1867		10.0	0.0200	3.0	50.0
Methylene Chloride	Lin1		0.5487		1.00	0.0100	6.7	50.0
tert-Butyl alcohol	Ave	0.0160	0.0162		50.0	0.200	1.3	50.0
Acrylonitrile	Ave	0.1003	0.1080		20.0	0.0200	7.6	50.0
Methyl tert-butyl ether	Ave	0.8510	0.8413		1.00	0.0100	-1.1	50.0
trans-1,2-Dichloroethene	Ave	0.4549	0.4481		1.00	0.0100	-1.5	50.0
Hexane	Ave	0.0680	0.0765		1.00	0.0100	12.4	20.0
1,1-Dichloroethane	Ave	0.6771	0.7054	0.1000	1.00	0.0100	4.2	50.0
Vinyl acetate	Ave	0.0309	0.0367		2.00	0.0100	18.7	50.0
2,2-Dichloropropane	Ave	0.4642	0.4503		1.00	0.0100	-3.0	50.0
cis-1,2-Dichloroethene	Ave	0.4543	0.4332		1.00	0.0100	-4.7	50.0
2-Butanone	Ave	0.0893	0.0927		10.0	0.0200	3.8	50.0
Bromochloromethane	Ave	0.2106	0.1976		1.00	0.0100	-6.2	50.0
Tetrahydrofuran	Lin1		0.0588		5.00	0.0100	7.0	50.0
Chloroform	Ave	0.6868	0.6644		1.00	0.0100	-3.3	20.0
1,1,1-Trichloroethane	Ave	0.5933	0.5761		1.00	0.0100	-2.9	50.0
Cyclohexane	Ave	0.6152	0.6565		1.00	0.0100	6.7	50.0
1,1-Dichloropropene	Ave	0.4586	0.4776		1.00	0.0100	4.1	50.0
Carbon tetrachloride	Ave	0.4818	0.4844		1.00	0.0100	0.5	50.0
Benzene	Ave	1.432	1.493		1.00	0.0100	4.2	50.0
1,2-Dichloroethane	Ave	0.4094	0.4222		1.00	0.0100	3.1	50.0
Trichloroethene	Ave	0.3876	0.3691		1.00	0.0100	-4.8	50.0
Methylcyclohexane	Ave	0.5961	0.5816		1.00	0.0100	-2.4	50.0
1,2-Dichloropropane	Ave	0.2969	0.3364		1.00	0.0100	13.3	20.0
Dibromomethane	Ave	0.1743	0.1759		1.00	0.0100	0.9	50.0
~~1,4-Dioxane~~	Ave	0.0025	~~0.0026~~		50.0	0.500	2.6	50.0
Bromodichloromethane	Ave	0.3458	0.3717		1.00	0.0100	7.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCVIS 240-97217/2 Calibration Date: 08/13/2013 10:26

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3931.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1003	0.1247		10.0	0.0200	24.4	50.0
cis-1,3-Dichloropropene	Lin1		0.4050		1.00	0.0100	3.3	50.0
4-Methyl-2-pentanone	Ave	0.1636	0.2058		10.0	0.0200	25.8	50.0
Toluene	Ave	1.731	1.842		1.00	0.0100	6.4	20.0
trans-1,3-Dichloropropene	Ave	0.3857	0.4174		1.00	0.0100	8.2	50.0
Ethyl methacrylate	Ave	0.2753	0.3585		1.00	0.0100	30.2	50.0
1,1,2-Trichloroethane	Ave	0.2754	0.2889		1.00	0.0100	4.9	50.0
Tetrachloroethene	Ave	0.4110	0.3929		1.00	0.0100	-4.4	50.0
1,3-Dichloropropane	Ave	0.4816	0.5366		1.00	0.0100	11.4	50.0
2-Hexanone	Ave	0.1331	0.1628		10.0	0.0200	22.3	50.0
Dibromochloromethane	Lin1		0.2997		1.00	0.0100	-5.2	50.0
1,2-Dibromoethane	Ave	0.2952	0.2998		1.00	0.0100	1.6	50.0
Chlorobenzene	Ave	1.257	1.253	0.3000	1.00	0.0100	-0.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4430	0.4200		1.00	0.0100	-5.2	50.0
Ethylbenzene	Ave	0.6621	0.6788		1.00	0.0100	2.5	20.0
m-Xylene & p-Xylene	Ave	1.616	1.728		2.00	0.0200	6.9	50.0
o-Xylene	Ave	0.8595	0.8304		1.00	0.0100	-3.4	50.0
Styrene	Ave	1.286	1.359		1.00	0.0100	5.7	50.0
Bromoform	Lin1		0.1734	0.1000	1.00	0.0100	-13.2	50.0
Isopropylbenzene	Ave	2.175	2.024		1.00	0.0100	-7.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5624	0.6223	0.3000	1.00	0.0100	10.7	50.0
Bromobenzene	Ave	0.8526	0.8828		1.00	0.0100	3.5	50.0
1,2,3-Trichloropropane	Ave	0.1932	0.1878		1.00	0.0100	-2.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1280	0.1051		1.00	0.0100	-17.9	50.0
n-Propylbenzene	Ave	0.8384	0.8874		1.00	0.0100	5.8	50.0
2-Chlorotoluene	Ave	0.7890	0.8202		1.00	0.0100	3.9	50.0
1,3,5-Trimethylbenzene	Ave	2.540	2.676		1.00	0.0100	5.3	50.0
4-Chlorotoluene	Ave	2.501	2.766		1.00	0.0100	10.6	50.0
tert-Butylbenzene	Lin1		2.077		1.00	0.0100	-13.5	50.0
1,2,4-Trimethylbenzene	Ave	2.607	2.776		1.00	0.0100	6.5	50.0
sec-Butylbenzene	Ave	3.079	3.177		1.00	0.0100	3.2	50.0
1,3-Dichlorobenzene	Ave	1.736	1.698		1.00	0.0100	-2.2	50.0
p-Isopropyltoluene	Ave	2.676	2.740		1.00	0.0100	2.4	50.0
1,4-Dichlorobenzene	Ave	1.822	1.759		1.00	0.0100	-3.4	50.0
n-Butylbenzene	Ave	2.232	2.252		1.00	0.0100	0.9	50.0
1,2-Dichlorobenzene	Ave	1.698	1.603		1.00	0.0100	-5.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0895	0.0775		2.00	0.0100	-13.4	50.0
1,3,5-Trichlorobenzene	Ave	1.215	1.000		1.00	0.0100	-17.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8904	0.6888		1.00	0.0100	-22.6	50.0
Hexachlorobutadiene	Ave	0.5811	0.4774		1.00	0.0100	-17.8	50.0
Naphthalene	Lin1		1.163		1.00	0.0100	-30.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCVIS 240-97217/2 Calibration Date: 08/13/2013 10:26

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 10:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 12:44

Lab File ID: UXC3931.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7822	0.6232		1.00	0.0100	-20.3	50.0
Dibromofluoromethane (Surr)	Ave	0.3530	0.3096		0.00780	0.00890	-12.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3414	0.3085		0.00804	0.00890	-9.6	50.0
Toluene-d8 (Surr)	Ave	1.514	1.436		0.00844	0.00890	-5.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6073	0.5224		0.00766	0.00890	-14.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCV 240-97217/3 Calibration Date: 08/13/2013 11:12

Instrument ID: A3UX15 Calib Start Date: 07/08/2013 13:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/08/2013 14:58

Lab File ID: UXC3933.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	1.149	0.9463		2.00	0.0100	-17.6	50.0
Ethyl ether	Ave	0.2735	0.2557		2.00	0.0100	-6.5	50.0
3-Chloro-1-propene	Ave	0.2145	0.1829		2.00	0.0100	-14.7	50.0
Diisopropyl ether	Ave	0.3435	0.3297		10.0	0.0500	-4.0	50.0
2-Chloro-1,3-butadiene	Ave	0.5657	0.5506		2.00	0.0100	-2.7	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8875	0.8242		5.00	0.0100	-7.1	50.0
Ethyl acetate	Ave	0.1275	0.1711		4.00	0.0200	34.2	50.0
Propionitrile	Ave	0.0316	0.0334		4.00	0.0200	5.6	50.0
Methacrylonitrile	Ave	0.1095	0.1160		2.00	0.0100	6.0	50.0
Isobutyl alcohol	Ave	0.0057	0.0061		50.0	0.200	7.9	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7251	0.6781		5.00	0.0100	-6.5	50.0
n-Heptane	Ave	0.0663	0.0656		1.00	0.0100	-1.1	50.0
n-Butanol	Ave	0.0040	0.0046		50.0	0.200	15.0	50.0
Methyl methacrylate	Ave	0.1169	0.1360		2.00	0.0100	16.3	50.0
2-Nitropropane	Ave	0.0190	0.0266		2.00	0.0200	40.2	50.0
Cyclohexanone	Ave	0.0757	0.0459		20.0	0.100	-39.4	50.0
1,2,3-Trimethylbenzene	Ave	2.862	3.186		0.0111	0.0100	11.3	50.0
2-Methylnaphthalene	Qua		0.2042		5.00	0.0200	-61.0*	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab File ID: BFB224.D BFB Injection Date: 05/07/2013

Instrument ID: A3UX17 BFB Injection Time: 11:36

Analysis Batch No.: 84979

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.8	
75	30.0 - 60.0 % of mass 95	46.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.6)1
174	50.0 - 120.00 % of mass 95	75.7	
175	5.0 - 9.0 % of mass 174	5.3	(7.0)1
176	95.0 - 101.0 % of mass 174	76.1	(100.5)1
177	5.0 - 9.0 % of mass 176	4.8	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-84979/8	UXR4181.D	05/07/2013	14:13
	STDA9 240-84979/9	UXR4182.D	05/07/2013	14:35
	STDA9 240-84979/10	UXR4183.D	05/07/2013	14:57
	STDA9 240-84979/11	UXR4184.D	05/07/2013	15:20
	STDA9 240-84979/12	UXR4185.D	05/07/2013	15:42
	STDA9 240-84979/13	UXR4186.D	05/07/2013	16:05

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-27624-1 | Analy Batch No.: 84979

SDG No.:

Instrument ID: A3UX17 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2013 14:13 | Calibration End Date: 05/07/2013 16:05 | Calibration ID: 15038

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-84979/13	UXR4186.D
Level 2	STDA9 240-84979/12	UXR4185.D
Level 3	STDA9 240-84979/11	UXR4184.D
Level 4	STDA9 240-84979/10	UXR4183.D
Level 5	STDA9 240-84979/9	UXR4182.D
Level 6	STDA9 240-84979/8	UXR4181.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4720 0.4666	0.4444	0.4425	0.4216	0.4511	Ave		0.4497				4.0		15.0			
Ethyl ether	0.2660 0.2823	0.2592	0.2598	0.2486	0.2724	Ave		0.2647				4.4		15.0			
3-Chloro-1-propene	0.1359 0.1610	0.1324	0.1370	0.1376	0.1525	Ave		0.1427				7.9		15.0			
Diisopropyl ether	0.2473 0.2740	0.2449	0.2495	0.2413	0.2619	Ave		0.2531				4.9		15.0			
2-Chloro-1,3-butadiene	0.4637 0.5263	0.4684	0.4797	0.4705	0.5114	Ave		0.4867				5.3		15.0			
Ethyl-t-butyl ether (ETBE)	0.9024 1.0209	0.8872	0.9050	0.8908	0.9641	Ave		0.9284				5.7		15.0			
Ethyl acetate	0.2738 0.2913	0.2604	0.2567	0.2603	0.2798	Ave		0.2704				5.0		15.0			
~~Propionitrile~~	0.0395 0.0446	0.0399	0.0413	0.0388	0.0444	Ave		~~0.0414~~				6.1		15.0			
Methacrylonitrile	0.2320 0.1962	0.2047	0.1845	0.1766	0.1935	Ave		0.1979				9.8		15.0			
~~Isobutyl alco~~hol	0.0129 0.0119	0.0118	0.0112	0.0113	0.0120	Ave		~~0.0118~~				4.9		15.0			
Tert-amyl-methyl ether (TAME)	0.7464 0.8505	0.7381	0.7539	0.7377	0.8150	Ave		0.7736				6.1		15.0			
n-Heptane	0.0701 0.0767	0.0672	0.0711	0.0682	0.0753	Ave		0.0714				5.4		15.0			
~~n-Butanol~~	0.0085 0.0102	0.0089	0.0092	0.0093	0.0103	Ave		~~0.0094~~				7.5		15.0			
Methyl methacrylate	0.2379 0.2805	0.2371	0.2462	0.2423	0.2654	Ave		0.2516				7.0		15.0			
2-Nitropropane	0.0556 0.0713	0.0560	0.0523	0.0573	0.0637	Ave		0.0594				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 84979

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2013 14:13 Calibration End Date: 05/07/2013 16:05 Calibration ID: 15038

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1022 0.1284	0.1025	0.1176	0.1228	0.1393	Ave		0.1188				12.0		15.0			
1,2,3-Trimethylbenzene	2.3866 2.6962	2.4621	2.4926	2.4662	2.6461	Ave		2.5250				4.7		15.0			
2-Methylnaphthalene	1.5422	1.4901	1.2024	1.0735	0.7790	Ave		1.2174				26.0	*	15.0			
n-Butyl acetate	0.2099 0.2525	0.2109	0.2217	0.2175	0.2461	Ave		0.2264				8.1		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab File ID: BFB353.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX17 BFB Injection Time: 09:20

Analysis Batch No.: 92260

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.9	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.6	(0.7)1
174	50.0 - 120.00 % of mass 95	90.4	
175	5.0 - 9.0 % of mass 174	6.3	(7.0)1
176	95.0 - 101.0 % of mass 174	89.1	(98.6)1
177	5.0 - 9.0 % of mass 176	5.3	(5.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92260/2	UXR6124.D	07/02/2013	09:46
	STD8260 240-92260/3	UXR6125.D	07/02/2013	10:08
	STD8260 240-92260/4	UXR6126.D	07/02/2013	10:31
	STD8260 240-92260/5	UXR6127.D	07/02/2013	10:53
	STD8260 240-92260/6	UXR6128.D	07/02/2013	11:15
	STD8260 240-92260/7	UXR6129.D	07/02/2013	11:37
	ICV 240-92260/8	UXR6130.D	07/02/2013	12:00

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-27624-1 | Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 | Calibration End Date: 07/02/2013 11:37 | Calibration ID: 16141

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92260/7	UXR6129.D
Level 2	STD8260 240-92260/6	UXR6128.D
Level 3	STD8260 240-92260/5	UXR6127.D
Level 4	STD8260 240-92260/4	UXR6126.D
Level 5	STD8260 240-92260/3	UXR6125.D
Level 6	STD8260 240-92260/2	UXR6124.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3223 0.3393	0.3181	0.3024	0.3004	0.3388	Ave		0.3202				5.3		15.0			
Chloromethane	0.4544 0.4578	0.4523	0.3929	0.4056	0.4875	Ave		0.4418			0.1000	8.0		15.0			
Vinyl chloride	0.4102 0.3798	0.3589	0.3503	0.3461	0.3994	Ave		0.3741				7.1		15.0			
Bromomethane	0.1230 0.1142	0.1222	0.0977	0.1057	0.1303	Ave		0.1155				10.0		15.0			
Chloroethane	0.1129 0.1281	0.1159	0.0846	0.1067	0.1312	Ave		0.1132				15.0		15.0			
Trichlorofluoromethane	0.3421 0.3476	0.3140	0.2938	0.3068	0.3554	Ave		0.3266				7.7		15.0			
~~Acrolein~~	0.0511 0.0494	0.0454	0.0435	0.0467	0.0511	Ave		~~0.0479~~				6.6		15.0			
1,1-Dichloroethene	0.2571 0.2867	0.2790	0.2658	0.2658	0.3037	Ave		0.2763				6.2		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2376 0.2392	0.2346	0.2256	0.2277	0.2502	Ave		0.2358				3.8		15.0			
Acetone	0.1744 0.0914	0.1137	0.0964	0.0931	0.0997	Lin1	0.0810	0.0920							0.9980		0.9900
Iodomethane	0.3498 0.4346	0.3974	0.3967	0.3960	0.4630	Ave		0.4062				9.5		15.0			
Carbon disulfide	0.7196 0.8532	0.7423	0.7167	0.7319	0.8720	Ave		0.7726				9.1		15.0			
~~Acetonitrile~~	0.0456 0.0363	0.0399	0.0281	0.0351	0.0309	Lin1	0.0404	~~0.0341~~							0.9910		0.9900
Methyl acetate	0.2619 0.2316	0.2391	0.2253	0.2251	0.2463	Ave		0.2382				6.0		15.0			
Methylene Chloride	1.1339 0.3108	0.5024	0.3675	0.3274	0.3357	Lin1	0.4058	0.3018							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0200 0.0192	0.0202	0.0152	0.0193	0.0162	Ave		0.0184				12.0		15.0			
Acrylonitrile	0.1340 0.1211	0.1183	0.1163	0.1204	0.1315	Ave		0.1236				5.9		15.0			
Methyl tert-butyl ether	0.7215 0.7881	0.7180	0.7115	0.7210	0.8152	Ave		0.7459				5.9		15.0			
trans-1,2-Dichloroethene	0.2980 0.3126	0.2933	0.2935	0.2838	0.3255	Ave		0.3011				5.1		15.0			
Hexane	0.0647 0.0811	0.0684	0.0717	0.0771	0.0870	Ave		0.0750				11.0		15.0			
1,1-Dichloroethane	0.4693 0.5520	0.5186	0.5101	0.5082	0.5741	Ave		0.5220			0.1000	7.0		15.0			
Vinyl acetate	0.0413 0.0541	0.0420	0.0414	0.0446	0.0553	Ave		0.0464				14.0		15.0			
2,2-Dichloropropane	0.2591 0.3070	0.2724	0.2646	0.2756	0.3223	Ave		0.2835				8.9		15.0			
cis-1,2-Dichloroethene	0.2858 0.3181	0.3108	0.2951	0.2946	0.3295	Ave		0.3056				5.4		15.0			
2-Butanone	0.1485 0.1278	0.1310	0.1199	0.1285	0.1339	Ave		0.1316				7.2		15.0			
Bromochloromethane	0.1398 0.1527	0.1469	0.1440	0.1386	0.1587	Ave		0.1468				5.3		15.0			
Tetrahydrofuran	0.0722 0.0804	0.0844	0.0811	0.0775	0.0849	Ave		0.0801				5.9		15.0			
Chloroform	0.4852 0.5245	0.4983	0.4978	0.4775	0.5543	Ave		0.5063				5.6		15.0			
1,1,1-Trichloroethane	0.3690 0.4340	0.3962	0.3904	0.4052	0.4480	Ave		0.4071				7.2		15.0			
Cyclohexane	0.4887 0.6445	0.5424	0.5673	0.5896	0.6635	Ave		0.5827				11.0		15.0			
1,1-Dichloropropene	0.3484 0.4169	0.3664	0.3760	0.3807	0.4327	Ave		0.3869				8.2		15.0			
Carbon tetrachloride	0.3418 0.4159	0.3617	0.3578	0.3669	0.4185	Ave		0.3771				8.5		15.0			
Benzene	1.1898 1.1961	1.1603	1.1274	1.1009	1.2515	Ave		1.1710				4.6		15.0			
1,2-Dichloroethane	0.3930 0.4351	0.4136	0.4178	0.4053	0.4559	Ave		0.4201				5.3		15.0			
Trichloroethene	0.2698 0.3135	0.2986	0.2884	0.2943	0.3227	Ave		0.2979				6.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.4315 0.5318	0.4455	0.4468	0.5032	0.5380	Ave		0.4828				9.8		15.0			
1,2-Dichloropropane	0.2862 0.3044	0.2800	0.2821	0.2832	0.3164	Ave		0.2921				5.1		15.0			
Dibromomethane	0.1395 0.1609	0.1519	0.1489	0.1510	0.1651	Ave		0.1529				5.9		15.0			
~~1,4-Dioxane~~	0.0023 0.0025	0.0030	0.0022	0.0030	0.0022	Ave		~~0.0025~~				14.0		15.0			
Bromodichloromethane	0.2888 0.3879	0.3306	0.3279	0.3403	0.3820	Ave		0.3429				11.0		15.0			
2-Chloroethyl vinyl ether	0.1405 0.1783	0.1405	0.1501	0.1612	0.1837	Ave		0.1590				12.0		15.0			
cis-1,3-Dichloropropene	0.3115 0.4587	0.3478	0.3667	0.3856	0.4540	Ave		0.3874				15.0		15.0			
4-Methyl-2-pentanone	0.2553 0.2669	0.2545	0.2314	0.2551	0.2782	Ave		0.2569				6.1		15.0			
Toluene	1.3021 1.5660	1.4857	1.5259	1.4959	1.7627	Ave		1.5230				9.7		15.0			
trans-1,3-Dichloropropene	0.3095 0.4917	0.3622	0.4125	0.4256	0.5422	Lin1	-0.156	0.4987							0.9930		0.9900
Ethyl methacrylate	0.2873 0.4520	0.3617	0.3962	0.4120	0.5071	Lin1	-0.128	0.4640							0.9940		0.9900
1,1,2-Trichloroethane	0.2620 0.2919	0.2917	0.3126	0.2924	0.3429	Ave		0.2989				9.0		15.0			
Tetrachloroethene	0.3251 0.3387	0.3449	0.3322	0.3316	0.3809	Ave		0.3422				5.9		15.0			
1,3-Dichloropropane	0.5100 0.5344	0.5403	0.5472	0.5294	0.6145	Ave		0.5460				6.6		15.0			
2-Hexanone	0.2134 0.2235	0.2009	0.2121	0.2203	0.2588	Ave		0.2215				9.0		15.0			
Dibromochloromethane	0.2672 0.3403	0.2767	0.2875	0.3009	0.3614	Ave		0.3056				12.0		15.0			
1,2-Dibromoethane	0.2718 0.3078	0.2933	0.2979	0.2998	0.3406	Ave		0.3019				7.5		15.0			
Chlorobenzene	1.0336 1.0296	1.0736	0.9932	1.0160	1.1012	Ave		1.0412			0.3000	3.8		15.0			
1,1,1,2-Tetrachloroethane	0.3225 0.3679	0.3455	0.3360	0.3498	0.3755	Ave		0.3495				5.6		15.0			
Ethylbenzene	0.4592 0.5652	0.5397	0.5104	0.5432	0.5908	Ave		0.5348				8.6		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.5523 0.7172	0.6526	0.6529	0.7040	0.7434	Ave		0.6704				10.0		15.0			
o-Xylene	0.5596 0.6746	0.6471	0.5751	0.6530	0.6722	Ave		0.6303				8.0		15.0			
Styrene	0.7832 1.1392	1.0109	0.9596	1.1027	1.1554	Ave		1.0252				14.0		15.0			
Bromoform	0.1587 0.2167	0.1855	0.1679	0.1979	0.2112	Ave		0.1896			0.1000	12.0		15.0			
Isopropylbenzene	1.2975 1.7865	1.6058	1.4021	1.7416	1.6737	Ave		1.5846				12.0		15.0			
1,1,2,2-Tetrachloroethane	0.5949 0.5897	0.6942	0.7135	0.6603	0.7537	Ave		0.6677			0.3000	9.9		15.0			
Bromobenzene	0.7409 0.7971	0.8019	0.8706	0.8037	0.9421	Ave		0.8260				8.5		15.0			
~~trans-1,4-Dichloro-2-butene~~	0.1420	0.1606	0.1973	0.1818	0.2574	Ave		0.1878				~~24.0~~	*	15.0			
1,2,3-Trichloropropane	0.2483 0.2118	0.2361	0.2538	0.2280	0.2714	Ave		0.2416				8.6		15.0			
n-Propylbenzene	0.6211 0.8461	0.7652	0.8446	0.8150	0.9632	Ave		0.8092				14.0		15.0			
2-Chlorotoluene	0.5766 0.7056	0.6461	0.7207	0.7206	0.8083	Ave		0.6963				11.0		15.0			
1,3,5-Trimethylbenzene	1.7328 2.5501	2.3224	2.4151	2.5420	2.7191	Ave		2.3803				14.0		15.0			
4-Chlorotoluene	0.5810 0.7447	0.7173	0.7968	0.7475	0.8723	Ave		0.7433				13.0		15.0			
tert-Butylbenzene	1.7565 2.2855	2.0708	2.3638	2.2608	2.4174	Ave		2.1925				11.0		15.0			
1,2,4-Trimethylbenzene	1.7940 2.5755	2.3657	2.3673	2.6187	2.6987	Ave		2.4033				14.0		15.0			
sec-Butylbenzene	2.2505 2.9931	2.8678	2.7937	3.0418	3.0878	Ave		2.8391				11.0		15.0			
1,3-Dichlorobenzene	1.5016 1.4651	1.6322	1.5141	1.5531	1.5720	Ave		1.5397				3.8		15.0			
p-Isopropyltoluene	1.9920 2.7142	2.5267	2.3747	2.7364	2.7397	Ave		2.5139				12.0		15.0			
1,4-Dichlorobenzene	1.6614 1.5087	1.6864	1.5588	1.5856	1.6207	Ave		1.6036				4.1		15.0			
n-Butylbenzene	1.9502 2.2067	2.0766	1.8145	2.2005	2.1637	Ave		2.0687				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.5565 1.3566	1.5885	1.3652	1.4847	1.4246	Ave		1.4627				6.7		15.0			
1,2-Dibromo-3-Chloropropane	0.1083 0.0945	0.1134	0.0988	0.1178	0.1139	Ave		0.1078				8.6		15.0			
1,3,5-Trichlorobenzene	1.4227 1.0423	1.1833	0.9899	1.1825	1.1199	Ave		1.1568				13.0		15.0			
1,2,4-Trichlorobenzene	1.3992 0.7944	1.0485	0.9061	0.9889	1.0932	Qua	-0.814	1.3217	-0.013						0.9940		0.9900
Hexachlorobutadiene	0.8577 0.4096	0.5785	0.4643	0.5487	0.5226	Qua	-0.164	0.6234	-0.005						0.9980		0.9900
Naphthalene	2.3471	1.7820	1.7350	1.9088	2.0992	Ave		1.9744				13.0		15.0			
1,2,3-Trichlorobenzene	1.5049	0.9894	0.9304	0.8656	1.0349	Lin1	0.1955	0.9536							0.9900		0.9900
Dibromofluoromethane (Surr)	0.2570 0.2718	0.2401	0.2412	0.2422	0.2860	Ave		0.2564				7.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3673 0.3525	0.3374	0.3278	0.3244	0.3727	Ave		0.3470				5.9		15.0			
Toluene-d8 (Surr)	1.3184 1.3778	1.2295	1.3293	1.2752	1.5607	Ave		1.3485				8.6		15.0			
4-Bromofluorobenzene (Surr)	0.5042 0.5333	0.5117	0.4346	0.5246	0.5224	Ave		0.5052				7.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: ICV 240-92260/8 Calibration Date: 07/02/2013 12:00

Instrument ID: A3UX17 Calib Start Date: 05/07/2013 14:13

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/07/2013 16:05

Lab File ID: UXR6130.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2647	0.2981		2.00	0.0100	12.6	50.0
Diisopropyl ether	Ave	0.2531	0.2478		10.0	0.0100	-2.1	50.0
Isobutyl alcohol	Ave	0.0118	0.0106		50.0	0.500	-10.2	50.0
Cyclohexanone	Ave	0.1188	0.0201		20.0	0.200	-83.1*	50.0
1,2,3-Trimethylbenzene	Ave	2.525	2.247		0.00890	0.0100	-11.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: ICV 240-92260/8 Calibration Date: 07/02/2013 12:00

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6130.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3202	0.2957		1.00	0.0100	-7.7	50.0
Chloromethane	Ave	0.4418	0.4174	0.1000	1.00	0.0100	-5.5	50.0
Vinyl chloride	Ave	0.3741	0.3615		1.00	0.0100	-3.4	20.0
Bromomethane	Ave	0.1155	0.0997		1.00	0.0100	-13.7	50.0
Chloroethane	Ave	0.1132	0.0945		1.00	0.0100	-16.5	50.0
Trichlorofluoromethane	Ave	0.3266	0.3057		1.00	0.0100	-6.4	50.0
Acrolein	Ave	0.0479	0.0405		20.0	0.0300	-15.4	50.0
1,1-Dichloroethene	Ave	0.2763	0.2831		1.00	0.0100	2.4	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2358	0.2478		1.00	0.0100	5.1	50.0
Acetone	Lin1		0.0790		10.0	0.0200	-18.6	50.0
Iodomethane	Ave	0.4062	0.4026		1.00	0.0100	-0.9	50.0
Carbon disulfide	Ave	0.7726	0.8095		1.00	0.0100	4.8	50.0
Acetonitrile	Lin1		0.0295		20.0	0.0300	-17.3	50.0
Methyl acetate	Ave	0.2382	0.2401		10.0	0.0100	0.8	50.0
Methylene Chloride	Lin1		0.3303		1.00	0.0100	-4.0	50.0
tert-Butyl alcohol	Ave	0.0184	0.0153		50.0	0.200	-16.6	50.0
Acrylonitrile	Ave	0.1236	0.1209		20.0	0.0300	-2.1	50.0
Methyl tert-butyl ether	Ave	0.7459	0.7409		1.00	0.0100	-0.7	50.0
trans-1,2-Dichloroethene	Ave	0.3011	0.3005		1.00	0.0100	-0.2	50.0
Hexane	Ave	0.0750	0.0821		1.00	0.0100	9.5	20.0
1,1-Dichloroethane	Ave	0.5220	0.5326	0.1000	1.00	0.0100	2.0	50.0
Vinyl acetate	Ave	0.0464	0.0513		2.00	0.0100	10.5	50.0
2,2-Dichloropropane	Ave	0.2835	0.2664		1.00	0.0100	-6.0	50.0
cis-1,2-Dichloroethene	Ave	0.3056	0.3185		1.00	0.0100	4.2	50.0
2-Butanone	Ave	0.1316	0.1192		10.0	0.0200	-9.4	50.0
Bromochloromethane	Ave	0.1468	0.1465		1.00	0.0100	-0.2	50.0
Tetrahydrofuran	Ave	0.0801	0.0783		5.00	0.0100	-2.3	50.0
Chloroform	Ave	0.5063	0.5069		1.00	0.0100	0.1	20.0
1,1,1-Trichloroethane	Ave	0.4071	0.4101		1.00	0.0100	0.7	50.0
Cyclohexane	Ave	0.5827	0.5848		1.00	0.0100	0.4	50.0
1,1-Dichloropropene	Ave	0.3869	0.3863		1.00	0.0100	-0.2	50.0
Carbon tetrachloride	Ave	0.3771	0.3705		1.00	0.0100	-1.8	50.0
Benzene	Ave	1.171	1.168		1.00	0.0100	-0.3	50.0
1,2-Dichloroethane	Ave	0.4201	0.4331		1.00	0.0100	3.1	50.0
Trichloroethene	Ave	0.2979	0.3031		1.00	0.0100	1.8	50.0
Methylcyclohexane	Ave	0.4828	0.4576		1.00	0.0100	-5.2	50.0
1,2-Dichloropropane	Ave	0.2921	0.2926		1.00	0.0100	0.2	20.0
Dibromomethane	Ave	0.1529	0.1597		1.00	0.0100	4.5	50.0
Bromodichloromethane	Ave	0.3429	0.3572		1.00	0.0100	4.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1590	0.1527		10.0	0.0100	-4.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: ICV 240-92260/8 Calibration Date: 07/02/2013 12:00

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6130.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Ave	0.3874	0.3849		1.00	0.0100	-0.7	50.0
4-Methyl-2-pentanone	Ave	0.2569	0.2551		10.0	0.0200	-0.7	50.0
Toluene	Ave	1.523	1.556		1.00	0.0100	2.2	20.0
trans-1,3-Dichloropropene	Lin1		0.4292		1.00	0.0100	-10.8	50.0
1,1,2-Trichloroethane	Ave	0.2989	0.3175		1.00	0.0100	6.2	50.0
Tetrachloroethene	Ave	0.3422	0.3309		1.00	0.0100	-3.3	50.0
1,3-Dichloropropane	Ave	0.5460	0.5534		1.00	0.0100	1.4	50.0
2-Hexanone	Ave	0.2215	0.2145		10.0	0.0200	-3.1	50.0
Dibromochloromethane	Ave	0.3056	0.3086		1.00	0.0100	1.0	50.0
1,2-Dibromoethane	Ave	0.3019	0.3024		1.00	0.0100	0.2	50.0
Chlorobenzene	Ave	1.041	0.997	0.3000	1.00	0.0100	-4.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3495	0.3266		1.00	0.0100	-6.6	50.0
Ethylbenzene	Ave	0.5348	0.5117		1.00	0.0100	-4.3	20.0
m-Xylene & p-Xylene	Ave	0.6704	0.6472		2.00	0.0200	-3.5	50.0
o-Xylene	Ave	0.6303	0.5908		1.00	0.0100	-6.3	50.0
Styrene	Ave	1.025	1.007		1.00	0.0100	-1.7	50.0
Bromoform	Ave	0.1896	0.1829	0.1000	1.00	0.0100	-3.6	50.0
Isopropylbenzene	Ave	1.585	1.425		1.00	0.0100	-10.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6677	0.6837	0.3000	1.00	0.0100	2.4	50.0
Bromobenzene	Ave	0.8260	0.8468		1.00	0.0100	2.5	50.0
1,2,3-Trichloropropane	Ave	0.2416	0.2439		1.00	0.0100	1.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1878	0.2049		1.00	0.0200	9.1	50.0
n-Propylbenzene	Ave	0.8092	0.8646		1.00	0.0100	6.8	50.0
2-Chlorotoluene	Ave	0.6963	0.6948		1.00	0.0100	-0.2	50.0
1,3,5-Trimethylbenzene	Ave	2.380	2.375		1.00	0.0100	-0.2	50.0
4-Chlorotoluene	Ave	0.7433	0.7522		1.00	0.0100	1.2	50.0
tert-Butylbenzene	Ave	2.192	2.026		1.00	0.0100	-7.6	50.0
1,2,4-Trimethylbenzene	Ave	2.403	2.377		1.00	0.0100	-1.1	50.0
sec-Butylbenzene	Ave	2.839	2.657		1.00	0.0100	-6.4	50.0
1,3-Dichlorobenzene	Ave	1.540	1.413		1.00	0.0100	-8.2	50.0
p-Isopropyltoluene	Ave	2.514	2.354		1.00	0.0100	-6.4	50.0
1,4-Dichlorobenzene	Ave	1.604	1.414		1.00	0.0100	-11.8	50.0
n-Butylbenzene	Ave	2.069	1.785		1.00	0.0100	-13.7	50.0
1,2-Dichlorobenzene	Ave	1.463	1.260		1.00	0.0100	-13.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1078	0.0851		2.00	0.0100	-21.0	50.0
1,2,4-Trichlorobenzene	Qua		0.6063		1.00	0.0100	-45.1	50.0
Hexachlorobutadiene	Qua		0.3045		1.00	0.0100	-46.1	50.0
Naphthalene	Ave	1.974	1.026		1.00	0.0100	-48.1	50.0
1,2,3-Trichlorobenzene	Lin1		0.5077		1.00	0.0100	-48.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2564	0.2340		0.00813	0.00891	-8.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3470	0.3072		0.00789	0.00891	-11.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: ICV 240-92260/8 Calibration Date: 07/02/2013 12:00

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6130.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.349	1.256		0.00830	0.00891	-6.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5052	0.4410		0.00778	0.00891	-12.7	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab File ID: BFB407.D BFB Injection Date: 08/13/2013

Instrument ID: A3UX17 BFB Injection Time: 11:32

Analysis Batch No.: 97250

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.5	
75	30.0 - 60.0 % of mass 95	48.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.1	
173	Less than 2.0 % of mass 174	0.5	(0.5)1
174	50.0 - 120.00 % of mass 95	97.0	
175	5.0 - 9.0 % of mass 174	7.8	(8.0)1
176	95.0 - 101.0 % of mass 174	96.1	(99.0)1
177	5.0 - 9.0 % of mass 176	6.2	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97250/2	UXR6882.D	08/13/2013	11:57
	CCV 240-97250/3	UXR6883.D	08/13/2013	12:20
	LCS 240-97250/4	UXR6884.D	08/13/2013	12:42
	MB 240-97250/6	UXR6886.D	08/13/2013	13:27
DR-DPT-27-40	240-27624-2	UXR6901.D	08/13/2013	19:30
DR-DPT-27-49	240-27624-4	UXR6902.D	08/13/2013	19:53
DR-DPT-41-25	240-27624-5	UXR6903.D	08/13/2013	20:15
	240-27547-B-2 MS	UXR6908.D	08/13/2013	22:06
	240-27547-B-2 MSD	UXR6909.D	08/13/2013	22:28

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCVIS 240-97250/2 Calibration Date: 08/13/2013 11:57

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6882.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3202	0.3401		1.00	0.0100	6.2	50.0
Chloromethane	Ave	0.4418	0.4913	0.1000	1.00	0.0100	11.2	50.0
Vinyl chloride	Ave	0.3741	0.4483		1.00	0.0100	19.8	20.0
Bromomethane	Ave	0.1155	0.1560		1.00	0.0100	35.1	50.0
Chloroethane	Ave	0.1132	0.1366		1.00	0.0100	20.6	50.0
Trichlorofluoromethane	Ave	0.3266	0.4114		1.00	0.0100	26.0	50.0
Acrolein	Ave	0.0479	0.0471		20.0	0.100	-1.7	50.0
1,1-Dichloroethene	Ave	0.2763	0.3061		1.00	0.0100	10.8	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2358	0.2864		1.00	0.0100	21.5	50.0
Acetone	Lin1		0.1129		10.0	0.0200	18.3	50.0
Iodomethane	Ave	0.4062	0.4621		1.00	0.0100	13.7	50.0
Carbon disulfide	Ave	0.7726	0.8762		1.00	0.0100	13.4	50.0
Acetonitrile	Lin1		0.0424		20.0	0.100	23.8	50.0
Methyl acetate	Ave	0.2382	0.2477		10.0	0.0200	4.0	50.0
Methylene Chloride	Lin1		0.3922		1.00	0.0100	16.5	50.0
tert-Butyl alcohol	Ave	0.0184	0.0206		50.0	0.200	12.0	50.0
Acrylonitrile	Ave	0.1236	0.1224		20.0	0.0200	-1.0	50.0
Methyl tert-butyl ether	Ave	0.7459	0.8024		1.00	0.0100	7.6	50.0
trans-1,2-Dichloroethene	Ave	0.3011	0.3342		1.00	0.0100	11.0	50.0
Hexane	Ave	0.0750	0.0720		1.00	0.0100	-4.0	20.0
1,1-Dichloroethane	Ave	0.5220	0.5501	0.1000	1.00	0.0100	5.4	50.0
Vinyl acetate	Ave	0.0464	0.0471		2.00	0.0100	1.4	50.0
2,2-Dichloropropane	Ave	0.2835	0.3306		1.00	0.0100	16.6	50.0
cis-1,2-Dichloroethene	Ave	0.3056	0.3103		1.00	0.0100	1.5	50.0
2-Butanone	Ave	0.1316	0.1240		10.0	0.0200	-5.8	50.0
Bromochloromethane	Ave	0.1468	0.1654		1.00	0.0100	12.7	50.0
Tetrahydrofuran	Ave	0.0801	0.0718		5.00	0.0100	-10.4	50.0
Chloroform	Ave	0.5063	0.5618		1.00	0.0100	11.0	20.0
1,1,1-Trichloroethane	Ave	0.4071	0.4736		1.00	0.0100	16.3	50.0
Cyclohexane	Ave	0.5827	0.5331		1.00	0.0100	-8.5	50.0
1,1-Dichloropropene	Ave	0.3869	0.3921		1.00	0.0100	1.3	50.0
Carbon tetrachloride	Ave	0.3771	0.4552		1.00	0.0100	20.7	50.0
Benzene	Ave	1.171	1.106		1.00	0.0100	-5.6	50.0
1,2-Dichloroethane	Ave	0.4201	0.4554		1.00	0.0100	8.4	50.0
Trichloroethene	Ave	0.2979	0.3191		1.00	0.0100	7.1	50.0
Methylcyclohexane	Ave	0.4828	0.4316		1.00	0.0100	-10.6	50.0
1,2-Dichloropropane	Ave	0.2921	0.2601		1.00	0.0100	-10.9	20.0
1,4-Dioxane	Ave	0.0025	0.0024		50.0	0.500	-7.1	50.0
Dibromomethane	Ave	0.1529	0.1559		1.00	0.0100	2.0	50.0
Bromodichloromethane	Ave	0.3429	0.3941		1.00	0.0100	14.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCVIS 240-97250/2 Calibration Date: 08/13/2013 11:57

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6882.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1590	0.1208		10.0	0.0200	-24.1	50.0
cis-1,3-Dichloropropene	Ave	0.3874	0.3656		1.00	0.0100	-5.6	50.0
4-Methyl-2-pentanone	Ave	0.2569	0.2288		10.0	0.0200	-10.9	50.0
Toluene	Ave	1.523	1.427		1.00	0.0100	-6.3	20.0
trans-1,3-Dichloropropene	Lin1		0.4122		1.00	0.0100	-14.2	50.0
Ethyl methacrylate	Lin1		0.3294		1.00	0.0100	-26.2	50.0
1,1,2-Trichloroethane	Ave	0.2989	0.2828		1.00	0.0100	-5.4	50.0
Tetrachloroethene	Ave	0.3422	0.3845		1.00	0.0100	12.3	50.0
1,3-Dichloropropane	Ave	0.5460	0.4873		1.00	0.0100	-10.7	50.0
2-Hexanone	Ave	0.2215	0.1855		10.0	0.0200	-16.3	50.0
Dibromochloromethane	Ave	0.3056	0.3428		1.00	0.0100	12.1	50.0
1,2-Dibromoethane	Ave	0.3019	0.2963		1.00	0.0100	-1.8	50.0
Chlorobenzene	Ave	1.041	0.9742	0.3000	1.00	0.0100	-6.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3495	0.3880		1.00	0.0100	11.0	50.0
Ethylbenzene	Ave	0.5348	0.5048		1.00	0.0100	-5.6	20.0
m-Xylene & p-Xylene	Ave	0.6704	0.6580		2.00	0.0200	-1.9	50.0
o-Xylene	Ave	0.6303	0.6000		1.00	0.0100	-4.8	50.0
Styrene	Ave	1.025	1.001		1.00	0.0100	-2.4	50.0
Bromoform	Ave	0.1896	0.2207	0.1000	1.00	0.0100	16.4	50.0
Isopropylbenzene	Ave	1.585	1.534		1.00	0.0100	-3.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6677	0.5188	0.3000	1.00	0.0100	-22.3	50.0
Bromobenzene	Ave	0.8260	0.7680		1.00	0.0100	-7.0	50.0
1,2,3-Trichloropropane	Ave	0.2416	0.2058		1.00	0.0100	-14.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1878	0.1065		1.00	0.0100	-43.3	50.0
n-Propylbenzene	Ave	0.8092	0.7153		1.00	0.0100	-11.6	50.0
2-Chlorotoluene	Ave	0.6963	0.6623		1.00	0.0100	-4.9	50.0
1,3,5-Trimethylbenzene	Ave	2.380	2.225		1.00	0.0100	-6.5	50.0
4-Chlorotoluene	Ave	0.7433	0.6721		1.00	0.0100	-9.6	50.0
tert-Butylbenzene	Ave	2.192	1.901		1.00	0.0100	-13.3	50.0
1,2,4-Trimethylbenzene	Ave	2.403	2.306		1.00	0.0100	-4.0	50.0
sec-Butylbenzene	Ave	2.839	2.433		1.00	0.0100	-14.3	50.0
1,3-Dichlorobenzene	Ave	1.540	1.375		1.00	0.0100	-10.7	50.0
p-Isopropyltoluene	Ave	2.514	2.268		1.00	0.0100	-9.8	50.0
1,4-Dichlorobenzene	Ave	1.604	1.414		1.00	0.0100	-11.9	50.0
n-Butylbenzene	Ave	2.069	1.669		1.00	0.0100	-19.3	50.0
1,2-Dichlorobenzene	Ave	1.463	1.325		1.00	0.0100	-9.4	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1078	0.0880		2.00	0.0100	-18.3	50.0
1,3,5-Trichlorobenzene	Ave	1.157	0.9885		1.00	0.0100	-14.5	50.0
1,2,4-Trichlorobenzene	Qua		0.6844		1.00	0.0100	-38.5	50.0
Hexachlorobutadiene	Qua		0.4451		1.00	0.0100	-20.7	50.0
Naphthalene	Ave	1.974	0.9162		1.00	0.0100	-53.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCVIS 240-97250/2 Calibration Date: 08/13/2013 11:57

Instrument ID: A3UX17 Calib Start Date: 07/02/2013 09:46

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 11:37

Lab File ID: UXR6882.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Lin1		0.5024		1.00	0.0100	-49.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2564	0.2661		0.00925	0.00891	3.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3470	0.3410		0.00876	0.00891	-1.7	50.0
Toluene-d8 (Surr)	Ave	1.349	1.183		0.00782	0.00891	-12.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5052	0.4772		0.00842	0.00891	-5.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab Sample ID: CCV 240-97250/3 Calibration Date: 08/13/2013 12:20

Instrument ID: A3UX17 Calib Start Date: 05/07/2013 14:13

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/07/2013 16:05

Lab File ID: UXR6883.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.4497	0.4318		2.00	0.0100	-4.0	50.0
Ethyl ether	Ave	0.2647	0.2365		2.00	0.0100	-10.7	50.0
3-Chloro-1-propene	Ave	0.1427	0.0911		2.00	0.0100	-36.2	50.0
Diisopropyl ether	Ave	0.2531	0.2130		10.0	0.0500	-15.8	50.0
2-Chloro-1,3-butadiene	Ave	0.4867	0.4540		2.00	0.0100	-6.7	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.9284	0.7019		5.00	0.0100	-24.4	50.0
Ethyl acetate	Ave	0.2704	0.2028		4.00	0.0200	-25.0	50.0
Propionitrile	Ave	0.0414	0.0335		4.00	0.0200	-19.2	50.0
Methacrylonitrile	Ave	0.1979	0.1317		2.00	0.0100	-33.5	50.0
Isobutyl alcohol	Ave	0.0118	0.0089		50.0	0.200	-25.2	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7736	0.5631		5.00	0.0100	-27.2	50.0
n-Heptane	Ave	0.0714	0.0645		1.00	0.0100	-9.7	50.0
n-Butanol	Ave	0.0094	0.0074		50.0	0.200	-21.5	50.0
Methyl methacrylate	Ave	0.2516	0.1603		2.00	0.0100	-36.3	50.0
2-Nitropropane	Ave	0.0594	0.0540		2.00	0.0200	-9.1	50.0
Cyclohexanone	Ave	0.1188	0.0912		20.0	0.100	-23.2	50.0
1,2,3-Trimethylbenzene	Ave	2.525	2.193		0.00868	0.0100	-13.2	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab File ID: UXC3879.D Lab Sample ID: MB 240-97045/6

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX15 Date Analyzed: 08/12/2013 11:48

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97045/5	UXC3876.D	08/12/2013 10:41
DR-DPT-27-35	240-27624-1	UXC3890.D	08/12/2013 15:57
DR-DPT-27-45	240-27624-3	UXC3892.D	08/12/2013 16:41
	240-27585-B-1 MS	UXC3900.D	08/12/2013 19:39
	240-27585-B-1 MSD	UXC3901.D	08/12/2013 20:01

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97045/6

Matrix: Water | Lab File ID: UXC3879.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2013 11:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97045 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97045/6

Matrix: Water Lab File ID: UXC3879.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97045/6

Matrix: Water Lab File ID: UXC3879.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	82		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97045/6

Matrix: Water Lab File ID: UXC3879.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2013 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97045 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3876.D

Lab ID: LCS 240-97045/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.03	90	72-116	
1,1,1-Trichloroethane	10.0	9.12	91	74-118	
1,1,2,2-Tetrachloroethane	10.0	10.5	105	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.38	94	74-151	
1,1-Dichloroethane	10.0	9.04	90	82-115	
1,1-Dichloroethene	10.0	9.23	92	78-131	
1,1-Dichloropropene	10.0	9.16	92	83-114	
1,2,3-Trichlorobenzene	10.0	7.98	80	54-126	
1,2,3-Trichloropropane	10.0	9.71	97	73-129	
1,2,3-Trimethylbenzene	10.0	10.0	100	70-130	
1,2,4-Trichlorobenzene	10.0	8.08	81	48-135	
1,2,4-Trimethylbenzene	10.0	10.7	107	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.42	84	42-136	
1,2-Dichlorobenzene	10.0	9.26	93	81-110	
1,2-Dichloroethane	10.0	9.02	90	71-127	
1,2-Dichloropropane	10.0	10.0	100	81-115	
1,3-Dichlorobenzene	10.0	9.48	95	80-110	
1,3-Dichloropropane	10.0	10.6	106	79-116	
1,4-Dichlorobenzene	10.0	9.30	93	82-110	
2,2-Dichloropropane	10.0	9.48	95	50-129	
2-Chloroethyl vinyl ether	10.0	11.4	114	52-131	
2-Chlorotoluene	10.0	10.6	106	76-116	
2-Hexanone	20.0	22.6	113	55-133	
Bromobenzene	10.0	10.2	102	76-115	
Bromochloromethane	10.0	8.66	87	77-120	
4-Chlorotoluene	10.0	10.5	105	77-115	
p-Isopropyltoluene	10.0	10.6	106	74-120	
Acetone	20.0	15.1	75	43-136	
Benzene	10.0	9.56	96	83-112	
Bromoform	10.0	8.27	83	40-131	
Bromomethane	10.0	6.18	62	11-185	
Carbon disulfide	10.0	11.7	117	62-142	
Carbon tetrachloride	10.0	9.45	94	66-128	
Chlorobenzene	10.0	9.48	95	85-110	
Chloroethane	10.0	7.46	75	25-153	
Chloroform	10.0	8.54	85	79-117	
Chloromethane	10.0	8.09	81	44-126	
cis-1,2-Dichloroethene	10.0	8.88	89	80-113	
cis-1,3-Dichloropropene	10.0	9.46	95	61-115	
Hexachlorobutadiene	10.0	7.94	79	36-134	
Dibromomethane	10.0	9.72	97	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3876.D

Lab ID: LCS 240-97045/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.2	102	72-121	
Dichlorodifluoromethane	10.0	6.77	68	19-129	
Ethylbenzene	10.0	9.66	97	83-112	
1,2-Dibromoethane	10.0	9.34	93	79-113	
Diisopropyl ether	10.0	8.86 J	89	77-118	
Naphthalene	10.0	7.05	70	32-141	
m-Xylene & p-Xylene	20.0	19.7	99	83-113	
n-Butylbenzene	10.0	10.3	103	66-125	
Isopropylbenzene	10.0	9.25	93	75-114	
n-Propylbenzene	10.0	10.7	107	74-121	
2-Butanone	20.0	18.1	91	60-126	
4-Methyl-2-pentanone	20.0	22.9	114	63-128	
sec-Butylbenzene	10.0	10.3	103	70-117	
Methyl tert-butyl ether	10.0	9.43	94	52-144	
Methylene Chloride	10.0	8.79	88	66-131	
o-Xylene	10.0	9.33	93	83-113	
Styrene	10.0	9.97	100	79-114	
tert-Butylbenzene	10.0	8.98	90	71-115	
Tetrachloroethene	10.0	9.12	91	79-114	
Toluene	10.0	10.3	103	84-111	
trans-1,2-Dichloroethene	10.0	8.65	87	83-117	
trans-1,3-Dichloropropene	10.0	10.0	100	58-117	
Trichloroethene	10.0	9.08	91	76-117	
Trichlorofluoromethane	10.0	8.11	81	49-157	
Vinyl acetate	10.0	10.9	109	46-161	
Vinyl chloride	10.0	8.15	81	53-127	
tert-Butyl alcohol	200	183	92	70-130	
Xylenes, Total	30.0	29.0	97	83-112	
Dibromochloromethane	10.0	8.94	89	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab File ID: UXC3935.D Lab Sample ID: MB 240-97217/5

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX15 Date Analyzed: 08/13/2013 11:57

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97217/4	UXC3932.D	08/13/2013 10:49
TB-080613	240-27624-6	UXC3937.D	08/13/2013 12:42
	240-27504-B-6 MS	UXC3943.D	08/13/2013 15:02
	240-27504-B-6 MSD	UXC3944.D	08/13/2013 15:24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97217/5

Matrix: Water | Lab File ID: UXC3935.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/13/2013 11:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97217 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97217/5

Matrix: Water Lab File ID: UXC3935.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 11:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97217 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97217/5

Matrix: Water | Lab File ID: UXC3935.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/13/2013 11:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97217 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	103		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97217/5

Matrix: Water Lab File ID: UXC3935.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 11:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97217 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3932.D

Lab ID: LCS 240-97217/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.78	98	72-116	
1,1,1-Trichloroethane	10.0	9.55	95	74-118	
1,1,2,2-Tetrachloroethane	10.0	10.7	107	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.3	103	74-151	
1,1-Dichloroethane	10.0	9.73	97	82-115	
1,1-Dichloroethene	10.0	9.71	97	78-131	
1,1-Dichloropropene	10.0	9.95	99	83-114	
1,2,3-Trichlorobenzene	10.0	7.90	79	54-126	
1,2,3-Trichloropropane	10.0	10.3	103	73-129	
1,2,3-Trimethylbenzene	10.0	10.7	107	70-130	
1,2,4-Trichlorobenzene	10.0	7.91	79	48-135	
1,2,4-Trimethylbenzene	10.0	11.0	110	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.94	89	42-136	
1,2-Dichlorobenzene	10.0	10.1	101	81-110	
1,2-Dichloroethane	10.0	9.55	95	71-127	
1,2-Dichloropropane	10.0	10.2	102	81-115	
1,3-Dichlorobenzene	10.0	10.2	102	80-110	
1,3-Dichloropropane	10.0	11.5	115	79-116	
1,4-Dichlorobenzene	10.0	9.50	95	82-110	
2,2-Dichloropropane	10.0	9.98	100	50-129	
2-Chloroethyl vinyl ether	10.0	9.69 J	97	52-131	
2-Chlorotoluene	10.0	10.2	102	76-116	
2-Hexanone	20.0	26.6	133	55-133	
Bromobenzene	10.0	9.98	100	76-115	
Bromochloromethane	10.0	8.50	85	77-120	
4-Chlorotoluene	10.0	10.5	105	77-115	
p-Isopropyltoluene	10.0	11.2	112	74-120	
Acetone	20.0	14.6	73	43-136	
Benzene	10.0	10.1	101	83-112	
Bromoform	10.0	7.69	77	40-131	
Bromomethane	10.0	6.59	66	11-185	
Carbon disulfide	10.0	12.3	123	62-142	
Carbon tetrachloride	10.0	9.88	99	66-128	
Chlorobenzene	10.0	9.76	98	85-110	
Chloroethane	10.0	7.51	75	25-153	
Chloroform	10.0	9.31	93	79-117	
Chloromethane	10.0	8.58	86	44-126	
cis-1,2-Dichloroethene	10.0	8.97	90	80-113	
cis-1,3-Dichloropropene	10.0	9.51	95	61-115	
Hexachlorobutadiene	10.0	8.34	83	36-134	
Dibromomethane	10.0	9.85	99	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3932.D

Lab ID: LCS 240-97217/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.2	102	72-121	
Dichlorodifluoromethane	10.0	7.39	74	19-129	
Ethylbenzene	10.0	9.82	98	83-112	
1,2-Dibromoethane	10.0	10.4	104	79-113	
Diisopropyl ether	10.0	8.79 J	88	77-118	
Naphthalene	10.0	6.68	67	32-141	
m-Xylene & p-Xylene	20.0	19.9	100	83-113	
n-Butylbenzene	10.0	11.1	111	66-125	
Isopropylbenzene	10.0	8.57	86	75-114	
n-Propylbenzene	10.0	10.3	103	74-121	
2-Butanone	20.0	18.3	91	60-126	
4-Methyl-2-pentanone	20.0	22.8	114	63-128	
sec-Butylbenzene	10.0	10.4	104	70-117	
Methyl tert-butyl ether	10.0	9.06	91	52-144	
Methylene Chloride	10.0	9.64	96	66-131	
o-Xylene	10.0	9.19	92	83-113	
Styrene	10.0	9.72	97	79-114	
tert-Butylbenzene	10.0	8.82	88	71-115	
Tetrachloroethene	10.0	10.1	101	79-114	
Toluene	10.0	10.3	103	84-111	
trans-1,2-Dichloroethene	10.0	9.10	91	83-117	
trans-1,3-Dichloropropene	10.0	11.2	112	58-117	
Trichloroethene	10.0	9.62	96	76-117	
Trichlorofluoromethane	10.0	8.51	85	49-157	
Vinyl acetate	10.0	11.8	118	46-161	
Vinyl chloride	10.0	8.83	88	53-127	
tert-Butyl alcohol	200	190	95	70-130	
Xylenes, Total	30.0	29.1	97	83-112	
Dibromochloromethane	10.0	9.80	98	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Lab File ID: UXR6886.D Lab Sample ID: MB 240-97250/6

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/13/2013 13:27

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97250/4	UXR6884.D	08/13/2013 12:42
DR-DPT-27-40	240-27624-2	UXR6901.D	08/13/2013 19:30
DR-DPT-27-49	240-27624-4	UXR6902.D	08/13/2013 19:53
DR-DPT-41-25	240-27624-5	UXR6903.D	08/13/2013 20:15
	240-27547-B-2 MS	UXR6908.D	08/13/2013 22:06
	240-27547-B-2 MSD	UXR6909.D	08/13/2013 22:28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97250/6

Matrix: Water | Lab File ID: UXR6886.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/13/2013 13:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97250 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97250/6

Matrix: Water Lab File ID: UXR6886.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 13:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	0.394	J	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97250/6

Matrix: Water Lab File ID: UXR6886.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 13:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	107		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97250/6

Matrix: Water Lab File ID: UXR6886.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2013 13:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97250 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6884.D

Lab ID: LCS 240-97250/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.5	105	72-116	
1,1,1-Trichloroethane	10.0	11.2	112	74-118	
1,1,2,2-Tetrachloroethane	10.0	7.26	73	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.1	111	74-151	
1,1-Dichloroethane	10.0	10.5	105	82-115	
1,1-Dichloroethene	10.0	9.73	97	78-131	
1,1-Dichloropropene	10.0	10.0	100	83-114	
1,2,3-Trichlorobenzene	10.0	5.58	56	54-126	
1,2,3-Trichloropropane	10.0	8.21	82	73-129	
1,2,3-Trimethylbenzene	10.0	9.38	94	70-130	
1,2,4-Trichlorobenzene	10.0	6.53	65	48-135	
1,2,4-Trimethylbenzene	10.0	9.07	91	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.53	85	42-136	
1,2-Dichlorobenzene	10.0	8.87	89	81-110	
1,2-Dichloroethane	10.0	10.7	107	71-127	
1,2-Dichloropropane	10.0	9.02	90	81-115	
1,3-Dichlorobenzene	10.0	9.00	90	80-110	
1,3-Dichloropropane	10.0	9.32	93	79-116	
1,4-Dichlorobenzene	10.0	8.58	86	82-110	
2,2-Dichloropropane	10.0	10.9	109	50-129	
2-Chloroethyl vinyl ether	10.0	7.01 J	70	52-131	
2-Chlorotoluene	10.0	8.87	89	76-116	
2-Hexanone	20.0	16.8	84	55-133	
Bromobenzene	10.0	9.28	93	76-115	
Bromochloromethane	10.0	10.8	108	77-120	
4-Chlorotoluene	10.0	8.98	90	77-115	
p-Isopropyltoluene	10.0	9.22	92	74-120	
Acetone	20.0	18.0	90	43-136	
Benzene	10.0	9.33	93	83-112	
Bromoform	10.0	10.2	102	40-131	
Bromomethane	10.0	12.1	121	11-185	
Carbon disulfide	10.0	9.69	97	62-142	
Carbon tetrachloride	10.0	11.5	115	66-128	
Chlorobenzene	10.0	9.21	92	85-110	
Chloroethane	10.0	10.3	103	25-153	
Chloroform	10.0	10.9	109	79-117	
Chloromethane	10.0	10.4	104	44-126	
cis-1,2-Dichloroethene	10.0	9.62	96	80-113	
cis-1,3-Dichloropropene	10.0	9.43	94	61-115	
Hexachlorobutadiene	10.0	7.01	70	36-134	
Dibromomethane	10.0	10.8	108	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6884.D

Lab ID: LCS 240-97250/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.6	116	72-121	
Dichlorodifluoromethane	10.0	9.43	94	19-129	
Ethylbenzene	10.0	9.48	95	83-112	
1,2-Dibromoethane	10.0	9.74	97	79-113	
Diisopropyl ether	10.0	9.64 J	96	77-118	
Naphthalene	10.0	4.62	46	32-141	
m-Xylene & p-Xylene	20.0	19.2	96	83-113	
n-Butylbenzene	10.0	7.92	79	66-125	
Isopropylbenzene	10.0	9.10	91	75-114	
n-Propylbenzene	10.0	9.18	92	74-121	
2-Butanone	20.0	16.8	84	60-126	
4-Methyl-2-pentanone	20.0	20.2	101	63-128	
sec-Butylbenzene	10.0	8.24	82	70-117	
Methyl tert-butyl ether	10.0	10.9	109	52-144	
Methylene Chloride	10.0	9.84	98	66-131	
o-Xylene	10.0	9.28	93	83-113	
Styrene	10.0	9.29	93	79-114	
tert-Butylbenzene	10.0	8.43	84	71-115	
Tetrachloroethene	10.0	10.2	102	79-114	
Toluene	10.0	9.73	97	84-111	
trans-1,2-Dichloroethene	10.0	10.6	106	83-117	
trans-1,3-Dichloropropene	10.0	8.34	83	58-117	
Trichloroethene	10.0	10.9	109	76-117	
Trichlorofluoromethane	10.0	11.0	110	49-157	
Vinyl acetate	10.0	8.89	89	46-161	
Vinyl chloride	10.0	11.1	111	53-127	
tert-Butyl alcohol	200	215	108	70-130	
Xylenes, Total	30.0	28.5	95	83-112	
Dibromochloromethane	10.0	10.6	106	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3900.D

Lab ID: 240-27585-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	333	33 U	327	98	64-118	
1,1,1-Trichloroethane	333	33 U	277	83	68-121	
1,1,2,2-Tetrachloroethane	333	33 U	373	112	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	333	33 U	284	85	70-152	
1,1-Dichloroethane	333	33 U	310	93	79-116	
1,1-Dichloroethene	333	33 U	287	86	74-135	
1,1-Dichloropropene	333	33 U	322	97	80-114	
1,2,3-Trichlorobenzene	333	33 U	266	80	45-129	
1,2,3-Trichloropropane	333	33 U	330	99	67-132	
1,2,3-Trimethylbenzene	333	170 U	338	101	70-130	
1,2,4-Trichlorobenzene	333	33 U	251	75	38-138	
1,2,4-Trimethylbenzene	333	33 U	355	107	67-124	
1,2-Dibromo-3-Chloropropane	333	67 U	302	91	32-139	
1,2-Dichlorobenzene	333	33 U	315	94	75-111	
1,2-Dichloroethane	333	33 U	329	99	68-129	
1,2-Dichloropropane	333	33 U	337	101	78-115	
1,3-Dichlorobenzene	333	33 U	309	93	73-110	
1,3-Dichloropropane	333	33 U	380	114	74-118	
1,4-Dichlorobenzene	333	33 U	306	92	75-110	
2,2-Dichloropropane	333	33 U	271	81	38-127	
2-Chloroethyl vinyl ether	333	330 U	330 U	0	10-150	F
2-Chlorotoluene	333	33 U	343	103	69-117	
2-Hexanone	667	330 U	838	126	47-139	
Bromobenzene	333	33 U	335	101	71-116	
Bromochloromethane	333	33 U	282	85	73-121	
4-Chlorotoluene	333	33 U	340	102	71-116	
p-Isopropyltoluene	333	33 U	340	102	64-122	
Acetone	667	330 U	463	69	33-145	
Benzene	333	33 U	331	99	72-121	
Bromoform	333	33 U	278	83	32-128	
Bromomethane	333	33 U	190	57	10-186	
Carbon disulfide	333	33 U	361	108	57-147	
Carbon tetrachloride	333	33 U	283	85	59-129	
Chlorobenzene	333	33 U	327	98	80-110	
Chloroethane	333	33 U	231	69	21-165	
Chloroform	333	33 U	294	88	76-118	
Chloromethane	333	33 U	265	79	33-132	
cis-1,2-Dichloroethene	333	410	709	89	70-120	
cis-1,3-Dichloropropene	333	33 U	285	85	51-110	
Hexachlorobutadiene	333	33 U	248	74	27-132	
Dibromomethane	333	33 U	328	98	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3900.D

Lab ID: 240-27585-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	333	33 U	334	100	67-120	
Dichlorodifluoromethane	333	33 U	193	58	17-128	
Ethylbenzene	333	33 U	328	99	75-116	
1,2-Dibromoethane	333	33 U	333	100	74-113	
Diisopropyl ether	333	330 U	281 J	84	73-118	
Naphthalene	333	33 U	235	70	15-158	
m-Xylene & p-Xylene	667	67 U	684	103	75-117	
n-Butylbenzene	333	33 U	328	98	56-127	
Isopropylbenzene	333	33 U	318	95	68-116	
n-Propylbenzene	333	33 U	346	104	64-124	
2-Butanone	667	330 U	644	97	54-129	
4-Methyl-2-pentanone	667	330 U	746	112	56-131	
sec-Butylbenzene	333	33 U	334	100	60-119	
Methyl tert-butyl ether	333	33 U	295	88	46-144	
Methylene Chloride	333	33 U	281	84	63-128	
o-Xylene	333	33 U	327	98	76-116	
Styrene	333	33 U	336	101	71-117	
tert-Butylbenzene	333	33 U	297	89	61-119	
Tetrachloroethene	333	33 U	324	97	70-117	
Toluene	333	33 U	374	112	78-114	
trans-1,2-Dichloroethene	333	33 U	289	87	80-119	
trans-1,3-Dichloropropene	333	33 U	344	103	46-116	
Trichloroethene	333	650	925	82	66-120	
Trichlorofluoromethane	333	33 U	245	74	46-157	
Vinyl acetate	333	67 U	386	116	43-157	
Vinyl chloride	333	81	333	75	49-130	
tert-Butyl alcohol	6670	1700 U	6150	92	70-130	
Xylenes, Total	1000	67 U	1010	101	76-116	
Dibromochloromethane	333	33 U	300	90	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3901.D

Lab ID: 240-27585-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	333	334	100	2	30	64-118	
1,1,1-Trichloroethane	333	299	90	8	30	68-121	
1,1,2,2-Tetrachloroethane	333	377	113	1	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	333	312	94	9	30	70-152	
1,1-Dichloroethane	333	333	100	7	30	79-116	
1,1-Dichloroethene	333	321	96	11	30	74-135	
1,1-Dichloropropene	333	326	98	1	30	80-114	
1,2,3-Trichlorobenzene	333	273	82	3	30	45-129	
1,2,3-Trichloropropane	333	324	97	2	30	67-132	
1,2,3-Trimethylbenzene	333	340	102	1	30	70-130	
1,2,4-Trichlorobenzene	333	264	79	5	30	38-138	
1,2,4-Trimethylbenzene	333	350	105	1	30	67-124	
1,2-Dibromo-3-Chloropropane	333	321	96	6	30	32-139	
1,2-Dichlorobenzene	333	316	95	0	30	75-111	
1,2-Dichloroethane	333	348	104	6	30	68-129	
1,2-Dichloropropane	333	363	109	8	30	78-115	
1,3-Dichlorobenzene	333	316	95	2	30	73-110	
1,3-Dichloropropane	333	376	113	1	30	74-118	
1,4-Dichlorobenzene	333	312	94	2	30	75-110	
2,2-Dichloropropane	333	288	86	6	30	38-127	
2-Chloroethyl vinyl ether	333	330 U	0	NC	30	10-150	F
2-Chlorotoluene	333	337	101	2	30	69-117	
2-Hexanone	667	884	133	5	30	47-139	
Bromobenzene	333	335	101	0	30	71-116	
Bromochloromethane	333	308	92	9	30	73-121	
4-Chlorotoluene	333	348	104	2	30	71-116	
p-Isopropyltoluene	333	342	103	1	30	64-122	
Acetone	667	527	79	13	30	33-145	
Benzene	333	346	104	4	30	72-121	
Bromoform	333	281	84	1	30	32-128	
Bromomethane	333	232	69	20	30	10-186	
Carbon disulfide	333	389	117	8	30	57-147	
Carbon tetrachloride	333	311	93	9	30	59-129	
Chlorobenzene	333	327	98	0	30	80-110	
Chloroethane	333	260	78	12	30	21-165	
Chloroform	333	311	93	6	30	76-118	
Chloromethane	333	289	87	9	30	33-132	
cis-1,2-Dichloroethene	333	762	105	7	30	70-120	
cis-1,3-Dichloropropene	333	308	92	8	30	51-110	
Hexachlorobutadiene	333	258	77	4	30	27-132	
Dibromomethane	333	341	102	4	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3901.D

Lab ID: 240-27585-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	333	355	107	6	30	67-120	
Dichlorodifluoromethane	333	216	65	11	30	17-128	
Ethylbenzene	333	335	100	2	30	75-116	
1,2-Dibromoethane	333	348	104	4	30	74-113	
Diisopropyl ether	333	303 J	91	8	30	73-118	
Naphthalene	333	246	74	4	30	15-158	
m-Xylene & p-Xylene	667	681	102	0	30	75-117	
n-Butylbenzene	333	330	99	1	30	56-127	
Isopropylbenzene	333	319	96	1	30	68-116	
n-Propylbenzene	333	342	103	1	30	64-124	
2-Butanone	667	712	107	10	30	54-129	
4-Methyl-2-pentanone	667	796	119	7	30	56-131	
sec-Butylbenzene	333	328	98	2	30	60-119	
Methyl tert-butyl ether	333	325	98	10	30	46-144	
Methylene Chloride	333	305	92	8	30	63-128	
o-Xylene	333	331	99	1	30	76-116	
Styrene	333	349	105	4	30	71-117	
tert-Butylbenzene	333	288	87	3	30	61-119	
Tetrachloroethene	333	314	94	3	30	70-117	
Toluene	333	375	113	0	30	78-114	
trans-1,2-Dichloroethene	333	303	91	5	30	80-119	
trans-1,3-Dichloropropene	333	357	107	4	30	46-116	
Trichloroethene	333	992	102	7	30	66-120	
Trichlorofluoromethane	333	270	81	10	30	46-157	
Vinyl acetate	333	376	113	3	30	43-157	
Vinyl chloride	333	368	86	10	30	49-130	
tert-Butyl alcohol	6670	6830	102	10	30	70-130	
Xylenes, Total	1000	1010	101	0	30	76-116	
Dibromochloromethane	333	319	96	6	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3943.D

Lab ID: 240-27504-B-6 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	12500	1300 U	13300	107	64-118	
1,1,1-Trichloroethane	12500	1300 U	12900	103	68-121	
1,1,2,2-Tetrachloroethane	12500	1300 U	14200	114	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	12500	1300 U	14100	113	70-152	
1,1-Dichloroethane	12500	1300 U	14100	113	79-116	
1,1-Dichloroethene	12500	1300 U	14000	112	74-135	
1,1-Dichloropropene	12500	1300 U	14000	112	80-114	
1,2,3-Trichlorobenzene	12500	1300 U	11000	88	45-129	
1,2,3-Trichloropropane	12500	1300 U	12600	101	67-132	
1,2,4-Trichlorobenzene	12500	1300 U	10700	86	38-138	
1,2,4-Trimethylbenzene	12500	5100	21900	134	67-124	F
1,2-Dibromo-3-Chloropropane	12500	2500 U	12500	100	32-139	
1,2-Dichlorobenzene	12500	1300 U	12500	100	75-111	
1,2-Dichloroethane	12500	1300 U	13600	109	68-129	
1,2-Dichloropropane	12500	1300 U	14000	112	78-115	
1,3-Dichlorobenzene	12500	1300 U	12500	100	73-110	
1,3-Dichloropropane	12500	1300 U	13700	110	74-118	
1,4-Dichlorobenzene	12500	1300 U	12100	97	75-110	
2,2-Dichloropropane	12500	1300 U	12900	103	38-127	
2-Chlorotoluene	12500	1300 U	13800	110	69-117	
2-Hexanone	25000	13000 U	32600	131	47-139	
Bromobenzene	12500	1300 U	12300	99	71-116	
Bromochloromethane	12500	1300 U	12900	103	73-121	
4-Chlorotoluene	12500	1300 U	13900	111	71-116	
p-Isopropyltoluene	12500	1300 U	14000	112	64-122	
Acetone	25000	13000 U	21700	87	33-145	
Benzene	12500	1300 U	13900	111	72-121	
Bromoform	12500	1300 U	11300	90	32-128	
Bromomethane	12500	1300 U	8810	70	10-186	
Carbon disulfide	12500	1300 U	16600	133	57-147	
Carbon tetrachloride	12500	1300 U	13200	106	59-129	
Chlorobenzene	12500	1300 U	12500	100	80-110	
Chloroethane	12500	1300 U	10600	85	21-165	
Chloroform	12500	1300 U	13300	106	76-118	
Chloromethane	12500	1300 U	12600	101	33-132	
cis-1,2-Dichloroethene	12500	1300 U	12900	103	70-120	
cis-1,3-Dichloropropene	12500	1300 U	10300	82	51-110	
Hexachlorobutadiene	12500	1300 U	10800	86	27-132	
Dibromomethane	12500	1300 U	13600	109	77-121	
Bromodichloromethane	12500	1300 U	13600	108	67-120	
Dichlorodifluoromethane	12500	1300 U	10200	82	17-128	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3943.D

Lab ID: 240-27504-B-6 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Ethylbenzene	12500	12000	28200	129	75-116	F
1,2-Dibromoethane	12500	1300 U	12700	102	74-113	
Naphthalene	12500	1300 U	9490	76	15-158	
m-Xylene & p-Xylene	25000	68000	106000	150	75-117	E F
n-Butylbenzene	12500	1300 U	14100	113	56-127	
Isopropylbenzene	12500	170 J	13200	104	68-116	
n-Propylbenzene	12500	410 J	14500	113	64-124	
2-Butanone	25000	13000 U	26200	105	54-129	
4-Methyl-2-pentanone	25000	13000 U	29300	117	56-131	
sec-Butylbenzene	12500	1300 U	13300	106	60-119	
Methyl tert-butyl ether	12500	1300 U	12800	102	46-144	
Methylene Chloride	12500	850 J	14600	110	63-128	
o-Xylene	12500	16000	31900	130	76-116	F
Styrene	12500	1300 U	15300	123	71-117	F
tert-Butylbenzene	12500	1300 U	11100	89	61-119	
Tetrachloroethene	12500	1300 U	12500	100	70-117	
Toluene	12500	3300	18200	119	78-114	F
trans-1,2-Dichloroethene	12500	1300 U	13600	109	80-119	
trans-1,3-Dichloropropene	12500	1300 U	12000	96	46-116	
Trichloroethene	12500	1300 U	12300	99	66-120	
Trichlorofluoromethane	12500	1300 U	12400	99	46-157	
Vinyl chloride	12500	1300 U	12700	101	49-130	
Xylenes, Total	37500	84000	138000	144	76-116	F
Dibromochloromethane	12500	1300 U	12400	99	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3944.D

Lab ID: 240-27504-B-6 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	12500	14500	116	8	30	64-118	
1,1,1-Trichloroethane	12500	12800	102	1	30	68-121	
1,1,2,2-Tetrachloroethane	12500	14500	116	2	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	12500	14100	112	0	30	70-152	
1,1-Dichloroethane	12500	14300	114	1	30	79-116	
1,1-Dichloroethene	12500	13100	105	7	30	74-135	
1,1-Dichloropropene	12500	14200	113	1	30	80-114	
1,2,3-Trichlorobenzene	12500	11100	89	1	30	45-129	
1,2,3-Trichloropropane	12500	13300	106	5	30	67-132	
1,2,4-Trichlorobenzene	12500	11100	89	3	30	38-138	
1,2,4-Trimethylbenzene	12500	21800	134	0	30	67-124	F
1,2-Dibromo-3-Chloropropane	12500	12900	104	3	30	32-139	
1,2-Dichlorobenzene	12500	13100	105	5	30	75-111	
1,2-Dichloroethane	12500	13300	107	2	30	68-129	
1,2-Dichloropropane	12500	13900	111	1	30	78-115	
1,3-Dichlorobenzene	12500	12600	101	1	30	73-110	
1,3-Dichloropropane	12500	14500	116	6	30	74-118	
1,4-Dichlorobenzene	12500	12300	99	1	30	75-110	
2,2-Dichloropropane	12500	13000	104	1	30	38-127	
2-Chlorotoluene	12500	14000	112	1	30	69-117	
2-Hexanone	25000	33600	134	3	30	47-139	
Bromobenzene	12500	13000	104	5	30	71-116	
Bromochloromethane	12500	12500	100	3	30	73-121	
4-Chlorotoluene	12500	14400	115	3	30	71-116	
p-Isopropyltoluene	12500	14200	114	2	30	64-122	
Acetone	25000	23500	94	8	30	33-145	
Benzene	12500	13800	110	1	30	72-121	
Bromoform	12500	10800	86	5	30	32-128	
Bromomethane	12500	7890	63	11	30	10-186	
Carbon disulfide	12500	16200	129	3	30	57-147	
Carbon tetrachloride	12500	13300	106	0	30	59-129	
Chlorobenzene	12500	12900	103	4	30	80-110	
Chloroethane	12500	9710	78	9	30	21-165	
Chloroform	12500	13300	106	0	30	76-118	
Chloromethane	12500	12200	98	3	30	33-132	
cis-1,2-Dichloroethene	12500	13000	104	1	30	70-120	
cis-1,3-Dichloropropene	12500	10800	87	5	30	51-110	
Hexachlorobutadiene	12500	11300	90	5	30	27-132	
Dibromomethane	12500	13500	108	0	30	77-121	
Bromodichloromethane	12500	13500	108	0	30	67-120	
Dichlorodifluoromethane	12500	10100	81	2	30	17-128	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3944.D

Lab ID: 240-27504-B-6 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethylbenzene	12500	30100	143	6	30	75-116	F
1,2-Dibromoethane	12500	12900	103	1	30	74-113	
Naphthalene	12500	10300	83	8	30	15-158	
m-Xylene & p-Xylene	25000	104000	141	2	30	75-117	E F
n-Butylbenzene	12500	14500	116	2	30	56-127	
Isopropylbenzene	12500	13600	107	3	30	68-116	
n-Propylbenzene	12500	14900	116	2	30	64-124	
2-Butanone	25000	26400	106	1	30	54-129	
4-Methyl-2-pentanone	25000	30800	123	5	30	56-131	
sec-Butylbenzene	12500	13800	110	4	30	60-119	
Methyl tert-butyl ether	12500	12700	101	1	30	46-144	
Methylene Chloride	12500	14000	105	4	30	63-128	
o-Xylene	12500	30900	122	3	30	76-116	F
Styrene	12500	15200	122	1	30	71-117	F
tert-Butylbenzene	12500	11600	93	5	30	61-119	
Tetrachloroethene	12500	12700	102	1	30	70-117	
Toluene	12500	19500	130	7	30	78-114	F
trans-1,2-Dichloroethene	12500	13200	105	3	30	80-119	
trans-1,3-Dichloropropene	12500	13500	108	12	30	46-116	
Trichloroethene	12500	12500	100	1	30	66-120	
Trichlorofluoromethane	12500	11900	95	4	30	46-157	
Vinyl chloride	12500	12300	98	3	30	49-130	
Xylenes, Total	37500	135000	136	2	30	76-116	F
Dibromochloromethane	12500	12100	97	3	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6908.D

Lab ID: 240-27547-B-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	833	83 U	903	108	64-118	
1,1,1-Trichloroethane	833	83 U	864	104	68-121	
1,1,2,2-Tetrachloroethane	833	83 U	638	77	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	833	83 U	921	111	70-152	
1,1-Dichloroethane	833	83 U	751	90	79-116	
1,1-Dichloroethene	833	32 J	808	93	74-135	
1,1-Dichloropropene	833	83 U	740	89	80-114	
1,2,3-Trichlorobenzene	833	83 U	404	49	45-129	
1,2,3-Trichloropropane	833	83 U	673	81	67-132	
1,2,3-Trimethylbenzene	833	420 U	680	82	70-130	
1,2,4-Trichlorobenzene	833	83 U	461	55	38-138	
1,2,4-Trimethylbenzene	833	83 U	725	87	67-124	
1,2-Dibromo-3-Chloropropane	833	170 U	661	79	32-139	
1,2-Dichlorobenzene	833	83 U	779	94	75-111	
1,2-Dichloroethane	833	20 J	859	101	68-129	
1,2-Dichloropropane	833	83 U	690	83	78-115	
1,3-Dichlorobenzene	833	83 U	714	86	73-110	
1,3-Dichloropropane	833	83 U	826	99	74-118	
1,4-Dichlorobenzene	833	83 U	710	85	75-110	
2,2-Dichloropropane	833	83 U	840	101	38-127	
2-Chloroethyl vinyl ether	833	830 U	373 J	45	10-150	
2-Chlorotoluene	833	83 U	734	88	69-117	
2-Hexanone	1670	830 U	1440	87	47-139	
Bromobenzene	833	83 U	751	90	71-116	
Bromochloromethane	833	83 U	817	98	73-121	
4-Chlorotoluene	833	83 U	715	86	71-116	
p-Isopropyltoluene	833	83 U	722	87	64-122	
Acetone	1670	830 U	1290	77	33-145	
Benzene	833	12 J	716	84	72-121	
Bromoform	833	83 U	868	104	32-128	
Bromomethane	833	83 U	1090	131	10-186	
Carbon disulfide	833	83 U	761	91	57-147	
Carbon tetrachloride	833	83 U	898	108	59-129	
Chlorobenzene	833	83 U	762	91	80-110	
Chloroethane	833	83 U	1170	141	21-165	
Chloroform	833	83 U	827	99	76-118	
Chloromethane	833	83 U	802	96	33-132	
cis-1,2-Dichloroethene	833	3000	3550	66	70-120	E F
cis-1,3-Dichloropropene	833	83 U	707	85	51-110	
Hexachlorobutadiene	833	83 U	551	66	27-132	
Dibromomethane	833	83 U	935	112	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6908.D

Lab ID: 240-27547-B-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	833	83 U	916	110	67-120	
Dichlorodifluoromethane	833	83 U	677	81	17-128	
Ethylbenzene	833	83 U	783	94	75-116	
1,2-Dibromoethane	833	83 U	859	103	74-113	
Diisopropyl ether	833	830 U	713 J	86	73-118	
Naphthalene	833	83 U	320	38	15-158	
m-Xylene & p-Xylene	1670	170 U	1570	94	75-117	
n-Butylbenzene	833	83 U	619	74	56-127	
Isopropylbenzene	833	83 U	805	97	68-116	
n-Propylbenzene	833	83 U	731	88	64-124	
2-Butanone	1670	830 U	1180	71	54-129	
4-Methyl-2-pentanone	1670	830 U	1120	67	56-131	
sec-Butylbenzene	833	83 U	637	76	60-119	
Methyl tert-butyl ether	833	83 U	689	83	46-144	
Methylene Chloride	833	91	727	76	63-128	
o-Xylene	833	83 U	796	96	76-116	
Styrene	833	83 U	900	108	71-117	
tert-Butylbenzene	833	83 U	656	79	61-119	
Tetrachloroethene	833	83 U	869	104	70-117	
Toluene	833	83 U	762	91	78-114	
trans-1,2-Dichloroethene	833	83 U	740	89	80-119	
trans-1,3-Dichloropropene	833	83 U	614	74	46-116	
Trichloroethene	833	3100	3780	79	66-120	E
Trichlorofluoromethane	833	83 U	992	119	46-157	
Vinyl acetate	833	170 U	653	78	43-157	
Vinyl chloride	833	280	1100	99	49-130	
tert-Butyl alcohol	16700	4200 U	14300	86	70-130	
Xylenes, Total	2500	170 U	2370	95	76-116	
Dibromochloromethane	833	83 U	876	105	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6909.D

Lab ID: 240-27547-B-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	833	816	98	10	30	64-118	
1,1,1-Trichloroethane	833	1000	120	15	30	68-121	
1,1,2,2-Tetrachloroethane	833	616	74	3	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	833	1050	126	13	30	70-152	
1,1-Dichloroethane	833	949	114	23	30	79-116	
1,1-Dichloroethene	833	949	110	16	30	74-135	
1,1-Dichloropropene	833	845	101	13	30	80-114	
1,2,3-Trichlorobenzene	833	529	63	27	30	45-129	
1,2,3-Trichloropropane	833	675	81	0	30	67-132	
1,2,3-Trimethylbenzene	833	724	87	6	30	70-130	
1,2,4-Trichlorobenzene	833	533	64	14	30	38-138	
1,2,4-Trimethylbenzene	833	752	90	4	30	67-124	
1,2-Dibromo-3-Chloropropane	833	621	75	6	30	32-139	
1,2-Dichlorobenzene	833	741	89	5	30	75-111	
1,2-Dichloroethane	833	909	107	6	30	68-129	
1,2-Dichloropropane	833	707	85	3	30	78-115	
1,3-Dichlorobenzene	833	749	90	5	30	73-110	
1,3-Dichloropropane	833	626	75	28	30	74-118	
1,4-Dichlorobenzene	833	716	86	1	30	75-110	
2,2-Dichloropropane	833	978	117	15	30	38-127	
2-Chloroethyl vinyl ether	833	375 J	45	0	30	10-150	
2-Chlorotoluene	833	704	84	4	30	69-117	
2-Hexanone	1670	1200	72	19	30	47-139	
Bromobenzene	833	764	92	2	30	71-116	
Bromochloromethane	833	926	111	12	30	73-121	
4-Chlorotoluene	833	769	92	7	30	71-116	
p-Isopropyltoluene	833	759	91	5	30	64-122	
Acetone	1670	1620	97	23	30	33-145	
Benzene	833	773	91	8	30	72-121	
Bromoform	833	768	92	12	30	32-128	
Bromomethane	833	1200	144	9	30	10-186	
Carbon disulfide	833	963	116	23	30	57-147	
Carbon tetrachloride	833	1010	121	11	30	59-129	
Chlorobenzene	833	751	90	1	30	80-110	
Chloroethane	833	1310	157	11	30	21-165	
Chloroform	833	938	113	13	30	76-118	
Chloromethane	833	912	109	13	30	33-132	
cis-1,2-Dichloroethene	833	4180	142	16	30	70-120	E F
cis-1,3-Dichloropropene	833	734	88	4	30	51-110	
Hexachlorobutadiene	833	663	80	19	30	27-132	
Dibromomethane	833	862	103	8	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR6909.D

Lab ID: 240-27547-B-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	833	890	107	3	30	67-120	
Dichlorodifluoromethane	833	761	91	12	30	17-128	
Ethylbenzene	833	717	86	9	30	75-116	
1,2-Dibromoethane	833	728	87	17	30	74-113	
Diisopropyl ether	833	859	103	19	30	73-118	
Naphthalene	833	433	52	30	30	15-158	
m-Xylene & p-Xylene	1670	1500	90	5	30	75-117	
n-Butylbenzene	833	682	82	10	30	56-127	
Isopropylbenzene	833	810	97	1	30	68-116	
n-Propylbenzene	833	727	87	0	30	64-124	
2-Butanone	1670	1470	88	22	30	54-129	
4-Methyl-2-pentanone	1670	1260	75	12	30	56-131	
sec-Butylbenzene	833	765	92	18	30	60-119	
Methyl tert-butyl ether	833	855	103	22	30	46-144	
Methylene Chloride	833	925	100	24	30	63-128	
o-Xylene	833	713	86	11	30	76-116	
Styrene	833	743	89	19	30	71-117	
tert-Butylbenzene	833	709	85	8	30	61-119	
Tetrachloroethene	833	777	93	11	30	70-117	
Toluene	833	699	84	9	30	78-114	
trans-1,2-Dichloroethene	833	884	106	18	30	80-119	
trans-1,3-Dichloropropene	833	632	76	3	30	46-116	
Trichloroethene	833	3930	96	4	30	66-120	E
Trichlorofluoromethane	833	1080	129	8	30	46-157	
Vinyl acetate	833	784	94	18	30	43-157	
Vinyl chloride	833	1230	114	11	30	49-130	
tert-Butyl alcohol	16700	17900	108	23	30	70-130	
Xylenes, Total	2500	2210	89	7	30	76-116	
Dibromochloromethane	833	736	88	17	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
	MRL 240-97217/10	102	100	98	85

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	10-150
DCA = 1,2-Dichloroethane-d4 (Surr)	10-150
TOL = Toluene-d8 (Surr)	10-150
BFB = 4-Bromofluorobenzene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-27-35	240-27624-1	88	96	93	74
DR-DPT-27-40	240-27624-2	104	107	83	77
DR-DPT-27-45	240-27624-3	85	99	92	77
DR-DPT-27-49	240-27624-4	109	106	80	72
DR-DPT-41-25	240-27624-5	105	104	80	76
TB-080613	240-27624-6	105	104	92	79
	MB 240-97045/6	82	89	89	74
	MB 240-97217/5	103	106	92	79
	MB 240-97250/6	107	106	87	83
	LCS 240-97045/5	85	85	98	90
	LCS 240-97217/4	86	89	92	78
	LCS 240-97250/4	97	101	92	95
	240-27585-B-1 MS	82	87	101	87
	240-27504-B-6 MS	100	99	107	96
	240-27547-B-2 MS	91	92	83	99
	240-27585-B-1 MSD	86	95	103	89
	240-27504-B-6 MSD	95	98	112	92
	240-27547-B-2 MSD	106	101	77	87

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Sample No.: STD8260 240-92812/4 Date Analyzed: 07/08/2013 11:37

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC2913.D Heated Purge: (Y/N) N

Calibration ID: 16192

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1157942	5.21	913091	7.89	679041	10.12
UPPER LIMIT		2315884	5.71	1826182	8.39	1358082	10.62
LOWER LIMIT		578971	4.71	456546	7.39	339521	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92812/14		1203057	5.21	925992	7.89	661092	10.12
CCVIS 240-97045/2		2087197	5.21	1697654	7.89	1021220	10.12
CCVIS 240-97217/2		1644857	5.21	1371404	7.89	874222	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Sample No.: CCVIS 240-97045/2 Date Analyzed: 08/12/2013 10:18

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC3875.D Heated Purge: (Y/N) N

Calibration ID: 16194

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2087197	5.21	1697654	7.89	1021220	10.12
UPPER LIMIT		4174394	5.71	3395308	8.39	2042440	10.62
LOWER LIMIT		1043599	4.71	848827	7.39	510610	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-97045/5		1891325	5.21	1566405	7.89	965410	10.12
CCV 240-97045/3		2059608	5.21	1646018	7.89	850443	10.12
CCV 240-97045/4		1932503	5.21	1605495	7.89	795831	10.12
MB 240-97045/6		1857174	5.21	1487954	7.89	768071	10.12
240-27624-1	DR-DPT-27-35	1461582	5.21	1093235	7.89	536682	10.12
240-27624-3	DR-DPT-27-45	1429362	5.21	1038376	7.89	537017	10.12
240-27585-B-1 MS		1830524	5.21	1277039	7.89	848043	10.12
240-27585-B-1 MSD		1733279	5.21	1269844	7.89	865539	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Sample No.: CCVIS 240-97217/2 Date Analyzed: 08/13/2013 10:26

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC3931.D Heated Purge: (Y/N) N

Calibration ID: 16194

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1644857	5.21	1371404	7.89	874222	10.12
UPPER LIMIT		3289714	5.71	2742808	8.39	1748444	10.62
LOWER LIMIT		822429	4.71	685702	7.39	437111	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-97217/4		1416912	5.21	1154021	7.89	696856	10.12
CCV 240-97217/3		1533333	5.21	1086578	7.89	652438	10.12
MB 240-97217/5		1132391	5.21	844014	7.89	473103	10.12
MRL 240-97217/10		1139012	5.21	781774	7.89	525993	10.12
240-27624-6	TB-080613	1059848	5.21	761375	7.89	439845	10.12
240-27504-B-6 MS		1222232	5.21	841699	7.89	605629	10.12
240-27504-B-6 MSD		1295053	5.21	896400	7.89	620196	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Sample No.: STD8260 240-92260/4 Date Analyzed: 07/02/2013 10:31

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR6126.D Heated Purge: (Y/N) N

Calibration ID: 16141

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1341606	5.76	1090840	8.48	658450	10.72
UPPER LIMIT		2683212	6.26	2181680	8.98	1316900	11.22
LOWER LIMIT		670803	5.26	545420	7.98	329225	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92260/8		1263222	5.76	971310	8.48	471339	10.72
CCVIS 240-97250/2		854103	5.76	707726	8.48	462183	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Sample No.: CCVIS 240-97250/2 Date Analyzed: 08/13/2013 11:57

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR6882.D Heated Purge: (Y/N) N

Calibration ID: 16141

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		854103	5.76	707726	8.48	462183	10.72
UPPER LIMIT		1708206	6.26	1415452	8.98	924366	11.22
LOWER LIMIT		427052	5.26	353863	7.98	231092	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-97250/3		966256	5.76	719666	8.48	404155	10.72
LCS 240-97250/4		864114	5.76	760587	8.48	469437	10.72
MB 240-97250/6		880374	5.76	656607	8.48	356400	10.72
240-27624-2	DR-DPT-27-40	847980	5.76	703109	8.48	370333	10.72
240-27624-4	DR-DPT-27-49	845382	5.76	717577	8.48	374313	10.72
240-27624-5	DR-DPT-41-25	846043	5.76	703203	8.48	363241	10.72
240-27547-B-2 MS		837808	5.78	685632	8.48	457636	10.72
240-27547-B-2 MSD		827426	5.76	761361	8.48	459649	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3936.D

Lab ID: MRL 240-97217/10 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	0.00100	1.0 U	94	10-150	
1,1,1-Trichloroethane	0.00100	1.0 U	114	10-150	
1,1,2,2-Tetrachloroethane	0.00100	1.0 U	130	10-150	
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.00100	1.0 U	122	10-150	
1,1-Dichloroethane	0.00100	1.0 U	131	10-150	
1,1-Dichloroethene	0.00100	1.0 U	126	10-150	
1,1-Dichloropropene	0.00100	1.0 U	118	10-150	
1,2,3-Trichlorobenzene	0.00100	1.0 U	74	10-150	
1,2,3-Trichloropropane	0.00100	1.0 U	137	10-150	
1,2,4-Trichlorobenzene	0.00100	1.0 U	78	10-150	
1,2,4-Trimethylbenzene	0.00100	1.0 U	88	10-150	
1,2-Dibromo-3-Chloropropane	0.00100	2.0 U	98	10-150	
1,2-Dichlorobenzene	0.00100	1.0 U	107	10-150	
1,2-Dichloroethane	0.00100	1.0 U	124	10-150	
1,2-Dichloropropane	0.00100	1.0 U	113	10-150	
1,3-Dichlorobenzene	0.00100	1.0 U	108	10-150	
1,3-Dichloropropane	0.00100	1.0 U	113	10-150	
1,4-Dichlorobenzene	0.00100	1.0 U	113	10-150	
2,2-Dichloropropane	0.00100	1.0 U	116	10-150	
2-Chloroethyl vinyl ether	0.00200	10 U	83	10-150	
2-Chlorotoluene	0.00100	1.0 U	106	10-150	
2-Hexanone	0.0100	10 U	104	10-150	
Bromobenzene	0.00100	1.0 U	114	10-150	
Bromochloromethane	0.00100	1.0 U	116	10-150	
4-Chlorotoluene	0.00100	1.0 U	105	10-150	
p-Isopropyltoluene	0.00100	1.0 U	76	10-150	
Acetone	0.0100	10 U	55	10-150	
Benzene	0.00100	1.0 U	117	10-150	
Bromoform	0.00100	1.0 U	131	10-150	
Bromomethane	0.00100	1.0 U	94	10-150	
Carbon disulfide	0.00100	1.0 U	141	10-150	
Carbon tetrachloride	0.00100	1.0 U	109	10-150	
Chlorobenzene	0.00100	1.0 U	109	10-150	
Chloroethane	0.00100	1.0 U	100	10-150	
Chloroform	0.00100	1.0 U	120	10-150	
Chloromethane	0.00100	1.0 U	126	10-150	
cis-1,2-Dichloroethene	0.00100	1.0 U	115	10-150	
cis-1,3-Dichloropropene	0.00100	1.0 U	121	10-150	
Hexachlorobutadiene	0.00100	1.0 U	102	10-150	
Dibromomethane	0.00100	1.0 U	119	10-150	
Bromodichloromethane	0.00100	1.0 U	96	10-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27624-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC3936.D

Lab ID: MRL 240-97217/10 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Dichlorodifluoromethane	0.00100	1.0 U	87	10-150	
Ethylbenzene	0.00100	1.0 U	86	10-150	
1,2-Dibromoethane	0.00100	1.0 U	110	10-150	
Naphthalene	0.00100	1.0 U	101	10-150	
m-Xylene & p-Xylene	0.00200	2.0 U	91	10-150	
n-Butylbenzene	0.00100	1.0 U	83	10-150	
Isopropylbenzene	0.00100	1.0 U	86	10-150	
n-Propylbenzene	0.00100	1.0 U	101	10-150	
2-Butanone	0.0100	10 U	63	10-150	
4-Methyl-2-pentanone	0.0100	10 U	89	10-150	
sec-Butylbenzene	0.00100	1.0 U	88	10-150	
Methyl tert-butyl ether	0.00100	1.0 U	115	10-150	
Methylene Chloride	0.00100	1.0 U	148	10-150	
o-Xylene	0.00100	1.0 U	90	10-150	
Styrene	0.00100	1.0 U	81	10-150	
tert-Butylbenzene	0.00100	1.0 U	118	10-150	
Tetrachloroethene	0.00100	1.0 U	103	10-150	
Toluene	0.00100	1.0 U	114	10-150	
trans-1,2-Dichloroethene	0.00100	1.0 U	126	10-150	
trans-1,3-Dichloropropene	0.00100	1.0 U	106	10-150	
Trichloroethene	0.00100	1.0 U	108	10-150	
Trichlorofluoromethane	0.00100	1.0 U	119	10-150	
Vinyl acetate	0.00100	2.0 U	85	10-150	
Vinyl chloride	0.00100	1.0 U	118	10-150	
tert-Butyl alcohol	0.0200	50 U	120	10-150	
Xylenes, Total	0.00300	2.0 U	0	10-150	^
Dibromochloromethane	0.00100	1.0 U	142	10-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

VOC CALCULATION	SAMPLE		
	DR-DPT-41-25		
TARGET ANALYTE	**trichloroethene**		
ANALYTE RESPONSE	463490		
INTERNAL STANDARD	fluorobenzene		
I.S. RESPONSE	846043		
I.S. CONCENTRATION	10	µg/l	
ANALYTE CAL. RF	0.2979		
DILUTION FACTOR (DF)	1250		
INITIAL SAMPLE VOLUME - V1	5	ml	
FINAL SAMPLE VOLUME - V2	5		
(ANALYTE RESPONSE) x (I.S. CONCENTRATION) X DF x V2 / (I.S. RESPONSE) x (CAL. R.F.) x V1	=	22987.27	µg/l

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27624-1

SDG No.:

Client Sample ID: DR-DPT-41-25 | Lab Sample ID: 240-27624-5

Matrix: Water | Lab File ID: UXR6903.D

Analysis Method: 8260B | Date Collected: 08/06/2013 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/13/2013 20:15

Soil Aliquot Vol: | Dilution Factor: 1250

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97250 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1300	U	1300	200
74-87-3	Chloromethane	1300	U	1300	380
156-59-2	cis-1,2-Dichloroethene	17000		1300	210
10061-01-5	cis-1,3-Dichloropropene	1300	U	1300	180
87-68-3	Hexachlorobutadiene	1300	U	1300	380
74-95-3	Dibromomethane	1300	U	1300	350
75-27-4	Bromodichloromethane	1300	U	1300	190
75-71-8	Dichlorodifluoromethane	1300	U	1300	390
100-41-4	Ethylbenzene	1300	U	1300	210
106-93-4	1,2-Dibromoethane	1300	U	1300	300
108-20-3	Diisopropyl ether	13000	U	13000	1900
91-20-3	Naphthalene	1300	U	1300	300
179601-23-1	m-Xylene & p-Xylene	2500	U	2500	300
104-51-8	n-Butylbenzene	1300	U	1300	150
98-82-8	Isopropylbenzene	1300	U	1300	160
103-65-1	n-Propylbenzene	1300	U	1300	180
78-93-3	2-Butanone	13000	U	13000	710
108-10-1	4-Methyl-2-pentanone	13000	U	13000	400
135-98-8	sec-Butylbenzene	1300	U	1300	160
1634-04-4	Methyl tert-butyl ether	1300	U	1300	210
994-05-8	Tert-amyl-methyl ether (TAME)	6300	U	6300	84
75-09-2	Methylene Chloride	1600	B	1300	410
95-47-6	o-Xylene	1300	U	1300	180
100-42-5	Styrene	1300	U	1300	140
637-92-3	Ethyl-t-butyl ether (ETBE)	6300	U	6300	140
98-06-6	tert-Butylbenzene	1300	U	1300	160
127-18-4	Tetrachloroethene	1300	U	1300	360
108-88-3	Toluene	1700		1300	160
156-60-5	trans-1,2-Dichloroethene	1300	U	1300	240
10061-02-6	trans-1,3-Dichloropropene	1300	U	1300	240
79-01-6	Trichloroethene	23000		1300	210
75-69-4	Trichlorofluoromethane	1300	U	1300	260
108-05-4	Vinyl acetate	2500	U	2500	240
75-01-4	Vinyl chloride	1300	U	1300	280
75-65-0	tert-Butyl alcohol	63000	U	63000	4900
1330-20-7	Xylenes, Total	2500	U	2500	180

Report Date: 14-Aug-2013 10:07:27 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\NCCHROM\ChromData\A3UX17\20130813-22439.b\UXR6903.D		
Lims ID:	240-27624-C-5	Client ID:	DR-DPT-41-25
Inject. Date:	13-Aug-2013 20:15:30	Dil. Factor:	1250.0000
Sample Type:	Client		
Sample ID:	240-0022439-023		
Misc. Info.:			
Operator:	1644	Instrument ID:	A3UX17
Purge Vol:	5.000 mL	ALS Bottle#:	22
Lims Batch ID:	97250	Lims Sample ID:	23
Detector:	MS SCAN		
Method:	\\NCCHROM\ChromData\A3UX17\20130813-22439.b\8260_17.m		
Last Update:	14-Aug-2013 10:07:17	Calib Date:	02-Jul-2013 11:37:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\NCCHROM\ChromData\A3UX17\20130702-21310.b\UXR6129.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK004		

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
1 Fluorobenzene	96	5.763	5.763	0.0	99	846043	10.0	
* 2 Chlorobenzene-d5	117	8.479	8.479	0.0	82	703203	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.0	94	363241	10.0	
$ 6 Dibromofluoromethane (Surr)	113	5.194	5.194	0.0	60	203569	9.38	
$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.491	5.490	0.001	0	272280	9.27	
$ 8 Toluene-d8 (Surr)	98	7.151	7.151	0.0	93	679283	7.16	
$ 9 4-Bromofluorobenzene (Surr)	95	9.594	9.582	0.012	95	239418	6.74	
14 Dichlorodifluoromethane	85		1.648					
15 Chloromethane	50		1.826					
17 Vinyl chloride	62	1.957	1.957	0.0	19	6655	0.2103	
18 Bromomethane	94		2.312					
19 Chloroethane	64		2.419					
21 Trichlorofluoromethane	101		2.668					
25 1,1-Dichloroethene	96		3.178					9
26 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.190					
27 Acetone	43		3.237					
29 Carbon disulfide	76		3.391					9
33 Methylene Chloride	84	3.641	3.641	0.0	92	67493	1.30	
34 2-Methyl-2-propanol	59		3.735					
35 Methyl tert-butyl ether	73		3.878					
37 trans-1,2-Dichloroethene	96	3.890	3.890	0.0	55	2724	0.1069	
39 1,1-Dichloroethane	63		4.269					9
40 Vinyl acetate	86		4.305					
41 Isopropyl ether	87		4.305					
43 Tert-butyl ethyl ether	59		4.625					
45 cis-1,2-Dichloroethene	96	4.779	4.779	0.0	68	343558	13.3	
44 2,2-Dichloropropane	77		4.779					9
46 2-Butanone (MEK)	43		4.791					
50 Chlorobromomethane	128		4.992					
52 Chloroform	83		5.052					
53 1,1,1-Trichloroethane	97		5.206					
55 Carbon tetrachloride	117		5.348					

Report Date: 14-Aug-2013 10:07:27 Chrom Revision: 2.0 01-Apr-2013 21:16:10
Data File: \\NCCHROM\ChromData\A3UX17\20130813-22439.b\UXR6903.D

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
56 1,1-Dichloropropene	75		5.348					
58 Benzene	78		5.538					
59 1,2-Dichloroethane	62	5.550	5.550	0.0	8	4024	0.1132	
60 Tert-amyl methyl ether	73		5.609					
63 Trichloroethene	130	6.083	6.083	0.0	93	463490	18.4	
66 1,2-Dichloropropane	63		6.285					
69 Dibromomethane	93		6.392					
70 Dichlorobromomethane	83		6.522					
72 2-Chloroethyl vinyl ether	63		6.759					
73 cis-1,3-Dichloropropene	75		6.902					
74 4-Methyl-2-pentanone (MIBK)	43		7.032					
75 Toluene	91	7.210	7.210	0.0	92	143835	1.34	
76 trans-1,3-Dichloropropene	75		7.400					
79 Tetrachloroethene	164		7.696					
81 1,3-Dichloropropane	76		7.732					
82 2-Hexanone	43		7.779					
84 Chlorodibromomethane	129		7.933					
85 Ethylene Dibromide	107		8.052					
87 Chlorobenzene	112		8.503					
88 1,1,1,2-Tetrachloroethane	131		8.574					
89 Ethylbenzene	106		8.586					9
90 m-Xylene & p-Xylene	106		8.692					9
91 o-Xylene	106		9.084					9
92 Styrene	104		9.095					
93 Bromoform	173		9.285					
95 Isopropylbenzene	105		9.427					
97 1,1,2,2-Tetrachloroethane	83		9.724					
98 Bromobenzene	156		9.748					
100 1,2,3-Trichloropropane	110		9.771					
101 N-Propylbenzene	120		9.831					
102 2-Chlorotoluene	126		9.926					
104 4-Chlorotoluene	126		10.032					
105 tert-Butylbenzene	119		10.317					
106 1,2,4-Trimethylbenzene	105		10.364					9
107 sec-Butylbenzene	105		10.530					
108 1,3-Dichlorobenzene	146		10.661					
109 4-Isopropyltoluene	119		10.673					
110 1,4-Dichlorobenzene	146		10.744					
111 1,2,3-Trimethylbenzene	105		10.791					9
112 n-Butylbenzene	91		11.076					
113 1,2-Dichlorobenzene	146		11.123					
114 1,2-Dibromo-3-Chloropropane	157		11.906					
116 1,2,4-Trichlorobenzene	180		12.724					
117 Hexachlorobutadiene	225		12.890					
118 Naphthalene	128		12.997					
119 1,2,3-Trichlorobenzene	180		13.258					
S 124 Xylenes, Total	106		16.530					7

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27624-1 Analy Batch No.: 92260

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 09:46 Calibration End Date: 07/02/2013 11:37 Calibration ID: 16141

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0200 0.0192	0.0202	0.0152	0.0193	0.0162	Ave		0.0184				12.0		15.0			
Acrylonitrile	0.1340 0.1211	0.1183	0.1163	0.1204	0.1315	Ave		0.1236				5.9		15.0			
Methyl tert-butyl ether	0.7215 0.7881	0.7180	0.7115	0.7210	0.8152	Ave		0.7459				5.9		15.0			
trans-1,2-Dichloroethene	0.2980 0.3126	0.2933	0.2935	0.2838	0.3255	Ave		0.3011				5.1		15.0			
Hexane	0.0647 0.0811	0.0684	0.0717	0.0771	0.0870	Ave		0.0750				11.0		15.0			
1,1-Dichloroethane	0.4693 0.5520	0.5186	0.5101	0.5082	0.5741	Ave		0.5220			0.1000	7.0		15.0			
Vinyl acetate	0.0413 0.0541	0.0420	0.0414	0.0446	0.0553	Ave		0.0464				14.0		15.0			
2,2-Dichloropropane	0.2591 0.3070	0.2724	0.2646	0.2756	0.3223	Ave		0.2835				8.9		15.0			
cis-1,2-Dichloroethene	0.2858 0.3181	0.3108	0.2951	0.2946	0.3295	Ave		0.3056				5.4		15.0			
2-Butanone	0.1485 0.1278	0.1310	0.1199	0.1285	0.1339	Ave		0.1316				7.2		15.0			
Bromochloromethane	0.1398 0.1527	0.1469	0.1440	0.1386	0.1587	Ave		0.1468				5.3		15.0			
Tetrahydrofuran	0.0722 0.0804	0.0844	0.0811	0.0775	0.0849	Ave		0.0801				5.9		15.0			
Chloroform	0.4852 0.5245	0.4983	0.4978	0.4775	0.5543	Ave		0.5063				5.6		15.0			
1,1,1-Trichloroethane	0.3690 0.4340	0.3962	0.3904	0.4052	0.4480	Ave		0.4071				7.2		15.0			
Cyclohexane	0.4887 0.6445	0.5424	0.5673	0.5896	0.6635	Ave		0.5827				11.0		15.0			
1,1-Dichloropropene	0.3484 0.4169	0.3664	0.3760	0.3807	0.4327	Ave		0.3869				8.2		15.0			
Carbon tetrachloride	0.3418 0.4159	0.3617	0.3578	0.3669	0.4185	Ave		0.3771				8.5		15.0			
Benzene	1.1898 1.1961	1.1603	1.1274	1.1009	1.2515	Ave		1.1710				4.6		15.0			
1,2-Dichloroethane	0.3930 0.4351	0.4136	0.4178	0.4053	0.4559	Ave		0.4201				5.3		15.0			
Trichloroethene	0.2698 0.3135	0.2986	0.2884	0.2943	0.3227	Ave		0.2979				6.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. AVANAVAGE** **DATE:** **NOVEMBER 6, 2013**

FROM: **A. COGNETTI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOC**
MSA DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-27719-1

SAMPLES: 9/Aqueous/VOC

DR-DPT-40-20	DR-DPT-40-25	DR-DPT-40-30	DR-DPT-40-35
DR-DPT-40-40	DR-DPT-41-35	DR-DPT-41-40	DR-DPT-41-45
TB-080713			

Overview

The sample set for MSA Dump Road Source Areas, SDG 240-27719-1 consisted of eight (8) aqueous environmental samples and a trip blank analyzed for volatile organic compounds (VOCs).

The samples were collected on August 7, 2013 and analyzed by Test America Laboratories Inc. All analyses were conducted in accordance with SW-846 Methods 8260B for VOCs analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method /preparation blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate, internal standard recoveries, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major

- VOC initial calibration relative response factors (RRFs) for tert-butyl alcohol and vinyl acetate were less than 0.05 quality control limit on July 2, 2013 for instrument A3UX10 and the continuing calibration on August 15, 2013 @ 13:05. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR) in the affected samples.

- The tentatively identified compound (TIC), trimethylsilanol, was qualified as rejected in sample TB-080713. This compound is indicative of column bleed.

Minor

- The continuing calibration percent differences (%Ds) for several compounds were greater than 20% and less than 50% on August 15, 2013 @ 13:05 on instrument A3UX10. The compounds were dichlorodifluoromethane, chloroethane, acetone, 2,2'-dichloropropane, 1,1,1-trichloroethane, carbon tetrachloride, bromodichloromethane, trans-1,3-dichloropropene, dibromochloromethane, 1,1,1,2-tetrachloroethane and bromoform. The detected acetone and 1,1,1-trichloroethane results were qualified as estimated (J), except for the acetone result in sample DR-DPT-40-40 acetone result which was qualified due to blank contamination. No action was taken on the nondetecetd results of the aforementioned analytes. The continuing calibration %D for tert-butyl alcohol was greater than 50%. The nondetected tert-butyl alcohol results were qualified as rejected due to a more severe noncompliance. No action was taken.

- Contamination was detected in the VOC laboratory method blank associated with batch 240-97617/6.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Methylene Chloride	1.1	11

An action level of 10X the maximum concentration of common laboratory contaminant, methylene chloride, was established in order to evaluate samples for blank contamination. Sample aliquot and dilution factors were applied. The detected methylene chloride result in sample DR-DPT-41-45 was qualified as (B).

- Contamination was detected in the trip blank TB-080713.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Acetone	6.8	68

An action level of 10X the maximum concentration of common laboratory contaminant, acetone, was established in order to evaluate samples for blank contamination. Sample aliquot and dilution factors were applied. The detected acetone result in sample DR-DPT-40-40 was qualified as (B).

- The matrix spike/ matrix spike duplicate (MS/MSD) %Rs for 1,1,1,2-tetrachloroethane, carbon tetrachloride, trichloroethene, and dibromochloromethane in sample DR-DPT-41-35. The detected trichloroethene was qualified as estimated high (K). No action was taken on the nondetected 1,1,1,2-tetrachloroethane, carbon tetrachloride and dibromochloromethane results. The MSD %R of bromodichloromethane was greater than the upper quality control limit. No action was taken on the nondetected bromodichloromethane result. The MS/MSD %R of tert-butyl alcohol was less the lower quality control limit. No action was taken on the nondetected tert-butyl result which was qualified as rejected due to a more severe noncompliance.

- The non-target compound methylcyclohexane results in samples DR-DPT-41-40 and DR-DPT-41-45 were qualified estimated (J).

- Positive results reported below the quantitation limit but above the method detection limit (MDL) were qualified as estimated, (J).

Notes

The laboratory control sample (LCS) percent recoveries (%Rs) for 1,1,1,2-tetrachloroethane, and dibromochloromethane were greater than the upper quality control limit. No action was taken on the nondetected 1,1,1,2-tetrachloroethane, and dibromochloromethane results. The LCS %R of tert-butyl alcohol was less than the lower quality control limit. No action was taken on the nondetected tert-butyl results which were qualified as rejected due to a more severe noncompliance.

Nondetected results were reported to the MDL.

Executive Summary

Laboratory Performance: The VOC RRFs for tert-butyl alcohol and vinyl acetate were less than the quality control limit resulting in the rejection of nondetected results. The continuing calibration %Ds for acetone and 1,1,1-trichloroethane were greater than 20% and less than 50%.

Other Factors Affecting Data Quality: Methylene chloride was detected in the laboratory method blank. The trip blank contained acetone. TICs were detected in several samples. The MS/MSD %R of trichloroethene was greater than the upper quality control limit. Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Ann Cognetti

Tetra Tech
Ann Cognetti
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-40-20			DR-DPT-40-25			DR-DPT-40-30			DR-DPT-40-35		
SDG: 240-27719-1	LAB_ID	240-27719-4			240-27719-5			240-27719-6			240-27719-7		
FRACTION: OV	SAMP_DATE	8/7/2013			8/7/2013			8/7/2013			8/7/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		77	U		29	U		77	U		58	U	
1,1,1-TRICHLOROETHANE		73	U		28	U		73	U		160	J	CP
1,1,2,2-TETRACHLOROETHANE		60	U		23	U		60	U		45	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		93	U		35	U		93	U		70	U	
1,1-DICHLOROETHANE		50	U		19	U		50	U		38	U	
1,1-DICHLOROETHENE		63	U		24	U		63	U		48	U	
1,1-DICHLOROPROPENE		43	U		16	U		43	U		33	U	
1,2,3-TRICHLOROBENZENE		57	U		21	U		57	U		43	U	
1,2,3-TRICHLOROPROPANE		140	U		54	U		140	U		110	U	
1,2,3-TRIMETHYLBENZENE		2	U		0.74	U		2	U		1.5	U	
1,2,4-TRICHLOROBENZENE		50	U		19	U		50	U		38	U	
1,2,4-TRIMETHYLBENZENE		40	U		15	U		40	U		30	U	
1,2-DIBROMO-3-CHLOROPROPANE		220	U		84	U		220	U		170	U	
1,2-DIBROMOETHANE		80	U		30	U		80	U		60	U	
1,2-DICHLOROBENZENE		43	U		16	U		43	U		33	U	
1,2-DICHLOROETHANE		73	U		28	U		73	U		55	U	
1,2-DICHLOROPROPANE		60	U		23	U		60	U		45	U	
1,3-DICHLOROBENZENE		47	U		18	U		47	U		35	U	
1,3-DICHLOROPROPANE		53	U		20	U		53	U		40	U	
1,4-DICHLOROBENZENE		43	U		16	U		43	U		33	U	
2,2-DICHLOROPROPANE		43	U		16	U		43	U		33	U	
2-BUTANONE		190	U		71	U		190	U		140	U	
2-CHLOROETHYL VINYL ETHER		330	U		120	U		330	U		250	U	
2-CHLOROTOLUENE		37	U		14	U		37	U		28	U	
2-HEXANONE		140	U		51	U		140	U		100	U	
4-CHLOROTOLUENE		60	U		23	U		60	U		45	U	
4-ISOPROPYLTOLUENE		40	U		15	U		40	U		30	U	
4-METHYL-2-PENTANONE		110	U		40	U		110	U		80	U	
ACETONE		370	U		140	U		370	U		280	U	
BENZENE		43	U		16	U		43	U		33	U	
BROMOBENZENE		43	U		16	U		43	U		33	U	
BROMOCHLOROMETHANE		97	U		36	U		97	U		73	U	
BROMODICHLOROMETHANE		50	U		19	U		50	U		38	U	
BROMOFORM		210	U		80	U		210	U		160	U	
BROMOMETHANE		140	U		51	U		140	U		100	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-40-40			DR-DPT-41-35			DR-DPT-41-40			DR-DPT-41-45		
SDG: 240-27719-1	LAB_ID	240-27719-8			240-27719-1			240-27719-2			240-27719-3		
FRACTION: OV	SAMP_DATE	8/7/2013			8/7/2013			8/7/2013			8/7/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	12	U		190	U		9.2	U		5.8	U	
1,1,1-TRICHLOROETHANE	11	U		180	U		8.8	U		5.5	U	
1,1,2,2-TETRACHLOROETHANE	9	U		150	U		7.2	U		4.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	14	U		230	U		11	U		7	U	
1,1-DICHLOROETHANE	7.5	U		120	U		6	U		3.8	U	
1,1-DICHLOROETHENE	9.5	U		160	U		7.6	U		4.8	U	
1,1-DICHLOROPROPENE	6.5	U		110	U		5.2	U		3.3	U	
1,2,3-TRICHLOROBENZENE	8.5	U		140	U		6.8	U		4.3	U	
1,2,3-TRICHLOROPROPANE	22	U		360	U		17	U		11	U	
1,2,3-TRIMETHYLBENZENE	0.3	U		4.9	U		0.24	U		0.15	U	
1,2,4-TRICHLOROBENZENE	7.5	U		120	U		6	U		3.8	U	
1,2,4-TRIMETHYLBENZENE	6	U		100	U		4.8	U		3	U	
1,2-DIBROMO-3-CHLOROPROPANE	34	U		560	U		27	U		17	U	
1,2-DIBROMOETHANE	12	U		200	U		9.6	U		6	U	
1,2-DICHLOROBENZENE	6.5	U		110	U		5.2	U		3.3	U	
1,2-DICHLOROETHANE	11	U		180	U		8.8	J	P	7.6	J	P
1,2-DICHLOROPROPANE	9	U		150	U		7.2	U		4.5	U	
1,3-DICHLOROBENZENE	7	U		120	U		5.6	U		3.5	U	
1,3-DICHLOROPROPANE	8	U		130	U		6.4	U		4	U	
1,4-DICHLOROBENZENE	6.5	U		110	U		5.2	U		3.3	U	
2,2-DICHLOROPROPANE	6.5	U		110	U		5.2	U		3.3	U	
2-BUTANONE	29	U		470	U		23	U		14	U	
2-CHLOROETHYL VINYL ETHER	50	U		820	U		40	U		25	U	
2-CHLOROTOLUENE	5.5	U		92	U		4.4	U		2.8	U	
2-HEXANONE	21	U		340	U		16	U		10	U	
4-CHLOROTOLUENE	9	U		150	U		7.2	U		4.5	U	
4-ISOPROPYLTOLUENE	6	U		100	U		4.8	U		3	U	
4-METHYL-2-PENTANONE	16	U		270	U		13	U		8	U	
ACETONE	67	B	AB	920	U		44	U		28	U	
BENZENE	6.5	U		110	U		5.2	U		3.3	U	
BROMOBENZENE	6.5	U		110	U		5.2	U		3.3	U	
BROMOCHLOROMETHANE	15	U		240	U		12	U		7.3	U	
BROMODICHLOROMETHANE	7.5	U		120	U		6	U		3.8	U	
BROMOFORM	32	U		530	U		26	U		16	U	
BROMOMETHANE	21	U		340	U		16	U		10	U	

PROJ_NO: 04882	NSAMPLE	TB-080713
SDG: 240-27719-1	LAB_ID	240-27719-9
FRACTION: OV	SAMP_DATE	8/7/2013
MEDIA: WATER	QC_TYPE	TB
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U	
1,1-DICHLOROETHANE	0.15	U	
1,1-DICHLOROETHENE	0.19	U	
1,1-DICHLOROPROPENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U	
1,2-DIBROMOETHANE	0.24	U	
1,2-DICHLOROBENZENE	0.13	U	
1,2-DICHLOROETHANE	0.22	U	
1,2-DICHLOROPROPANE	0.18	U	
1,3-DICHLOROBENZENE	0.14	U	
1,3-DICHLOROPROPANE	0.16	U	
1,4-DICHLOROBENZENE	0.13	U	
2,2-DICHLOROPROPANE	0.13	U	
2-BUTANONE	0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U	
2-CHLOROTOLUENE	0.11	U	
2-HEXANONE	0.41	U	
4-CHLOROTOLUENE	0.18	U	
4-ISOPROPYLTOLUENE	0.12	U	
4-METHYL-2-PENTANONE	0.32	U	
ACETONE	6.8	J	CP
BENZENE	0.13	U	
BROMOBENZENE	0.13	U	
BROMOCHLOROMETHANE	0.29	U	
BROMODICHLOROMETHANE	0.15	U	
BROMOFORM	0.64	U	
BROMOMETHANE	0.41	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-40-20			DR-DPT-40-25			DR-DPT-40-30			DR-DPT-40-35		
SDG: 240-27719-1	LAB_ID	240-27719-4			240-27719-5			240-27719-6			240-27719-7		
FRACTION: OV	SAMP_DATE	8/7/2013			8/7/2013			8/7/2013			8/7/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		43	U		16	U		43	U		33	U	
CARBON TETRACHLORIDE		43	U		16	U		43	U		33	U	
CHLOROBENZENE		50	U		19	U		50	U		38	U	
CHLORODIBROMOMETHANE		60	U		23	U		60	U		45	U	
CHLOROETHANE		97	U		36	U		97	U		73	U	
CHLOROFORM		53	U		20	U		53	U		40	U	
CHLOROMETHANE		100	U		38	U		100	U		75	U	
CIS-1,2-DICHLOROETHENE		9100			3700			9000			5500		
CIS-1,3-DICHLOROPROPENE		47	U		18	U		47	U		35	U	
DIBROMOMETHANE		93	U		35	U		93	U		70	U	
DICHLORODIFLUOROMETHANE		100	U		39	U		100	U		78	U	
DIISOPROPYL ETHER		500	U		190	U		500	U		380	U	
ETHYL TERT-BUTYL ETHER		37	U		14	U		37	U		28	U	
ETHYLBENZENE		57	U		21	U		57	U		43	U	
HEXACHLOROBUTADIENE		100	U		38	U		100	U		75	U	
ISOPROPYLBENZENE		43	U		16	U		43	U		33	U	
M+P-XYLENES		80	U		30	U		80	U		60	U	
METHYL TERT-BUTYL ETHER		57	U		21	U		57	U		43	U	
METHYLENE CHLORIDE		110	U		41	U		110	U		83	U	
NAPHTHALENE		80	U		30	U		80	U		60	U	
N-BUTYLBENZENE		40	U		15	U		40	U		30	U	
N-PROPYLBENZENE		47	U		18	U		47	U		35	U	
O-XYLENE		47	U		18	U		47	U		35	U	
SEC-BUTYLBENZENE		43	U		16	U		43	U		33	U	
STYRENE		37	U		14	U		37	U		28	U	
TERT-AMYL METHYL ETHER		22	U		8.4	U		22	U		17	U	
TERT-BUTYLBENZENE		43	U		16	U		43	U		33	U	
TERTIARY-BUTYL ALCOHOL		1300	UR	C	490	UR	C	1300	UR	C	980	UR	C
TETRACHLOROETHENE		97	U		36	U		97	U		73	U	
TOLUENE		43	U		16	U		43	U		33	U	
TOTAL XYLENES		47	U		18	U		47	U		35	U	
TRANS-1,2-DICHLOROETHENE		170	J	P	89	J	P	200	J	P	77	J	P
TRANS-1,3-DICHLOROPROPENE		63	U		24	U		63	U		48	U	
TRICHLOROETHENE		460			210			2800			5800		
TRICHLOROFLUOROMETHANE		70	U		26	U		70	U		53	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-40-40			DR-DPT-41-35			DR-DPT-41-40			DR-DPT-41-45		
SDG: 240-27719-1	LAB_ID	240-27719-8			240-27719-1			240-27719-2			240-27719-3		
FRACTION: OV	SAMP_DATE	8/7/2013			8/7/2013			8/7/2013			8/7/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE	6.5	U		110	U		5.2	U		3.3	U	
CARBON TETRACHLORIDE	6.5	U		110	U		5.2	U		3.3	U	
CHLOROBENZENE	7.5	U		120	U		6	U		3.8	U	
CHLORODIBROMOMETHANE	9	U		150	U		7.2	U		4.5	U	
CHLOROETHANE	15	U		240	U		12	U		7.3	U	
CHLOROFORM	8	U		130	U		6.4	U		4	U	
CHLOROMETHANE	15	U		250	U		12	U		7.5	U	
CIS-1,2-DICHLOROETHENE	1100			1900			320			340		
CIS-1,3-DICHLOROPROPENE	7	U		120	U		5.6	U		3.5	U	
DIBROMOMETHANE	14	U		230	U		11	U		7	U	
DICHLORODIFLUOROMETHANE	16	U		260	U		12	U		7.8	U	
DIISOPROPYL ETHER	75	U		1200	U		60	U		38	U	
ETHYL TERT-BUTYL ETHER	5.5	U		92	U		4.4	U		2.8	U	
ETHYLBENZENE	8.5	U		140	U		6.8	U		4.3	U	
HEXACHLOROBUTADIENE	15	U		250	U		12	U		7.5	U	
ISOPROPYLBENZENE	6.5	U		110	U		5.2	U		3.3	U	
M+P-XYLENES	12	U		200	U		9.6	U		6	U	
METHYL TERT-BUTYL ETHER	8.5	U		140	U		6.8	U		4.3	U	
METHYLENE CHLORIDE	17	U		270	U		13	U		12	B	A
NAPHTHALENE	12	U		200	U		9.6	U		6	U	
N-BUTYLBENZENE	6	U		100	U		4.8	U		3	U	
N-PROPYLBENZENE	7	U		120	U		5.6	U		3.5	U	
O-XYLENE	7	U		120	U		5.6	U		3.5	U	
SEC-BUTYLBENZENE	6.5	U		110	U		5.2	U		3.3	U	
STYRENE	5.5	U		92	U		4.4	U		2.8	U	
TERT-AMYL METHYL ETHER	3.4	U		56	U		2.7	U		1.7	U	
TERT-BUTYLBENZENE	6.5	U		110	U		5.2	U		3.3	U	
TERTIARY-BUTYL ALCOHOL	200	UR	C	3200	UR	C	160	UR	C	98	UR	C
TETRACHLOROETHENE	15	U		240	U		12	U		7.3	U	
TOLUENE	6.5	U		110	U		66			62		
TOTAL XYLENES	7	U		120	U		5.6	U		3.5	U	
TRANS-1,2-DICHLOROETHENE	9.5	U		160	U		19	J	P	20	J	P
TRANS-1,3-DICHLOROPROPENE	9.5	U		160	U		7.6	U		4.8	U	
TRICHLOROETHENE	120			28000	K	D	1100			870		
TRICHLOROFLUOROMETHANE	11	U		170	U		8.4	U		5.3	U	

PROJ_NO: 04882	NSAMPLE	TB-080713
SDG: 240-27719-1	LAB_ID	240-27719-9
FRACTION: OV	SAMP_DATE	8/7/2013
MEDIA: WATER	QC_TYPE	TB
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
CARBON DISULFIDE	0.13	U	
CARBON TETRACHLORIDE	0.13	U	
CHLOROBENZENE	0.15	U	
CHLORODIBROMOMETHANE	0.18	U	
CHLOROETHANE	0.29	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U	
DIBROMOMETHANE	0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U	
DIISOPROPYL ETHER	1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U	
ETHYLBENZENE	0.17	U	
HEXACHLOROBUTADIENE	0.3	U	
ISOPROPYLBENZENE	0.13	U	
M+P-XYLENES	0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U	
METHYLENE CHLORIDE	0.33	U	
NAPHTHALENE	0.24	U	
N-BUTYLBENZENE	0.12	U	
N-PROPYLBENZENE	0.14	U	
O-XYLENE	0.14	U	
SEC-BUTYLBENZENE	0.13	U	
STYRENE	0.11	U	
TERT-AMYL METHYL ETHER	0.067	U	
TERT-BUTYLBENZENE	0.13	U	
TERTIARY-BUTYL ALCOHOL	3.9	UR	C
TETRACHLOROETHENE	0.29	U	
TOLUENE	0.13	U	
TOTAL XYLENES	0.14	U	
TRANS-1,2-DICHLOROETHENE	0.19	U	
TRANS-1,3-DICHLOROPROPENE	0.19	U	
TRICHLOROETHENE	0.17	U	
TRICHLOROFLUOROMETHANE	0.21	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-40-20			DR-DPT-40-25			DR-DPT-40-30			DR-DPT-40-35		
SDG: 240-27719-1	LAB_ID	240-27719-4			240-27719-5			240-27719-6			240-27719-7		
FRACTION: OV	SAMP_DATE	8/7/2013			8/7/2013			8/7/2013			8/7/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		63	UR	C	24	UR	C	63	UR	C	48	UR	C
VINYL CHLORIDE		350			51	J	P	130	J	P	71	J	P

PROJ_NO: 04882	NSAMPLE	DR-DPT-40-40			DR-DPT-41-35			DR-DPT-41-40			DR-DPT-41-45		
SDG: 240-27719-1	LAB_ID	240-27719-8			240-27719-1			240-27719-2			240-27719-3		
FRACTION: OV	SAMP_DATE	8/7/2013			8/7/2013			8/7/2013			8/7/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		9.5	UR	C	160	UR	C	7.6	UR	C	4.8	UR	C
VINYL CHLORIDE		43	J	P	180	U		16	J	P	11	J	P

PROJ_NO: 04882	NSAMPLE	TB-080713		
SDG: 240-27719-1	LAB_ID	240-27719-9		
FRACTION: OV	SAMP_DATE	8/7/2013		
MEDIA: WATER	QC_TYPE	TB		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C
VINYL CHLORIDE		0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-41-40			DR-DPT-41-45			TB-080713		
SDG: 240-27719-1	LAB_ID	240-27719-2			240-27719-3			240-27719-9		
FRACTION: TICOV	SAMP_DATE	8/7/2013			8/7/2013			8/7/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYLCYCLOHEXANE		5.7	J	P	5.2	J	P			
SILANOL, TRIMETHYL-								4.2	R	Z2

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-20 | Lab Sample ID: 240-27719-4

Matrix: Water | Lab File ID: UX6718.D

Analysis Method: 8260B | Date Collected: 08/07/2013 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 16:34

Soil Aliquot Vol: | Dilution Factor: 333.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	330	U *	330	77
71-55-6	1,1,1-Trichloroethane	330	U	330	73
79-34-5	1,1,2,2-Tetrachloroethane	330	U	330	60
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	330	U	330	93
75-34-3	1,1-Dichloroethane	330	U	330	50
75-35-4	1,1-Dichloroethene	330	U	330	63
563-58-6	1,1-Dichloropropene	330	U	330	43
87-61-6	1,2,3-Trichlorobenzene	330	U	330	57
96-18-4	1,2,3-Trichloropropane	330	U	330	140
526-73-8	1,2,3-Trimethylbenzene	1700	U	1700	2.0
120-82-1	1,2,4-Trichlorobenzene	330	U	330	50
95-63-6	1,2,4-Trimethylbenzene	330	U	330	40
96-12-8	1,2-Dibromo-3-Chloropropane	670	U	670	220
95-50-1	1,2-Dichlorobenzene	330	U	330	43
107-06-2	1,2-Dichloroethane	330	U	330	73
78-87-5	1,2-Dichloropropane	330	U	330	60
541-73-1	1,3-Dichlorobenzene	330	U	330	47
142-28-9	1,3-Dichloropropane	330	U	330	53
106-46-7	1,4-Dichlorobenzene	330	U	330	43
594-20-7	2,2-Dichloropropane	330	U	330	43
110-75-8	2-Chloroethyl vinyl ether	3300	U	3300	330
95-49-8	2-Chlorotoluene	330	U	330	37
591-78-6	2-Hexanone	3300	U	3300	140
108-86-1	Bromobenzene	330	U	330	43
74-97-5	Bromochloromethane	330	U	330	97
106-43-4	4-Chlorotoluene	330	U	330	60
99-87-6	p-Isopropyltoluene	330	U	330	40
67-64-1	Acetone	3300	U	3300	370
71-43-2	Benzene	330	U	330	43
75-25-2	Bromoform	330	U	330	210
74-83-9	Bromomethane	330	U	330	140
75-15-0	Carbon disulfide	330	U	330	43
56-23-5	Carbon tetrachloride	330	U	330	43
108-90-7	Chlorobenzene	330	U	330	50
75-00-3	Chloroethane	330	U	330	97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-20 Lab Sample ID: 240-27719-4

Matrix: Water Lab File ID: UX6718.D

Analysis Method: 8260B Date Collected: 08/07/2013 13:35

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 16:34

Soil Aliquot Vol: Dilution Factor: 333.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	330	U	330	53
74-87-3	Chloromethane	330	U	330	100
156-59-2	cis-1,2-Dichloroethene	9100		330	57
10061-01-5	cis-1,3-Dichloropropene	330	U	330	47
87-68-3	Hexachlorobutadiene	330	U	330	100
74-95-3	Dibromomethane	330	U	330	93
75-27-4	Bromodichloromethane	330	U	330	50
75-71-8	Dichlorodifluoromethane	330	U	330	100
100-41-4	Ethylbenzene	330	U	330	57
106-93-4	1,2-Dibromoethane	330	U	330	80
108-20-3	Diisopropyl ether	3300	U	3300	500
91-20-3	Naphthalene	330	U	330	80
179601-23-1	m-Xylene & p-Xylene	670	U	670	80
104-51-8	n-Butylbenzene	330	U	330	40
98-82-8	Isopropylbenzene	330	U	330	43
103-65-1	n-Propylbenzene	330	U	330	47
78-93-3	2-Butanone	3300	U	3300	190
108-10-1	4-Methyl-2-pentanone	3300	U	3300	110
135-98-8	sec-Butylbenzene	330	U	330	43
1634-04-4	Methyl tert-butyl ether	330	U	330	57
994-05-8	Tert-amyl-methyl ether (TAME)	1700	U	1700	22
75-09-2	Methylene Chloride	330	U	330	110
95-47-6	o-Xylene	330	U	330	47
100-42-5	Styrene	330	U	330	37
637-92-3	Ethyl-t-butyl ether (ETBE)	1700	U	1700	37
98-06-6	tert-Butylbenzene	330	U	330	43
127-18-4	Tetrachloroethene	330	U	330	97
108-88-3	Toluene	330	U	330	43
156-60-5	trans-1,2-Dichloroethene	170	J	330	63
10061-02-6	trans-1,3-Dichloropropene	330	U	330	63
79-01-6	Trichloroethene	460		330	57
75-69-4	Trichlorofluoromethane	330	U	330	70
108-05-4	Vinyl acetate	670	U	670	63
75-01-4	Vinyl chloride	350		330	73
75-65-0	tert-Butyl alcohol	17000	U *	17000	1300
1330-20-7	Xylenes, Total	670	U	670	47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-20 | Lab Sample ID: 240-27719-4

Matrix: Water | Lab File ID: UX6718.D

Analysis Method: 8260B | Date Collected: 08/07/2013 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 16:34

Soil Aliquot Vol: | Dilution Factor: 333.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	330	U *	330	60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-20 Lab Sample ID: 240-27719-4

Matrix: Water Lab File ID: UX6718.D

Analysis Method: 8260B Date Collected: 08/07/2013 13:35

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 16:34

Soil Aliquot Vol: Dilution Factor: 333.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-25 Lab Sample ID: 240-27719-5

Matrix: Water Lab File ID: UX6719.D

Analysis Method: 8260B Date Collected: 08/07/2013 13:50

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 16:56

Soil Aliquot Vol: Dilution Factor: 125

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	130	U *	130	29
71-55-6	1,1,1-Trichloroethane	130	U	130	28
79-34-5	1,1,2,2-Tetrachloroethane	130	U	130	23
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	130	U	130	35
75-34-3	1,1-Dichloroethane	130	U	130	19
75-35-4	1,1-Dichloroethene	130	U	130	24
563-58-6	1,1-Dichloropropene	130	U	130	16
87-61-6	1,2,3-Trichlorobenzene	130	U	130	21
96-18-4	1,2,3-Trichloropropane	130	U	130	54
526-73-8	1,2,3-Trimethylbenzene	630	U	630	0.74
120-82-1	1,2,4-Trichlorobenzene	130	U	130	19
95-63-6	1,2,4-Trimethylbenzene	130	U	130	15
96-12-8	1,2-Dibromo-3-Chloropropane	250	U	250	84
95-50-1	1,2-Dichlorobenzene	130	U	130	16
107-06-2	1,2-Dichloroethane	130	U	130	28
78-87-5	1,2-Dichloropropane	130	U	130	23
541-73-1	1,3-Dichlorobenzene	130	U	130	18
142-28-9	1,3-Dichloropropane	130	U	130	20
106-46-7	1,4-Dichlorobenzene	130	U	130	16
594-20-7	2,2-Dichloropropane	130	U	130	16
110-75-8	2-Chloroethyl vinyl ether	1300	U	1300	120
95-49-8	2-Chlorotoluene	130	U	130	14
591-78-6	2-Hexanone	1300	U	1300	51
108-86-1	Bromobenzene	130	U	130	16
74-97-5	Bromochloromethane	130	U	130	36
106-43-4	4-Chlorotoluene	130	U	130	23
99-87-6	p-Isopropyltoluene	130	U	130	15
67-64-1	Acetone	1300	U	1300	140
71-43-2	Benzene	130	U	130	16
75-25-2	Bromoform	130	U	130	80
74-83-9	Bromomethane	130	U	130	51
75-15-0	Carbon disulfide	130	U	130	16
56-23-5	Carbon tetrachloride	130	U	130	16
108-90-7	Chlorobenzene	130	U	130	19
75-00-3	Chloroethane	130	U	130	36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-25 | Lab Sample ID: 240-27719-5

Matrix: Water | Lab File ID: UX6719.D

Analysis Method: 8260B | Date Collected: 08/07/2013 13:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 16:56

Soil Aliquot Vol: | Dilution Factor: 125

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	130	U	130	20
74-87-3	Chloromethane	130	U	130	38
156-59-2	cis-1,2-Dichloroethene	3700		130	21
10061-01-5	cis-1,3-Dichloropropene	130	U	130	18
87-68-3	Hexachlorobutadiene	130	U	130	38
74-95-3	Dibromomethane	130	U	130	35
75-27-4	Bromodichloromethane	130	U	130	19
75-71-8	Dichlorodifluoromethane	130	U	130	39
100-41-4	Ethylbenzene	130	U	130	21
106-93-4	1,2-Dibromoethane	130	U	130	30
108-20-3	Diisopropyl ether	1300	U	1300	190
91-20-3	Naphthalene	130	U	130	30
179601-23-1	m-Xylene & p-Xylene	250	U	250	30
104-51-8	n-Butylbenzene	130	U	130	15
98-82-8	Isopropylbenzene	130	U	130	16
103-65-1	n-Propylbenzene	130	U	130	18
78-93-3	2-Butanone	1300	U	1300	71
108-10-1	4-Methyl-2-pentanone	1300	U	1300	40
135-98-8	sec-Butylbenzene	130	U	130	16
1634-04-4	Methyl tert-butyl ether	130	U	130	21
994-05-8	Tert-amyl-methyl ether (TAME)	630	U	630	8.4
75-09-2	Methylene Chloride	130	U	130	41
95-47-6	o-Xylene	130	U	130	18
100-42-5	Styrene	130	U	130	14
637-92-3	Ethyl-t-butyl ether (ETBE)	630	U	630	14
98-06-6	tert-Butylbenzene	130	U	130	16
127-18-4	Tetrachloroethene	130	U	130	36
108-88-3	Toluene	130	U	130	16
156-60-5	trans-1,2-Dichloroethene	89	J	130	24
10061-02-6	trans-1,3-Dichloropropene	130	U	130	24
79-01-6	Trichloroethene	210		130	21
75-69-4	Trichlorofluoromethane	130	U	130	26
108-05-4	Vinyl acetate	250	U	250	24
75-01-4	Vinyl chloride	51	J	130	28
75-65-0	tert-Butyl alcohol	6300	U *	6300	490
1330-20-7	Xylenes, Total	250	U	250	18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-25 Lab Sample ID: 240-27719-5

Matrix: Water Lab File ID: UX6719.D

Analysis Method: 8260B Date Collected: 08/07/2013 13:50

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 16:56

Soil Aliquot Vol: Dilution Factor: 125

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	130	U *	130	23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-25 Lab Sample ID: 240-27719-5

Matrix: Water Lab File ID: UX6719.D

Analysis Method: 8260B Date Collected: 08/07/2013 13:50

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 16:56

Soil Aliquot Vol: Dilution Factor: 125

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-30 Lab Sample ID: 240-27719-6

Matrix: Water Lab File ID: UX6720.D

Analysis Method: 8260B Date Collected: 08/07/2013 14:15

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 17:17

Soil Aliquot Vol: Dilution Factor: 333.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	330	U *	330	77
71-55-6	1,1,1-Trichloroethane	330	U	330	73
79-34-5	1,1,2,2-Tetrachloroethane	330	U	330	60
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	330	U	330	93
75-34-3	1,1-Dichloroethane	330	U	330	50
75-35-4	1,1-Dichloroethene	330	U	330	63
563-58-6	1,1-Dichloropropene	330	U	330	43
87-61-6	1,2,3-Trichlorobenzene	330	U	330	57
96-18-4	1,2,3-Trichloropropane	330	U	330	140
526-73-8	1,2,3-Trimethylbenzene	1700	U	1700	2.0
120-82-1	1,2,4-Trichlorobenzene	330	U	330	50
95-63-6	1,2,4-Trimethylbenzene	330	U	330	40
96-12-8	1,2-Dibromo-3-Chloropropane	670	U	670	220
95-50-1	1,2-Dichlorobenzene	330	U	330	43
107-06-2	1,2-Dichloroethane	330	U	330	73
78-87-5	1,2-Dichloropropane	330	U	330	60
541-73-1	1,3-Dichlorobenzene	330	U	330	47
142-28-9	1,3-Dichloropropane	330	U	330	53
106-46-7	1,4-Dichlorobenzene	330	U	330	43
594-20-7	2,2-Dichloropropane	330	U	330	43
110-75-8	2-Chloroethyl vinyl ether	3300	U	3300	330
95-49-8	2-Chlorotoluene	330	U	330	37
591-78-6	2-Hexanone	3300	U	3300	140
108-86-1	Bromobenzene	330	U	330	43
74-97-5	Bromochloromethane	330	U	330	97
106-43-4	4-Chlorotoluene	330	U	330	60
99-87-6	p-Isopropyltoluene	330	U	330	40
67-64-1	Acetone	3300	U	3300	370
71-43-2	Benzene	330	U	330	43
75-25-2	Bromoform	330	U	330	210
74-83-9	Bromomethane	330	U	330	140
75-15-0	Carbon disulfide	330	U	330	43
56-23-5	Carbon tetrachloride	330	U	330	43
108-90-7	Chlorobenzene	330	U	330	50
75-00-3	Chloroethane	330	U	330	97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-30 | Lab Sample ID: 240-27719-6

Matrix: Water | Lab File ID: UX6720.D

Analysis Method: 8260B | Date Collected: 08/07/2013 14:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 17:17

Soil Aliquot Vol: | Dilution Factor: 333.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	330	U	330	53
74-87-3	Chloromethane	330	U	330	100
156-59-2	cis-1,2-Dichloroethene	9000		330	57
10061-01-5	cis-1,3-Dichloropropene	330	U	330	47
87-68-3	Hexachlorobutadiene	330	U	330	100
74-95-3	Dibromomethane	330	U	330	93
75-27-4	Bromodichloromethane	330	U	330	50
75-71-8	Dichlorodifluoromethane	330	U	330	100
100-41-4	Ethylbenzene	330	U	330	57
106-93-4	1,2-Dibromoethane	330	U	330	80
108-20-3	Diisopropyl ether	3300	U	3300	500
91-20-3	Naphthalene	330	U	330	80
179601-23-1	m-Xylene & p-Xylene	670	U	670	80
104-51-8	n-Butylbenzene	330	U	330	40
98-82-8	Isopropylbenzene	330	U	330	43
103-65-1	n-Propylbenzene	330	U	330	47
78-93-3	2-Butanone	3300	U	3300	190
108-10-1	4-Methyl-2-pentanone	3300	U	3300	110
135-98-8	sec-Butylbenzene	330	U	330	43
1634-04-4	Methyl tert-butyl ether	330	U	330	57
994-05-8	Tert-amyl-methyl ether (TAME)	1700	U	1700	22
75-09-2	Methylene Chloride	330	U	330	110
95-47-6	o-Xylene	330	U	330	47
100-42-5	Styrene	330	U	330	37
637-92-3	Ethyl-t-butyl ether (ETBE)	1700	U	1700	37
98-06-6	tert-Butylbenzene	330	U	330	43
127-18-4	Tetrachloroethene	330	U	330	97
108-88-3	Toluene	330	U	330	43
156-60-5	trans-1,2-Dichloroethene	200	J	330	63
10061-02-6	trans-1,3-Dichloropropene	330	U	330	63
79-01-6	Trichloroethene	2800		330	57
75-69-4	Trichlorofluoromethane	330	U	330	70
108-05-4	Vinyl acetate	670	U	670	63
75-01-4	Vinyl chloride	130	J	330	73
75-65-0	tert-Butyl alcohol	17000	U *	17000	1300
1330-20-7	Xylenes, Total	670	U	670	47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-30 Lab Sample ID: 240-27719-6

Matrix: Water Lab File ID: UX6720.D

Analysis Method: 8260B Date Collected: 08/07/2013 14:15

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 17:17

Soil Aliquot Vol: Dilution Factor: 333.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	330	U *	330	60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-30 Lab Sample ID: 240-27719-6

Matrix: Water Lab File ID: UX6720.D

Analysis Method: 8260B Date Collected: 08/07/2013 14:15

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 17:17

Soil Aliquot Vol: Dilution Factor: 333.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-35 Lab Sample ID: 240-27719-7

Matrix: Water Lab File ID: UX6721.D

Analysis Method: 8260B Date Collected: 08/07/2013 14:35

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 17:39

Soil Aliquot Vol: Dilution Factor: 250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	250	U *	250	58
71-55-6	1,1,1-Trichloroethane	160	J	250	55
79-34-5	1,1,2,2-Tetrachloroethane	250	U	250	45
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	250	U	250	70
75-34-3	1,1-Dichloroethane	250	U	250	38
75-35-4	1,1-Dichloroethene	250	U	250	48
563-58-6	1,1-Dichloropropene	250	U	250	33
87-61-6	1,2,3-Trichlorobenzene	250	U	250	43
96-18-4	1,2,3-Trichloropropane	250	U	250	110
526-73-8	1,2,3-Trimethylbenzene	1300	U	1300	1.5
120-82-1	1,2,4-Trichlorobenzene	250	U	250	38
95-63-6	1,2,4-Trimethylbenzene	250	U	250	30
96-12-8	1,2-Dibromo-3-Chloropropane	500	U	500	170
95-50-1	1,2-Dichlorobenzene	250	U	250	33
107-06-2	1,2-Dichloroethane	250	U	250	55
78-87-5	1,2-Dichloropropane	250	U	250	45
541-73-1	1,3-Dichlorobenzene	250	U	250	35
142-28-9	1,3-Dichloropropane	250	U	250	40
106-46-7	1,4-Dichlorobenzene	250	U	250	33
594-20-7	2,2-Dichloropropane	250	U	250	33
110-75-8	2-Chloroethyl vinyl ether	2500	U	2500	250
95-49-8	2-Chlorotoluene	250	U	250	28
591-78-6	2-Hexanone	2500	U	2500	100
108-86-1	Bromobenzene	250	U	250	33
74-97-5	Bromochloromethane	250	U	250	73
106-43-4	4-Chlorotoluene	250	U	250	45
99-87-6	p-Isopropyltoluene	250	U	250	30
67-64-1	Acetone	2500	U	2500	280
71-43-2	Benzene	250	U	250	33
75-25-2	Bromoform	250	U	250	160
74-83-9	Bromomethane	250	U	250	100
75-15-0	Carbon disulfide	250	U	250	33
56-23-5	Carbon tetrachloride	250	U	250	33
108-90-7	Chlorobenzene	250	U	250	38
75-00-3	Chloroethane	250	U	250	73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-35 Lab Sample ID: 240-27719-7

Matrix: Water Lab File ID: UX6721.D

Analysis Method: 8260B Date Collected: 08/07/2013 14:35

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 17:39

Soil Aliquot Vol: Dilution Factor: 250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	250	U	250	40
74-87-3	Chloromethane	250	U	250	75
156-59-2	cis-1,2-Dichloroethene	5500		250	43
10061-01-5	cis-1,3-Dichloropropene	250	U	250	35
87-68-3	Hexachlorobutadiene	250	U	250	75
74-95-3	Dibromomethane	250	U	250	70
75-27-4	Bromodichloromethane	250	U	250	38
75-71-8	Dichlorodifluoromethane	250	U	250	78
100-41-4	Ethylbenzene	250	U	250	43
106-93-4	1,2-Dibromoethane	250	U	250	60
108-20-3	Diisopropyl ether	2500	U	2500	380
91-20-3	Naphthalene	250	U	250	60
179601-23-1	m-Xylene & p-Xylene	500	U	500	60
104-51-8	n-Butylbenzene	250	U	250	30
98-82-8	Isopropylbenzene	250	U	250	33
103-65-1	n-Propylbenzene	250	U	250	35
78-93-3	2-Butanone	2500	U	2500	140
108-10-1	4-Methyl-2-pentanone	2500	U	2500	80
135-98-8	sec-Butylbenzene	250	U	250	33
1634-04-4	Methyl tert-butyl ether	250	U	250	43
994-05-8	Tert-amyl-methyl ether (TAME)	1300	U	1300	17
75-09-2	Methylene Chloride	250	U	250	83
95-47-6	o-Xylene	250	U	250	35
100-42-5	Styrene	250	U	250	28
637-92-3	Ethyl-t-butyl ether (ETBE)	1300	U	1300	28
98-06-6	tert-Butylbenzene	250	U	250	33
127-18-4	Tetrachloroethene	250	U	250	73
108-88-3	Toluene	250	U	250	33
156-60-5	trans-1,2-Dichloroethene	77	J	250	48
10061-02-6	trans-1,3-Dichloropropene	250	U	250	48
79-01-6	Trichloroethene	5800		250	43
75-69-4	Trichlorofluoromethane	250	U	250	53
108-05-4	Vinyl acetate	500	U	500	48
75-01-4	Vinyl chloride	71	J	250	55
75-65-0	tert-Butyl alcohol	13000	U *	13000	980
1330-20-7	Xylenes, Total	500	U	500	35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-35 Lab Sample ID: 240-27719-7

Matrix: Water Lab File ID: UX6721.D

Analysis Method: 8260B Date Collected: 08/07/2013 14:35

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 17:39

Soil Aliquot Vol: Dilution Factor: 250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	250	U *	250	45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-117
2037-26-5	Toluene-d8 (Surr)	94		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-35 Lab Sample ID: 240-27719-7

Matrix: Water Lab File ID: UX6721.D

Analysis Method: 8260B Date Collected: 08/07/2013 14:35

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 17:39

Soil Aliquot Vol: Dilution Factor: 250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-40 Lab Sample ID: 240-27719-8

Matrix: Water Lab File ID: UXX6734.D

Analysis Method: 8260B Date Collected: 08/07/2013 14:55

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 22:16

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	50	U *	50	12
71-55-6	1,1,1-Trichloroethane	50	U	50	11
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	9.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	50	U	50	14
75-34-3	1,1-Dichloroethane	50	U	50	7.5
75-35-4	1,1-Dichloroethene	50	U	50	9.5
563-58-6	1,1-Dichloropropene	50	U	50	6.5
87-61-6	1,2,3-Trichlorobenzene	50	U	50	8.5
96-18-4	1,2,3-Trichloropropane	50	U	50	22
526-73-8	1,2,3-Trimethylbenzene	250	U	250	0.30
120-82-1	1,2,4-Trichlorobenzene	50	U	50	7.5
95-63-6	1,2,4-Trimethylbenzene	50	U	50	6.0
96-12-8	1,2-Dibromo-3-Chloropropane	100	U	100	34
95-50-1	1,2-Dichlorobenzene	50	U	50	6.5
107-06-2	1,2-Dichloroethane	50	U	50	11
78-87-5	1,2-Dichloropropane	50	U	50	9.0
541-73-1	1,3-Dichlorobenzene	50	U	50	7.0
142-28-9	1,3-Dichloropropane	50	U	50	8.0
106-46-7	1,4-Dichlorobenzene	50	U	50	6.5
594-20-7	2,2-Dichloropropane	50	U	50	6.5
110-75-8	2-Chloroethyl vinyl ether	500	U	500	50
95-49-8	2-Chlorotoluene	50	U	50	5.5
591-78-6	2-Hexanone	500	U	500	21
108-86-1	Bromobenzene	50	U	50	6.5
74-97-5	Bromochloromethane	50	U	50	15
106-43-4	4-Chlorotoluene	50	U	50	9.0
99-87-6	p-Isopropyltoluene	50	U	50	6.0
67-64-1	Acetone	67	J	500	55
71-43-2	Benzene	50	U	50	6.5
75-25-2	Bromoform	50	U	50	32
74-83-9	Bromomethane	50	U	50	21
75-15-0	Carbon disulfide	50	U	50	6.5
56-23-5	Carbon tetrachloride	50	U	50	6.5
108-90-7	Chlorobenzene	50	U	50	7.5
75-00-3	Chloroethane	50	U	50	15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-40 Lab Sample ID: 240-27719-8

Matrix: Water Lab File ID: UXX6734.D

Analysis Method: 8260B Date Collected: 08/07/2013 14:55

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 22:16

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	50	U	50	8.0
74-87-3	Chloromethane	50	U	50	15
156-59-2	cis-1,2-Dichloroethene	1100		50	8.5
10061-01-5	cis-1,3-Dichloropropene	50	U	50	7.0
87-68-3	Hexachlorobutadiene	50	U	50	15
74-95-3	Dibromomethane	50	U	50	14
75-27-4	Bromodichloromethane	50	U	50	7.5
75-71-8	Dichlorodifluoromethane	50	U	50	16
100-41-4	Ethylbenzene	50	U	50	8.5
106-93-4	1,2-Dibromoethane	50	U	50	12
108-20-3	Diisopropyl ether	500	U	500	75
91-20-3	Naphthalene	50	U	50	12
179601-23-1	m-Xylene & p-Xylene	100	U	100	12
104-51-8	n-Butylbenzene	50	U	50	6.0
98-82-8	Isopropylbenzene	50	U	50	6.5
103-65-1	n-Propylbenzene	50	U	50	7.0
78-93-3	2-Butanone	500	U	500	29
108-10-1	4-Methyl-2-pentanone	500	U	500	16
135-98-8	sec-Butylbenzene	50	U	50	6.5
1634-04-4	Methyl tert-butyl ether	50	U	50	8.5
994-05-8	Tert-amyl-methyl ether (TAME)	250	U	250	3.4
75-09-2	Methylene Chloride	50	U	50	17
95-47-6	o-Xylene	50	U	50	7.0
100-42-5	Styrene	50	U	50	5.5
637-92-3	Ethyl-t-butyl ether (ETBE)	250	U	250	5.5
98-06-6	tert-Butylbenzene	50	U	50	6.5
127-18-4	Tetrachloroethene	50	U	50	15
108-88-3	Toluene	50	U	50	6.5
156-60-5	trans-1,2-Dichloroethene	50	U	50	9.5
10061-02-6	trans-1,3-Dichloropropene	50	U	50	9.5
79-01-6	Trichloroethene	120		50	8.5
75-69-4	Trichlorofluoromethane	50	U	50	11
108-05-4	Vinyl acetate	100	U	100	9.5
75-01-4	Vinyl chloride	43	J	50	11
75-65-0	tert-Butyl alcohol	2500	U *	2500	200
1330-20-7	Xylenes, Total	100	U	100	7.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-40 | Lab Sample ID: 240-27719-8

Matrix: Water | Lab File ID: UXX6734.D

Analysis Method: 8260B | Date Collected: 08/07/2013 14:55

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 22:16

Soil Aliquot Vol: | Dilution Factor: 50

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	50	U *	50	9.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-40-40 Lab Sample ID: 240-27719-8

Matrix: Water Lab File ID: UXX6734.D

Analysis Method: 8260B Date Collected: 08/07/2013 14:55

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 22:16

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-35 | Lab Sample ID: 240-27719-1

Matrix: Water | Lab File ID: UX6715.D

Analysis Method: 8260B | Date Collected: 08/07/2013 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 15:27

Soil Aliquot Vol: | Dilution Factor: 833.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	830	U *	830	190
71-55-6	1,1,1-Trichloroethane	830	U	830	180
79-34-5	1,1,2,2-Tetrachloroethane	830	U	830	150
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	830	U	830	230
75-34-3	1,1-Dichloroethane	830	U	830	120
75-35-4	1,1-Dichloroethene	830	U	830	160
563-58-6	1,1-Dichloropropene	830	U	830	110
87-61-6	1,2,3-Trichlorobenzene	830	U	830	140
96-18-4	1,2,3-Trichloropropane	830	U	830	360
526-73-8	1,2,3-Trimethylbenzene	4200	U	4200	4.9
120-82-1	1,2,4-Trichlorobenzene	830	U	830	120
95-63-6	1,2,4-Trimethylbenzene	830	U	830	100
96-12-8	1,2-Dibromo-3-Chloropropane	1700	U	1700	560
95-50-1	1,2-Dichlorobenzene	830	U	830	110
107-06-2	1,2-Dichloroethane	830	U	830	180
78-87-5	1,2-Dichloropropane	830	U	830	150
541-73-1	1,3-Dichlorobenzene	830	U	830	120
142-28-9	1,3-Dichloropropane	830	U	830	130
106-46-7	1,4-Dichlorobenzene	830	U	830	110
594-20-7	2,2-Dichloropropane	830	U	830	110
110-75-8	2-Chloroethyl vinyl ether	8300	U	8300	820
95-49-8	2-Chlorotoluene	830	U	830	92
591-78-6	2-Hexanone	8300	U	8300	340
108-86-1	Bromobenzene	830	U	830	110
74-97-5	Bromochloromethane	830	U	830	240
106-43-4	4-Chlorotoluene	830	U	830	150
99-87-6	p-Isopropyltoluene	830	U	830	100
67-64-1	Acetone	8300	U	8300	920
71-43-2	Benzene	830	U	830	110
75-25-2	Bromoform	830	U	830	530
74-83-9	Bromomethane	830	U	830	340
75-15-0	Carbon disulfide	830	U	830	110
56-23-5	Carbon tetrachloride	830	U	830	110
108-90-7	Chlorobenzene	830	U	830	120
75-00-3	Chloroethane	830	U	830	240

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-35 | Lab Sample ID: 240-27719-1

Matrix: Water | Lab File ID: UX6715.D

Analysis Method: 8260B | Date Collected: 08/07/2013 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 15:27

Soil Aliquot Vol: | Dilution Factor: 833.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	830	U	830	130
74-87-3	Chloromethane	830	U	830	250
156-59-2	cis-1,2-Dichloroethene	1900		830	140
10061-01-5	cis-1,3-Dichloropropene	830	U	830	120
87-68-3	Hexachlorobutadiene	830	U	830	250
74-95-3	Dibromomethane	830	U	830	230
75-27-4	Bromodichloromethane	830	U	830	120
75-71-8	Dichlorodifluoromethane	830	U	830	260
100-41-4	Ethylbenzene	830	U	830	140
106-93-4	1,2-Dibromoethane	830	U	830	200
108-20-3	Diisopropyl ether	8300	U	8300	1200
91-20-3	Naphthalene	830	U	830	200
179601-23-1	m-Xylene & p-Xylene	1700	U	1700	200
104-51-8	n-Butylbenzene	830	U	830	100
98-82-8	Isopropylbenzene	830	U	830	110
103-65-1	n-Propylbenzene	830	U	830	120
78-93-3	2-Butanone	8300	U	8300	470
108-10-1	4-Methyl-2-pentanone	8300	U	8300	270
135-98-8	sec-Butylbenzene	830	U	830	110
1634-04-4	Methyl tert-butyl ether	830	U	830	140
994-05-8	Tert-amyl-methyl ether (TAME)	4200	U	4200	56
75-09-2	Methylene Chloride	830	U	830	270
95-47-6	o-Xylene	830	U	830	120
100-42-5	Styrene	830	U	830	92
637-92-3	Ethyl-t-butyl ether (ETBE)	4200	U	4200	92
98-06-6	tert-Butylbenzene	830	U	830	110
127-18-4	Tetrachloroethene	830	U	830	240
108-88-3	Toluene	830	U	830	110
156-60-5	trans-1,2-Dichloroethene	830	U	830	160
10061-02-6	trans-1,3-Dichloropropene	830	U	830	160
79-01-6	Trichloroethene	28000		830	140
75-69-4	Trichlorofluoromethane	830	U	830	170
108-05-4	Vinyl acetate	1700	U	1700	160
75-01-4	Vinyl chloride	830	U	830	180
75-65-0	tert-Butyl alcohol	42000	U *	42000	3200
1330-20-7	Xylenes, Total	1700	U	1700	120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-35 Lab Sample ID: 240-27719-1

Matrix: Water Lab File ID: UX6715.D

Analysis Method: 8260B Date Collected: 08/07/2013 09:45

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 15:27

Soil Aliquot Vol: Dilution Factor: 833.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	830	U *	830	150

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	85		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-35 Lab Sample ID: 240-27719-1

Matrix: Water Lab File ID: UX6715.D

Analysis Method: 8260B Date Collected: 08/07/2013 09:45

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 15:27

Soil Aliquot Vol: Dilution Factor: 833.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-40 Lab Sample ID: 240-27719-2

Matrix: Water Lab File ID: UX6716.D

Analysis Method: 8260B Date Collected: 08/07/2013 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 15:51

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	40	U *	40	9.2
71-55-6	1,1,1-Trichloroethane	40	U	40	8.8
79-34-5	1,1,2,2-Tetrachloroethane	40	U	40	7.2
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	40	U	40	11
75-34-3	1,1-Dichloroethane	40	U	40	6.0
75-35-4	1,1-Dichloroethene	40	U	40	7.6
563-58-6	1,1-Dichloropropene	40	U	40	5.2
87-61-6	1,2,3-Trichlorobenzene	40	U	40	6.8
96-18-4	1,2,3-Trichloropropane	40	U	40	17
526-73-8	1,2,3-Trimethylbenzene	200	U	200	0.24
120-82-1	1,2,4-Trichlorobenzene	40	U	40	6.0
95-63-6	1,2,4-Trimethylbenzene	40	U	40	4.8
96-12-8	1,2-Dibromo-3-Chloropropane	80	U	80	27
95-50-1	1,2-Dichlorobenzene	40	U	40	5.2
107-06-2	1,2-Dichloroethane	8.8	J	40	8.8
78-87-5	1,2-Dichloropropane	40	U	40	7.2
541-73-1	1,3-Dichlorobenzene	40	U	40	5.6
142-28-9	1,3-Dichloropropane	40	U	40	6.4
106-46-7	1,4-Dichlorobenzene	40	U	40	5.2
594-20-7	2,2-Dichloropropane	40	U	40	5.2
110-75-8	2-Chloroethyl vinyl ether	400	U	400	40
95-49-8	2-Chlorotoluene	40	U	40	4.4
591-78-6	2-Hexanone	400	U	400	16
108-86-1	Bromobenzene	40	U	40	5.2
74-97-5	Bromochloromethane	40	U	40	12
106-43-4	4-Chlorotoluene	40	U	40	7.2
99-87-6	p-Isopropyltoluene	40	U	40	4.8
67-64-1	Acetone	400	U	400	44
71-43-2	Benzene	40	U	40	5.2
75-25-2	Bromoform	40	U	40	26
74-83-9	Bromomethane	40	U	40	16
75-15-0	Carbon disulfide	40	U	40	5.2
56-23-5	Carbon tetrachloride	40	U	40	5.2
108-90-7	Chlorobenzene	40	U	40	6.0
75-00-3	Chloroethane	40	U	40	12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-40 | Lab Sample ID: 240-27719-2

Matrix: Water | Lab File ID: UX6716.D

Analysis Method: 8260B | Date Collected: 08/07/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 15:51

Soil Aliquot Vol: | Dilution Factor: 40

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	40	U	40	6.4
74-87-3	Chloromethane	40	U	40	12
156-59-2	cis-1,2-Dichloroethene	320		40	6.8
10061-01-5	cis-1,3-Dichloropropene	40	U	40	5.6
87-68-3	Hexachlorobutadiene	40	U	40	12
74-95-3	Dibromomethane	40	U	40	11
75-27-4	Bromodichloromethane	40	U	40	6.0
75-71-8	Dichlorodifluoromethane	40	U	40	12
100-41-4	Ethylbenzene	40	U	40	6.8
106-93-4	1,2-Dibromoethane	40	U	40	9.6
108-20-3	Diisopropyl ether	400	U	400	60
91-20-3	Naphthalene	40	U	40	9.6
179601-23-1	m-Xylene & p-Xylene	80	U	80	9.6
104-51-8	n-Butylbenzene	40	U	40	4.8
98-82-8	Isopropylbenzene	40	U	40	5.2
103-65-1	n-Propylbenzene	40	U	40	5.6
78-93-3	2-Butanone	400	U	400	23
108-10-1	4-Methyl-2-pentanone	400	U	400	13
135-98-8	sec-Butylbenzene	40	U	40	5.2
1634-04-4	Methyl tert-butyl ether	40	U	40	6.8
994-05-8	Tert-amyl-methyl ether (TAME)	200	U	200	2.7
75-09-2	Methylene Chloride	40	U	40	13
95-47-6	o-Xylene	40	U	40	5.6
100-42-5	Styrene	40	U	40	4.4
637-92-3	Ethyl-t-butyl ether (ETBE)	200	U	200	4.4
98-06-6	tert-Butylbenzene	40	U	40	5.2
127-18-4	Tetrachloroethene	40	U	40	12
108-88-3	Toluene	66		40	5.2
156-60-5	trans-1,2-Dichloroethene	19	J	40	7.6
10061-02-6	trans-1,3-Dichloropropene	40	U	40	7.6
79-01-6	Trichloroethene	1100		40	6.8
75-69-4	Trichlorofluoromethane	40	U	40	8.4
108-05-4	Vinyl acetate	80	U	80	7.6
75-01-4	Vinyl chloride	16	J	40	8.8
75-65-0	tert-Butyl alcohol	2000	U *	2000	160
1330-20-7	Xylenes, Total	80	U	80	5.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-40 | Lab Sample ID: 240-27719-2

Matrix: Water | Lab File ID: UX6716.D

Analysis Method: 8260B | Date Collected: 08/07/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 15:51

Soil Aliquot Vol: | Dilution Factor: 40

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	40	U *	40	7.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	86		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-40 | Lab Sample ID: 240-27719-2

Matrix: Water | Lab File ID: UX6716.D

Analysis Method: 8260B | Date Collected: 08/07/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 15:51

Soil Aliquot Vol: | Dilution Factor: 40

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 5.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
108-87-2	Methylcyclohexane	5.69	5.7	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-45 Lab Sample ID: 240-27719-3

Matrix: Water Lab File ID: UX6717.D

Analysis Method: 8260B Date Collected: 08/07/2013 10:40

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 16:12

Soil Aliquot Vol: Dilution Factor: 25

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	25	U *	25	5.8
71-55-6	1,1,1-Trichloroethane	25	U	25	5.5
79-34-5	1,1,2,2-Tetrachloroethane	25	U	25	4.5
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	25	U	25	7.0
75-34-3	1,1-Dichloroethane	25	U	25	3.8
75-35-4	1,1-Dichloroethene	25	U	25	4.8
563-58-6	1,1-Dichloropropene	25	U	25	3.3
87-61-6	1,2,3-Trichlorobenzene	25	U	25	4.3
96-18-4	1,2,3-Trichloropropane	25	U	25	11
526-73-8	1,2,3-Trimethylbenzene	130	U	130	0.15
120-82-1	1,2,4-Trichlorobenzene	25	U	25	3.8
95-63-6	1,2,4-Trimethylbenzene	25	U	25	3.0
96-12-8	1,2-Dibromo-3-Chloropropane	50	U	50	17
95-50-1	1,2-Dichlorobenzene	25	U	25	3.3
107-06-2	1,2-Dichloroethane	7.6	J	25	5.5
78-87-5	1,2-Dichloropropane	25	U	25	4.5
541-73-1	1,3-Dichlorobenzene	25	U	25	3.5
142-28-9	1,3-Dichloropropane	25	U	25	4.0
106-46-7	1,4-Dichlorobenzene	25	U	25	3.3
594-20-7	2,2-Dichloropropane	25	U	25	3.3
110-75-8	2-Chloroethyl vinyl ether	250	U	250	25
95-49-8	2-Chlorotoluene	25	U	25	2.8
591-78-6	2-Hexanone	250	U	250	10
108-86-1	Bromobenzene	25	U	25	3.3
74-97-5	Bromochloromethane	25	U	25	7.3
106-43-4	4-Chlorotoluene	25	U	25	4.5
99-87-6	p-Isopropyltoluene	25	U	25	3.0
67-64-1	Acetone	250	U	250	28
71-43-2	Benzene	25	U	25	3.3
75-25-2	Bromoform	25	U	25	16
74-83-9	Bromomethane	25	U	25	10
75-15-0	Carbon disulfide	25	U	25	3.3
56-23-5	Carbon tetrachloride	25	U	25	3.3
108-90-7	Chlorobenzene	25	U	25	3.8
75-00-3	Chloroethane	25	U	25	7.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-45 | Lab Sample ID: 240-27719-3

Matrix: Water | Lab File ID: UX6717.D

Analysis Method: 8260B | Date Collected: 08/07/2013 10:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 16:12

Soil Aliquot Vol: | Dilution Factor: 25

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	25	U	25	4.0
74-87-3	Chloromethane	25	U	25	7.5
156-59-2	cis-1,2-Dichloroethene	340		25	4.3
10061-01-5	cis-1,3-Dichloropropene	25	U	25	3.5
87-68-3	Hexachlorobutadiene	25	U	25	7.5
74-95-3	Dibromomethane	25	U	25	7.0
75-27-4	Bromodichloromethane	25	U	25	3.8
75-71-8	Dichlorodifluoromethane	25	U	25	7.8
100-41-4	Ethylbenzene	25	U	25	4.3
106-93-4	1,2-Dibromoethane	25	U	25	6.0
108-20-3	Diisopropyl ether	250	U	250	38
91-20-3	Naphthalene	25	U	25	6.0
179601-23-1	m-Xylene & p-Xylene	50	U	50	6.0
104-51-8	n-Butylbenzene	25	U	25	3.0
98-82-8	Isopropylbenzene	25	U	25	3.3
103-65-1	n-Propylbenzene	25	U	25	3.5
78-93-3	2-Butanone	250	U	250	14
108-10-1	4-Methyl-2-pentanone	250	U	250	8.0
135-98-8	sec-Butylbenzene	25	U	25	3.3
1634-04-4	Methyl tert-butyl ether	25	U	25	4.3
994-05-8	Tert-amyl-methyl ether (TAME)	130	U	130	1.7
75-09-2	Methylene Chloride	12	J B	25	8.3
95-47-6	o-Xylene	25	U	25	3.5
100-42-5	Styrene	25	U	25	2.8
637-92-3	Ethyl-t-butyl ether (ETBE)	130	U	130	2.8
98-06-6	tert-Butylbenzene	25	U	25	3.3
127-18-4	Tetrachloroethene	25	U	25	7.3
108-88-3	Toluene	62		25	3.3
156-60-5	trans-1,2-Dichloroethene	20	J	25	4.8
10061-02-6	trans-1,3-Dichloropropene	25	U	25	4.8
79-01-6	Trichloroethene	870		25	4.3
75-69-4	Trichlorofluoromethane	25	U	25	5.3
108-05-4	Vinyl acetate	50	U	50	4.8
75-01-4	Vinyl chloride	11	J	25	5.5
75-65-0	tert-Butyl alcohol	1300	U *	1300	98
1330-20-7	Xylenes, Total	50	U	50	3.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-45 Lab Sample ID: 240-27719-3

Matrix: Water Lab File ID: UX6717.D

Analysis Method: 8260B Date Collected: 08/07/2013 10:40

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 16:12

Soil Aliquot Vol: Dilution Factor: 25

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	25	U *	25	4.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-45 Lab Sample ID: 240-27719-3

Matrix: Water Lab File ID: UX6717.D

Analysis Method: 8260B Date Collected: 08/07/2013 10:40

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 16:12

Soil Aliquot Vol: Dilution Factor: 25

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 1 TIC Result Total: 5.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
108-87-2	Methylcyclohexane	5.69	5.2	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: TB-080713 Lab Sample ID: 240-27719-9

Matrix: Water Lab File ID: UXX6723.D

Analysis Method: 8260B Date Collected: 08/07/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 18:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	6.8	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: TB-080713 | Lab Sample ID: 240-27719-9

Matrix: Water | Lab File ID: UXX6723.D

Analysis Method: 8260B | Date Collected: 08/07/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 18:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: TB-080713 Lab Sample ID: 240-27719-9

Matrix: Water Lab File ID: UXX6723.D

Analysis Method: 8260B Date Collected: 08/07/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 18:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: TB-080713 Lab Sample ID: 240-27719-9

Matrix: Water Lab File ID: UXX6723.D

Analysis Method: 8260B Date Collected: 08/07/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 18:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 1 TIC Result Total: 4.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	4.2	T J N

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-27719-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/08/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.4 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-41-35 (240-27719-1), DR-DPT-41-40 (240-27719-2), DR-DPT-41-45 (240-27719-3), DR-DPT-40-20 (240-27719-4), DR-DPT-40-25 (240-27719-5), DR-DPT-40-30 (240-27719-6), DR-DPT-40-35 (240-27719-7), DR-DPT-40-40 (240-27719-8) and TB-080713 (240-27719-9) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/15/2013.

Methylene Chloride was detected in method blank MB 240-97617/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-41-35 (240-27719-1)[833.33X], DR-DPT-41-40 (240-27719-2)[40X], DR-DPT-41-45 (240-27719-3)[25X], DR-DPT-40-20 (240-27719-4)[333.33X], DR-DPT-40-25 (240-27719-5)[125X], DR-DPT-40-30 (240-27719-6)[333.33X], DR-DPT-40-35 (240-27719-7)[250X] and DR-DPT-40-40 (240-27719-8)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 97617 recovered outside control limits for the following analytes: Chlorodibromomethane and 1,1,1,2-Tetrachloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 97617 recovered outside control limits for the following analyte(s): 2-Methyl-2-propanol--has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27719-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27719-1	DR-DPT-41-35	Water	08/07/2013 0945	08/08/2013 0920
240-27719-2	DR-DPT-41-40	Water	08/07/2013 1010	08/08/2013 0920
240-27719-3	DR-DPT-41-45	Water	08/07/2013 1040	08/08/2013 0920
240-27719-4	DR-DPT-40-20	Water	08/07/2013 1335	08/08/2013 0920
240-27719-5	DR-DPT-40-25	Water	08/07/2013 1350	08/08/2013 0920
240-27719-6	DR-DPT-40-30	Water	08/07/2013 1415	08/08/2013 0920
240-27719-7	DR-DPT-40-35	Water	08/07/2013 1435	08/08/2013 0920
240-27719-8	DR-DPT-40-40	Water	08/07/2013 1455	08/08/2013 0920
240-27719-9TB	TB-080713	Water	08/07/2013 0000	08/08/2013 0920

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27719-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/7/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W)			SDG No.
(301) 528-3021 Phone	TAT if different from Below 5 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			Sampler: S. Cameron
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT-41-35	8/7/2013	0945	GW	Water	3		x	
DR-DPT-41-40	8/7/2013	1010	GW	Water	3		x	
DR-DPT-41-45	8/7/2013	1040	GW	Water	3		x	
DR-DPT-40-20	8/7/2013	1335	GW	Water	3		x	
DR-DPT-40-25	8/7/2013	1350	GW	Water	3		x	
DR-DPT-40-30	8/7/2013	1415	GW	Water	3		x	
DR-DPT-40-35	8/7/2013	1435	GW	Water	3		x	
DR-DPT-40-40	8/7/2013	1455	GW	Water	3		x	
DR-DPT-	~~8/7/2013~~		GW	Water	3		x	
DR-DPT-	8/7/2013		GW	Water	3		x	
DR-DPT-	~~8/7/2013~~		GW	Water	3		x	
TB-080713	8/7/2013		GW	Water	2		x	

240-27719 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: 5 Day TAT

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8-7-13/1600		TestAmerica	8/7/13 1530
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	8/7/13/1640		TA	8-8-13 920
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 27719**
Canton Facility

Client Test Tech Site Name _____ Cooler unpacked by: Derek A. Green

Cooler Received on 8-8-13 Opened on 8-8-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF -1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. 2.4 °C	Corrected Cooler Temp. 2.4 °C	
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

HOLDTIME

SDG 240-27719-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-42-10	240-27831-1	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-31-35	240-28158-2	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-31-40	240-28158-3	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-31-45	240-28158-4	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-38-15	240-27760-1	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-30	240-27760-2	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-35	240-27760-3	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-40	240-27760-4	NM	08/08/2013	08/16/2013	08/16/2013	8	0	8
OV	UG/L	DR-DPT-40-20	240-27719-4	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-25	240-27719-5	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-30	240-27719-6	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-35	240-27719-7	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-40	240-27719-8	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-41-35	240-27719-1	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-31-30	240-28158-1	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-43B-10	240-28158-5	NM	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	TB-082013	240-28158-8	TB	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	TB-080913	240-27831-7	TB	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	TB-080813	240-27760-5	NM	08/08/2013	08/16/2013	08/16/2013	8	0	8
OV	UG/L	TB-080713	240-27719-9	TB	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-70-20	240-28270-1	NM	08/22/2013	08/28/2013	08/28/2013	6	0	6
OV	UG/L	DR-DPT-41-40	240-27719-2	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-43B-15	240-28158-6	NM	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	DR-DPT-41-45	240-27719-3	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-42-35	240-27831-6	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-30	240-27831-5	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-25	240-27831-4	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-20	240-27831-3	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-15	240-27831-2	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	TB-082213	240-28270-2	TB	08/22/2013	08/28/2013	08/28/2013	6	0	6
OV	UG/L	DR-DPT-43B-20	240-28158-7	NM	08/20/2013	08/29/2013	08/29/2013	9	0	9

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Lab File ID: BFB5262.D BFB Injection Date: 05/28/2013

Instrument ID: A3UX10 BFB Injection Time: 13:16

Analysis Batch No.: 87495

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	52.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	98.2	
175	5.0 - 9.0 % of mass 174	6.7	(6.9)1
176	95.0 - 101.0 % of mass 174	93.5	(95.2)1
177	5.0 - 9.0 % of mass 176	6.1	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-87495/8	UXX4658.D	05/28/2013	15:50
	STDA9 240-87495/9	UXX4659.D	05/28/2013	16:11
	STDA9 240-87495/10	UXX4660.D	05/28/2013	16:32
	STDA9 240-87495/11	UXX4661.D	05/28/2013	16:53
	STDA9 240-87495/12	UXX4662.D	05/28/2013	17:15
	STDA9 240-87495/13	UXX4663.D	05/28/2013	17:36

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27719-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-87495/13	UXX4663.D
Level 2	STDA9 240-87495/12	UXX4662.D
Level 3	STDA9 240-87495/11	UXX4661.D
Level 4	STDA9 240-87495/10	UXX4660.D
Level 5	STDA9 240-87495/9	UXX4659.D
Level 6	STDA9 240-87495/8	UXX4658.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.9351 0.7200	0.8183	0.9669	0.7435	0.8522	Ave		0.8393				12.0		15.0			
Ethyl ether	0.3526 0.2524	0.2870	0.3279	0.2696	0.3339	Ave		0.3039				13.0		15.0			
3-Chloro-1-propene	0.1632 0.1612	0.1539	0.1609	0.1639	0.1752	Ave		0.1630				4.2		15.0			
Diisopropyl ether	0.2436 0.2941	0.2470	0.2427	0.2569	0.2816	Ave		0.2610				8.3		15.0			
2-Chloro-1,3-butadiene	0.4470 0.5692	0.4651	0.4677	0.4894	0.5665	Ave		0.5008				11.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.7474 0.9445	0.7998	0.8028	0.8547	0.9344	Ave		0.8473				9.3		15.0			
Propionitrile	0.0183 0.0231	0.0204	0.0273	0.0252	0.0240	Ave		0.0230				14.0		15.0			
Ethyl acetate	0.1590 0.1647	0.1524	0.2142	0.1705	0.1575	Ave		0.1697				13.0		15.0			
Methacrylonitrile	0.1102 0.1289	0.1319	0.1213	0.1325	0.1332	Ave		0.1263				7.1		15.0			
Isobutyl alcohol	0.0076 0.0057	0.0068	0.0075	0.0083	0.0073	Ave		0.0072				12.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6746 0.8156	0.6951	0.7166	0.7363	0.8000	Ave		0.7397				7.7		15.0			
n-Heptane	0.0683 0.0638	0.0609	0.0626	0.0604	0.0641	Ave		0.0634				4.5		15.0			
n-Butanol	0.0050	0.0051	0.0047	0.0072	0.0067	Lin	-0.083	0.0070							0.9920		0.9900
Methyl methacrylate	0.1815 0.1582	0.1559	0.1663	0.1628	0.1584	Ave		0.1639				5.8		15.0			
2-Nitropropane	0.0181 0.0163	0.0192	0.0150	0.0189	0.0149	Ave		0.0170				11.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27719-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0764 0.0641	0.0838	0.0840	0.0919	0.0886	Ave		0.0815				12.0		15.0			
1,2,3-Trimethylbenzene	2.1912 2.8021	2.2708	2.3128	2.4773	2.5677	Ave		2.4370				9.3		15.0			
2-Methylnaphthalene	1.0000 0.8868	0.9617	1.0575	1.0106	1.0960	Ave		1.0021				7.3		15.0			
n-Butyl acetate	0.1536 0.1805	0.1506	0.1861	0.1673	0.1756	Ave		0.1690				8.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Lab File ID: BFB5311.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX10 BFB Injection Time: 12:26

Analysis Batch No.: 92306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	86.8	
175	5.0 - 9.0 % of mass 174	6.2	(7.1)1
176	95.0 - 101.0 % of mass 174	86.3	(99.4)1
177	5.0 - 9.0 % of mass 176	5.5	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92306/2	UXX5740.D	07/02/2013	12:55
	STD8260 240-92306/3	UXX5741.D	07/02/2013	13:16
	STD8260 240-92306/4	UXX5742.D	07/02/2013	13:37
	STD8260 240-92306/5	UXX5743.D	07/02/2013	13:59
	STD8260 240-92306/6	UXX5744.D	07/02/2013	14:20
	STD8260 240-92306/7	UXX5745.D	07/02/2013	14:41
	ICV 240-92306/8	UXX5746.D	07/02/2013	15:03

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27719-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92306/7	UXX5745.D
Level 2	STD8260 240-92306/6	UXX5744.D
Level 3	STD8260 240-92306/5	UXX5743.D
Level 4	STD8260 240-92306/4	UXX5742.D
Level 5	STD8260 240-92306/3	UXX5741.D
Level 6	STD8260 240-92306/2	UXX5740.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2977 0.2838	0.2577	0.2748	0.2528	0.2566	Ave		0.2706				6.6		15.0			
Chloromethane	0.4636 0.3885	0.4208	0.4187	0.3892	0.3928	Ave		0.4122			0.1000	7.1		15.0			
Vinyl chloride	0.3817 0.3523	0.3628	0.3635	0.3478	0.3489	Ave		0.3595				3.6		15.0			
Bromomethane	0.1738 0.1513	0.1661	0.1687	0.1771	0.1716	Ave		0.1681				5.4		15.0			
Chloroethane	0.2457 0.2275	0.2302	0.2304	0.2310	0.2376	Ave		0.2338				2.9		15.0			
Trichlorofluoromethane	0.3575 0.3719	0.3350	0.3525	0.3679	0.3820	Ave		0.3611				4.6		15.0			
Acrolein	0.0359 0.0431	0.0395	0.0411	0.0449	0.0462	Ave		0.0418				9.0		15.0			
1,1-Dichloroethene	0.3190 0.2928	0.2948	0.2913	0.2993	0.3010	Ave		0.2997				3.4		15.0			
Acetone	0.0740 0.0622	0.0776	0.0718	0.0736	0.0689	Ave		0.0713				7.4		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2062 0.2056	0.2022	0.2152	0.2144	0.2141	Ave		0.2096				2.7		15.0			
Iodomethane	0.4548 0.4274	0.4570	0.4317	0.4435	0.4405	Ave		0.4425				2.7		15.0			
Carbon disulfide	0.8923 0.9201	0.8872	0.8823	0.9357	0.9395	Ave		0.9095				2.8		15.0			
Acetonitrile	0.0167 0.0157	0.0178	0.0214	0.0237	0.0177	Qua	0.0061	0.0220	0						0.9940		0.9900
Methyl acetate	0.1969 0.2006	0.2062	0.2102	0.2165	0.2151	Ave		0.2076				3.8		15.0			
Methylene Chloride	0.7288 0.3199	0.5369	0.3954	0.3695	0.3438	Lin1	0.4289	0.3150							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27719-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0095 0.0104	0.0120	0.0145	0.0164	0.0130	Qua	-0.124	0.0171	0						0.9970		0.9900
Acrylonitrile	0.0905 0.1021	0.0983	0.1034	0.1068	0.1082	Ave		0.1016				6.4		15.0			
Methyl tert-butyl ether	0.7590 0.7679	0.7484	0.7512	0.8058	0.8208	Ave		0.7755				3.9		15.0			
trans-1,2-Dichloroethene	0.3358 0.3195	0.3308	0.3296	0.3254	0.3340	Ave		0.3292				1.8		15.0			
Hexane	0.0712 0.0637	0.0646	0.0668	0.0661	0.0671	Ave		0.0666				3.9		15.0			
1,1-Dichloroethane	0.5578 0.5246	0.5449	0.5273	0.5247	0.5369	Ave		0.5360			0.1000	2.5		15.0			
Vinyl acetate	0.0458 0.0460	0.0362	0.0441	0.0416	0.0442	Ave		0.0430				8.6		15.0			
2-Butanone	0.0991 0.0997	0.0968	0.1003	0.0974	0.1064	Ave		0.0999				3.4		15.0			
cis-1,2-Dichloroethene	0.3285 0.3322	0.3571	0.3290	0.3348	0.3453	Ave		0.3378				3.3		15.0			
2,2-Dichloropropane	0.2688 0.2905	0.2819	0.2776	0.2821	0.3040	Ave		0.2842				4.2		15.0			
Bromochloromethane	0.1521 0.1504	0.1506	0.1534	0.1499	0.1524	Ave		0.1515				0.9		15.0			
Tetrahydrofuran	0.0772 0.0698	0.0789	0.0767	0.0752	0.0716	Ave		0.0749				4.7		15.0			
Chloroform	0.4907 0.4900	0.5020	0.4890	0.4920	0.4962	Ave		0.4933				1.0		15.0			
1,1,1-Trichloroethane	0.4106 0.3726	0.3778	0.3695	0.3890	0.3851	Ave		0.3841				3.9		15.0			
Cyclohexane	0.5528 0.5297	0.5227	0.5349	0.5435	0.5429	Ave		0.5378				2.0		15.0			
1,1-Dichloropropene	0.3609 0.3601	0.3698	0.3664	0.3618	0.3692	Ave		0.3647				1.2		15.0			
Carbon tetrachloride	0.2610 0.2765	0.2656	0.2674	0.2761	0.2887	Ave		0.2725				3.7		15.0			
1,2-Dichloroethane	0.3474 0.3376	0.3583	0.3351	0.3500	0.3553	Ave		0.3473				2.7		15.0			
Benzene	1.1681 1.1119	1.1203	1.0964	1.1265	1.1340	Ave		1.1262				2.2		15.0			
Trichloroethene	0.3214 0.2780	0.2821	0.2900	0.2862	0.2843	Ave		0.2904				5.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27719-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloropropane	0.2454 0.2502	0.2581	0.2466	0.2561	0.2683	Ave		0.2541				3.4		15.0			
Methylcyclohexane	0.4919 0.4866	0.4934	0.4893	0.5052	0.5090	Ave		0.4959				1.8		15.0			
Dibromomethane	0.1412 0.1445	0.1506	0.1469	0.1502	0.1477	Ave		0.1468				2.4		15.0			
1,4-Dioxane	0.0014 0.0009	0.0011	0.0016	0.0020	0.0013	Ave		0.0014				26.0	*	15.0			
Bromodichloromethane	0.2890 0.3042	0.2800	0.2808	0.2937	0.3002	Ave		0.2913				3.4		15.0			
2-Chloroethyl vinyl ether	0.1328 0.1460	0.1268	0.1340	0.1400	0.1524	Ave		0.1387				6.8		15.0			
cis-1,3-Dichloropropene	0.3136 0.3654	0.2925	0.3234	0.3329	0.3608	Ave		0.3314				8.4		15.0			
4-Methyl-2-pentanone	0.1851 0.2307	0.1947	0.2072	0.2263	0.2356	Ave		0.2133				9.7		15.0			
Toluene	1.5717 1.7749	1.5621	1.5832	1.5919	1.6670	Ave		1.6251				5.1		15.0			
trans-1,3-Dichloropropene	0.3281 0.4436	0.3301	0.3424	0.3783	0.4187	Ave		0.3735				13.0		15.0			
Ethyl methacrylate	0.3469 0.4669	0.3719	0.3886	0.4197	0.4555	Ave		0.4082				12.0		15.0			
1,1,2-Trichloroethane	0.3016 0.3098	0.3088	0.3075	0.2994	0.3063	Ave		0.3056				1.4		15.0			
1,3-Dichloropropane	0.5636 0.5513	0.5066	0.5178	0.5309	0.5453	Ave		0.5359				4.0		15.0			
Tetrachloroethene	0.3249 0.3137	0.3109	0.3123	0.3155	0.3171	Ave		0.3157				1.6		15.0			
2-Hexanone	0.1784 0.2174	0.1735	0.1912	0.2073	0.2193	Ave		0.1979				10.0		15.0			
Dibromochloromethane	0.2360 0.2992	0.2543	0.2535	0.2707	0.2882	Ave		0.2670				8.9		15.0			
1,2-Dibromoethane	0.2969 0.3100	0.2975	0.2857	0.3063	0.3126	Ave		0.3015				3.3		15.0			
Chlorobenzene	1.1153 1.1370	1.1006	1.0569	1.0906	1.1038	Ave		1.1007			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2824 0.3322	0.2829	0.2918	0.3108	0.3194	Ave		0.3032				6.8		15.0			
Ethylbenzene	0.5758 0.6262	0.5863	0.6011	0.6014	0.6212	Ave		0.6020				3.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27719-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.7270 0.8215	0.7355	0.7415	0.7771	0.8022	Ave		0.7675				5.1		15.0			
o-Xylene	0.6796 0.7942	0.7047	0.7272	0.7639	0.7596	Ave		0.7382				5.7		15.0			
Styrene	1.1077 1.3987	1.1933	1.1883	1.2806	1.3155	Ave		1.2474				8.4		15.0			
Bromoform	0.1365 0.1881	0.1411	0.1461	0.1592	0.1772	Ave		0.1580			0.1000	13.0		15.0			
Isopropylbenzene	1.7511 2.0343	1.7718	1.8148	1.9530	1.9719	Ave		1.8828				6.3		15.0			
1,1,2,2-Tetrachloroethane	0.7449 0.7423	0.7656	0.8018	0.7659	0.7719	Ave		0.7654			0.3000	2.8		15.0			
Bromobenzene	0.8881 0.8401	0.8893	0.8519	0.8109	0.8110	Ave		0.8485				4.1		15.0			
1,2,3-Trichloropropane	0.2528 0.2485	0.2436	0.2471	0.2523	0.2472	Ave		0.2486				1.4		15.0			
trans-1,4-Dichloro-2-butene	0.1594 0.2065	0.1645	0.1863	0.1935	0.1991	Ave		0.1849				10.0		15.0			
n-Propylbenzene	0.8836 0.9348	0.9225	0.9442	0.9060	0.9061	Ave		0.9162				2.4		15.0			
2-Chlorotoluene	0.8471 0.8107	0.8035	0.8145	0.8068	0.8122	Ave		0.8158				1.9		15.0			
1,3,5-Trimethylbenzene	2.5762 2.8611	2.6002	2.7221	2.7556	2.8139	Ave		2.7215				4.2		15.0			
4-Chlorotoluene	0.8988 0.9081	0.8802	0.8823	0.8848	0.8823	Ave		0.8894				1.3		15.0			
tert-Butylbenzene	2.5038 2.4500	2.2239	2.4167	2.3292	2.3560	Ave		2.3799				4.2		15.0			
1,2,4-Trimethylbenzene	2.6043 2.8929	2.6775	2.7491	2.8000	2.8183	Ave		2.7570				3.8		15.0			
sec-Butylbenzene	3.0300 3.4431	3.1666	3.3039	3.3542	3.3916	Ave		3.2816				4.7		15.0			
1,3-Dichlorobenzene	1.5092 1.5056	1.5998	1.5710	1.5273	1.5059	Ave		1.5365				2.6		15.0			
p-Isopropyltoluene	2.4424 2.7807	2.5538	2.6635	2.6618	2.7434	Ave		2.6409				4.7		15.0			
1,4-Dichlorobenzene	1.7229 1.6045	1.6252	1.6225	1.5715	1.5870	Ave		1.6223				3.3		15.0			
n-Butylbenzene	2.0630 2.2382	2.0945	2.2927	2.3221	2.3183	Ave		2.2215				5.2		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27719-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4074 1.3553	1.4151	1.4245	1.4040	1.3915	Ave		1.3996				1.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0897 0.0915	0.0866	0.1008	0.1037	0.0925	Ave		0.0941				7.1		15.0			
1,3,5-Trichlorobenzene	0.9389 0.8233	0.9547	0.9599	0.9476	0.8670	Ave		0.9152				6.2		15.0			
1,2,4-Trichlorobenzene	0.8510 0.7437	0.8164	0.8427	0.8344	0.7483	Ave		0.8061				5.9		15.0			
Hexachlorobutadiene	0.2820 0.2374	0.2926	0.3073	0.2714	0.2509	Ave		0.2736				9.5		15.0			
Naphthalene	1.9175 1.8952	1.9376	2.0220	2.1068	1.9312	Ave		1.9684				4.1		15.0			
1,2,3-Trichlorobenzene	0.7657 0.6768	0.7464	0.7504	0.7341	0.6861	Ave		0.7266				5.0		15.0			
Dibromofluoromethane (Surr)	0.2502 0.2509	0.2370	0.2459	0.2475	0.2591	Ave		0.2484				2.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3197 0.2982	0.2804	0.2943	0.2970	0.3023	Ave		0.2987				4.3		15.0			
Toluene-d8 (Surr)	1.3686 1.4472	1.2543	1.3081	1.3123	1.3963	Ave		1.3478				5.2		15.0			
4-Bromofluorobenzene (Surr)	0.5086 0.5764	0.5161	0.5353	0.5693	0.5900	Ave		0.5493				6.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Lab File ID: BFB5348.D BFB Injection Date: 08/15/2013

Instrument ID: A3UX10 BFB Injection Time: 12:16

Analysis Batch No.: 97617

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.9	
75	30.0 - 60.0 % of mass 95	51.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.4	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	75.5	
175	5.0 - 9.0 % of mass 174	5.7	(7.5)1
176	95.0 - 101.0 % of mass 174	74.7	(99.0)1
177	5.0 - 9.0 % of mass 176	5.0	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97617/2	UX6710.D	08/15/2013	13:05
	CCV 240-97617/3	UX6711.D	08/15/2013	13:27
	LCS 240-97617/4	UX6712.D	08/15/2013	13:49
	MB 240-97617/6	UX6714.D	08/15/2013	14:32
DR-DPT-41-35	240-27719-1	UX6715.D	08/15/2013	15:27
DR-DPT-41-40	240-27719-2	UX6716.D	08/15/2013	15:51
DR-DPT-41-45	240-27719-3	UX6717.D	08/15/2013	16:12
DR-DPT-40-20	240-27719-4	UX6718.D	08/15/2013	16:34
DR-DPT-40-25	240-27719-5	UX6719.D	08/15/2013	16:56
DR-DPT-40-30	240-27719-6	UX6720.D	08/15/2013	17:17
DR-DPT-40-35	240-27719-7	UX6721.D	08/15/2013	17:39
TB-080713	240-27719-9	UXX6723.D	08/15/2013	18:21
DR-DPT-40-40	240-27719-8	UXX6734.D	08/15/2013	22:16
DR-DPT-41-35 MS	240-27719-1 MS	UXX6735.D	08/15/2013	22:38
DR-DPT-41-35 MSD	240-27719-1 MSD	UXX6736.D	08/15/2013	22:59

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Lab Sample ID: CCVIS 240-97617/2 Calibration Date: 08/15/2013 13:05

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UX6710.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.3319		1.00	0.0100	22.6	50.0
Chloromethane	Ave	0.4122	0.4455	0.1000	1.00	0.0100	8.1	50.0
Vinyl chloride	Ave	0.3595	0.3844		1.00	0.0100	6.9	20.0
Bromomethane	Ave	0.1681	0.1472		1.00	0.0100	-12.5	50.0
Chloroethane	Ave	0.2338	0.1775		1.00	0.0100	24.0	50.0
Trichlorofluoromethane	Ave	0.3611	0.4169		1.00	0.0100	15.4	50.0
Acrolein	Ave	0.0418	0.0264		20.0	0.100	-36.9	50.0
1,1-Dichloroethene	Ave	0.2997	0.2966		1.00	0.0100	-1.0	20.0
Acetone	Ave	0.0713	0.0545		10.0	0.0200	-23.6	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2367		1.00	0.0100	12.9	50.0
Iodomethane	Ave	0.4425	0.4451		1.00	0.0100	0.6	50.0
Carbon disulfide	Ave	0.9095	0.9733		1.00	0.0100	7.0	50.0
Acetonitrile	Qua		0.0146		20.0	0.100	-30.5	50.0
Methyl acetate	Ave	0.2076	0.1796		10.0	0.0200	-13.5	50.0
Methylene Chloride	Lin1		0.3918		1.00	0.0100	10.7	50.0
tert-Butyl alcohol	Qua		0.0073		50.0	0.200	-51.2*	50.0
Acrylonitrile	Ave	0.1016	0.0898		20.0	0.0200	-11.6	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7275		1.00	0.0100	-6.2	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3322		1.00	0.0100	0.9	50.0
Hexane	Ave	0.0666	0.0711		1.00	0.0100	6.8	20.0
1,1-Dichloroethane	Ave	0.5360	0.5480	0.1000	1.00	0.0100	2.2	50.0
Vinyl acetate	Ave	0.0430	0.0389		2.00	0.0100	-9.5	50.0
2-Butanone	Ave	0.0999	0.0859		10.0	0.0200	-14.1	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3266		1.00	0.0100	-3.3	50.0
2,2-Dichloropropane	Ave	0.2842	0.3895		1.00	0.0100	37.1	50.0
Bromochloromethane	Ave	0.1515	0.1432		1.00	0.0100	-5.4	50.0
Chloroform	Ave	0.4933	0.5238		1.00	0.0100	6.2	20.0
Tetrahydrofuran	Ave	0.0749	0.0564		5.00	0.0100	-24.8	50.0
1,1,1-Trichloroethane	Ave	0.3841	0.4639		1.00	0.0100	20.8	50.0
Cyclohexane	Ave	0.5378	0.5925		1.00	0.0100	10.2	50.0
1,1-Dichloropropene	Ave	0.3647	0.3895		1.00	0.0100	6.8	50.0
Carbon tetrachloride	Ave	0.2725	0.3882		1.00	0.0100	42.4	50.0
1,2-Dichloroethane	Ave	0.3473	0.4028		1.00	0.0100	16.0	50.0
Benzene	Ave	1.126	1.170		1.00	0.0100	3.9	50.0
Trichloroethene	Ave	0.2904	0.2852		1.00	0.0100	-1.8	50.0
1,2-Dichloropropane	Ave	0.2541	0.2779		1.00	0.0100	9.3	20.0
Methylcyclohexane	Ave	0.4959	0.5186		1.00	0.0100	4.6	50.0
1,4-Dioxane	Ave	0.0014	0.0009		50.0	0.500	-34.7	50.0
Dibromomethane	Ave	0.1468	0.1512		1.00	0.0100	3.0	50.0
Bromodichloromethane	Ave	0.2913	0.3638		1.00	0.0100	24.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Lab Sample ID: CCVIS 240-97617/2 Calibration Date: 08/15/2013 13:05

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UX6710.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1376		10.0	0.0200	-0.7	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3875		1.00	0.0100	16.9	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2122		10.0	0.0200	-0.5	50.0
Toluene	Ave	1.625	1.751		1.00	0.0100	7.7	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4681		1.00	0.0100	25.3	50.0
Ethyl methacrylate	Ave	0.4082	0.4012		1.00	0.0100	-1.7	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3001		1.00	0.0100	-1.8	50.0
1,3-Dichloropropane	Ave	0.5359	0.5586		1.00	0.0100	4.2	50.0
Tetrachloroethene	Ave	0.3157	0.3176		1.00	0.0100	0.6	50.0
2-Hexanone	Ave	0.1979	0.1829		10.0	0.0200	-7.5	50.0
Dibromochloromethane	Ave	0.2670	0.3445		1.00	0.0100	29.0	50.0
1,2-Dibromoethane	Ave	0.3015	0.2897		1.00	0.0100	-3.9	50.0
Chlorobenzene	Ave	1.101	1.089	0.3000	1.00	0.0100	-1.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3844		1.00	0.0100	26.7	50.0
Ethylbenzene	Ave	0.6020	0.6068		1.00	0.0100	0.8	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7783		2.00	0.0200	1.4	50.0
o-Xylene	Ave	0.7382	0.7518		1.00	0.0100	1.8	50.0
Styrene	Ave	1.247	1.179		1.00	0.0100	-5.5	50.0
Bromoform	Ave	0.1580	0.2006	0.1000	1.00	0.0100	26.9	50.0
Isopropylbenzene	Ave	1.883	1.942		1.00	0.0100	3.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7099	0.3000	1.00	0.0100	-7.2	50.0
Bromobenzene	Ave	0.8485	0.7999		1.00	0.0100	-5.7	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2239		1.00	0.0100	-9.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1661		1.00	0.0100	-10.2	50.0
n-Propylbenzene	Ave	0.9162	0.9322		1.00	0.0100	1.7	50.0
2-Chlorotoluene	Ave	0.8158	0.8083		1.00	0.0100	-0.9	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.866		1.00	0.0100	5.3	50.0
4-Chlorotoluene	Ave	0.8894	0.8453		1.00	0.0100	-5.0	50.0
tert-Butylbenzene	Ave	2.380	2.607		1.00	0.0100	9.6	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.908		1.00	0.0100	5.5	50.0
sec-Butylbenzene	Ave	3.282	3.290		1.00	0.0100	0.2	50.0
1,3-Dichlorobenzene	Ave	1.536	1.496		1.00	0.0100	-2.6	50.0
p-Isopropyltoluene	Ave	2.641	2.713		1.00	0.0100	2.7	50.0
1,4-Dichlorobenzene	Ave	1.622	1.604		1.00	0.0100	-1.1	50.0
n-Butylbenzene	Ave	2.221	2.291		1.00	0.0100	3.1	50.0
1,2-Dichlorobenzene	Ave	1.400	1.440		1.00	0.0100	2.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.1039		2.00	0.0100	10.4	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.8859		1.00	0.0100	-3.2	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.7179		1.00	0.0100	-10.9	50.0
Hexachlorobutadiene	Ave	0.2736	0.2235		1.00	0.0100	-18.3	50.0
Naphthalene	Ave	1.968	1.620		1.00	0.0100	-17.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Lab Sample ID: CCVIS 240-97617/2 Calibration Date: 08/15/2013 13:05

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UX6710.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.6228		1.00	0.0100	-14.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2156		0.00868	0.0100	-13.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2839		0.00951	0.0100	-4.9	50.0
Toluene-d8 (Surr)	Ave	1.348	1.212		0.00899	0.0100	-10.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4619		0.00841	0.0100	-15.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Lab Sample ID: CCV 240-97617/3 Calibration Date: 08/15/2013 13:27

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UX6711.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.5066		2.00	0.0100	-39.6	50.0
Ethyl ether	Ave	0.3039	0.2457		2.00	0.0100	-19.1	50.0
3-Chloro-1-propene	Ave	0.1630	0.1615		2.00	0.0100	-1.0	50.0
Diisopropyl ether	Ave	0.2610	0.2539		10.0	0.0500	-2.7	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5379		2.00	0.0100	7.4	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8324		5.00	0.0100	-1.8	50.0
Propionitrile	Ave	0.0230	0.0286		4.00	0.0200	24.1	50.0
Ethyl acetate	Ave	0.1697	0.2066		4.00	0.0200	21.7	50.0
Methacrylonitrile	Ave	0.1263	0.1449		2.00	0.0100	14.7	50.0
Isobutyl alcohol	Ave	0.0072	0.0069		50.0	0.200	-4.6	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6491		5.00	0.0100	-12.2	50.0
n-Heptane	Ave	0.0634	0.0645		1.00	0.0100	1.7	50.0
n-Butanol	Lin		0.0053		50.0	0.200	-19.0	50.0
Methyl methacrylate	Ave	0.1639	0.2000		2.00	0.0100	22.1	50.0
2-Nitropropane	Ave	0.0170	0.0507		2.00	0.0200	197.2*	50.0
Cyclohexanone	Ave	0.0815	0.0653		20.0	0.100	-19.9	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.939		0.0121	0.0100	20.6	50.0
2-Methylnaphthalene	Ave	1.002	0.7681		5.00	0.0200	-23.4	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Lab File ID: UX6714.D Lab Sample ID: MB 240-97617/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/15/2013 14:32

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97617/4	UX6712.D	08/15/2013 13:49
DR-DPT-41-35	240-27719-1	UX6715.D	08/15/2013 15:27
DR-DPT-41-40	240-27719-2	UX6716.D	08/15/2013 15:51
DR-DPT-41-45	240-27719-3	UX6717.D	08/15/2013 16:12
DR-DPT-40-20	240-27719-4	UX6718.D	08/15/2013 16:34
DR-DPT-40-25	240-27719-5	UX6719.D	08/15/2013 16:56
DR-DPT-40-30	240-27719-6	UX6720.D	08/15/2013 17:17
DR-DPT-40-35	240-27719-7	UX6721.D	08/15/2013 17:39
TB-080713	240-27719-9	UXX6723.D	08/15/2013 18:21
DR-DPT-40-40	240-27719-8	UXX6734.D	08/15/2013 22:16
DR-DPT-41-35 MS	240-27719-1 MS	UXX6735.D	08/15/2013 22:38
DR-DPT-41-35 MSD	240-27719-1 MSD	UXX6736.D	08/15/2013 22:59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97617/6

Matrix: Water Lab File ID: UX6714.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 14:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97617/6

Matrix: Water Lab File ID: UX6714.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 14:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.10		1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97617/6

Matrix: Water | Lab File ID: UX6714.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 14:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97617/6

Matrix: Water Lab File ID: UX6714.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 14:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-41-35	240-27719-1	85	89	89	74
DR-DPT-41-40	240-27719-2	86	90	91	75
DR-DPT-41-45	240-27719-3	87	90	92	76
DR-DPT-40-20	240-27719-4	92	94	90	76
DR-DPT-40-25	240-27719-5	92	96	91	76
DR-DPT-40-30	240-27719-6	89	92	91	74
DR-DPT-40-35	240-27719-7	89	95	94	77
DR-DPT-40-40	240-27719-8	89	94	91	77
TB-080713	240-27719-9	91	94	91	75
	MB 240-97617/6	88	92	90	78
	LCS 240-97617/4	88	99	94	87
DR-DPT-41-35 MS	240-27719-1 MS	88	97	94	89
DR-DPT-41-35 MSD	240-27719-1 MSD	87	97	96	89

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX6712.D

Lab ID: LCS 240-97617/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.7	117	72-116	*
1,1,1-Trichloroethane	10.0	10.8	108	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.67	97	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.6	106	74-151	
1,1-Dichloroethane	10.0	9.56	96	82-115	
1,1-Dichloroethene	10.0	8.85	89	78-131	
1,1-Dichloropropene	10.0	9.69	97	83-114	
1,2,3-Trichlorobenzene	10.0	8.20	82	54-126	
1,2,3-Trichloropropane	10.0	9.55	96	73-129	
1,2,3-Trimethylbenzene	10.0	11.1	111	70-130	
1,2,4-Trichlorobenzene	10.0	7.95	80	48-135	
1,2,4-Trimethylbenzene	10.0	10.0	100	76-120	
1,2-Dibromo-3-Chloropropane	10.0	11.8	118	42-136	
1,2-Dichlorobenzene	10.0	9.73	97	81-110	
1,2-Dichloroethane	10.0	10.8	108	71-127	
1,2-Dichloropropane	10.0	10.0	100	81-115	
1,3-Dichlorobenzene	10.0	9.08	91	80-110	
1,3-Dichloropropane	10.0	10.0	100	79-116	
1,4-Dichlorobenzene	10.0	9.09	91	82-110	
2,2-Dichloropropane	10.0	12.1	121	50-129	
2-Chloroethyl vinyl ether	10.0	8.88 J	89	52-131	
2-Chlorotoluene	10.0	9.43	94	76-116	
2-Hexanone	20.0	18.8	94	55-133	
Bromobenzene	10.0	8.81	88	76-115	
Bromochloromethane	10.0	8.83	88	77-120	
4-Chlorotoluene	10.0	9.03	90	77-115	
p-Isopropyltoluene	10.0	9.87	99	74-120	
Acetone	20.0	18.0	90	43-136	
Benzene	10.0	9.51	95	83-112	
Bromoform	10.0	11.4	114	40-131	
Bromomethane	10.0	6.15	61	11-185	
Carbon disulfide	10.0	9.72	97	62-142	
Carbon tetrachloride	10.0	12.8	128	66-128	
Chlorobenzene	10.0	9.10	91	85-110	
Chloroethane	10.0	5.95	60	25-153	
Chloroform	10.0	9.61	96	79-117	
Chloromethane	10.0	8.48	85	44-126	
cis-1,2-Dichloroethene	10.0	8.92	89	80-113	
cis-1,3-Dichloropropene	10.0	10.7	107	61-115	
Hexachlorobutadiene	10.0	7.13	71	36-134	
Dibromomethane	10.0	10.0	100	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX6712.D

Lab ID: LCS 240-97617/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.6	116	72-121	
Dichlorodifluoromethane	10.0	7.80	78	19-129	
Ethylbenzene	10.0	9.33	93	83-112	
1,2-Dibromoethane	10.0	9.32	93	79-113	
Diisopropyl ether	10.0	8.93 J	89	77-118	
Naphthalene	10.0	8.18	82	32-141	
m-Xylene & p-Xylene	20.0	18.3	92	83-113	
n-Butylbenzene	10.0	9.77	98	66-125	
Isopropylbenzene	10.0	9.25	93	75-114	
n-Propylbenzene	10.0	9.75	97	74-121	
2-Butanone	20.0	17.6	88	60-126	
4-Methyl-2-pentanone	20.0	20.5	102	63-128	
sec-Butylbenzene	10.0	9.51	95	70-117	
Methyl tert-butyl ether	10.0	8.98	90	52-144	
Methylene Chloride	10.0	10.1	101	66-131	
o-Xylene	10.0	9.18	92	83-113	
Styrene	10.0	8.69	87	79-114	
tert-Butylbenzene	10.0	10.3	103	71-115	
Tetrachloroethene	10.0	9.16	92	79-114	
Toluene	10.0	9.82	98	84-111	
trans-1,2-Dichloroethene	10.0	8.90	89	83-117	
trans-1,3-Dichloropropene	10.0	11.5	115	58-117	
Trichloroethene	10.0	9.07	91	76-117	
Trichlorofluoromethane	10.0	9.00	90	49-157	
Vinyl acetate	10.0	8.19	82	46-161	
Vinyl chloride	10.0	8.17	82	53-127	
tert-Butyl alcohol	200	108	54	70-130	*
Xylenes, Total	30.0	27.5	92	83-112	
Dibromochloromethane	10.0	12.0	120	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6735.D

Lab ID: 240-27719-1 MS Client ID: DR-DPT-41-35 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	8330	830 U	9910	119	64-118	F
1,1,1-Trichloroethane	8330	830 U	9530	114	68-121	
1,1,2,2-Tetrachloroethane	8330	830 U	7280	87	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	8330	830 U	8680	104	70-152	
1,1-Dichloroethane	8330	830 U	8430	101	79-116	
1,1-Dichloroethene	8330	830 U	7850	94	74-135	
1,1-Dichloropropene	8330	830 U	8270	99	80-114	
1,2,3-Trichlorobenzene	8330	830 U	7000	84	45-129	
1,2,3-Trichloropropane	8330	830 U	7640	92	67-132	
1,2,3-Trimethylbenzene	8330	4200 U	9230	111	70-130	
1,2,4-Trichlorobenzene	8330	830 U	7100	85	38-138	
1,2,4-Trimethylbenzene	8330	830 U	8250	99	67-124	
1,2-Dibromo-3-Chloropropane	8330	1700 U	8270	99	32-139	
1,2-Dichlorobenzene	8330	830 U	8000	96	75-111	
1,2-Dichloroethane	8330	830 U	9570	115	68-129	
1,2-Dichloropropane	8330	830 U	8730	105	78-115	
1,3-Dichlorobenzene	8330	830 U	7570	91	73-110	
1,3-Dichloropropane	8330	830 U	8450	101	74-118	
1,4-Dichlorobenzene	8330	830 U	7470	90	75-110	
2,2-Dichloropropane	8330	830 U	10200	123	38-127	
2-Chloroethyl vinyl ether	8330	8300 U	7110 J	85	10-150	
2-Chlorotoluene	8330	830 U	7550	91	69-117	
2-Hexanone	16700	8300 U	15700	94	47-139	
Bromobenzene	8330	830 U	7070	85	71-116	
Bromochloromethane	8330	830 U	7810	94	73-121	
4-Chlorotoluene	8330	830 U	7160	86	71-116	
p-Isopropyltoluene	8330	830 U	8280	99	64-122	
Acetone	16700	8300 U	13500	81	33-145	
Benzene	8330	830 U	8160	98	72-121	
Bromoform	8330	830 U	9580	115	32-128	
Bromomethane	8330	830 U	5310	64	10-186	
Carbon disulfide	8330	830 U	8940	107	57-147	
Carbon tetrachloride	8330	830 U	11200	134	59-129	F
Chlorobenzene	8330	830 U	7880	95	80-110	
Chloroethane	8330	830 U	5760	69	21-165	
Chloroform	8330	830 U	8660	104	76-118	
Chloromethane	8330	830 U	6180	74	33-132	
cis-1,2-Dichloroethene	8330	1900	10900	107	70-120	
cis-1,3-Dichloropropene	8330	830 U	8680	104	51-110	
Hexachlorobutadiene	8330	830 U	6840	82	27-132	
Dibromomethane	8330	830 U	8350	100	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6735.D

Lab ID: 240-27719-1 MS Client ID: DR-DPT-41-35 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	8330	830 U	9960	119	67-120	
Dichlorodifluoromethane	8330	830 U	6580	79	17-128	
Ethylbenzene	8330	830 U	7920	95	75-116	
1,2-Dibromoethane	8330	830 U	7800	94	74-113	
Diisopropyl ether	8330	8300 U	7780 J	93	73-118	
Naphthalene	8330	830 U	6170	74	15-158	
m-Xylene & p-Xylene	16700	1700 U	15800	95	75-117	
n-Butylbenzene	8330	830 U	8420	101	56-127	
Isopropylbenzene	8330	830 U	8000	96	68-116	
n-Propylbenzene	8330	830 U	7880	95	64-124	
2-Butanone	16700	8300 U	14000	84	54-129	
4-Methyl-2-pentanone	16700	8300 U	16800	101	56-131	
sec-Butylbenzene	8330	830 U	7840	94	60-119	
Methyl tert-butyl ether	8330	830 U	7580	91	46-144	
Methylene Chloride	8330	830 U	8820	106	63-128	
o-Xylene	8330	830 U	8040	97	76-116	
Styrene	8330	830 U	7580	91	71-117	
tert-Butylbenzene	8330	830 U	7190	86	61-119	
Tetrachloroethene	8330	830 U	8070	97	70-117	
Toluene	8330	830 U	8670	104	78-114	
trans-1,2-Dichloroethene	8330	830 U	8120	97	80-119	
trans-1,3-Dichloropropene	8330	830 U	9310	112	46-116	
Trichloroethene	8330	28000	44300	192	66-120	E F
Trichlorofluoromethane	8330	830 U	7350	88	46-157	
Vinyl acetate	8330	1700 U	7090	85	43-157	
Vinyl chloride	8330	830 U	7250	87	49-130	
tert-Butyl alcohol	167000	42000 U	83300	50	70-130	F
Xylenes, Total	25000	1700 U	23800	95	76-116	
Dibromochloromethane	8330	830 U	10300	123	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6736.D

Lab ID: 240-27719-1 MSD Client ID: DR-DPT-41-35 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	8330	10400	125	5	30	64-118	F
1,1,1-Trichloroethane	8330	9880	119	4	30	68-121	
1,1,2,2-Tetrachloroethane	8330	7370	88	1	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	8330	8730	105	1	30	70-152	
1,1-Dichloroethane	8330	8520	102	1	30	79-116	
1,1-Dichloroethene	8330	7830	94	0	30	74-135	
1,1-Dichloropropene	8330	8490	102	3	30	80-114	
1,2,3-Trichlorobenzene	8330	7100	85	2	30	45-129	
1,2,3-Trichloropropane	8330	7260	87	5	30	67-132	
1,2,3-Trimethylbenzene	8330	9800	118	6	30	70-130	
1,2,4-Trichlorobenzene	8330	7230	87	2	30	38-138	
1,2,4-Trimethylbenzene	8330	8640	104	5	30	67-124	
1,2-Dibromo-3-Chloropropane	8330	9000	108	8	30	32-139	
1,2-Dichlorobenzene	8330	8410	101	5	30	75-111	
1,2-Dichloroethane	8330	9470	114	1	30	68-129	
1,2-Dichloropropane	8330	8830	106	1	30	78-115	
1,3-Dichlorobenzene	8330	7930	95	5	30	73-110	
1,3-Dichloropropane	8330	8550	103	1	30	74-118	
1,4-Dichlorobenzene	8330	7640	92	2	30	75-110	
2,2-Dichloropropane	8330	10200	122	0	30	38-127	
2-Chloroethyl vinyl ether	8330	6850 J	82	4	30	10-150	
2-Chlorotoluene	8330	7960	96	5	30	69-117	
2-Hexanone	16700	15500	93	1	30	47-139	
Bromobenzene	8330	7290	87	3	30	71-116	
Bromochloromethane	8330	7540	91	4	30	73-121	
4-Chlorotoluene	8330	7550	91	5	30	71-116	
p-Isopropyltoluene	8330	8760	105	6	30	64-122	
Acetone	16700	13100	78	3	30	33-145	
Benzene	8330	8410	101	3	30	72-121	
Bromoform	8330	9490	114	1	30	32-128	
Bromomethane	8330	5100	61	4	30	10-186	
Carbon disulfide	8330	9120	109	2	30	57-147	
Carbon tetrachloride	8330	11500	139	3	30	59-129	F
Chlorobenzene	8330	7980	96	1	30	80-110	
Chloroethane	8330	5490	66	5	30	21-165	
Chloroform	8330	8650	104	0	30	76-118	
Chloromethane	8330	6100	73	1	30	33-132	
cis-1,2-Dichloroethene	8330	10700	105	2	30	70-120	
cis-1,3-Dichloropropene	8330	8850	106	2	30	51-110	
Hexachlorobutadiene	8330	7120	85	4	30	27-132	
Dibromomethane	8330	8470	102	1	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6736.D

Lab ID: 240-27719-1 MSD Client ID: DR-DPT-41-35 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	8330	10000	121	1	30	67-120	F
Dichlorodifluoromethane	8330	6340	76	4	30	17-128	
Ethylbenzene	8330	8360	100	5	30	75-116	
1,2-Dibromoethane	8330	7970	96	2	30	74-113	
Diisopropyl ether	8330	7760 J	93	0	30	73-118	
Naphthalene	8330	6550	79	6	30	15-158	
m-Xylene & p-Xylene	16700	16300	98	3	30	75-117	
n-Butylbenzene	8330	8740	105	4	30	56-127	
Isopropylbenzene	8330	8460	101	6	30	68-116	
n-Propylbenzene	8330	8240	99	4	30	64-124	
2-Butanone	16700	14400	86	2	30	54-129	
4-Methyl-2-pentanone	16700	16500	99	1	30	56-131	
sec-Butylbenzene	8330	8250	99	5	30	60-119	
Methyl tert-butyl ether	8330	7760	93	2	30	46-144	
Methylene Chloride	8330	8700	104	1	30	63-128	
o-Xylene	8330	8420	101	5	30	76-116	
Styrene	8330	7820	94	3	30	71-117	
tert-Butylbenzene	8330	7730	93	7	30	61-119	
Tetrachloroethene	8330	8450	101	5	30	70-117	
Toluene	8330	8960	108	3	30	78-114	
trans-1,2-Dichloroethene	8330	8080	97	0	30	80-119	
trans-1,3-Dichloropropene	8330	9310	112	0	30	46-116	
Trichloroethene	8330	46400	217	5	30	66-120	E F
Trichlorofluoromethane	8330	7020	84	4	30	46-157	
Vinyl acetate	8330	7610	91	7	30	43-157	
Vinyl chloride	8330	7490	90	3	30	49-130	
tert-Butyl alcohol	167000	97600	59	16	30	70-130	F
Xylenes, Total	25000	24700	99	4	30	76-116	
Dibromochloromethane	8330	10400	124	1	30	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Sample No.: STD8260 240-92306/4 Date Analyzed: 07/02/2013 13:37

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX5742.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1899526	5.20	1402128	7.87	826109	10.11
UPPER LIMIT		3799052	5.70	2804256	8.37	1652218	10.61
LOWER LIMIT		949763	4.70	701064	7.37	413055	9.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92306/8		1830940	5.20	1292823	7.87	693029	10.11
CCVIS 240-97617/2		1712420	5.20	1201129	7.87	649416	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27719-1

SDG No.:

Sample No.: CCVIS 240-97617/2 Date Analyzed: 08/15/2013 13:05

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX6710.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1712420	5.20	1201129	7.87	649416	10.12
UPPER LIMIT		3424840	5.70	2402258	8.37	1298832	10.62
LOWER LIMIT		856210	4.70	600565	7.37	324708	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-97617/3		1772918	5.20	1156280	7.87	556418	10.12
LCS 240-97617/4		1745526	5.20	1210175	7.87	626960	10.11
MB 240-97617/6		1592680	5.20	1095898	7.87	546990	10.11
240-27719-1	DR-DPT-41-35	1642296	5.20	1129935	7.88	540431	10.11
240-27719-2	DR-DPT-41-40	1635185	5.20	1102174	7.87	525120	10.12
240-27719-3	DR-DPT-41-45	1646572	5.20	1107901	7.87	530020	10.12
240-27719-4	DR-DPT-40-20	1565943	5.20	1077660	7.87	542579	10.12
240-27719-5	DR-DPT-40-25	1587080	5.20	1060911	7.87	537480	10.12
240-27719-6	DR-DPT-40-30	1590814	5.20	1072203	7.87	503330	10.12
240-27719-7	DR-DPT-40-35	1599335	5.20	1034368	7.87	510785	10.12
240-27719-9	TB-080713	1533004	5.20	1037210	7.87	519153	10.12
240-27719-8	DR-DPT-40-40	1519303	5.20	1038469	7.87	545108	10.12
240-27719-1 MS	DR-DPT-41-35 MS	1606097	5.20	1121916	7.87	642943	10.12
240-27719-1 MSD	DR-DPT-41-35 MSD	1631768	5.20	1119778	7.87	634067	10.11

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

Sample Calculation

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27719-1

SDG No.:

Client Sample ID: DR-DPT-41-35 | Lab Sample ID: 240-27719-1

Matrix: Water | Lab File ID: UX6715.D

Analysis Method: 8260B | Date Collected: 08/07/2013 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 15:27

Soil Aliquot Vol: | Dilution Factor: 833.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	830	U	830	130
74-87-3	Chloromethane	830	U	830	250
156-59-2	cis-1,2-Dichloroethene	1900		830	140
10061-01-5	cis-1,3-Dichloropropene	830	U	830	120
87-68-3	Hexachlorobutadiene	830	U	830	250
74-95-3	Dibromomethane	830	U	830	230
75-27-4	Bromodichloromethane	830	U	830	120
75-71-8	Dichlorodifluoromethane	830	U	830	260
100-41-4	Ethylbenzene	830	U	830	140
106-93-4	1,2-Dibromoethane	830	U	830	200
108-20-3	Diisopropyl ether	8300	U	8300	1200
91-20-3	Naphthalene	830	U	830	200
179601-23-1	m-Xylene & p-Xylene	1700	U	1700	200
104-51-8	n-Butylbenzene	830	U	830	100
98-82-8	Isopropylbenzene	830	U	830	110
103-65-1	n-Propylbenzene	830	U	830	120
78-93-3	2-Butanone	8300	U	8300	470
108-10-1	4-Methyl-2-pentanone	8300	U	8300	270
135-98-8	sec-Butylbenzene	830	U	830	110
1634-04-4	Methyl tert-butyl ether	830	U	830	140
994-05-8	Tert-amyl-methyl ether (TAME)	4200	U	4200	56
75-09-2	Methylene Chloride	830	U	830	270
95-47-6	o-Xylene	830	U	830	120
100-42-5	Styrene	830	U	830	92
637-92-3	Ethyl-t-butyl ether (ETBE)	4200	U	4200	92
98-06-6	tert-Butylbenzene	830	U	830	110
127-18-4	Tetrachloroethene	830	U	830	240
108-88-3	Toluene	830	U	830	110
156-60-5	trans-1,2-Dichloroethene	830	U	830	160
10061-02-6	trans-1,3-Dichloropropene	830	U	830	160
79-01-6	Trichloroethene	28000		830	140
75-69-4	Trichlorofluoromethane	830	U	830	170
108-05-4	Vinyl acetate	1700	U	1700	160
75-01-4	Vinyl chloride	830	U	830	180
75-65-0	tert-Butyl alcohol	42000	U *	42000	3200
1330-20-7	Xylenes, Total	1700	U	1700	120

Report Date: 16-Aug-2013 10:12:20 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton
Target Compound Quantitation Report

Sample Calculation

Data File: \\NCChrom\ChromData\A3UX10\20130815-22525.b\UX6715.D
Lims ID: 240-27719-B-1 Client ID: DR-DPT-41-35
Inject. Date: 15-Aug-2013 15:27:30 Dil. Factor: 833.3300
Sample Type: Client
Sample ID: 240-0022525-007
Misc. Info.:
Operator: 1644 Instrument ID: A3UX10
Purge Vol: 5.000 mL ALS Bottle#: 6
Lims Batch ID: 97617 Lims Sample ID: 7
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX10\20130815-22525.b\8260_10.m
Last Update: 16-Aug-2013 10:12:20 Calib Date: 02-Jul-2013 14:41:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX10\20130702-21321.b\UXX5745.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK015

First Level Reviewer: williamsla Date: 16-Aug-2013 10:08:55

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.200	5.197	0.003	98	1642296	10.0	
* 2 Chlorobenzene-d5	117	7.875	7.871	0.004	86	1129935	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.111	10.120	-0.009	98	540431	10.0	
$ 5 Dibromofluoromethane (Surr)	113	4.621	4.629	-0.008	60	346493	8.49	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.916	4.913	0.003	0	437718	8.92	
$ 7 Toluene-d8 (Surr)	98	6.561	6.558	0.003	94	1362914	8.95	
$ 8 4-Bromofluorobenzene (Surr)	95	8.987	8.984	0.003	90	457119	7.36	
12 Dichlorodifluoromethane	85		1.564					
13 Chloromethane	50		1.695					
14 Vinyl chloride	62		1.789					
16 Bromomethane	94		2.085					
17 Chloroethane	64		2.168					9
19 Trichlorofluoromethane	101		2.393					
23 1,1-Dichloroethene	96		2.807					9
24 Acetone	43	2.822	2.819	0.003	72	8653	0.7385	
25 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.831					
27 Carbon disulfide	76		2.996					
31 Methylene Chloride	84	3.189	3.186	0.003	96	76826	0.1236	
32 2-Methyl-2-propanol	59		3.257					
34 trans-1,2-Dichloroethene	96	3.425	3.422	0.003	51	6001	0.1110	
35 Methyl tert-butyl ether	73		3.422					
37 1,1-Dichloroethane	63		3.765					
38 Vinyl acetate	86		3.789					
39 Isopropyl ether	87		3.825					
41 Tert-butyl ethyl ether	59		4.120					
42 2-Butanone (MEK)	43		4.239					9
43 cis-1,2-Dichloroethene	96	4.242	4.239	0.003	69	128897	2.32	
44 2,2-Dichloropropane	77		4.250					
48 Chlorobromomethane	128		4.440					
50 Chloroform	83		4.487					9

 Sample Calculation

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
51 1,1,1-Trichloroethane	97		4.665					
53 1,1-Dichloropropene	75		4.807					
54 Carbon tetrachloride	117		4.818					
56 1,2-Dichloroethane	62	4.976	4.972	0.004	1	9905	0.1737	
57 Benzene	78		4.972					9
58 Tert-amyl methyl ether	73		5.055					
61 Trichloroethene	130	5.508	5.517	-0.009	97	1621162	34.0	
64 1,2-Dichloropropane	63		5.694					
66 Dibromomethane	93		5.801					
68 Dichlorobromomethane	83		5.919					
70 2-Chloroethyl vinyl ether	63		6.167					
71 cis-1,3-Dichloropropene	75		6.309					
72 4-Methyl-2-pentanone (MIBK)	43		6.428					
73 Toluene	91	6.620	6.617	0.003	76	21956	0.1196	
74 trans-1,3-Dichloropropene	75		6.795					
77 1,3-Dichloropropane	76		7.114					
78 Tetrachloroethene	164		7.126					9
79 2-Hexanone	43		7.173					
81 Chlorodibromomethane	129		7.327					
83 Ethylene Dibromide	107		7.445					
85 Chlorobenzene	112		7.895					
86 1,1,1,2-Tetrachloroethane	131		7.966					
87 Ethylbenzene	106		8.001					9
88 m-Xylene & p-Xylene	106		8.108					9
89 o-Xylene	106		8.487					9
90 Styrene	104		8.487					9
91 Bromoform	173		8.664					
92 Isopropylbenzene	105		8.830					9
95 1,1,2,2-Tetrachloroethane	83		9.102					
96 Bromobenzene	156		9.137					
97 1,2,3-Trichloropropane	110		9.149					
99 N-Propylbenzene	120		9.232					
100 2-Chlorotoluene	126		9.327					
102 4-Chlorotoluene	126		9.421					
103 tert-Butylbenzene	119		9.729					
104 1,2,4-Trimethylbenzene	105		9.776					9
105 sec-Butylbenzene	105		9.942					9
106 1,3-Dichlorobenzene	146		10.049					
107 4-Isopropyltoluene	119		10.084					9
108 1,4-Dichlorobenzene	146		10.143					9
109 1,2,3-Trimethylbenzene	105		10.191					9
110 n-Butylbenzene	91		10.486					9
111 1,2-Dichlorobenzene	146		10.510					
112 1,2-Dibromo-3-Chloropropane	157		11.267					
114 1,2,4-Trichlorobenzene	180		12.119					9
115 Hexachlorobutadiene	225		12.285					
116 Naphthalene	128		12.356					9
117 1,2,3-Trichlorobenzene	180		12.604					
S 122 Xylenes, Total	106		16.530					7

Sample Calculation

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27719-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0095 0.0104	0.0120	0.0145	0.0164	0.0130	Qua	-0.124	0.0171	0						0.9970		0.9900
Acrylonitrile	0.0905 0.1021	0.0983	0.1034	0.1068	0.1082	Ave		0.1016				6.4		15.0			
Methyl tert-butyl ether	0.7590 0.7679	0.7484	0.7512	0.8058	0.8208	Ave		0.7755				3.9		15.0			
trans-1,2-Dichloroethene	0.3358 0.3195	0.3308	0.3296	0.3254	0.3340	Ave		0.3292				1.8		15.0			
Hexane	0.0712 0.0637	0.0646	0.0668	0.0661	0.0671	Ave		0.0666				3.9		15.0			
1,1-Dichloroethane	0.5578 0.5246	0.5449	0.5273	0.5247	0.5369	Ave		0.5360			0.1000	2.5		15.0			
Vinyl acetate	0.0458 0.0460	0.0362	0.0441	0.0416	0.0442	Ave		0.0430				8.6		15.0			
2-Butanone	0.0991 0.0997	0.0968	0.1003	0.0974	0.1064	Ave		0.0999				3.4		15.0			
cis-1,2-Dichloroethene	0.3285 0.3322	0.3571	0.3290	0.3348	0.3453	Ave		0.3378				3.3		15.0			
2,2-Dichloropropane	0.2688 0.2905	0.2819	0.2776	0.2821	0.3040	Ave		0.2842				4.2		15.0			
Bromochloromethane	0.1521 0.1504	0.1506	0.1534	0.1499	0.1524	Ave		0.1515				0.9		15.0			
Tetrahydrofuran	0.0772 0.0698	0.0789	0.0767	0.0752	0.0716	Ave		0.0749				4.7		15.0			
Chloroform	0.4907 0.4900	0.5020	0.4890	0.4920	0.4962	Ave		0.4933				1.0		15.0			
1,1,1-Trichloroethane	0.4106 0.3726	0.3778	0.3695	0.3890	0.3851	Ave		0.3841				3.9		15.0			
Cyclohexane	0.5528 0.5297	0.5227	0.5349	0.5435	0.5429	Ave		0.5378				2.0		15.0			
1,1-Dichloropropene	0.3609 0.3601	0.3698	0.3664	0.3618	0.3692	Ave		0.3647				1.2		15.0			
Carbon tetrachloride	0.2610 0.2765	0.2656	0.2674	0.2761	0.2887	Ave		0.2725				3.7		15.0			
1,2-Dichloroethane	0.3474 0.3376	0.3583	0.3351	0.3500	0.3553	Ave		0.3473				2.7		15.0			
Benzene	1.1681 1.1119	1.1203	1.0964	1.1265	1.1340	Ave		1.1262				2.2		15.0			
Trichloroethene	0.3214 0.2780	0.2821	0.2900	0.2862	0.2843	Ave		0.2904				5.4		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

Sample Calculation
Lockheed, SDG 240-27719-1

Sample DR-DPT-41-35; (trichloroethene)

$$\frac{1621162}{1642296} * 833.33 * \frac{10^{4}\ ug/L}{0.2904} = 28326.7\ ug/L$$

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**November 6, 2013**
FROM:	**MEGAN CARSON**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION-VOC**
LOCKHEED-MARTIN STATE AIRPORT (MSA)
DUMP ROAD SOURCE AREAS
SDG 240-27760-1

SAMPLES: 5/Aqueous/

DR-DPT-38-15	DR-DPT-38-30
DR-DPT-38-35	DR-DPT-38-40
TB-080813	

Overview

The sample set for Lockheed MSA, SDG 240-27760-1, consists of four (4) aqueous environmental samples and one trip blank.

All samples were analyzed for volatile organic compounds (VOCs). The samples were collected by Tetra Tech August 8th, 2013and analyzed by TestAmerica. VOC analyses were conducted using method 8260B.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, GC/MS tuning, initial and continuing calibration verification results, laboratory method / preparation blank results, internal standard recoveries, surrogate standard recoveries, laboratory control sample recoveries, matrix spike recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems-

- The initial calibration analyzed on 7/2/13 on instrument A3UX10 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. All samples were affected. Non-detected results were qualified as rejected (UR).

- The continuing calibration analyzed 8/15/13 at 13:05 on instrument A3UX10 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. Samples DR-DPT-38-15, DR-DPT-38-30, and DR-DPT-38-35 were affected. Non-detected results were qualified as rejected (UR).

- The continuing calibration analyzed 8/16/13 at 00:03 on instrument A3UX10 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. Samples DR-DPT-38-40 and TB-0808135 were affected. Non-detected results were qualified as rejected (UR).

Minor Problems-

- The following contaminants were detected in method and calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Acetone [1]	2.1 ug/L	21 ug/L
Methylene chloride [2]	1.10 ug/L	11 ug/L
Tert-butyl alcohol [3]	8.04 ug/L	40.2 ug/L

[1] Maximum concentration found in a trip blank.
[2] Maximum concentration found in a preparation blank affecting samples in 240-97617.
[3] Maximum concentration found in a preparation blank affecting samples in 240-97692.

An action level of 5X and 10X (methylene chloride and acetone only) the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the blank action level were qualified (B) for blank contamination.

- The continuing calibration standard analyzed on 8/15/13 at 13:05 on instrument A3UX10 had a percent difference > 20% but less than 50% for dichlorodifluoromethane, chloroethane, acetone, 2,2-dichloropropane, carbon tetrachloride, bromodichloromethane, trans-1,3-dichloropropene, dibromochloromethane, 1,1,1,2-trichloroethane, bromoform, dichlorofluoromethane, and a percent recovery > 50% for tert butyl alcohol. Samples DR-DPT-38-15, DR-DPT-38-30, and DR-DPT-38-35 were affected. Positive tert-butyl alcohol results were qualified as estimated (J). Non-detected dichlorodifluoromethane, chloroethane, acetone, 2,2-dichloropropane, carbon tetrachloride, bromodichloromethane, trans-1,3-dichloropropene, dibromochloromethane, 1,1,1,2-trichloroethane, bromoform, dichlorofluoromethane results were not qualified as %D< 50%. No validation action was warranted for non-detect tert-butyl alcohol as sample results were rejected for RRF non-compliances.

- The continuing calibration standard analyzed on 8/16/13 at 00:03 on instrument A3UX10 had a percent difference > 20% but less than 50% for chloroethane, tert butyl alcohol, 2,2-dichloropropane, 1,1,1-trichloroethane, carbon tetrachloride, bromodichloromethane, dibromochloromethane, 1,1,1,2-trichloroethane, bromoform, naphthalene, and dichlorofluoromethane . Samples DR-DPT-38-40 and TB-080813 were affected. The detected bromodichloromethane result was qualified as estimated (J). Non-detected chloroethane, tert butyl alcohol, 2,2-dichloropropane, 1,1,1-trichloroethane, carbon tetrachloride, bromodichloromethane, dibromochloromethane, 1,1,1,2-trichloroethane, bromoform, naphthalene, and dichlorofluoromethane results were not qualified as %D< 50%. No validation action was warranted for tert-butyl alcohol as sample results were rejected for RRF non-compliances.

- The laboratory control spike for preparation batch 240-97617 had a percent recovery greater than the upper QC limit for 1,1,1,2-tetrachloroethane, dibromochloromethane, and a percent recovery less than the lower limit for tert-butyl alcohol. Samples DR-DPT-38-15, DR-DPT-38-30, and DR-DPT-38-35 were affected. Detected tert-butyl alcohol results were qualified as estimated (J). Non-detected 1,1,1,2-tetrachloroethane dibromochloromethane, and tert-butyl alcohol results were not qualified.

- The laboratory control spike for preparation batch 240-97692 had percent recovery less than the lower limit for tert-butyl alcohol. Samples DR-DPT-38-40 and TB-080813 were affected. No validation action was warranted as sample results were either qualified for blank contamination or rejected for calibration RRF non-compliances.

- Silanol TIC compounds were rejected (R) because silanol is used in operation of the instrumentation.

Notes

Non-detected results were reported at the MDL.

Tentatively Identified Compounds (TICs) were also analyzed for VOC analyses..

Compound chlorodibromomethane was listed in the lab data as dibromochloromethane.

The following samples were analyzed at the following dilutions for all VOCs:

Sample ID	Dilution Factor
DR-DPT-38-35	5.26X
DR-DPT-38-40	1.82X

Executive Summary

Laboratory Performance: Preparation blank contamination for acetone and tert-butyl alcohol resulted in the qualification of sample results. Initial and continuing calibration RRF non-compliances resulted in the rejection of tert-butyl alcohol and vinyl acetate results. Continuing calibration %D non-compliances for bromodichloromethane and tert-butyl alcohol resulted in the qualification of sample results. Laboratory spike non-compliances for tert-butyl alcohol resulted in the qualification of sample results.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	DR-DPT-38-15			DR-DPT-38-30			DR-DPT-38-35			DR-DPT-38-40		
SDG: 240-27760-1	LAB_ID	240-27760-1			240-27760-2			240-27760-3			240-27760-4		
FRACTION: OV	SAMP_DATE	8/8/2013			8/8/2013			8/8/2013			8/8/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U		1.2	U		0.42	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		1.2	U		0.4	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.95	U		0.33	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		1.5	U		0.51	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.79	U		0.27	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		1	U		0.35	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.68	U		0.24	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.89	U		0.31	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		2.3	U		0.78	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.031	U		0.011	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.79	U		0.27	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.63	U		0.22	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		3.5	U		1.2	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		1.3	U		0.44	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.68	U		0.24	U	
1,2-DICHLOROETHANE		0.99	J	P	2.1			4.8	J	P	3.6		
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.95	U		0.33	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.74	U		0.25	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.84	U		0.29	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.68	U		0.24	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.68	U		0.24	U	
2-BUTANONE		2.3	J	P	0.57	U		3	U		1	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		5.2	U		1.8	U	
2-CHLOROTOLUENE		0.11	U		0.11	U		0.58	U		0.2	U	
2-HEXANONE		0.41	U		0.41	U		2.2	U		0.75	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.95	U		0.33	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.63	U		0.22	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		1.7	U		0.58	U	
ACETONE		8.7	B	A	20	B	A	21	B	A	51		
BENZENE		6.3			0.98	J	P	3.3	J	P	1.3	J	P
BROMOBENZENE		0.13	U		0.13	U		0.68	U		0.24	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		1.5	U		0.53	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.79	U		0.5	J	CP
BROMOFORM		0.64	U		0.64	U		3.4	U		1.2	U	
BROMOMETHANE		0.41	U		0.41	U		2.2	U		0.75	U	

PROJ_NO: 04882	NSAMPLE	TB-080813		
SDG: 240-27760-1	LAB_ID	240-27760-5		
FRACTION: OV	SAMP_DATE	8/8/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U	
1,1-DICHLOROETHANE		0.15	U	
1,1-DICHLOROETHENE		0.19	U	
1,1-DICHLOROPROPENE		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U	
1,2-DIBROMOETHANE		0.24	U	
1,2-DICHLOROBENZENE		0.13	U	
1,2-DICHLOROETHANE		0.22	U	
1,2-DICHLOROPROPANE		0.18	U	
1,3-DICHLOROBENZENE		0.14	U	
1,3-DICHLOROPROPANE		0.16	U	
1,4-DICHLOROBENZENE		0.13	U	
2,2-DICHLOROPROPANE		0.13	U	
2-BUTANONE		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U	
2-CHLOROTOLUENE		0.11	U	
2-HEXANONE		0.41	U	
4-CHLOROTOLUENE		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U	
4-METHYL-2-PENTANONE		0.32	U	
ACETONE		2.1	J	P
BENZENE		0.13	U	
BROMOBENZENE		0.13	U	
BROMOCHLOROMETHANE		0.29	U	
BROMODICHLOROMETHANE		0.15	U	
BROMOFORM		0.64	U	
BROMOMETHANE		0.41	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-38-15			DR-DPT-38-30			DR-DPT-38-35			DR-DPT-38-40		
SDG: 240-27760-1	LAB_ID	240-27760-1			240-27760-2			240-27760-3			240-27760-4		
FRACTION: OV	SAMP_DATE	8/8/2013			8/8/2013			8/8/2013			8/8/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1.8			1.6			3.4	J	P	2.3		
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.68	U		0.24	U	
CHLOROBENZENE		0.15	U		0.78	J	P	1.4	J	P	0.27	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.95	U		0.33	U	
CHLOROETHANE		0.29	U		0.29	U		1.5	U		0.53	U	
CHLOROFORM		0.21	J	P	0.46	J	P	1.9	J	P	2.9		
CHLOROMETHANE		0.3	U		0.3	U		1.6	U		0.55	U	
CIS-1,2-DICHLOROETHENE		0.92	J	P	16			42			26		
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.74	U		0.25	U	
DIBROMOMETHANE		0.28	U		0.28	U		1.5	U		0.51	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		1.6	U		0.56	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		7.9	U		2.7	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.58	U		0.2	U	
ETHYLBENZENE		0.17	U		0.17	U		0.89	U		0.31	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		1.6	U		0.55	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.68	U		0.24	U	
M+P-XYLENES		0.24	U		0.24	U		1.3	U		0.44	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.89	U		0.31	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		1.7	U		0.6	U	
NAPHTHALENE		0.24	U		0.24	U		1.3	U		0.44	U	
N-BUTYLBENZENE		0.12	U		0.12	U		0.63	U		0.22	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.74	U		0.25	U	
O-XYLENE		0.14	U		0.14	U		0.76	J	P	0.25	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.68	U		0.24	U	
STYRENE		0.11	U		0.11	U		0.58	U		0.2	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.35	U		0.12	U	
TERT-BUTYLBENZENE		0.4	J	P	0.13	U		0.68	U		0.24	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	12	J	CEP	42	J	CEP	22	B	A
TETRACHLOROETHENE		0.29	U		0.29	U		1.5	U		0.53	U	
TOLUENE		0.41	J	P	0.98	J	P	4.6	J	P	2.4		
TOTAL XYLENES		0.14	U		0.14	U		0.76	J	P	0.25	U	
TRANS-1,2-DICHLOROETHENE		5.8			0.78	J	P	3.6	J	P	2.2		
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		1	U		0.35	U	
TRICHLOROETHENE		0.17	U		6.5			32			21		
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		1.1	U		0.38	U	

PROJ_NO: 04882	NSAMPLE	TB-080813
SDG: 240-27760-1	LAB_ID	240-27760-5
FRACTION: OV	SAMP_DATE	8/8/2013
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
CARBON DISULFIDE	0.13	U	
CARBON TETRACHLORIDE	0.13	U	
CHLOROBENZENE	0.15	U	
CHLORODIBROMOMETHANE	0.18	U	
CHLOROETHANE	0.29	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U	
DIBROMOMETHANE	0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U	
DIISOPROPYL ETHER	1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U	
ETHYLBENZENE	0.17	U	
HEXACHLOROBUTADIENE	0.3	U	
ISOPROPYLBENZENE	0.13	U	
M+P-XYLENES	0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U	
METHYLENE CHLORIDE	0.33	U	
NAPHTHALENE	0.24	U	
N-BUTYLBENZENE	0.12	U	
N-PROPYLBENZENE	0.14	U	
O-XYLENE	0.14	U	
SEC-BUTYLBENZENE	0.13	U	
STYRENE	0.11	U	
TERT-AMYL METHYL ETHER	0.067	U	
TERT-BUTYLBENZENE	0.13	U	
TERTIARY-BUTYL ALCOHOL	3.9	UR	C
TETRACHLOROETHENE	0.29	U	
TOLUENE	0.13	U	
TOTAL XYLENES	0.14	U	
TRANS-1,2-DICHLOROETHENE	0.19	U	
TRANS-1,3-DICHLOROPROPENE	0.19	U	
TRICHLOROETHENE	0.17	U	
TRICHLOROFLUOROMETHANE	0.21	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-38-15			DR-DPT-38-30			DR-DPT-38-35			DR-DPT-38-40		
SDG: 240-27760-1	LAB_ID	240-27760-1			240-27760-2			240-27760-3			240-27760-4		
FRACTION: OV	SAMP_DATE	8/8/2013			8/8/2013			8/8/2013			8/8/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C	0.19	UR	C	1	UR	C	0.35	UR	C
VINYL CHLORIDE		8.1			17			95			63		

PROJ_NO: 04882	NSAMPLE	TB-080813		
SDG: 240-27760-1	LAB_ID	240-27760-5		
FRACTION: OV	SAMP_DATE	8/8/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C
VINYL CHLORIDE		0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-38-15			DR-DPT-38-30			DR-DPT-38-35			DR-DPT-38-40		
SDG: 240-27760-1	LAB_ID	240-27760-1			240-27760-2			240-27760-3			240-27760-4		
FRACTION: TICOV	SAMP_DATE	8/8/2013			8/8/2013			8/8/2013			8/8/2013		
MEDIA: TIC	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,2-TRICHLOROETHANE											0.57	J	P
1,4-DIOXANE		130			210			340			220		
1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-		2.8	J	Z1									
2-HEPTENE, 2,6-DIMETHYL-					2.6	NJ	Z1						
BENZENE, (2-METHYLPROPYL)-		2.1	NJ	Z1									
BENZENE, 1-METHYL-4-(1-METHYLETHYL)-		3.1	NJ	Z1									
CYCLOHEXANE		12	J	P	0.12	J	P	1.2	J	P	0.37	J	P
CYCLOPENTANE, 1,1-DIMETHYL-											2.2	R	Z2
METHYLCYCLOHEXANE								1	J	P	0.26	J	P
N-BUTANOL		14	J	P							27	J	P
PENTANE, 2,2,4-TRIMETHYL-		17	NJ	Z1									
PENTANE, 2,3,3-TRIMETHYL-		19	NJ	Z1									
PENTANE, 2,3,4-TRIMETHYL-		12	NJ	Z1									
SILANOL, TRIMETHYL-		5.4	R	Z2							3.5	R	Z2
TETRAHYDROFURAN					0.86	J	P						

PROJ_NO: 04882	NSAMPLE	TB-080813		
SDG: 240-27760-1	LAB_ID	240-27760-5		
FRACTION: TICOV	SAMP_DATE	8/8/2013		
MEDIA: TIC	QC_TYPE	TIC		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,1,2-TRICHLOROETHANE				
1,4-DIOXANE		30	J	P
1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-				
2-HEPTENE, 2,6-DIMETHYL-				
BENZENE, (2-METHYLPROPYL)-				
BENZENE, 1-METHYL-4-(1-METHYLETHYL)-				
CYCLOHEXANE				
CYCLOPENTANE, 1,1-DIMETHYL-				
METHYLCYCLOHEXANE				
N-BUTANOL		13	J	P
PENTANE, 2,2,4-TRIMETHYL-				
PENTANE, 2,3,3-TRIMETHYL-				
PENTANE, 2,3,4-TRIMETHYL-				
SILANOL, TRIMETHYL-		1.5	R	Z2
TETRAHYDROFURAN				

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-15 Lab Sample ID: 240-27760-1

Matrix: Water Lab File ID: UXX6724.D

Analysis Method: 8260B Date Collected: 08/08/2013 09:50

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 18:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.99	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	8.7	J	10	1.1
71-43-2	Benzene	6.3		1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.8		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

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FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-15 Lab Sample ID: 240-27760-1

Matrix: Water Lab File ID: UXX6724.D

Analysis Method: 8260B Date Collected: 08/08/2013 09:50

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 18:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.21	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.92	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	2.3	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	0.40	J	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.41	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	5.8		1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	8.1		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-15 | Lab Sample ID: 240-27760-1

Matrix: Water | Lab File ID: UXX6724.D

Analysis Method: 8260B | Date Collected: 08/08/2013 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 18:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	94		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-15 | Lab Sample ID: 240-27760-1

Matrix: Water | Lab File ID: UXX6724.D

Analysis Method: 8260B | Date Collected: 08/08/2013 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 18:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

Number TICs Found: 10 | TIC Result Total: 217.4

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.11	5.4	T J N
110-82-7	Cyclohexane	4.74	12	
540-84-1	Pentane, 2,2,4-trimethyl-	5.05	17	T J N
71-36-3	n-Butanol	5.40	14	J
123-91-1	1,4-Dioxane	5.80	130	
565-75-3	Pentane, 2,3,4-trimethyl-	6.04	12	T J N
560-21-4	Pentane, 2,3,3-trimethyl-	6.16	19	T J N
538-93-2	Benzene, (2-methylpropyl)-	9.91	2.1	T J N
99-87-6	Benzene, 1-methyl-4-(1-methylethyl)-	10.97	3.1	T J N
4912-92-9	1H-Indene, 2,3-dihydro-1,1-dimethyl-	11.14	2.8	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-30 | Lab Sample ID: 240-27760-2

Matrix: Water | Lab File ID: UXX6725.D

Analysis Method: 8260B | Date Collected: 08/08/2013 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 19:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	2.1		1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	20		10	1.1
71-43-2	Benzene	0.98	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.6		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	0.78	J	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-30 Lab Sample ID: 240-27760-2

Matrix: Water Lab File ID: UXX6725.D

Analysis Method: 8260B Date Collected: 08/08/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 19:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.46	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	16		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.98	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	0.78	J	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	6.5		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	17		1.0	0.22
75-65-0	tert-Butyl alcohol	12	J *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-30 Lab Sample ID: 240-27760-2

Matrix: Water Lab File ID: UXX6725.D

Analysis Method: 8260B Date Collected: 08/08/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 19:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-30 Lab Sample ID: 240-27760-2

Matrix: Water Lab File ID: UXX6725.D

Analysis Method: 8260B Date Collected: 08/08/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 19:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 4 TIC Result Total: 213.58

CAS NO.	COMPOUND NAME	RT	RESULT	Q
109-99-9	Tetrahydrofuran	4.49	0.86	J
110-82-7	Cyclohexane	4.74	0.12	J
123-91-1	1,4-Dioxane	5.80	210	
5557-98-2	2-Heptene, 2,6-dimethyl-	10.23	2.6	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-35 Lab Sample ID: 240-27760-3

Matrix: Water Lab File ID: UXX6726.D

Analysis Method: 8260B Date Collected: 08/08/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 19:26

Soil Aliquot Vol: Dilution Factor: 5.26

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.3	U *	5.3	1.2
71-55-6	1,1,1-Trichloroethane	5.3	U	5.3	1.2
79-34-5	1,1,2,2-Tetrachloroethane	5.3	U	5.3	0.95
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.3	U	5.3	1.5
75-34-3	1,1-Dichloroethane	5.3	U	5.3	0.79
75-35-4	1,1-Dichloroethene	5.3	U	5.3	1.0
563-58-6	1,1-Dichloropropene	5.3	U	5.3	0.68
87-61-6	1,2,3-Trichlorobenzene	5.3	U	5.3	0.89
96-18-4	1,2,3-Trichloropropane	5.3	U	5.3	2.3
526-73-8	1,2,3-Trimethylbenzene	26	U	26	0.031
120-82-1	1,2,4-Trichlorobenzene	5.3	U	5.3	0.79
95-63-6	1,2,4-Trimethylbenzene	5.3	U	5.3	0.63
96-12-8	1,2-Dibromo-3-Chloropropane	11	U	11	3.5
95-50-1	1,2-Dichlorobenzene	5.3	U	5.3	0.68
107-06-2	1,2-Dichloroethane	4.8	J	5.3	1.2
78-87-5	1,2-Dichloropropane	5.3	U	5.3	0.95
541-73-1	1,3-Dichlorobenzene	5.3	U	5.3	0.74
142-28-9	1,3-Dichloropropane	5.3	U	5.3	0.84
106-46-7	1,4-Dichlorobenzene	5.3	U	5.3	0.68
594-20-7	2,2-Dichloropropane	5.3	U	5.3	0.68
110-75-8	2-Chloroethyl vinyl ether	53	U	53	5.2
95-49-8	2-Chlorotoluene	5.3	U	5.3	0.58
591-78-6	2-Hexanone	53	U	53	2.2
108-86-1	Bromobenzene	5.3	U	5.3	0.68
74-97-5	Bromochloromethane	5.3	U	5.3	1.5
106-43-4	4-Chlorotoluene	5.3	U	5.3	0.95
99-87-6	p-Isopropyltoluene	5.3	U	5.3	0.63
67-64-1	Acetone	21	J	53	5.8
71-43-2	Benzene	3.3	J	5.3	0.68
75-25-2	Bromoform	5.3	U	5.3	3.4
74-83-9	Bromomethane	5.3	U	5.3	2.2
75-15-0	Carbon disulfide	3.4	J	5.3	0.68
56-23-5	Carbon tetrachloride	5.3	U	5.3	0.68
108-90-7	Chlorobenzene	1.4	J	5.3	0.79
75-00-3	Chloroethane	5.3	U	5.3	1.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-35 | Lab Sample ID: 240-27760-3

Matrix: Water | Lab File ID: UXX6726.D

Analysis Method: 8260B | Date Collected: 08/08/2013 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 19:26

Soil Aliquot Vol: | Dilution Factor: 5.26

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.9	J	5.3	0.84
74-87-3	Chloromethane	5.3	U	5.3	1.6
156-59-2	cis-1,2-Dichloroethene	42		5.3	0.89
10061-01-5	cis-1,3-Dichloropropene	5.3	U	5.3	0.74
87-68-3	Hexachlorobutadiene	5.3	U	5.3	1.6
74-95-3	Dibromomethane	5.3	U	5.3	1.5
75-27-4	Bromodichloromethane	5.3	U	5.3	0.79
75-71-8	Dichlorodifluoromethane	5.3	U	5.3	1.6
100-41-4	Ethylbenzene	5.3	U	5.3	0.89
106-93-4	1,2-Dibromoethane	5.3	U	5.3	1.3
108-20-3	Diisopropyl ether	53	U	53	7.9
91-20-3	Naphthalene	5.3	U	5.3	1.3
179601-23-1	m-Xylene & p-Xylene	11	U	11	1.3
104-51-8	n-Butylbenzene	5.3	U	5.3	0.63
98-82-8	Isopropylbenzene	5.3	U	5.3	0.68
103-65-1	n-Propylbenzene	5.3	U	5.3	0.74
78-93-3	2-Butanone	53	U	53	3.0
108-10-1	4-Methyl-2-pentanone	53	U	53	1.7
135-98-8	sec-Butylbenzene	5.3	U	5.3	0.68
1634-04-4	Methyl tert-butyl ether	5.3	U	5.3	0.89
994-05-8	Tert-amyl-methyl ether (TAME)	26	U	26	0.35
75-09-2	Methylene Chloride	5.3	U	5.3	1.7
95-47-6	o-Xylene	0.76	J	5.3	0.74
100-42-5	Styrene	5.3	U	5.3	0.58
637-92-3	Ethyl-t-butyl ether (ETBE)	26	U	26	0.58
98-06-6	tert-Butylbenzene	5.3	U	5.3	0.68
127-18-4	Tetrachloroethene	5.3	U	5.3	1.5
108-88-3	Toluene	4.6	J	5.3	0.68
156-60-5	trans-1,2-Dichloroethene	3.6	J	5.3	1.0
10061-02-6	trans-1,3-Dichloropropene	5.3	U	5.3	1.0
79-01-6	Trichloroethene	32		5.3	0.89
75-69-4	Trichlorofluoromethane	5.3	U	5.3	1.1
108-05-4	Vinyl acetate	11	U	11	1.0
75-01-4	Vinyl chloride	95		5.3	1.2
75-65-0	tert-Butyl alcohol	42	J *	260	21
1330-20-7	Xylenes, Total	0.76	J	11	0.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-35 | Lab Sample ID: 240-27760-3

Matrix: Water | Lab File ID: UXX6726.D

Analysis Method: 8260B | Date Collected: 08/08/2013 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 19:26

Soil Aliquot Vol: | Dilution Factor: 5.26

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	5.3	U *	5.3	0.95

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-35 Lab Sample ID: 240-27760-3

Matrix: Water Lab File ID: UXX6726.D

Analysis Method: 8260B Date Collected: 08/08/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 19:26

Soil Aliquot Vol: Dilution Factor: 5.26

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 3 TIC Result Total: 342.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
110-82-7	Cyclohexane	4.74	1.2	J
108-87-2	Methylcyclohexane	5.71	1.0	J
123-91-1	1,4-Dioxane	5.82	340	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-40 | Lab Sample ID: 240-27760-4

Matrix: Water | Lab File ID: UXX6744.D

Analysis Method: 8260B | Date Collected: 08/08/2013 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2013 02:32

Soil Aliquot Vol: | Dilution Factor: 1.82

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.8	U	1.8	0.42
71-55-6	1,1,1-Trichloroethane	1.8	U	1.8	0.40
79-34-5	1,1,2,2-Tetrachloroethane	1.8	U	1.8	0.33
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.8	U	1.8	0.51
75-34-3	1,1-Dichloroethane	1.8	U	1.8	0.27
75-35-4	1,1-Dichloroethene	1.8	U	1.8	0.35
563-58-6	1,1-Dichloropropene	1.8	U	1.8	0.24
87-61-6	1,2,3-Trichlorobenzene	1.8	U	1.8	0.31
96-18-4	1,2,3-Trichloropropane	1.8	U	1.8	0.78
526-73-8	1,2,3-Trimethylbenzene	9.1	U	9.1	0.011
120-82-1	1,2,4-Trichlorobenzene	1.8	U	1.8	0.27
95-63-6	1,2,4-Trimethylbenzene	1.8	U	1.8	0.22
96-12-8	1,2-Dibromo-3-Chloropropane	3.6	U	3.6	1.2
95-50-1	1,2-Dichlorobenzene	1.8	U	1.8	0.24
107-06-2	1,2-Dichloroethane	3.6		1.8	0.40
78-87-5	1,2-Dichloropropane	1.8	U	1.8	0.33
541-73-1	1,3-Dichlorobenzene	1.8	U	1.8	0.25
142-28-9	1,3-Dichloropropane	1.8	U	1.8	0.29
106-46-7	1,4-Dichlorobenzene	1.8	U	1.8	0.24
594-20-7	2,2-Dichloropropane	1.8	U	1.8	0.24
110-75-8	2-Chloroethyl vinyl ether	18	U	18	1.8
95-49-8	2-Chlorotoluene	1.8	U	1.8	0.20
591-78-6	2-Hexanone	18	U	18	0.75
108-86-1	Bromobenzene	1.8	U	1.8	0.24
74-97-5	Bromochloromethane	1.8	U	1.8	0.53
106-43-4	4-Chlorotoluene	1.8	U	1.8	0.33
99-87-6	p-Isopropyltoluene	1.8	U	1.8	0.22
67-64-1	Acetone	51		18	2.0
71-43-2	Benzene	1.3	J	1.8	0.24
75-25-2	Bromoform	1.8	U	1.8	1.2
74-83-9	Bromomethane	1.8	U	1.8	0.75
75-15-0	Carbon disulfide	2.3		1.8	0.24
56-23-5	Carbon tetrachloride	1.8	U	1.8	0.24
108-90-7	Chlorobenzene	1.8	U	1.8	0.27
75-00-3	Chloroethane	1.8	U	1.8	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-40 | Lab Sample ID: 240-27760-4

Matrix: Water | Lab File ID: UXX6744.D

Analysis Method: 8260B | Date Collected: 08/08/2013 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2013 02:32

Soil Aliquot Vol: | Dilution Factor: 1.82

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	2.9		1.8	0.29
74-87-3	Chloromethane	1.8	U	1.8	0.55
156-59-2	cis-1,2-Dichloroethene	26		1.8	0.31
10061-01-5	cis-1,3-Dichloropropene	1.8	U	1.8	0.25
87-68-3	Hexachlorobutadiene	1.8	U	1.8	0.55
74-95-3	Dibromomethane	1.8	U	1.8	0.51
75-27-4	Bromodichloromethane	0.50	J	1.8	0.27
75-71-8	Dichlorodifluoromethane	1.8	U	1.8	0.56
100-41-4	Ethylbenzene	1.8	U	1.8	0.31
106-93-4	1,2-Dibromoethane	1.8	U	1.8	0.44
108-20-3	Diisopropyl ether	18	U	18	2.7
91-20-3	Naphthalene	1.8	U	1.8	0.44
179601-23-1	m-Xylene & p-Xylene	3.6	U	3.6	0.44
104-51-8	n-Butylbenzene	1.8	U	1.8	0.22
98-82-8	Isopropylbenzene	1.8	U	1.8	0.24
103-65-1	n-Propylbenzene	1.8	U	1.8	0.25
78-93-3	2-Butanone	18	U	18	1.0
108-10-1	4-Methyl-2-pentanone	18	U	18	0.58
135-98-8	sec-Butylbenzene	1.8	U	1.8	0.24
1634-04-4	Methyl tert-butyl ether	1.8	U	1.8	0.31
994-05-8	Tert-amyl-methyl ether (TAME)	9.1	U	9.1	0.12
75-09-2	Methylene Chloride	1.8	U	1.8	0.60
95-47-6	o-Xylene	1.8	U	1.8	0.25
100-42-5	Styrene	1.8	U	1.8	0.20
637-92-3	Ethyl-t-butyl ether (ETBE)	9.1	U	9.1	0.20
98-06-6	tert-Butylbenzene	1.8	U	1.8	0.24
127-18-4	Tetrachloroethene	1.8	U	1.8	0.53
108-88-3	Toluene	2.4		1.8	0.24
156-60-5	trans-1,2-Dichloroethene	2.2		1.8	0.35
10061-02-6	trans-1,3-Dichloropropene	1.8	U	1.8	0.35
79-01-6	Trichloroethene	21		1.8	0.31
75-69-4	Trichlorofluoromethane	1.8	U	1.8	0.38
108-05-4	Vinyl acetate	3.6	U	3.6	0.35
75-01-4	Vinyl chloride	63		1.8	0.40
75-65-0	tert-Butyl alcohol	22	J B *	91	7.1
1330-20-7	Xylenes, Total	3.6	U	3.6	0.25

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-40 | Lab Sample ID: 240-27760-4

Matrix: Water | Lab File ID: UXX6744.D

Analysis Method: 8260B | Date Collected: 08/08/2013 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2013 02:32

Soil Aliquot Vol: | Dilution Factor: 1.82

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.8	U	1.8	0.33

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: DR-DPT-38-40 | Lab Sample ID: 240-27760-4

Matrix: Water | Lab File ID: UXX6744.D

Analysis Method: 8260B | Date Collected: 08/08/2013 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2013 02:32

Soil Aliquot Vol: | Dilution Factor: 1.82

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97692 | Units: ug/L

Number TICs Found: 7 | TIC Result Total: 253.9

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	3.5	T J N
110-82-7	Cyclohexane	4.75	0.37	J
71-36-3	n-Butanol	5.41	27	J
108-87-2	Methylcyclohexane	5.69	0.26	J
123-91-1	1,4-Dioxane	5.81	220	
79-00-5	1,1,2-Trichloroethane	6.96	0.57	J
1638-26-2	Cyclopentane, 1,1-dimethyl-	10.23	2.2	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: TB-080813 Lab Sample ID: 240-27760-5

Matrix: Water Lab File ID: UXX6745.D

Analysis Method: 8260B Date Collected: 08/08/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2013 02:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	2.1	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: TB-080813 Lab Sample ID: 240-27760-5

Matrix: Water Lab File ID: UXX6745.D

Analysis Method: 8260B Date Collected: 08/08/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2013 02:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: TB-080813 | Lab Sample ID: 240-27760-5

Matrix: Water | Lab File ID: UXX6745.D

Analysis Method: 8260B | Date Collected: 08/08/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2013 02:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: TB-080813 Lab Sample ID: 240-27760-5

Matrix: Water Lab File ID: UXX6745.D

Analysis Method: 8260B Date Collected: 08/08/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2013 02:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97692 Units: ug/L

Number TICs Found: 3 TIC Result Total: 44.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	1.5	T J N
71-36-3	n-Butanol	5.40	13	J
123-91-1	1,4-Dioxane	5.81	30	J

APPENDIX C

SUPPORT DOCUMENTATION

North Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
phone 330.497.9396 fax 330.497.077

240-27760 Chain of Custody

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/8/13	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 5 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			Sampler: S. Cameron
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT- 38-15	8/8/2013	0950	GW	Water	3		x	
DR-DPT- 38-30	8/8/2013	1115	GW	Water	3		x	
DR-DPT- 38-35	8/8/2013	1140	GW	Water	3		x	
DR-DPT- 38-40	8/8/2013	1200	GW	Water	3		x	
DR-DPT-	8/8/2013		GW	Water	3		x	
DR-DPT-	8/8/2013		GW	Water	3		x	
DR-DPT-	8/8/2013		GW	Water	3		x	
DR-DPT-	8/8/2013		GW	Water	3		x	
DR-DPT-	8/8/2013		GW	Water	3		x	
DR-DPT-	8/8/2013		GW	Water	3		x	
DR-DPT-	8/8/2013		GW	Water	3		x	
TB-080813	8/8/2013		GW	Water	2		x	

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Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: 5 day TAT

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/8/13/1600		TestAmerica	8/8/13 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	8/8/13/1630		TA	8-9-13 900
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-27760-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/09/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.0 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-38-15 (240-27760-1), DR-DPT-38-30 (240-27760-2), DR-DPT-38-35 (240-27760-3), DR-DPT-38-40 (240-27760-4) and TB-080813 (240-27760-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/15/2013 and 08/16/2013.

Methylene Chloride was detected in method blank MB 240-97617/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

tert-Butyl alcohol was detected in method blank MB 240-97692/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-38-35 (240-27760-3)[5.26X] and DR-DPT-38-40 (240-27760-4)[1.82X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 97617 recovered outside control limits for the following analytes: Chlorodibromomethane and 1,1,1,2-Tetrachloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 97617 recovered outside control limits for the following analyte(s):
2-Methyl-2-propanol--has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

The laboratory control sample (LCS) for batch 97692 recovered outside control limits for the following analyte(s):
2-Methyl-2-propanol--has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

There was an MS/MSD analyzed in batch 97692 but could not be reported because the associated sample needed reanalyzed in a different batch.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX10\20130815-22525.b\UXX6726.D
Lims ID: 240-27760-B-3 Client ID: DR-DPT-38-35
Inject. Date: 15-Aug-2013 19:26:30 Dil. Factor: 5.2600
Sample Type: Client
Sample ID: 240-0022525-018
Misc. Info.:
Operator: 1644 Instrument ID: A3UX10
Purge Vol: 5.000 mL ALS Bottle#: 17
Lims Batch ID: 97617 Lims Sample ID: 18
Detector: MS SCAN

DR-DPT 38-35

Method: \\NCChrom\ChromData\A3UX10\20130815-22525.b\8260_10.m
Last Update: 16-Aug-2013 10:12:20 Calib Date: 02-Jul-2013 14:41:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX10\20130702-21321.b\UXX5745.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK015

First Level Reviewer: williamsla Date: 16-Aug-2013 09:34:47

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.200	5.197	0.003	99	1629873	10.0	
* 2 Chlorobenzene-d5	117	7.874	7.871	0.003	88	1090122	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.110	10.120	-0.010	97	524138	10.0	
$ 5 Dibromofluoromethane (Surr)	113	4.632	4.629	0.003	59	357271	8.82	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.916	4.913	0.003	0	452293	9.29	
$ 7 Toluene-d8 (Surr)	98	6.561	6.558	0.003	95	1332122	9.07	
$ 8 4-Bromofluorobenzene (Surr)	95	8.986	8.984	0.002	89	453816	7.58	
12 Dichlorodifluoromethane	85		1.564					
13 Chloromethane	50		1.695					9
14 Vinyl chloride	62	1.804	1.789	0.015	99	1052801	18.0	
~~16 Bromomethane~~	94		2.085					
17 Chloroethane	64		2.168					9
19 Trichlorofluoromethane	101		2.393					
23 1,1-Dichloroethene	96		2.807					9
24 Acetone	43	2.821	2.819	0.002	92	47419	4.08	
25 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.831					
27 Carbon disulfide	76	2.999	2.996	0.003	95	95202	0.6422	
31 Methylene Chloride	84		3.186					
32 2-Methyl-2-propanol	59	3.247	3.257	-0.010	54	2183	8.06	
34 trans-1,2-Dichloroethene	96	3.425	3.422	0.003	92	36773	0.6854	
35 Methyl tert-butyl ether	73		3.422					
37 1,1-Dichloroethane	63		3.765					9
38 Vinyl acetate	86		3.789					
39 Isopropyl ether	87		3.825					
41 Tert-butyl ethyl ether	59		4.120					9
42 2-Butanone (MEK)	43		4.239					9
43 cis-1,2-Dichloroethene	96	4.241	4.239	0.002	84	435583	7.91	
44 2,2-Dichloropropane	77		4.250					9
48 Chlorobromomethane	128		4.440					
50 Chloroform	83	4.490	4.487	0.003	75	29572	0.3678	

$\frac{1052801 \text{ Sam}}{1629873 \text{ Int}} \times \frac{10 \text{ Int}}{0.3595 \text{ Cal}} \times 5.26 \text{ DF} = 94.5 \frac{\text{ug}}{\text{L}}$ reported as 95 ug/L

HOLDTIME

SDG 240-27719-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-42-10	240-27831-1	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-31-35	240-28158-2	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-31-40	240-28158-3	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-31-45	240-28158-4	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-38-15	240-27760-1	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-30	240-27760-2	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-35	240-27760-3	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-40	240-27760-4	NM	08/08/2013	08/16/2013	08/16/2013	8	0	8
OV	UG/L	DR-DPT-40-20	240-27719-4	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-25	240-27719-5	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-30	240-27719-6	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-35	240-27719-7	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-40	240-27719-8	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-41-35	240-27719-1	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-31-30	240-28158-1	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-43B-10	240-28158-5	NM	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	TB-082013	240-28158-8	TB	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	TB-080913	240-27831-7	TB	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	TB-080813	240-27760-5	NM	08/08/2013	08/16/2013	08/16/2013	8	0	8
OV	UG/L	TB-080713	240-27719-9	TB	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-70-20	240-28270-1	NM	08/22/2013	08/28/2013	08/28/2013	6	0	6
OV	UG/L	DR-DPT-41-40	240-27719-2	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-43B-15	240-28158-6	NM	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	DR-DPT-41-45	240-27719-3	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-42-35	240-27831-6	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-30	240-27831-5	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-25	240-27831-4	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-20	240-27831-3	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-15	240-27831-2	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	TB-082213	240-28270-2	TB	08/22/2013	08/28/2013	08/28/2013	6	0	6
OV	UG/L	DR-DPT-43B-20	240-28158-7	NM	08/20/2013	08/29/2013	08/29/2013	9	0	9

TestAmerica Canton Sample Receipt Form/Narrative Login # : 27760
Canton Facility

Client Tera Tech Site Name _____ Cooler unpacked by: Derek D. Green

Cooler Received on 8-9-13 Opened on 8-9-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF −1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. 20 °C	Corrected Cooler Temp. 20 °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab File ID: UX6714.D Lab Sample ID: MB 240-97617/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/15/2013 14:32

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97617/4	UX6712.D	08/15/2013 13:49
DR-DPT-38-15	240-27760-1	UXX6724.D	08/15/2013 18:43
DR-DPT-38-30	240-27760-2	UXX6725.D	08/15/2013 19:05
DR-DPT-38-35	240-27760-3	UXX6726.D	08/15/2013 19:26
	240-27719-B-1 MS	UXX6735.D	08/15/2013 22:38
	240-27719-B-1 MSD	UXX6736.D	08/15/2013 22:59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97617/6

Matrix: Water | Lab File ID: UX6714.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 14:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97617/6

Matrix: Water | Lab File ID: UX6714.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 14:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.10		1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97617/6

Matrix: Water | Lab File ID: UX6714.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2013 14:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97617 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97617/6

Matrix: Water Lab File ID: UX6714.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2013 14:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97617 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX6712.D

Lab ID: LCS 240-97617/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.7	117	72-116	*
1,1,1-Trichloroethane	10.0	10.8	108	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.67	97	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.6	106	74-151	
1,1-Dichloroethane	10.0	9.56	96	82-115	
1,1-Dichloroethene	10.0	8.85	89	78-131	
1,1-Dichloropropene	10.0	9.69	97	83-114	
1,2,3-Trichlorobenzene	10.0	8.20	82	54-126	
1,2,3-Trichloropropane	10.0	9.55	96	73-129	
1,2,3-Trimethylbenzene	10.0	11.1	111	70-130	
1,2,4-Trichlorobenzene	10.0	7.95	80	48-135	
1,2,4-Trimethylbenzene	10.0	10.0	100	76-120	
1,2-Dibromo-3-Chloropropane	10.0	11.8	118	42-136	
1,2-Dichlorobenzene	10.0	9.73	97	81-110	
1,2-Dichloroethane	10.0	10.8	108	71-127	
1,2-Dichloropropane	10.0	10.0	100	81-115	
1,3-Dichlorobenzene	10.0	9.08	91	80-110	
1,3-Dichloropropane	10.0	10.0	100	79-116	
1,4-Dichlorobenzene	10.0	9.09	91	82-110	
2,2-Dichloropropane	10.0	12.1	121	50-129	
2-Chloroethyl vinyl ether	10.0	8.88 J	89	52-131	
2-Chlorotoluene	10.0	9.43	94	76-116	
2-Hexanone	20.0	18.8	94	55-133	
Bromobenzene	10.0	8.81	88	76-115	
Bromochloromethane	10.0	8.83	88	77-120	
4-Chlorotoluene	10.0	9.03	90	77-115	
p-Isopropyltoluene	10.0	9.87	99	74-120	
Acetone	20.0	18.0	90	43-136	
Benzene	10.0	9.51	95	83-112	
Bromoform	10.0	11.4	114	40-131	
Bromomethane	10.0	6.15	61	11-185	
Carbon disulfide	10.0	9.72	97	62-142	
Carbon tetrachloride	10.0	12.8	128	66-128	
Chlorobenzene	10.0	9.10	91	85-110	
Chloroethane	10.0	5.95	60	25-153	
Chloroform	10.0	9.61	96	79-117	
Chloromethane	10.0	8.48	85	44-126	
cis-1,2-Dichloroethene	10.0	8.92	89	80-113	
cis-1,3-Dichloropropene	10.0	10.7	107	61-115	
Hexachlorobutadiene	10.0	7.13	71	36-134	
Dibromomethane	10.0	10.0	100	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX6712.D

Lab ID: LCS 240-97617/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.6	116	72-121	
Dichlorodifluoromethane	10.0	7.80	78	19-129	
Ethylbenzene	10.0	9.33	93	83-112	
1,2-Dibromoethane	10.0	9.32	93	79-113	
Diisopropyl ether	10.0	8.93 J	89	77-118	
Naphthalene	10.0	8.18	82	32-141	
m-Xylene & p-Xylene	20.0	18.3	92	83-113	
n-Butylbenzene	10.0	9.77	98	66-125	
Isopropylbenzene	10.0	9.25	93	75-114	
n-Propylbenzene	10.0	9.75	97	74-121	
2-Butanone	20.0	17.6	88	60-126	
4-Methyl-2-pentanone	20.0	20.5	102	63-128	
sec-Butylbenzene	10.0	9.51	95	70-117	
Methyl tert-butyl ether	10.0	8.98	90	52-144	
Methylene Chloride	10.0	10.1	101	66-131	
o-Xylene	10.0	9.18	92	83-113	
Styrene	10.0	8.69	87	79-114	
tert-Butylbenzene	10.0	10.3	103	71-115	
Tetrachloroethene	10.0	9.16	92	79-114	
Toluene	10.0	9.82	98	84-111	
trans-1,2-Dichloroethene	10.0	8.90	89	83-117	
trans-1,3-Dichloropropene	10.0	11.5	115	58-117	
Trichloroethene	10.0	9.07	91	76-117	
Trichlorofluoromethane	10.0	9.00	90	49-157	
Vinyl acetate	10.0	8.19	82	46-161	
Vinyl chloride	10.0	8.17	82	53-127	
tert-Butyl alcohol	200	108	54	70-130	*
Xylenes, Total	30.0	27.5	92	83-112	
Dibromochloromethane	10.0	12.0	120	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Sample not in SDG

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6735.D

Lab ID: 240-27719-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	8330	830 U	9910	119	64-118	F
1,1,1-Trichloroethane	8330	830 U	9530	114	68-121	
1,1,2,2-Tetrachloroethane	8330	830 U	7280	87	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	8330	830 U	8680	104	70-152	
1,1-Dichloroethane	8330	830 U	8430	101	79-116	
1,1-Dichloroethene	8330	830 U	7850	94	74-135	
1,1-Dichloropropene	8330	830 U	8270	99	80-114	
1,2,3-Trichlorobenzene	8330	830 U	7000	84	45-129	
1,2,3-Trichloropropane	8330	830 U	7640	92	67-132	
1,2,3-Trimethylbenzene	8330	4200 U	9230	111	70-130	
1,2,4-Trichlorobenzene	8330	830 U	7100	85	38-138	
1,2,4-Trimethylbenzene	8330	830 U	8250	99	67-124	
1,2-Dibromo-3-Chloropropane	8330	1700 U	8270	99	32-139	
1,2-Dichlorobenzene	8330	830 U	8000	96	75-111	
1,2-Dichloroethane	8330	830 U	9570	115	68-129	
1,2-Dichloropropane	8330	830 U	8730	105	78-115	
1,3-Dichlorobenzene	8330	830 U	7570	91	73-110	
1,3-Dichloropropane	8330	830 U	8450	101	74-118	
1,4-Dichlorobenzene	8330	830 U	7470	90	75-110	
2,2-Dichloropropane	8330	830 U	10200	123	38-127	
2-Chloroethyl vinyl ether	8330	8300 U	7110 J	85	10-150	
2-Chlorotoluene	8330	830 U	7550	91	69-117	
2-Hexanone	16700	8300 U	15700	94	47-139	
Bromobenzene	8330	830 U	7070	85	71-116	
Bromochloromethane	8330	830 U	7810	94	73-121	
4-Chlorotoluene	8330	830 U	7160	86	71-116	
p-Isopropyltoluene	8330	830 U	8280	99	64-122	
Acetone	16700	8300 U	13500	81	33-145	
Benzene	8330	830 U	8160	98	72-121	
Bromoform	8330	830 U	9580	115	32-128	
Bromomethane	8330	830 U	5310	64	10-186	
Carbon disulfide	8330	830 U	8940	107	57-147	
Carbon tetrachloride	8330	830 U	11200	134	59-129	F
Chlorobenzene	8330	830 U	7880	95	80-110	
Chloroethane	8330	830 U	5760	69	21-165	
Chloroform	8330	830 U	8660	104	76-118	
Chloromethane	8330	830 U	6180	74	33-132	
cis-1,2-Dichloroethene	8330	1900	10900	107	70-120	
cis-1,3-Dichloropropene	8330	830 U	8680	104	51-110	
Hexachlorobutadiene	8330	830 U	6840	82	27-132	
Dibromomethane	8330	830 U	8350	100	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6735.D

Lab ID: 240-27719-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	8330	830 U	9960	119	67-120	
Dichlorodifluoromethane	8330	830 U	6580	79	17-128	
Ethylbenzene	8330	830 U	7920	95	75-116	
1,2-Dibromoethane	8330	830 U	7800	94	74-113	
Diisopropyl ether	8330	8300 U	7780 J	93	73-118	
Naphthalene	8330	830 U	6170	74	15-158	
m-Xylene & p-Xylene	16700	1700 U	15800	95	75-117	
n-Butylbenzene	8330	830 U	8420	101	56-127	
Isopropylbenzene	8330	830 U	8000	96	68-116	
n-Propylbenzene	8330	830 U	7880	95	64-124	
2-Butanone	16700	8300 U	14000	84	54-129	
4-Methyl-2-pentanone	16700	8300 U	16800	101	56-131	
sec-Butylbenzene	8330	830 U	7840	94	60-119	
Methyl tert-butyl ether	8330	830 U	7580	91	46-144	
Methylene Chloride	8330	830 U	8820	106	63-128	
o-Xylene	8330	830 U	8040	97	76-116	
Styrene	8330	830 U	7580	91	71-117	
tert-Butylbenzene	8330	830 U	7190	86	61-119	
Tetrachloroethene	8330	830 U	8070	97	70-117	
Toluene	8330	830 U	8670	104	78-114	
trans-1,2-Dichloroethene	8330	830 U	8120	97	80-119	
trans-1,3-Dichloropropene	8330	830 U	9310	112	46-116	
Trichloroethene	8330	28000	44300	192	66-120	E F
Trichlorofluoromethane	8330	830 U	7350	88	46-157	
Vinyl acetate	8330	1700 U	7090	85	43-157	
Vinyl chloride	8330	830 U	7250	87	49-130	
tert-Butyl alcohol	167000	42000 U	83300	50	70-130	F
Xylenes, Total	25000	1700 U	23800	95	76-116	
Dibromochloromethane	8330	830 U	10300	123	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6736.D

Lab ID: 240-27719-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	8330	10400	125	5	30	64-118	F
1,1,1-Trichloroethane	8330	9880	119	4	30	68-121	
1,1,2,2-Tetrachloroethane	8330	7370	88	1	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	8330	8730	105	1	30	70-152	
1,1-Dichloroethane	8330	8520	102	1	30	79-116	
1,1-Dichloroethene	8330	7830	94	0	30	74-135	
1,1-Dichloropropene	8330	8490	102	3	30	80-114	
1,2,3-Trichlorobenzene	8330	7100	85	2	30	45-129	
1,2,3-Trichloropropane	8330	7260	87	5	30	67-132	
1,2,3-Trimethylbenzene	8330	9800	118	6	30	70-130	
1,2,4-Trichlorobenzene	8330	7230	87	2	30	38-138	
1,2,4-Trimethylbenzene	8330	8640	104	5	30	67-124	
1,2-Dibromo-3-Chloropropane	8330	9000	108	8	30	32-139	
1,2-Dichlorobenzene	8330	8410	101	5	30	75-111	
1,2-Dichloroethane	8330	9470	114	1	30	68-129	
1,2-Dichloropropane	8330	8830	106	1	30	78-115	
1,3-Dichlorobenzene	8330	7930	95	5	30	73-110	
1,3-Dichloropropane	8330	8550	103	1	30	74-118	
1,4-Dichlorobenzene	8330	7640	92	2	30	75-110	
2,2-Dichloropropane	8330	10200	122	0	30	38-127	
2-Chloroethyl vinyl ether	8330	6850 J	82	4	30	10-150	
2-Chlorotoluene	8330	7960	96	5	30	69-117	
2-Hexanone	16700	15500	93	1	30	47-139	
Bromobenzene	8330	7290	87	3	30	71-116	
Bromochloromethane	8330	7540	91	4	30	73-121	
4-Chlorotoluene	8330	7550	91	5	30	71-116	
p-Isopropyltoluene	8330	8760	105	6	30	64-122	
Acetone	16700	13100	78	3	30	33-145	
Benzene	8330	8410	101	3	30	72-121	
Bromoform	8330	9490	114	1	30	32-128	
Bromomethane	8330	5100	61	4	30	10-186	
Carbon disulfide	8330	9120	109	2	30	57-147	
Carbon tetrachloride	8330	11500	139	3	30	59-129	F
Chlorobenzene	8330	7980	96	1	30	80-110	
Chloroethane	8330	5490	66	5	30	21-165	
Chloroform	8330	8650	104	0	30	76-118	
Chloromethane	8330	6100	73	1	30	33-132	
cis-1,2-Dichloroethene	8330	10700	105	2	30	70-120	
cis-1,3-Dichloropropene	8330	8850	106	2	30	51-110	
Hexachlorobutadiene	8330	7120	85	4	30	27-132	
Dibromomethane	8330	8470	102	1	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6736.D

Lab ID: 240-27719-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	8330	10000	121	1	30	67-120	F
Dichlorodifluoromethane	8330	6340	76	4	30	17-128	
Ethylbenzene	8330	8360	100	5	30	75-116	
1,2-Dibromoethane	8330	7970	96	2	30	74-113	
Diisopropyl ether	8330	7760 J	93	0	30	73-118	
Naphthalene	8330	6550	79	6	30	15-158	
m-Xylene & p-Xylene	16700	16300	98	3	30	75-117	
n-Butylbenzene	8330	8740	105	4	30	56-127	
Isopropylbenzene	8330	8460	101	6	30	68-116	
n-Propylbenzene	8330	8240	99	4	30	64-124	
2-Butanone	16700	14400	86	2	30	54-129	
4-Methyl-2-pentanone	16700	16500	99	1	30	56-131	
sec-Butylbenzene	8330	8250	99	5	30	60-119	
Methyl tert-butyl ether	8330	7760	93	2	30	46-144	
Methylene Chloride	8330	8700	104	1	30	63-128	
o-Xylene	8330	8420	101	5	30	76-116	
Styrene	8330	7820	94	3	30	71-117	
tert-Butylbenzene	8330	7730	93	7	30	61-119	
Tetrachloroethene	8330	8450	101	5	30	70-117	
Toluene	8330	8960	108	3	30	78-114	
trans-1,2-Dichloroethene	8330	8080	97	0	30	80-119	
trans-1,3-Dichloropropene	8330	9310	112	0	30	46-116	
Trichloroethene	8330	46400	217	5	30	66-120	E F
Trichlorofluoromethane	8330	7020	84	4	30	46-157	
Vinyl acetate	8330	7610	91	7	30	43-157	
Vinyl chloride	8330	7490	90	3	30	49-130	
tert-Butyl alcohol	167000	97600	59	16	30	70-130	F
Xylenes, Total	25000	24700	99	4	30	76-116	
Dibromochloromethane	8330	10400	124	1	30	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab File ID: UXX6741.D Lab Sample ID: MB 240-97692/6

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/16/2013 01:28

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97692/4	UXX6739.D	08/16/2013 00:46
DR-DPT-38-40	240-27760-4	UXX6744.D	08/16/2013 02:32
TB-080813	240-27760-5	UXX6745.D	08/16/2013 02:53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97692/6

Matrix: Water | Lab File ID: UXX6741.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2013 01:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27760-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97692/6

Matrix: Water | Lab File ID: UXX6741.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2013 01:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	8.04	J	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97692/6

Matrix: Water Lab File ID: UXX6741.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2013 01:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97692/6

Matrix: Water Lab File ID: UXX6741.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2013 01:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97692 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6739.D

Lab ID: LCS 240-97692/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.1	111	72-116	
1,1,1-Trichloroethane	10.0	10.8	108	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.27	83	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.63	96	74-151	
1,1-Dichloroethane	10.0	9.13	91	82-115	
1,1-Dichloroethene	10.0	8.71	87	78-131	
1,1-Dichloropropene	10.0	9.10	91	83-114	
1,2,3-Trichlorobenzene	10.0	7.27	73	54-126	
1,2,3-Trichloropropane	10.0	7.83	78	73-129	
1,2,3-Trimethylbenzene	10.0	10.2	102	70-130	
1,2,4-Trichlorobenzene	10.0	7.48	75	48-135	
1,2,4-Trimethylbenzene	10.0	9.14	91	76-120	
1,2-Dibromo-3-Chloropropane	10.0	9.49	95	42-136	
1,2-Dichlorobenzene	10.0	8.95	89	81-110	
1,2-Dichloroethane	10.0	10.2	102	71-127	
1,2-Dichloropropane	10.0	9.73	97	81-115	
1,3-Dichlorobenzene	10.0	8.35	83	80-110	
1,3-Dichloropropane	10.0	9.50	95	79-116	
1,4-Dichlorobenzene	10.0	8.20	82	82-110	
2,2-Dichloropropane	10.0	11.0	110	50-129	
2-Chloroethyl vinyl ether	10.0	8.27 J	83	52-131	
2-Chlorotoluene	10.0	8.53	85	76-116	
2-Hexanone	20.0	17.6	88	55-133	
Bromobenzene	10.0	8.02	80	76-115	
Bromochloromethane	10.0	8.48	85	77-120	
4-Chlorotoluene	10.0	8.09	81	77-115	
p-Isopropyltoluene	10.0	8.93	89	74-120	
Acetone	20.0	15.7	78	43-136	
Benzene	10.0	9.18	92	83-112	
Bromoform	10.0	10.4	104	40-131	
Bromomethane	10.0	6.22	62	11-185	
Carbon disulfide	10.0	9.67	97	62-142	
Carbon tetrachloride	10.0	12.5	125	66-128	
Chlorobenzene	10.0	8.49	85	85-110	
Chloroethane	10.0	5.88	59	25-153	
Chloroform	10.0	9.47	95	79-117	
Chloromethane	10.0	7.68	77	44-126	
cis-1,2-Dichloroethene	10.0	8.60	86	80-113	
cis-1,3-Dichloropropene	10.0	9.95	99	61-115	
Hexachlorobutadiene	10.0	7.14	71	36-134	
Dibromomethane	10.0	9.45	95	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6739.D

Lab ID: LCS 240-97692/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.1	111	72-121	
Dichlorodifluoromethane	10.0	6.75	67	19-129	
Ethylbenzene	10.0	8.62	86	83-112	
1,2-Dibromoethane	10.0	8.76	88	79-113	
Diisopropyl ether	10.0	8.83 J	88	77-118	
Naphthalene	10.0	6.59	66	32-141	
m-Xylene & p-Xylene	20.0	16.9	85	83-113	
n-Butylbenzene	10.0	9.01	90	66-125	
Isopropylbenzene	10.0	8.62	86	75-114	
n-Propylbenzene	10.0	8.80	88	74-121	
2-Butanone	20.0	16.3	82	60-126	
4-Methyl-2-pentanone	20.0	18.2	91	63-128	
sec-Butylbenzene	10.0	8.56	86	70-117	
Methyl tert-butyl ether	10.0	8.35	84	52-144	
Methylene Chloride	10.0	8.65	86	66-131	
o-Xylene	10.0	8.72	87	83-113	
Styrene	10.0	8.22	82	79-114	
tert-Butylbenzene	10.0	8.12	81	71-115	
Tetrachloroethene	10.0	8.71	87	79-114	
Toluene	10.0	9.44	94	84-111	
trans-1,2-Dichloroethene	10.0	8.72	87	83-117	
trans-1,3-Dichloropropene	10.0	10.4	104	58-117	
Trichloroethene	10.0	8.52	85	76-117	
Trichlorofluoromethane	10.0	8.54	85	49-157	
Vinyl acetate	10.0	6.69	67	46-161	
Vinyl chloride	10.0	8.17	82	53-127	
tert-Butyl alcohol	200	93.9	47	70-130	*
Xylenes, Total	30.0	25.6	85	83-112	
Dibromochloromethane	10.0	11.1	111	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-38-15	240-27760-1	87	94	94	82
DR-DPT-38-30	240-27760-2	93	98	93	80
DR-DPT-38-35	240-27760-3	88	93	91	76
DR-DPT-38-40	240-27760-4	87	91	90	80
TB-080813	240-27760-5	87	94	92	75
	MB 240-97617/6	88	92	90	78
	MB 240-97692/6	87	91	90	76
	LCS 240-97617/4	88	99	94	87
	LCS 240-97692/4	87	97	94	87
	240-27719-B-1 MS	88	97	94	89
	240-27719-B-1 MSD	87	97	96	89

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab File ID: BFB5262.D BFB Injection Date: 05/28/2013

Instrument ID: A3UX10 BFB Injection Time: 13:16

Analysis Batch No.: 87495

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	52.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	98.2	
175	5.0 - 9.0 % of mass 174	6.7	(6.9)1
176	95.0 - 101.0 % of mass 174	93.5	(95.2)1
177	5.0 - 9.0 % of mass 176	6.1	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-87495/8	UXX4658.D	05/28/2013	15:50
	STDA9 240-87495/9	UXX4659.D	05/28/2013	16:11
	STDA9 240-87495/10	UXX4660.D	05/28/2013	16:32
	STDA9 240-87495/11	UXX4661.D	05/28/2013	16:53
	STDA9 240-87495/12	UXX4662.D	05/28/2013	17:15
	STDA9 240-87495/13	UXX4663.D	05/28/2013	17:36

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27760-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-87495/13	UXX4663.D
Level 2	STDA9 240-87495/12	UXX4662.D
Level 3	STDA9 240-87495/11	UXX4661.D
Level 4	STDA9 240-87495/10	UXX4660.D
Level 5	STDA9 240-87495/9	UXX4659.D
Level 6	STDA9 240-87495/8	UXX4658.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.9351 0.7200	0.8183	0.9669	0.7435	0.8522	Ave		0.8393				12.0		15.0			
Ethyl ether	0.3526 0.2524	0.2870	0.3279	0.2696	0.3339	Ave		0.3039				13.0		15.0			
3-Chloro-1-propene	0.1632 0.1612	0.1539	0.1609	0.1639	0.1752	Ave		0.1630				4.2		15.0			
Diisopropyl ether	0.2436 0.2941	0.2470	0.2427	0.2569	0.2816	Ave		0.2610				8.3		15.0			
2-Chloro-1,3-butadiene	0.4470 0.5692	0.4651	0.4677	0.4894	0.5665	Ave		0.5008				11.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.7474 0.9445	0.7998	0.8028	0.8547	0.9344	Ave		0.8473				9.3		15.0			
Propionitrile	0.0183 0.0231	0.0204	0.0273	0.0252	0.0240	Ave		0.0230				14.0		15.0			
Ethyl acetate	0.1590 0.1647	0.1524	0.2142	0.1705	0.1575	Ave		0.1697				13.0		15.0			
Methacrylonitrile	0.1102 0.1289	0.1319	0.1213	0.1325	0.1332	Ave		0.1263				7.1		15.0			
Isobutyl alcohol	0.0076 0.0057	0.0068	0.0075	0.0083	0.0073	Ave		0.0072				12.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6746 0.8156	0.6951	0.7166	0.7363	0.8000	Ave		0.7397				7.7		15.0			
n-Heptane	0.0683 0.0638	0.0609	0.0626	0.0604	0.0641	Ave		0.0634				4.5		15.0			
n-Butanol	0.0050	0.0051	0.0047	0.0072	0.0067	Lin	-0.083	0.0070							0.9920		0.9900
Methyl methacrylate	0.1815 0.1582	0.1559	0.1663	0.1628	0.1584	Ave		0.1639				5.8		15.0			
2-Nitropropane	0.0181 0.0163	0.0192	0.0150	0.0189	0.0149	Ave		0.0170				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27760-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0764 0.0641	0.0838	0.0840	0.0919	0.0886	Ave		0.0815				12.0		15.0			
1,2,3-Trimethylbenzene	2.1912 2.8021	2.2708	2.3128	2.4773	2.5677	Ave		2.4370				9.3		15.0			
2-Methylnaphthalene	1.0000 0.8868	0.9617	1.0575	1.0106	1.0960	Ave		1.0021				7.3		15.0			
n-Butyl acetate	0.1536 0.1805	0.1506	0.1861	0.1673	0.1756	Ave		0.1690				8.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab File ID: BFB5311.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX10 BFB Injection Time: 12:26

Analysis Batch No.: 92306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	86.8	
175	5.0 - 9.0 % of mass 174	6.2	(7.1)1
176	95.0 - 101.0 % of mass 174	86.3	(99.4)1
177	5.0 - 9.0 % of mass 176	5.5	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92306/2	UXX5740.D	07/02/2013	12:55
	STD8260 240-92306/3	UXX5741.D	07/02/2013	13:16
	STD8260 240-92306/4	UXX5742.D	07/02/2013	13:37
	STD8260 240-92306/5	UXX5743.D	07/02/2013	13:59
	STD8260 240-92306/6	UXX5744.D	07/02/2013	14:20
	STD8260 240-92306/7	UXX5745.D	07/02/2013	14:41
	ICV 240-92306/8	UXX5746.D	07/02/2013	15:03

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-27760-1 | Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 | Calibration End Date: 07/02/2013 14:41 | Calibration ID: 16139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92306/7	UXX5745.D
Level 2	STD8260 240-92306/6	UXX5744.D
Level 3	STD8260 240-92306/5	UXX5743.D
Level 4	STD8260 240-92306/4	UXX5742.D
Level 5	STD8260 240-92306/3	UXX5741.D
Level 6	STD8260 240-92306/2	UXX5740.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2977 0.2838	0.2577	0.2748	0.2528	0.2566	Ave		0.2706				6.6		15.0			
Chloromethane	0.4636 0.3885	0.4208	0.4187	0.3892	0.3928	Ave		0.4122			0.1000	7.1		15.0			
Vinyl chloride	0.3817 0.3523	0.3628	0.3635	0.3478	0.3489	Ave		0.3595				3.6		15.0			
Bromomethane	0.1738 0.1513	0.1661	0.1687	0.1771	0.1716	Ave		0.1681				5.4		15.0			
Chloroethane	0.2457 0.2275	0.2302	0.2304	0.2310	0.2376	Ave		0.2338				2.9		15.0			
Trichlorofluoromethane	0.3575 0.3719	0.3350	0.3525	0.3679	0.3820	Ave		0.3611				4.6		15.0			
Acrolein	0.0359 0.0431	0.0395	0.0411	0.0449	0.0462	Ave		0.0418				9.0		15.0			
1,1-Dichloroethene	0.3190 0.2928	0.2948	0.2913	0.2993	0.3010	Ave		0.2997				3.4		15.0			
Acetone	0.0740 0.0622	0.0776	0.0718	0.0736	0.0689	Ave		0.0713				7.4		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2062 0.2056	0.2022	0.2152	0.2144	0.2141	Ave		0.2096				2.7		15.0			
Iodomethane	0.4548 0.4274	0.4570	0.4317	0.4435	0.4405	Ave		0.4425				2.7		15.0			
Carbon disulfide	0.8923 0.9201	0.8872	0.8823	0.9357	0.9395	Ave		0.9095				2.8		15.0			
Acetonitrile	0.0167 0.0157	0.0178	0.0214	0.0237	0.0177	Qua	0.0061	0.0220	0						0.9940		0.9900
Methyl acetate	0.1969 0.2006	0.2062	0.2102	0.2165	0.2151	Ave		0.2076				3.8		15.0			
Methylene Chloride	0.7288 0.3199	0.5369	0.3954	0.3695	0.3438	Lin1	0.4289	0.3150							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27760-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0095 0.0104	0.0120	0.0145	0.0164	0.0130	Qua	-0.124	0.0171	0						0.9970		0.9900
Acrylonitrile	0.0905 0.1021	0.0983	0.1034	0.1068	0.1082	Ave		0.1016				6.4		15.0			
Methyl tert-butyl ether	0.7590 0.7679	0.7484	0.7512	0.8058	0.8208	Ave		0.7755				3.9		15.0			
trans-1,2-Dichloroethene	0.3358 0.3195	0.3308	0.3296	0.3254	0.3340	Ave		0.3292				1.8		15.0			
Hexane	0.0712 0.0637	0.0646	0.0668	0.0661	0.0671	Ave		0.0666				3.9		15.0			
1,1-Dichloroethane	0.5578 0.5246	0.5449	0.5273	0.5247	0.5369	Ave		0.5360			0.1000	2.5		15.0			
Vinyl acetate	0.0458 0.0460	0.0362	0.0441	0.0416	0.0442	Ave		0.0430				8.6		15.0			
2-Butanone	0.0991 0.0997	0.0968	0.1003	0.0974	0.1064	Ave		0.0999				3.4		15.0			
cis-1,2-Dichloroethene	0.3285 0.3322	0.3571	0.3290	0.3348	0.3453	Ave		0.3378				3.3		15.0			
2,2-Dichloropropane	0.2688 0.2905	0.2819	0.2776	0.2821	0.3040	Ave		0.2842				4.2		15.0			
Bromochloromethane	0.1521 0.1504	0.1506	0.1534	0.1499	0.1524	Ave		0.1515				0.9		15.0			
Tetrahydrofuran	0.0772 0.0698	0.0789	0.0767	0.0752	0.0716	Ave		0.0749				4.7		15.0			
Chloroform	0.4907 0.4900	0.5020	0.4890	0.4920	0.4962	Ave		0.4933				1.0		15.0			
1,1,1-Trichloroethane	0.4106 0.3726	0.3778	0.3695	0.3890	0.3851	Ave		0.3841				3.9		15.0			
Cyclohexane	0.5528 0.5297	0.5227	0.5349	0.5435	0.5429	Ave		0.5378				2.0		15.0			
1,1-Dichloropropene	0.3609 0.3601	0.3698	0.3664	0.3618	0.3692	Ave		0.3647				1.2		15.0			
Carbon tetrachloride	0.2610 0.2765	0.2656	0.2674	0.2761	0.2887	Ave		0.2725				3.7		15.0			
1,2-Dichloroethane	0.3474 0.3376	0.3583	0.3351	0.3500	0.3553	Ave		0.3473				2.7		15.0			
Benzene	1.1681 1.1119	1.1203	1.0964	1.1265	1.1340	Ave		1.1262				2.2		15.0			
Trichloroethene	0.3214 0.2780	0.2821	0.2900	0.2862	0.2843	Ave		0.2904				5.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27760-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloropropane	0.2454 0.2502	0.2581	0.2466	0.2561	0.2683	Ave		0.2541				3.4		15.0			
Methylcyclohexane	0.4919 0.4866	0.4934	0.4893	0.5052	0.5090	Ave		0.4959				1.8		15.0			
Dibromomethane	0.1412 0.1445	0.1506	0.1469	0.1502	0.1477	Ave		0.1468				2.4		15.0			
1,4-Dioxane	0.0014 0.0009	0.0011	0.0016	0.0020	0.0013	Ave		0.0014				26.0	*	15.0			
Bromodichloromethane	0.2890 0.3042	0.2800	0.2808	0.2937	0.3002	Ave		0.2913				3.4		15.0			
2-Chloroethyl vinyl ether	0.1328 0.1460	0.1268	0.1340	0.1400	0.1524	Ave		0.1387				6.8		15.0			
cis-1,3-Dichloropropene	0.3136 0.3654	0.2925	0.3234	0.3329	0.3608	Ave		0.3314				8.4		15.0			
4-Methyl-2-pentanone	0.1851 0.2307	0.1947	0.2072	0.2263	0.2356	Ave		0.2133				9.7		15.0			
Toluene	1.5717 1.7749	1.5621	1.5832	1.5919	1.6670	Ave		1.6251				5.1		15.0			
trans-1,3-Dichloropropene	0.3281 0.4436	0.3301	0.3424	0.3783	0.4187	Ave		0.3735				13.0		15.0			
Ethyl methacrylate	0.3469 0.4669	0.3719	0.3886	0.4197	0.4555	Ave		0.4082				12.0		15.0			
1,1,2-Trichloroethane	0.3016 0.3098	0.3088	0.3075	0.2994	0.3063	Ave		0.3056				1.4		15.0			
1,3-Dichloropropane	0.5636 0.5513	0.5066	0.5178	0.5309	0.5453	Ave		0.5359				4.0		15.0			
Tetrachloroethene	0.3249 0.3137	0.3109	0.3123	0.3155	0.3171	Ave		0.3157				1.6		15.0			
2-Hexanone	0.1784 0.2174	0.1735	0.1912	0.2073	0.2193	Ave		0.1979				10.0		15.0			
Dibromochloromethane	0.2360 0.2992	0.2543	0.2535	0.2707	0.2882	Ave		0.2670				8.9		15.0			
1,2-Dibromoethane	0.2969 0.3100	0.2975	0.2857	0.3063	0.3126	Ave		0.3015				3.3		15.0			
Chlorobenzene	1.1153 1.1370	1.1006	1.0569	1.0906	1.1038	Ave		1.1007			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2824 0.3322	0.2829	0.2918	0.3108	0.3194	Ave		0.3032				6.8		15.0			
Ethylbenzene	0.5758 0.6262	0.5863	0.6011	0.6014	0.6212	Ave		0.6020				3.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27760-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.7270 0.8215	0.7355	0.7415	0.7771	0.8022	Ave		0.7675				5.1		15.0			
o-Xylene	0.6796 0.7942	0.7047	0.7272	0.7639	0.7596	Ave		0.7382				5.7		15.0			
Styrene	1.1077 1.3987	1.1933	1.1883	1.2806	1.3155	Ave		1.2474				8.4		15.0			
Bromoform	0.1365 0.1881	0.1411	0.1461	0.1592	0.1772	Ave		0.1580			0.1000	13.0		15.0			
Isopropylbenzene	1.7511 2.0343	1.7718	1.8148	1.9530	1.9719	Ave		1.8828				6.3		15.0			
1,1,2,2-Tetrachloroethane	0.7449 0.7423	0.7656	0.8018	0.7659	0.7719	Ave		0.7654			0.3000	2.8		15.0			
Bromobenzene	0.8881 0.8401	0.8893	0.8519	0.8109	0.8110	Ave		0.8485				4.1		15.0			
1,2,3-Trichloropropane	0.2528 0.2485	0.2436	0.2471	0.2523	0.2472	Ave		0.2486				1.4		15.0			
trans-1,4-Dichloro-2-butene	0.1594 0.2065	0.1645	0.1863	0.1935	0.1991	Ave		0.1849				10.0		15.0			
n-Propylbenzene	0.8836 0.9348	0.9225	0.9442	0.9060	0.9061	Ave		0.9162				2.4		15.0			
2-Chlorotoluene	0.8471 0.8107	0.8035	0.8145	0.8068	0.8122	Ave		0.8158				1.9		15.0			
1,3,5-Trimethylbenzene	2.5762 2.8611	2.6002	2.7221	2.7556	2.8139	Ave		2.7215				4.2		15.0			
4-Chlorotoluene	0.8988 0.9081	0.8802	0.8823	0.8848	0.8823	Ave		0.8894				1.3		15.0			
tert-Butylbenzene	2.5038 2.4500	2.2239	2.4167	2.3292	2.3560	Ave		2.3799				4.2		15.0			
1,2,4-Trimethylbenzene	2.6043 2.8929	2.6775	2.7491	2.8000	2.8183	Ave		2.7570				3.8		15.0			
sec-Butylbenzene	3.0300 3.4431	3.1666	3.3039	3.3542	3.3916	Ave		3.2816				4.7		15.0			
1,3-Dichlorobenzene	1.5092 1.5056	1.5998	1.5710	1.5273	1.5059	Ave		1.5365				2.6		15.0			
p-Isopropyltoluene	2.4424 2.7807	2.5538	2.6635	2.6618	2.7434	Ave		2.6409				4.7		15.0			
1,4-Dichlorobenzene	1.7229 1.6045	1.6252	1.6225	1.5715	1.5870	Ave		1.6223				3.3		15.0			
n-Butylbenzene	2.0630 2.2382	2.0945	2.2927	2.3221	2.3183	Ave		2.2215				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27760-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4074 1.3553	1.4151	1.4245	1.4040	1.3915	Ave		1.3996				1.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0897 0.0915	0.0866	0.1008	0.1037	0.0925	Ave		0.0941				7.1		15.0			
1,3,5-Trichlorobenzene	0.9389 0.8233	0.9547	0.9599	0.9476	0.8670	Ave		0.9152				6.2		15.0			
1,2,4-Trichlorobenzene	0.8510 0.7437	0.8164	0.8427	0.8344	0.7483	Ave		0.8061				5.9		15.0			
Hexachlorobutadiene	0.2820 0.2374	0.2926	0.3073	0.2714	0.2509	Ave		0.2736				9.5		15.0			
Naphthalene	1.9175 1.8952	1.9376	2.0220	2.1068	1.9312	Ave		1.9684				4.1		15.0			
1,2,3-Trichlorobenzene	0.7657 0.6768	0.7464	0.7504	0.7341	0.6861	Ave		0.7266				5.0		15.0			
Dibromofluoromethane (Surr)	0.2502 0.2509	0.2370	0.2459	0.2475	0.2591	Ave		0.2484				2.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3197 0.2982	0.2804	0.2943	0.2970	0.3023	Ave		0.2987				4.3		15.0			
Toluene-d8 (Surr)	1.3686 1.4472	1.2543	1.3081	1.3123	1.3963	Ave		1.3478				5.2		15.0			
4-Bromofluorobenzene (Surr)	0.5086 0.5764	0.5161	0.5353	0.5693	0.5900	Ave		0.5493				6.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab File ID: BFB5348.D BFB Injection Date: 08/15/2013

Instrument ID: A3UX10 BFB Injection Time: 12:16

Analysis Batch No.: 97617

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.9	
75	30.0 - 60.0 % of mass 95	51.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.4	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	75.5	
175	5.0 - 9.0 % of mass 174	5.7	(7.5)1
176	95.0 - 101.0 % of mass 174	74.7	(99.0)1
177	5.0 - 9.0 % of mass 176	5.0	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97617/2	UX6710.D	08/15/2013	13:05
	CCV 240-97617/3	UX6711.D	08/15/2013	13:27
	LCS 240-97617/4	UX6712.D	08/15/2013	13:49
	MB 240-97617/6	UX6714.D	08/15/2013	14:32
DR-DPT-38-15	240-27760-1	UXX6724.D	08/15/2013	18:43
DR-DPT-38-30	240-27760-2	UXX6725.D	08/15/2013	19:05
DR-DPT-38-35	240-27760-3	UXX6726.D	08/15/2013	19:26
	240-27719-B-1 MS	UXX6735.D	08/15/2013	22:38
	240-27719-B-1 MSD	UXX6736.D	08/15/2013	22:59

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab Sample ID: CCVIS 240-97617/2 Calibration Date: 08/15/2013 13:05

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UX6710.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.3319		1.00	0.0100	22.6	50.0
Chloromethane	Ave	0.4122	0.4455	0.1000	1.00	0.0100	8.1	50.0
Vinyl chloride	Ave	0.3595	0.3844		1.00	0.0100	6.9	20.0
Bromomethane	Ave	0.1681	0.1472		1.00	0.0100	-12.5	50.0
Chloroethane	Ave	0.2338	0.1775		1.00	0.0100	-24.0	50.0
Trichlorofluoromethane	Ave	0.3611	0.4169		1.00	0.0100	15.4	50.0
Acrolein	Ave	0.0418	0.0264		20.0	0.100	-36.9	50.0
1,1-Dichloroethene	Ave	0.2997	0.2966		1.00	0.0100	-1.0	20.0
Acetone	Ave	0.0713	0.0545		10.0	0.0200	-23.6	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2367		1.00	0.0100	12.9	50.0
Iodomethane	Ave	0.4425	0.4451		1.00	0.0100	0.6	50.0
Carbon disulfide	Ave	0.9095	0.9733		1.00	0.0100	7.0	50.0
Acetonitrile	Qua		0.0146		20.0	0.100	-30.5	50.0
Methyl acetate	Ave	0.2076	0.1796		10.0	0.0200	-13.5	50.0
Methylene Chloride	Lin1		0.3918		1.00	0.0100	10.7	50.0
tert-Butyl alcohol	Qua		0.0073		50.0	0.200	-51.2*	50.0
Acrylonitrile	Ave	0.1016	0.0898		20.0	0.0200	-11.6	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7275		1.00	0.0100	-6.2	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3322		1.00	0.0100	0.9	50.0
Hexane	Ave	0.0666	0.0711		1.00	0.0100	6.8	20.0
1,1-Dichloroethane	Ave	0.5360	0.5480	0.1000	1.00	0.0100	2.2	50.0
Vinyl acetate	Ave	0.0430	0.0389		2.00	0.0100	-9.5	50.0
2-Butanone	Ave	0.0999	0.0859		10.0	0.0200	-14.1	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3266		1.00	0.0100	-3.3	50.0
2,2-Dichloropropane	Ave	0.2842	0.3895		1.00	0.0100	37.1	50.0
Bromochloromethane	Ave	0.1515	0.1432		1.00	0.0100	-5.4	50.0
Chloroform	Ave	0.4933	0.5238		1.00	0.0100	6.2	20.0
Tetrahydrofuran	Ave	0.0749	0.0564		5.00	0.0100	-24.8	50.0
1,1,1-Trichloroethane	Ave	0.3841	0.4639		1.00	0.0100	20.8	50.0
Cyclohexane	Ave	0.5378	0.5925		1.00	0.0100	10.2	50.0
1,1-Dichloropropene	Ave	0.3647	0.3895		1.00	0.0100	6.8	50.0
Carbon tetrachloride	Ave	0.2725	0.3882		1.00	0.0100	42.4	50.0
1,2-Dichloroethane	Ave	0.3473	0.4028		1.00	0.0100	16.0	50.0
Benzene	Ave	1.126	1.170		1.00	0.0100	3.9	50.0
Trichloroethene	Ave	0.2904	0.2852		1.00	0.0100	-1.8	50.0
1,2-Dichloropropane	Ave	0.2541	0.2779		1.00	0.0100	9.3	20.0
Methylcyclohexane	Ave	0.4959	0.5186		1.00	0.0100	4.6	50.0
1,4-Dioxane	Ave	0.0014	0.0009		50.0	0.500	-34.7	50.0
Dibromomethane	Ave	0.1468	0.1512		1.00	0.0100	3.0	50.0
Bromodichloromethane	Ave	0.2913	0.3638		1.00	0.0100	24.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab Sample ID: CCVIS 240-97617/2 Calibration Date: 08/15/2013 13:05

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UX6710.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1376		10.0	0.0200	-0.7	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3875		1.00	0.0100	16.9	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2122		10.0	0.0200	-0.5	50.0
Toluene	Ave	1.625	1.751		1.00	0.0100	7.7	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4681		1.00	0.0100	25.3	50.0
Ethyl methacrylate	Ave	0.4082	0.4012		1.00	0.0100	-1.7	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3001		1.00	0.0100	-1.8	50.0
1,3-Dichloropropane	Ave	0.5359	0.5586		1.00	0.0100	4.2	50.0
Tetrachloroethene	Ave	0.3157	0.3176		1.00	0.0100	0.6	50.0
2-Hexanone	Ave	0.1979	0.1829		10.0	0.0200	-7.5	50.0
Dibromochloromethane	Ave	0.2670	0.3445		1.00	0.0100	29.0	50.0
1,2-Dibromoethane	Ave	0.3015	0.2897		1.00	0.0100	-3.9	50.0
Chlorobenzene	Ave	1.101	1.089	0.3000	1.00	0.0100	-1.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3844		1.00	0.0100	26.7	50.0
Ethylbenzene	Ave	0.6020	0.6068		1.00	0.0100	0.8	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7783		2.00	0.0200	1.4	50.0
o-Xylene	Ave	0.7382	0.7518		1.00	0.0100	1.8	50.0
Styrene	Ave	1.247	1.179		1.00	0.0100	-5.5	50.0
Bromoform	Ave	0.1580	0.2006	0.1000	1.00	0.0100	26.9	50.0
Isopropylbenzene	Ave	1.883	1.942		1.00	0.0100	3.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7099	0.3000	1.00	0.0100	-7.2	50.0
Bromobenzene	Ave	0.8485	0.7999		1.00	0.0100	-5.7	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2239		1.00	0.0100	-9.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1661		1.00	0.0100	-10.2	50.0
n-Propylbenzene	Ave	0.9162	0.9322		1.00	0.0100	1.7	50.0
2-Chlorotoluene	Ave	0.8158	0.8083		1.00	0.0100	-0.9	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.866		1.00	0.0100	5.3	50.0
4-Chlorotoluene	Ave	0.8894	0.8453		1.00	0.0100	-5.0	50.0
tert-Butylbenzene	Ave	2.380	2.607		1.00	0.0100	9.6	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.908		1.00	0.0100	5.5	50.0
sec-Butylbenzene	Ave	3.282	3.290		1.00	0.0100	0.2	50.0
1,3-Dichlorobenzene	Ave	1.536	1.496		1.00	0.0100	-2.6	50.0
p-Isopropyltoluene	Ave	2.641	2.713		1.00	0.0100	2.7	50.0
1,4-Dichlorobenzene	Ave	1.622	1.604		1.00	0.0100	-1.1	50.0
n-Butylbenzene	Ave	2.221	2.291		1.00	0.0100	3.1	50.0
1,2-Dichlorobenzene	Ave	1.400	1.440		1.00	0.0100	2.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.1039		2.00	0.0100	10.4	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.8859		1.00	0.0100	-3.2	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.7179		1.00	0.0100	-10.9	50.0
Hexachlorobutadiene	Ave	0.2736	0.2235		1.00	0.0100	-18.3	50.0
Naphthalene	Ave	1.968	1.620		1.00	0.0100	-17.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab Sample ID: CCVIS 240-97617/2 Calibration Date: 08/15/2013 13:05

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UX6710.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.6228		1.00	0.0100	-14.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2156		0.00868	0.0100	-13.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2839		0.00951	0.0100	-4.9	50.0
Toluene-d8 (Surr)	Ave	1.348	1.212		0.00899	0.0100	-10.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4619		0.00841	0.0100	-15.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab Sample ID: CCV 240-97617/3 Calibration Date: 08/15/2013 13:27

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UX6711.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.5066		2.00	0.0100	-39.6	50.0
Ethyl ether	Ave	0.3039	0.2457		2.00	0.0100	-19.1	50.0
3-Chloro-1-propene	Ave	0.1630	0.1615		2.00	0.0100	-1.0	50.0
Diisopropyl ether	Ave	0.2610	0.2539		10.0	0.0500	-2.7	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5379		2.00	0.0100	7.4	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8324		5.00	0.0100	-1.8	50.0
Propionitrile	Ave	0.0230	0.0286		4.00	0.0200	24.1	50.0
Ethyl acetate	Ave	0.1697	0.2066		4.00	0.0200	21.7	50.0
Methacrylonitrile	Ave	0.1263	0.1449		2.00	0.0100	14.7	50.0
Isobutyl alcohol	Ave	0.0072	0.0069		50.0	0.200	-4.6	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6491		5.00	0.0100	-12.2	50.0
n-Heptane	Ave	0.0634	0.0645		1.00	0.0100	1.7	50.0
n-Butanol	Lin		0.0053		50.0	0.200	-19.0	50.0
Methyl methacrylate	Ave	0.1639	0.2000		2.00	0.0100	22.1	50.0
2-Nitropropane	Ave	0.0170	0.0507		2.00	0.0200	197.2*	50.0
Cyclohexanone	Ave	0.0815	0.0653		20.0	0.100	-19.9	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.939		0.0121	0.0100	20.6	50.0
2-Methylnaphthalene	Ave	1.002	0.7681		5.00	0.0200	-23.4	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab File ID: BFB5350.D BFB Injection Date: 08/15/2013

Instrument ID: A3UX10 BFB Injection Time: 23:42

Analysis Batch No.: 97692

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.1	
75	30.0 - 60.0 % of mass 95	52.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.2	(0.3)1
174	50.0 - 120.00 % of mass 95	74.6	
175	5.0 - 9.0 % of mass 174	5.7	(7.6)1
176	95.0 - 101.0 % of mass 174	72.2	(96.8)1
177	5.0 - 9.0 % of mass 176	5.0	(6.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97692/2	UXX6737.D	08/16/2013	00:03
	CCV 240-97692/3	UXX6738.D	08/16/2013	00:24
	LCS 240-97692/4	UXX6739.D	08/16/2013	00:46
	MB 240-97692/6	UXX6741.D	08/16/2013	01:28
DR-DPT-38-40	240-27760-4	UXX6744.D	08/16/2013	02:32
TB-080813	240-27760-5	UXX6745.D	08/16/2013	02:53

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab Sample ID: CCVIS 240-97692/2 Calibration Date: 08/16/2013 00:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6737.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2808		1.00	0.0100	3.8	50.0
Chloromethane	Ave	0.4122	0.4291	0.1000	1.00	0.0100	4.1	50.0
Vinyl chloride	Ave	0.3595	0.3677		1.00	0.0100	2.3	20.0
Bromomethane	Ave	0.1681	0.1359		1.00	0.0100	-19.1	50.0
Chloroethane	Ave	0.2338	0.1700		1.00	0.0100	-27.3	50.0
Trichlorofluoromethane	Ave	0.3611	0.3451		1.00	0.0100	-4.4	50.0
Acrolein	Ave	0.0418	0.0205		20.0	0.100	-51.0*	50.0
1,1-Dichloroethene	Ave	0.2997	0.2907		1.00	0.0100	-3.0	20.0
Acetone	Ave	0.0713	0.0653		10.0	0.0200	-8.5	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2185		1.00	0.0100	4.2	50.0
Iodomethane	Ave	0.4425	0.4611		1.00	0.0100	4.2	50.0
Carbon disulfide	Ave	0.9095	0.9844		1.00	0.0100	8.2	50.0
Acetonitrile	Qua		0.0136		20.0	0.100	-35.4	50.0
Methyl acetate	Ave	0.2076	0.1973		10.0	0.0200	-4.9	50.0
Methylene Chloride	Lin1		0.3610		1.00	0.0100	1.0	50.0
tert-Butyl alcohol	Qua		0.0080		50.0	0.200	-47.1	50.0
Acrylonitrile	Ave	0.1016	0.0924		20.0	0.0200	-9.0	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7830		1.00	0.0100	1.0	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3351		1.00	0.0100	1.8	50.0
Hexane	Ave	0.0666	0.0614		1.00	0.0100	-7.8	20.0
1,1-Dichloroethane	Ave	0.5360	0.5615	0.1000	1.00	0.0100	4.7	50.0
Vinyl acetate	Ave	0.0430	0.0342		2.00	0.0100	-20.4	50.0
2-Butanone	Ave	0.0999	0.0914		10.0	0.0200	-8.5	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3292		1.00	0.0100	-2.6	50.0
2,2-Dichloropropane	Ave	0.2842	0.3633		1.00	0.0100	27.8	50.0
Bromochloromethane	Ave	0.1515	0.1489		1.00	0.0100	-1.7	50.0
Tetrahydrofuran	Ave	0.0749	0.0638		5.00	0.0100	-14.8	50.0
Chloroform	Ave	0.4933	0.5333		1.00	0.0100	8.1	20.0
1,1,1-Trichloroethane	Ave	0.3841	0.4778		1.00	0.0100	24.4	50.0
Cyclohexane	Ave	0.5378	0.5684		1.00	0.0100	5.7	50.0
1,1-Dichloropropene	Ave	0.3647	0.3652		1.00	0.0100	0.1	50.0
Carbon tetrachloride	Ave	0.2725	0.3823		1.00	0.0100	40.3	50.0
1,2-Dichloroethane	Ave	0.3473	0.4120		1.00	0.0100	18.6	50.0
Benzene	Ave	1.126	1.141		1.00	0.0100	1.3	50.0
Trichloroethene	Ave	0.2904	0.2725		1.00	0.0100	-6.1	50.0
1,2-Dichloropropane	Ave	0.2541	0.2771		1.00	0.0100	9.0	20.0
Methylcyclohexane	Ave	0.4959	0.4787		1.00	0.0100	-3.5	50.0
1,4-Dioxane	Ave	0.0014	0.0007		50.0	0.500	-50.6*	50.0
Dibromomethane	Ave	0.1468	0.1522		1.00	0.0100	3.6	50.0
Bromodichloromethane	Ave	0.2913	0.3616		1.00	0.0100	24.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab Sample ID: CCVIS 240-97692/2 Calibration Date: 08/16/2013 00:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6737.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1349		10.0	0.0200	-2.7	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3794		1.00	0.0100	14.5	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2190		10.0	0.0200	2.7	50.0
Toluene	Ave	1.625	1.710		1.00	0.0100	5.2	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4470		1.00	0.0100	19.7	50.0
Ethyl methacrylate	Ave	0.4082	0.4291		1.00	0.0100	5.1	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3145		1.00	0.0100	2.9	50.0
1,3-Dichloropropane	Ave	0.5359	0.5680		1.00	0.0100	6.0	50.0
Tetrachloroethene	Ave	0.3157	0.3020		1.00	0.0100	-4.4	50.0
2-Hexanone	Ave	0.1979	0.1982		10.0	0.0200	0.2	50.0
Dibromochloromethane	Ave	0.2670	0.3437		1.00	0.0100	28.7	50.0
1,2-Dibromoethane	Ave	0.3015	0.3012		1.00	0.0100	-0.1	50.0
Chlorobenzene	Ave	1.101	1.056	0.3000	1.00	0.0100	-4.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3773		1.00	0.0100	24.4	50.0
Ethylbenzene	Ave	0.6020	0.5809		1.00	0.0100	-3.5	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7159		2.00	0.0200	-6.7	50.0
o-Xylene	Ave	0.7382	0.7120		1.00	0.0100	-3.6	50.0
Styrene	Ave	1.247	1.133		1.00	0.0100	-9.2	50.0
Bromoform	Ave	0.1580	0.1923	0.1000	1.00	0.0100	21.6	50.0
Isopropylbenzene	Ave	1.883	1.808		1.00	0.0100	-4.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7333	0.3000	1.00	0.0100	-4.2	50.0
Bromobenzene	Ave	0.8485	0.7434		1.00	0.0100	-12.4	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2308		1.00	0.0100	-7.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.0800		1.00	0.0100	-56.7*	50.0
n-Propylbenzene	Ave	0.9162	0.8499		1.00	0.0100	-7.2	50.0
2-Chlorotoluene	Ave	0.8158	0.7660		1.00	0.0100	-6.1	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.704		1.00	0.0100	-0.7	50.0
4-Chlorotoluene	Ave	0.8894	0.7726		1.00	0.0100	-13.1	50.0
tert-Butylbenzene	Ave	2.380	2.146		1.00	0.0100	-9.8	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.723		1.00	0.0100	-1.2	50.0
sec-Butylbenzene	Ave	3.282	3.136		1.00	0.0100	-4.4	50.0
1,3-Dichlorobenzene	Ave	1.536	1.439		1.00	0.0100	-6.4	50.0
p-Isopropyltoluene	Ave	2.641	2.550		1.00	0.0100	-3.4	50.0
1,4-Dichlorobenzene	Ave	1.622	1.484		1.00	0.0100	-8.5	50.0
n-Butylbenzene	Ave	2.221	2.206		1.00	0.0100	-0.7	50.0
1,2-Dichlorobenzene	Ave	1.400	1.368		1.00	0.0100	-2.3	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.0968		2.00	0.0100	2.8	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.8262		1.00	0.0100	-9.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.6915		1.00	0.0100	-14.2	50.0
Hexachlorobutadiene	Ave	0.2736	0.2352		1.00	0.0100	-14.0	50.0
Naphthalene	Ave	1.968	1.481		1.00	0.0100	-24.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab Sample ID: CCVIS 240-97692/2 Calibration Date: 08/16/2013 00:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6737.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.5921		1.00	0.0100	-18.5	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2181		0.00878	0.0100	-12.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2816		0.00943	0.0100	-5.7	50.0
Toluene-d8 (Surr)	Ave	1.348	1.267		0.00940	0.0100	-6.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4777		0.00870	0.0100	-13.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Lab Sample ID: CCV 240-97692/3 Calibration Date: 08/16/2013 00:24

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX6738.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.5038		2.00	0.0100	-40.0	50.0
Ethyl ether	Ave	0.3039	0.2398		2.00	0.0100	-21.1	50.0
3-Chloro-1-propene	Ave	0.1630	0.1540		2.00	0.0100	-5.5	50.0
Diisopropyl ether	Ave	0.2610	0.2473		10.0	0.0500	-5.3	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5082		2.00	0.0100	1.5	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8033		5.00	0.0100	-5.2	50.0
Ethyl acetate	Ave	0.1697	0.1932		4.00	0.0200	13.8	50.0
Propionitrile	Ave	0.0230	0.0242		4.00	0.0200	5.1	50.0
Methacrylonitrile	Ave	0.1263	0.1329		2.00	0.0100	5.2	50.0
Isobutyl alcohol	Ave	0.0072	0.0066		50.0	0.200	-7.7	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6232		5.00	0.0100	-15.7	50.0
n-Heptane	Ave	0.0634	0.0546		1.00	0.0100	-13.9	50.0
n-Butanol	Lin		0.0044		50.0	0.200	-30.7	50.0
Methyl methacrylate	Ave	0.1639	0.1897		2.00	0.0100	15.8	50.0
2-Nitropropane	Ave	0.0170	0.0469		2.00	0.0200	175.3*	50.0
Cyclohexanone	Ave	0.0815	0.0477		20.0	0.100	-41.4	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.710		0.0111	0.0100	11.2	50.0
2-Methylnaphthalene	Ave	1.002	0.6432		5.00	0.0200	-35.8	50.0

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Sample No.: STD8260 240-92306/4 Date Analyzed: 07/02/2013 13:37

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX5742.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1899526	5.20	1402128	7.87	826109	10.11
UPPER LIMIT		3799052	5.70	2804256	8.37	1652218	10.61
LOWER LIMIT		949763	4.70	701064	7.37	413055	9.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92306/8		1830940	5.20	1292823	7.87	693029	10.11
CCVIS 240-97617/2		1712420	5.20	1201129	7.87	649416	10.12
CCVIS 240-97692/2		1619159	5.20	1141899	7.87	624321	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Sample No.: CCVIS 240-97617/2 Date Analyzed: 08/15/2013 13:05

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX6710.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1712420	5.20	1201129	7.87	649416	10.12
UPPER LIMIT		3424840	5.70	2402258	8.37	1298832	10.62
LOWER LIMIT		856210	4.70	600565	7.37	324708	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-97617/3		1772918	5.20	1156280	7.87	556418	10.12
LCS 240-97617/4		1745526	5.20	1210175	7.87	626960	10.11
MB 240-97617/6		1592680	5.20	1095898	7.87	546990	10.11
240-27760-1	DR-DPT-38-15	1675524	5.20	1125570	7.87	560268	10.11
240-27760-2	DR-DPT-38-30	1562297	5.20	1043597	7.87	527499	10.11
240-27760-3	DR-DPT-38-35	1629873	5.20	1090122	7.87	524138	10.11
240-27719-B-1 MS		1606097	5.20	1121916	7.87	642943	10.12
240-27719-B-1 MSD		1631768	5.20	1119778	7.87	634067	10.11

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27760-1

SDG No.:

Sample No.: CCVIS 240-97692/2 Date Analyzed: 08/16/2013 00:03

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX6737.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1619159	5.20	1141899	7.87	624321	10.12
UPPER LIMIT		3238318	5.70	2283798	8.37	1248642	10.62
LOWER LIMIT		809580	4.70	570950	7.37	312161	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-97692/3		1678515	5.20	1124129	7.88	576508	10.11
LCS 240-97692/4		1655188	5.20	1166273	7.87	636569	10.11
MB 240-97692/6		1512536	5.20	1033269	7.87	532493	10.12
240-27760-4	DR-DPT-38-40	1547058	5.21	1087147	7.87	558976	10.12
240-27760-5	TB-080813	1489031	5.20	1027634	7.87	493853	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. AVANAVAGE** **DATE:** **SEPTEMBER 16, 2013**

FROM: **A. COGNETTI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOC**
MSA DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-27831-1

SAMPLES: 7/Aqueous/VOC

DR-DPT-42-10	DR-DPT-42-15	DR-DPT-42-20	DR-DPT-42-25
DR-DPT-42-30	DR-DPT-42-35	TB-080913	

Overview

The sample set for MSA Dump Road Source Areas, SDG 240-27831-1 consisted of six (6) aqueous environmental samples and a trip blank analyzed for volatile organic compounds (VOCs).

The samples were collected on August 9, 2013 and analyzed by Test America Laboratories Inc. All analyses were conducted in accordance with SW-846 Methods 8260B for VOCs analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method /preparation blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate, internal standard recoveries, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major

- The initial calibration relative response factors (RRFs) for tert-butyl alcohol and vinyl acetate were less than the 0.05 quality control limit on July 2, 2013 for instrument A3UX10 and the continuing calibration on August 17, 2013 @ 13:02. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR) in the affected samples. The detected tert-butyl alcohol results were qualified due to blank contamination.

- The tentatively identified compound (TIC), containing silanol, was qualified as rejected (R). This compound is indicative of column bleed.

Minor

- Contamination was detected in the VOC laboratory method blank associated with batch 240-97899/6 analyzed on August 17, 2013 on instrument A3UX10.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Methylene chloride	1.81	18.1
Tert-butyl alcohol	7.63	38.15

An action level of 5X the maximum concentration of contaminant of tert-butyl alcohol and 10X the maximum concentration of common laboratory contaminant, methylene chloride, was established in order to evaluate samples for blank contamination. Sample aliquot and dilution factors were applied. The detected methylene chloride and tert-butyl alcohol results were qualified as (B).

- The continuing calibration percent differences (%Ds) for acetone, 1,2-dichloroethane, bromodichloromethane, was greater than 20% and less than 50% on August 17, 2013 @ 13:02 on instrument A3UX10. The detected acetone, 1,2-dichloroethane and bromodichloromethane results were qualified as estimated (J) in the affected samples. No action was taken on the nondetected acetone, 1,2-dichloroethane and bromodichloromethane results. The continuing calibration %D for tert-butyl alcohol was greater than 50%. The detected tert-butyl alcohol results were qualified due to blank contamination and the nondetected results were qualified as rejected due to a more severe noncompliance.

- Several TICs were detected and qualified as presumptively present (NJ) in several samples.

- Positive results reported below the quantitation limit but above the method detection limit (MDL) were qualified as estimated, (J).

Notes

The continuing calibration %Ds for bromomethane, chloroethane, 2,2-dichlorpropane, 1,1,1-trichloroethane, carbon tetrachloride, bromodichloromethane, trans-1,3-dichloropropene, dibromochloromethane, 1,1,1,2-tetrachloroethane and bromoform were greater than 20% and less than 50% on August 17, 2013 @ 13:02 on instrument A3UX10. No action was taken on the bromomethane, chloroethane, 2,2-dichlorpropane, 1,1,1-trichloroethane, carbon tetrachloride, bromodichloromethane, trans-1,3-dichloropropene, dibromochloromethane, 1,1,1,2-tetrachloroethane and bromoformresults in the affected samples.

The laboratory control sample (LCS) percent recovery (%R) for 1,1,1,2-tetrachloroethane and dibromochloromethane were greater than the upper quality control limit in batch 240-97899/4. No action was taken on the nondetected 1,1,1,2-tetrachloroethane and dibromochloromethane results. The LCS %R of tert-butyl alcohol was less than the lower quality control limit. No action was taken. The detected tert-butyl alcohol results were qualified due to blank contamination and the nondetected results were qualified as rejected due to a more severe noncompliance.

The matrix spike/ matrix spike duplicate (MS/MSD) %Rs of 1,1,1,2-tetrachloroethane, carbon tetrachloride, and dibromochloromethane were greater than the upper quality control limit in sample 240-27638-1. The MSD %Rs of bromodichloromethane and trans-1,3-dichloropropene were greater than the upper quality control limit. No action was taken since this sample is not included in this SDG.

Nondetected results were reported to the MDL.

Executive Summary

Laboratory Performance: The VOC RRFs for tert-butyl alcohol and vinyl acetate were less than the quality control limit resulting in the rejection of nondetected results. Methylene chloride and tert-butyl alcohol were detected in thelaboratory method blank. The continuing calibration %Ds for acetone, 1,2-dichloroethane, bromodichloromethane, was greater than 20% and less than 50%. The continuing calibration %D for tert-butyl alcohol was greater than 50%.

Other Factors Affecting Data Quality: TICs were detected in several samples. Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Ann Cognetti

Tetra Tech
Ann Cognetti
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-42-10			DR-DPT-42-15			DR-DPT-42-20			DR-DPT-42-25		
SDG: 240-27831-1	LAB_ID	240-27831-1			240-27831-2			240-27831-3			240-27831-4		
FRACTION: OV	SAMP_DATE	8/9/2013			8/9/2013			8/9/2013			8/9/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U		0.23	U		1.3	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		1.3	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U		1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		1.6	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.86	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		1.1	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.74	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.97	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U		2.5	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.034	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.86	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.69	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U		3.8	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U		1.4	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.74	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U		1.3	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		1	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.8	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U		0.91	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.74	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.13	U		0.74	U	
2-BUTANONE		0.57	U		0.57	U		0.95	J	P	3.3	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		0.99	U		5.7	U	
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.63	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U		2.3	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		1	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.69	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U		1.8	U	
ACETONE		5	J	CP	4.4	J	CP	14	J	C	6.9	J	CP
BENZENE		0.13	U		0.13	U		0.15	J	P	0.74	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.74	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		1.7	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.25	J	CP	0.86	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		3.7	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U		2.3	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-42-30			DR-DPT-42-35			TB-080913		
SDG: 240-27831-1	LAB_ID	240-27831-5			240-27831-6			240-27831-7		
FRACTION: OV	SAMP_DATE	8/9/2013			8/9/2013			8/9/2013		
MEDIA: WATER	QC_TYPE	NM			NM			TB		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1.8	U		1.8	U		0.23	U	
1,1,1-TRICHLOROETHANE		1.8	U		1.8	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		1.4	U		1.4	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		2.2	U		2.2	U		0.28	U	
1,1-DICHLOROETHANE		1.2	U		1.2	U		0.15	U	
1,1-DICHLOROETHENE		1.5	U		1.5	U		0.19	U	
1,1-DICHLOROPROPENE		1	U		1	U		0.13	U	
1,2,3-TRICHLOROBENZENE		1.4	U		1.4	U		0.17	U	
1,2,3-TRICHLOROPROPANE		3.4	U		3.4	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.047	U		0.047	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		1.2	U		1.2	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.96	U		0.96	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		5.4	U		5.4	U		0.67	U	
1,2-DIBROMOETHANE		1.9	U		1.9	U		0.24	U	
1,2-DICHLOROBENZENE		1	U		1	U		0.13	U	
1,2-DICHLOROETHANE		1.8	J	CP	1.9	J	CP	0.22	U	
1,2-DICHLOROPROPANE		1.4	U		1.4	U		0.18	U	
1,3-DICHLOROBENZENE		1.1	U		1.1	U		0.14	U	
1,3-DICHLOROPROPANE		1.3	U		1.3	U		0.16	U	
1,4-DICHLOROBENZENE		1	U		1	U		0.13	U	
2,2-DICHLOROPROPANE		1	U		1	U		0.13	U	
2-BUTANONE		4.6	U		4.6	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		7.9	U		7.9	U		0.99	U	
2-CHLOROTOLUENE		0.88	U		0.88	U		0.11	U	
2-HEXANONE		3.3	U		3.3	U		0.41	U	
4-CHLOROTOLUENE		1.4	U		1.4	U		0.18	U	
4-ISOPROPYLTOLUENE		0.96	U		0.96	U		0.12	U	
4-METHYL-2-PENTANONE		2.6	U		2.6	U		0.32	U	
ACETONE		8.9	J	CP	10	J	CP	1.1	U	
BENZENE		1.9	J	P	2.1	J	P	0.13	U	
BROMOBENZENE		1	U		1	U		0.13	U	
BROMOCHLOROMETHANE		2.3	U		2.3	U		0.29	U	
BROMODICHLOROMETHANE		1.2	U		1.2	U		0.15	U	
BROMOFORM		5.1	U		5.1	U		0.64	U	
BROMOMETHANE		3.3	U		3.3	U		0.41	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-42-10			DR-DPT-42-15			DR-DPT-42-20			DR-DPT-42-25		
SDG: 240-27831-1	LAB_ID	240-27831-1			240-27831-2			240-27831-3			240-27831-4		
FRACTION: OV	SAMP_DATE	8/9/2013			8/9/2013			8/9/2013			8/9/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE	0.13	U		1.7			0.41	J	P	0.74	U	
CARBON TETRACHLORIDE	0.13	U		0.13	U		0.13	U		0.74	U	
CHLOROBENZENE	0.15	U		0.15	U		0.15	U		0.86	U	
CHLORODIBROMOMETHANE	0.18	U		0.18	U		0.18	U		1	U	
CHLOROETHANE	0.29	U		0.29	U		0.29	U		1.7	U	
CHLOROFORM	0.16	U		0.44	J	P	1.6			0.91	U	
CHLOROMETHANE	0.3	U		0.3	U		0.3	U		1.7	U	
CIS-1,2-DICHLOROETHENE	0.26	J	P	0.69	J	P	0.17	U		83		
CIS-1,3-DICHLOROPROPENE	0.14	U		0.14	U		0.14	U		0.8	U	
DIBROMOMETHANE	0.28	U		0.28	U		0.28	U		1.6	U	
DICHLORODIFLUOROMETHANE	0.31	U		0.31	U		0.31	U		1.8	U	
DIISOPROPYL ETHER	1.5	U		1.5	U		1.5	U		8.6	U	
ETHYL TERT-BUTYL ETHER	0.11	U		0.11	U		0.11	U		0.63	U	
ETHYLBENZENE	0.17	U		0.17	U		0.17	U		0.97	U	
HEXACHLOROBUTADIENE	0.3	U		0.3	U		0.3	U		1.7	U	
ISOPROPYLBENZENE	0.13	U		0.13	U		0.13	U		0.74	U	
M+P-XYLENES	0.24	U		0.24	U		0.24	U		1.4	U	
METHYL TERT-BUTYL ETHER	0.17	U		0.17	U		0.17	U		0.97	U	
METHYLENE CHLORIDE	0.33	U		0.33	U		0.33	U		8.2	B	A
NAPHTHALENE	0.24	U		0.24	U		0.24	U		1.4	U	
N-BUTYLBENZENE	0.12	U		0.12	U		0.12	U		0.69	U	
N-PROPYLBENZENE	0.14	U		0.14	U		0.14	U		0.8	U	
O-XYLENE	0.14	U		0.14	U		0.14	U		0.8	U	
SEC-BUTYLBENZENE	0.13	U		0.13	U		0.13	U		0.74	U	
STYRENE	0.11	U		0.11	U		0.11	U		0.63	U	
TERT-AMYL METHYL ETHER	0.067	U		0.067	U		0.067	U		0.38	U	
TERT-BUTYLBENZENE	0.13	U		0.13	U		0.13	U		0.74	U	
TERTIARY-BUTYL ALCOHOL	3.9	UR	C	3.9	UR	C	7.8	B	A	22	UR	C
TETRACHLOROETHENE	0.29	U		0.29	U		0.29	U		1.7	U	
TOLUENE	0.13	U		0.49	J	P	0.13	U		0.74	U	
TOTAL XYLENES	0.14	U		0.14	U		0.14	U		0.8	U	
TRANS-1,2-DICHLOROETHENE	0.19	U		0.19	U		0.19	U		4.4	J	P
TRANS-1,3-DICHLOROPROPENE	0.19	U		0.19	U		0.19	U		1.1	U	
TRICHLOROETHENE	0.28	J	P	0.9	J	P	0.17	U		160		
TRICHLOROFLUOROMETHANE	0.21	U		0.21	U		0.21	U		1.2	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-42-30			DR-DPT-42-35			TB-080913		
SDG: 240-27831-1	LAB_ID	240-27831-5			240-27831-6			240-27831-7		
FRACTION: OV	SAMP_DATE	8/9/2013			8/9/2013			8/9/2013		
MEDIA: WATER	QC_TYPE	NM			NM			TB		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1	U		1	U		0.13	U	
CARBON TETRACHLORIDE		1	U		1	U		0.13	U	
CHLOROBENZENE		1.2	U		1.2	U		0.15	U	
CHLORODIBROMOMETHANE		1.4	U		1.4	U		0.18	U	
CHLOROETHANE		2.3	U		2.3	U		0.29	U	
CHLOROFORM		1.3	U		1.3	U		0.16	U	
CHLOROMETHANE		2.4	U		2.4	U		0.3	U	
CIS-1,2-DICHLOROETHENE		200			170			0.17	U	
CIS-1,3-DICHLOROPROPENE		1.1	U		1.1	U		0.14	U	
DIBROMOMETHANE		2.2	U		2.2	U		0.28	U	
DICHLORODIFLUOROMETHANE		2.5	U		2.5	U		0.31	U	
DIISOPROPYL ETHER		12	U		12	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.88	U		0.88	U		0.11	U	
ETHYLBENZENE		1.4	U		1.4	U		0.17	U	
HEXACHLOROBUTADIENE		2.4	U		2.4	U		0.3	U	
ISOPROPYLBENZENE		1	U		1	U		0.13	U	
M+P-XYLENES		1.9	U		1.9	U		0.24	U	
METHYL TERT-BUTYL ETHER		1.4	U		1.4	U		0.17	U	
METHYLENE CHLORIDE		14	B	A	14	B	A	0.33	U	
NAPHTHALENE		1.9	U		1.9	U		0.24	U	
N-BUTYLBENZENE		0.96	U		0.96	U		0.12	U	
N-PROPYLBENZENE		1.1	U		1.1	U		0.14	U	
O-XYLENE		1.1	U		1.1	U		0.14	U	
SEC-BUTYLBENZENE		1	U		1	U		0.13	U	
STYRENE		0.88	U		0.88	U		0.11	U	
TERT-AMYL METHYL ETHER		0.54	U		0.54	U		0.067	U	
TERT-BUTYLBENZENE		1	U		1	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		31	UR	C	61	B	A	3.9	UR	C
TETRACHLOROETHENE		2.3	U		2.3	U		0.29	U	
TOLUENE		1	U		1	U		0.13	U	
TOTAL XYLENES		1.1	U		1.1	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		2	J	P	1.6	J	P	0.19	U	
TRANS-1,3-DICHLOROPROPENE		1.5	U		1.5	U		0.19	U	
TRICHLOROETHENE		89			86			0.17	U	
TRICHLOROFLUOROMETHANE		1.7	U		1.7	U		0.21	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-42-10			DR-DPT-42-15			DR-DPT-42-20			DR-DPT-42-25		
SDG: 240-27831-1	LAB_ID	240-27831-1			240-27831-2			240-27831-3			240-27831-4		
FRACTION: OV	SAMP_DATE	8/9/2013			8/9/2013			8/9/2013			8/9/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	1.1	UR	C
VINYL CHLORIDE		0.22	U		0.91	J	P	0.22	U		1.3	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-42-30			DR-DPT-42-35			TB-080913		
SDG: 240-27831-1	LAB_ID	240-27831-5			240-27831-6			240-27831-7		
FRACTION: OV	SAMP_DATE	8/9/2013			8/9/2013			8/9/2013		
MEDIA: WATER	QC_TYPE	NM			NM			TB		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		1.5	UR	C	1.5	UR	C	0.19	UR	C
VINYL CHLORIDE		120			95			0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-42-10			DR-DPT-42-15			DR-DPT-42-20		
SDG: 240-27831-1	LAB_ID	240-27831-1			240-27831-2			240-27831-3		
FRACTION: TICOV	SAMP_DATE	8/9/2013			8/9/2013			8/9/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-OCTENE, 2-METHYL-								1.1	NJ	Z1
3-HEXANONE, 2,4-DIMETHYL-					2.5	NJ	Z1			
EICOSANE		1.6	NJ	Z1						
N-TERT-BUTOXYCARBONYLIMIDAZOLE								1.4	NJ	Z1
SILANOL, TRIMETHYL-		2.8	R	Z2						

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-10 | Lab Sample ID: 240-27831-1

Matrix: Water | Lab File ID: UXX6334.D

Analysis Method: 8260B | Date Collected: 08/09/2013 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 18:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	5.0	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-10 Lab Sample ID: 240-27831-1

Matrix: Water Lab File ID: UXX6334.D

Analysis Method: 8260B Date Collected: 08/09/2013 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 18:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.26	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.28	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-10 Lab Sample ID: 240-27831-1

Matrix: Water Lab File ID: UXX6334.D

Analysis Method: 8260B Date Collected: 08/09/2013 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 18:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-10 Lab Sample ID: 240-27831-1

Matrix: Water Lab File ID: UXX6334.D

Analysis Method: 8260B Date Collected: 08/09/2013 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 18:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

Number TICs Found: 2 TIC Result Total: 4.4

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	2.8	T J N
112-95-8	Eicosane	8.36	1.6	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-15 | Lab Sample ID: 240-27831-2

Matrix: Water | Lab File ID: UXX6335.D

Analysis Method: 8260B | Date Collected: 08/09/2013 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 19:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	4.4	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.7		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-15 | Lab Sample ID: 240-27831-2

Matrix: Water | Lab File ID: UXX6335.D

Analysis Method: 8260B | Date Collected: 08/09/2013 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 19:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.44	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.69	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.49	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.90	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.91	J	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-15 Lab Sample ID: 240-27831-2

Matrix: Water Lab File ID: UXX6335.D

Analysis Method: 8260B Date Collected: 08/09/2013 09:30

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 19:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-15 Lab Sample ID: 240-27831-2

Matrix: Water Lab File ID: UXX6335.D

Analysis Method: 8260B Date Collected: 08/09/2013 09:30

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 19:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

Number TICs Found: 1 TIC Result Total: 2.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
18641-70-8	3-Hexanone, 2,4-dimethyl-	8.36	2.5	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-20 Lab Sample ID: 240-27831-3

Matrix: Water Lab File ID: UXX6336.D

Analysis Method: 8260B Date Collected: 08/09/2013 09:45

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 19:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	14		10	1.1
71-43-2	Benzene	0.15	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.41	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-20 | Lab Sample ID: 240-27831-3

Matrix: Water | Lab File ID: UXX6336.D

Analysis Method: 8260B | Date Collected: 08/09/2013 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 19:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.6		1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	0.25	J	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	0.95	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	7.8	J B *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-20 Lab Sample ID: 240-27831-3

Matrix: Water Lab File ID: UXX6336.D

Analysis Method: 8260B Date Collected: 08/09/2013 09:45

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 19:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

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GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-20 | Lab Sample ID: 240-27831-3

Matrix: Water | Lab File ID: UXX6336.D

Analysis Method: 8260B | Date Collected: 08/09/2013 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 19:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

Number TICs Found: 2 | TIC Result Total: 2.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
49761-82-2	N-tert-Butoxycarbonylimidazole	8.35	1.4	T J N
4588-18-5	1-Octene, 2-methyl-	10.23	1.1	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-25 | Lab Sample ID: 240-27831-4

Matrix: Water | Lab File ID: UXX6337.D

Analysis Method: 8260B | Date Collected: 08/09/2013 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 19:52

Soil Aliquot Vol: | Dilution Factor: 5.71

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.7	U *	5.7	1.3
71-55-6	1,1,1-Trichloroethane	5.7	U	5.7	1.3
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U	5.7	1.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.7	U	5.7	1.6
75-34-3	1,1-Dichloroethane	5.7	U	5.7	0.86
75-35-4	1,1-Dichloroethene	5.7	U	5.7	1.1
563-58-6	1,1-Dichloropropene	5.7	U	5.7	0.74
87-61-6	1,2,3-Trichlorobenzene	5.7	U	5.7	0.97
96-18-4	1,2,3-Trichloropropane	5.7	U	5.7	2.5
526-73-8	1,2,3-Trimethylbenzene	29	U	29	0.034
120-82-1	1,2,4-Trichlorobenzene	5.7	U	5.7	0.86
95-63-6	1,2,4-Trimethylbenzene	5.7	U	5.7	0.69
96-12-8	1,2-Dibromo-3-Chloropropane	11	U	11	3.8
95-50-1	1,2-Dichlorobenzene	5.7	U	5.7	0.74
107-06-2	1,2-Dichloroethane	5.7	U	5.7	1.3
78-87-5	1,2-Dichloropropane	5.7	U	5.7	1.0
541-73-1	1,3-Dichlorobenzene	5.7	U	5.7	0.80
142-28-9	1,3-Dichloropropane	5.7	U	5.7	0.91
106-46-7	1,4-Dichlorobenzene	5.7	U	5.7	0.74
594-20-7	2,2-Dichloropropane	5.7	U	5.7	0.74
110-75-8	2-Chloroethyl vinyl ether	57	U	57	5.7
95-49-8	2-Chlorotoluene	5.7	U	5.7	0.63
591-78-6	2-Hexanone	57	U	57	2.3
108-86-1	Bromobenzene	5.7	U	5.7	0.74
74-97-5	Bromochloromethane	5.7	U	5.7	1.7
106-43-4	4-Chlorotoluene	5.7	U	5.7	1.0
99-87-6	p-Isopropyltoluene	5.7	U	5.7	0.69
67-64-1	Acetone	6.9	J	57	6.3
71-43-2	Benzene	5.7	U	5.7	0.74
75-25-2	Bromoform	5.7	U	5.7	3.7
74-83-9	Bromomethane	5.7	U	5.7	2.3
75-15-0	Carbon disulfide	5.7	U	5.7	0.74
56-23-5	Carbon tetrachloride	5.7	U	5.7	0.74
108-90-7	Chlorobenzene	5.7	U	5.7	0.86
75-00-3	Chloroethane	5.7	U	5.7	1.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-25 | Lab Sample ID: 240-27831-4

Matrix: Water | Lab File ID: UXX6337.D

Analysis Method: 8260B | Date Collected: 08/09/2013 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 19:52

Soil Aliquot Vol: | Dilution Factor: 5.71

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	5.7	U	5.7	0.91
74-87-3	Chloromethane	5.7	U	5.7	1.7
156-59-2	cis-1,2-Dichloroethene	83		5.7	0.97
10061-01-5	cis-1,3-Dichloropropene	5.7	U	5.7	0.80
87-68-3	Hexachlorobutadiene	5.7	U	5.7	1.7
74-95-3	Dibromomethane	5.7	U	5.7	1.6
75-27-4	Bromodichloromethane	5.7	U	5.7	0.86
75-71-8	Dichlorodifluoromethane	5.7	U	5.7	1.8
100-41-4	Ethylbenzene	5.7	U	5.7	0.97
106-93-4	1,2-Dibromoethane	5.7	U	5.7	1.4
108-20-3	Diisopropyl ether	57	U	57	8.6
91-20-3	Naphthalene	5.7	U	5.7	1.4
179601-23-1	m-Xylene & p-Xylene	11	U	11	1.4
104-51-8	n-Butylbenzene	5.7	U	5.7	0.69
98-82-8	Isopropylbenzene	5.7	U	5.7	0.74
103-65-1	n-Propylbenzene	5.7	U	5.7	0.80
78-93-3	2-Butanone	57	U	57	3.3
108-10-1	4-Methyl-2-pentanone	57	U	57	1.8
135-98-8	sec-Butylbenzene	5.7	U	5.7	0.74
1634-04-4	Methyl tert-butyl ether	5.7	U	5.7	0.97
994-05-8	Tert-amyl-methyl ether (TAME)	29	U	29	0.38
75-09-2	Methylene Chloride	8.2	B	5.7	1.9
95-47-6	o-Xylene	5.7	U	5.7	0.80
100-42-5	Styrene	5.7	U	5.7	0.63
637-92-3	Ethyl-t-butyl ether (ETBE)	29	U	29	0.63
98-06-6	tert-Butylbenzene	5.7	U	5.7	0.74
127-18-4	Tetrachloroethene	5.7	U	5.7	1.7
108-88-3	Toluene	5.7	U	5.7	0.74
156-60-5	trans-1,2-Dichloroethene	4.4	J	5.7	1.1
10061-02-6	trans-1,3-Dichloropropene	5.7	U	5.7	1.1
79-01-6	Trichloroethene	160		5.7	0.97
75-69-4	Trichlorofluoromethane	5.7	U	5.7	1.2
108-05-4	Vinyl acetate	11	U	11	1.1
75-01-4	Vinyl chloride	5.7	U	5.7	1.3
75-65-0	tert-Butyl alcohol	290	U *	290	22
1330-20-7	Xylenes, Total	11	U	11	0.80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-25 Lab Sample ID: 240-27831-4

Matrix: Water Lab File ID: UXX6337.D

Analysis Method: 8260B Date Collected: 08/09/2013 10:15

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 19:52

Soil Aliquot Vol: Dilution Factor: 5.71

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	5.7	U *	5.7	1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-25 Lab Sample ID: 240-27831-4

Matrix: Water Lab File ID: UXX6337.D

Analysis Method: 8260B Date Collected: 08/09/2013 10:15

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 19:52

Soil Aliquot Vol: Dilution Factor: 5.71

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-30 | Lab Sample ID: 240-27831-5

Matrix: Water | Lab File ID: UXX6338.D

Analysis Method: 8260B | Date Collected: 08/09/2013 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 20:14

Soil Aliquot Vol: | Dilution Factor: 8

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	8.0	U *	8.0	1.8
71-55-6	1,1,1-Trichloroethane	8.0	U	8.0	1.8
79-34-5	1,1,2,2-Tetrachloroethane	8.0	U	8.0	1.4
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	8.0	U	8.0	2.2
75-34-3	1,1-Dichloroethane	8.0	U	8.0	1.2
75-35-4	1,1-Dichloroethene	8.0	U	8.0	1.5
563-58-6	1,1-Dichloropropene	8.0	U	8.0	1.0
87-61-6	1,2,3-Trichlorobenzene	8.0	U	8.0	1.4
96-18-4	1,2,3-Trichloropropane	8.0	U	8.0	3.4
526-73-8	1,2,3-Trimethylbenzene	40	U	40	0.047
120-82-1	1,2,4-Trichlorobenzene	8.0	U	8.0	1.2
95-63-6	1,2,4-Trimethylbenzene	8.0	U	8.0	0.96
96-12-8	1,2-Dibromo-3-Chloropropane	16	U	16	5.4
95-50-1	1,2-Dichlorobenzene	8.0	U	8.0	1.0
107-06-2	1,2-Dichloroethane	1.8	J	8.0	1.8
78-87-5	1,2-Dichloropropane	8.0	U	8.0	1.4
541-73-1	1,3-Dichlorobenzene	8.0	U	8.0	1.1
142-28-9	1,3-Dichloropropane	8.0	U	8.0	1.3
106-46-7	1,4-Dichlorobenzene	8.0	U	8.0	1.0
594-20-7	2,2-Dichloropropane	8.0	U	8.0	1.0
110-75-8	2-Chloroethyl vinyl ether	80	U	80	7.9
95-49-8	2-Chlorotoluene	8.0	U	8.0	0.88
591-78-6	2-Hexanone	80	U	80	3.3
108-86-1	Bromobenzene	8.0	U	8.0	1.0
74-97-5	Bromochloromethane	8.0	U	8.0	2.3
106-43-4	4-Chlorotoluene	8.0	U	8.0	1.4
99-87-6	p-Isopropyltoluene	8.0	U	8.0	0.96
67-64-1	Acetone	8.9	J	80	8.8
71-43-2	Benzene	1.9	J	8.0	1.0
75-25-2	Bromoform	8.0	U	8.0	5.1
74-83-9	Bromomethane	8.0	U	8.0	3.3
75-15-0	Carbon disulfide	8.0	U	8.0	1.0
56-23-5	Carbon tetrachloride	8.0	U	8.0	1.0
108-90-7	Chlorobenzene	8.0	U	8.0	1.2
75-00-3	Chloroethane	8.0	U	8.0	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-30 Lab Sample ID: 240-27831-5

Matrix: Water Lab File ID: UXX6338.D

Analysis Method: 8260B Date Collected: 08/09/2013 10:45

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 20:14

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	8.0	U	8.0	1.3
74-87-3	Chloromethane	8.0	U	8.0	2.4
156-59-2	cis-1,2-Dichloroethene	200		8.0	1.4
10061-01-5	cis-1,3-Dichloropropene	8.0	U	8.0	1.1
87-68-3	Hexachlorobutadiene	8.0	U	8.0	2.4
74-95-3	Dibromomethane	8.0	U	8.0	2.2
75-27-4	Bromodichloromethane	8.0	U	8.0	1.2
75-71-8	Dichlorodifluoromethane	8.0	U	8.0	2.5
100-41-4	Ethylbenzene	8.0	U	8.0	1.4
106-93-4	1,2-Dibromoethane	8.0	U	8.0	1.9
108-20-3	Diisopropyl ether	80	U	80	12
91-20-3	Naphthalene	8.0	U	8.0	1.9
179601-23-1	m-Xylene & p-Xylene	16	U	16	1.9
104-51-8	n-Butylbenzene	8.0	U	8.0	0.96
98-82-8	Isopropylbenzene	8.0	U	8.0	1.0
103-65-1	n-Propylbenzene	8.0	U	8.0	1.1
78-93-3	2-Butanone	80	U	80	4.6
108-10-1	4-Methyl-2-pentanone	80	U	80	2.6
135-98-8	sec-Butylbenzene	8.0	U	8.0	1.0
1634-04-4	Methyl tert-butyl ether	8.0	U	8.0	1.4
994-05-8	Tert-amyl-methyl ether (TAME)	40	U	40	0.54
75-09-2	Methylene Chloride	14	B	8.0	2.6
95-47-6	o-Xylene	8.0	U	8.0	1.1
100-42-5	Styrene	8.0	U	8.0	0.88
637-92-3	Ethyl-t-butyl ether (ETBE)	40	U	40	0.88
98-06-6	tert-Butylbenzene	8.0	U	8.0	1.0
127-18-4	Tetrachloroethene	8.0	U	8.0	2.3
108-88-3	Toluene	8.0	U	8.0	1.0
156-60-5	trans-1,2-Dichloroethene	2.0	J	8.0	1.5
10061-02-6	trans-1,3-Dichloropropene	8.0	U	8.0	1.5
79-01-6	Trichloroethene	89		8.0	1.4
75-69-4	Trichlorofluoromethane	8.0	U	8.0	1.7
108-05-4	Vinyl acetate	16	U	16	1.5
75-01-4	Vinyl chloride	120		8.0	1.8
75-65-0	tert-Butyl alcohol	400	U *	400	31
1330-20-7	Xylenes, Total	16	U	16	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-30 | Lab Sample ID: 240-27831-5

Matrix: Water | Lab File ID: UXX6338.D

Analysis Method: 8260B | Date Collected: 08/09/2013 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 20:14

Soil Aliquot Vol: | Dilution Factor: 8

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	8.0	U *	8.0	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-30 Lab Sample ID: 240-27831-5

Matrix: Water Lab File ID: UXX6338.D

Analysis Method: 8260B Date Collected: 08/09/2013 10:45

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 20:14

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-35 | Lab Sample ID: 240-27831-6

Matrix: Water | Lab File ID: UXX6339.D

Analysis Method: 8260B | Date Collected: 08/09/2013 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 20:35

Soil Aliquot Vol: | Dilution Factor: 8

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	8.0	U *	8.0	1.8
71-55-6	1,1,1-Trichloroethane	8.0	U	8.0	1.8
79-34-5	1,1,2,2-Tetrachloroethane	8.0	U	8.0	1.4
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	8.0	U	8.0	2.2
75-34-3	1,1-Dichloroethane	8.0	U	8.0	1.2
75-35-4	1,1-Dichloroethene	8.0	U	8.0	1.5
563-58-6	1,1-Dichloropropene	8.0	U	8.0	1.0
87-61-6	1,2,3-Trichlorobenzene	8.0	U	8.0	1.4
96-18-4	1,2,3-Trichloropropane	8.0	U	8.0	3.4
526-73-8	1,2,3-Trimethylbenzene	40	U	40	0.047
120-82-1	1,2,4-Trichlorobenzene	8.0	U	8.0	1.2
95-63-6	1,2,4-Trimethylbenzene	8.0	U	8.0	0.96
96-12-8	1,2-Dibromo-3-Chloropropane	16	U	16	5.4
95-50-1	1,2-Dichlorobenzene	8.0	U	8.0	1.0
107-06-2	1,2-Dichloroethane	1.9	J	8.0	1.8
78-87-5	1,2-Dichloropropane	8.0	U	8.0	1.4
541-73-1	1,3-Dichlorobenzene	8.0	U	8.0	1.1
142-28-9	1,3-Dichloropropane	8.0	U	8.0	1.3
106-46-7	1,4-Dichlorobenzene	8.0	U	8.0	1.0
594-20-7	2,2-Dichloropropane	8.0	U	8.0	1.0
110-75-8	2-Chloroethyl vinyl ether	80	U	80	7.9
95-49-8	2-Chlorotoluene	8.0	U	8.0	0.88
591-78-6	2-Hexanone	80	U	80	3.3
108-86-1	Bromobenzene	8.0	U	8.0	1.0
74-97-5	Bromochloromethane	8.0	U	8.0	2.3
106-43-4	4-Chlorotoluene	8.0	U	8.0	1.4
99-87-6	p-Isopropyltoluene	8.0	U	8.0	0.96
67-64-1	Acetone	10	J	80	8.8
71-43-2	Benzene	2.1	J	8.0	1.0
75-25-2	Bromoform	8.0	U	8.0	5.1
74-83-9	Bromomethane	8.0	U	8.0	3.3
75-15-0	Carbon disulfide	8.0	U	8.0	1.0
56-23-5	Carbon tetrachloride	8.0	U	8.0	1.0
108-90-7	Chlorobenzene	8.0	U	8.0	1.2
75-00-3	Chloroethane	8.0	U	8.0	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-35 Lab Sample ID: 240-27831-6

Matrix: Water Lab File ID: UXX6339.D

Analysis Method: 8260B Date Collected: 08/09/2013 11:00

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 20:35

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	8.0	U	8.0	1.3
74-87-3	Chloromethane	8.0	U	8.0	2.4
156-59-2	cis-1,2-Dichloroethene	170		8.0	1.4
10061-01-5	cis-1,3-Dichloropropene	8.0	U	8.0	1.1
87-68-3	Hexachlorobutadiene	8.0	U	8.0	2.4
74-95-3	Dibromomethane	8.0	U	8.0	2.2
75-27-4	Bromodichloromethane	8.0	U	8.0	1.2
75-71-8	Dichlorodifluoromethane	8.0	U	8.0	2.5
100-41-4	Ethylbenzene	8.0	U	8.0	1.4
106-93-4	1,2-Dibromoethane	8.0	U	8.0	1.9
108-20-3	Diisopropyl ether	80	U	80	12
91-20-3	Naphthalene	8.0	U	8.0	1.9
179601-23-1	m-Xylene & p-Xylene	16	U	16	1.9
104-51-8	n-Butylbenzene	8.0	U	8.0	0.96
98-82-8	Isopropylbenzene	8.0	U	8.0	1.0
103-65-1	n-Propylbenzene	8.0	U	8.0	1.1
78-93-3	2-Butanone	80	U	80	4.6
108-10-1	4-Methyl-2-pentanone	80	U	80	2.6
135-98-8	sec-Butylbenzene	8.0	U	8.0	1.0
1634-04-4	Methyl tert-butyl ether	8.0	U	8.0	1.4
994-05-8	Tert-amyl-methyl ether (TAME)	40	U	40	0.54
75-09-2	Methylene Chloride	14	B	8.0	2.6
95-47-6	o-Xylene	8.0	U	8.0	1.1
100-42-5	Styrene	8.0	U	8.0	0.88
637-92-3	Ethyl-t-butyl ether (ETBE)	40	U	40	0.88
98-06-6	tert-Butylbenzene	8.0	U	8.0	1.0
127-18-4	Tetrachloroethene	8.0	U	8.0	2.3
108-88-3	Toluene	8.0	U	8.0	1.0
156-60-5	trans-1,2-Dichloroethene	1.6	J	8.0	1.5
10061-02-6	trans-1,3-Dichloropropene	8.0	U	8.0	1.5
79-01-6	Trichloroethene	86		8.0	1.4
75-69-4	Trichlorofluoromethane	8.0	U	8.0	1.7
108-05-4	Vinyl acetate	16	U	16	1.5
75-01-4	Vinyl chloride	95		8.0	1.8
75-65-0	tert-Butyl alcohol	61	J B *	400	31
1330-20-7	Xylenes, Total	16	U	16	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-35 | Lab Sample ID: 240-27831-6

Matrix: Water | Lab File ID: UXX6339.D

Analysis Method: 8260B | Date Collected: 08/09/2013 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 20:35

Soil Aliquot Vol: | Dilution Factor: 8

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	8.0	U *	8.0	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-35 | Lab Sample ID: 240-27831-6

Matrix: Water | Lab File ID: UXX6339.D

Analysis Method: 8260B | Date Collected: 08/09/2013 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 20:35

Soil Aliquot Vol: | Dilution Factor: 8

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: TB-080913 | Lab Sample ID: 240-27831-7

Matrix: Water | Lab File ID: UXX6340.D

Analysis Method: 8260B | Date Collected: 08/09/2013 11:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 20:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: TB-080913 Lab Sample ID: 240-27831-7

Matrix: Water Lab File ID: UXX6340.D

Analysis Method: 8260B Date Collected: 08/09/2013 11:45

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 20:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: TB-080913 Lab Sample ID: 240-27831-7

Matrix: Water Lab File ID: UXX6340.D

Analysis Method: 8260B Date Collected: 08/09/2013 11:45

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 20:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: TB-080913 Lab Sample ID: 240-27831-7

Matrix: Water Lab File ID: UXX6340.D

Analysis Method: 8260B Date Collected: 08/09/2013 11:45

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 20:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-27831-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/10/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.2 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-42-10 (240-27831-1), DR-DPT-42-15 (240-27831-2), DR-DPT-42-20 (240-27831-3), DR-DPT-42-25 (240-27831-4), DR-DPT-42-30 (240-27831-5), DR-DPT-42-35 (240-27831-6) and TB-080913 (240-27831-7) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/17/2013.

Methylene Chloride was detected in method blank MB 240-97899/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

tert-Butyl alcohol was detected in method blank MB 240-97899/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-42-25 (240-27831-4)[5.71X], DR-DPT-42-30 (240-27831-5)[8X] and DR-DPT-42-35 (240-27831-6)[8X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 97899 recovered outside control limits for the following analyte(s):
2-Methyl-2-propanol--has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

The laboratory control sample (LCS) for batch 97899 recovered outside control limits for the following analytes: Chlorodibromomethane and 1,1,1,2-Tetrachloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEAD... ENVIR... ...TAL T

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/9/13	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below 5 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			Sampler: S. Cameron
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT-42-10	8/9/2013	0905	GW	Water	3		x	
DR-DPT-42-15	8/9/2013	0930	GW	Water	3		x	
DR-DPT-42-20	8/9/2013	0945	GW	Water	3		x	
DR-DPT-42-25	8/9/2013	1015	GW	Water	3		x	
DR-DPT-42-30	8/9/2013	1045	GW	Water	3		x	
DR-DPT-42-35	8/9/2013	1100	GW	Water	3		x	
DR-DPT-	8/9/2013		GW	Water	3		x	
DR-DPT-	8/9/2013		GW	Water	3		x	
DR-DPT-	8/9/2013		GW	Water	3		x	
DR-DPT-	8/9/2013		GW	Water	3		x	
DR-DPT-	8/9/2013		GW	Water	3		x	
TB-080913	8/9/2013	1145	GW	Water	2		x	

240-27831 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Relinquished by: Josh Mullis	Company: Tetra Tech	Date/Time: 8/9/13 1200	Received by:	Company: TestAmerica	Date/Time: 8/9/13 1340
Relinquished by:	Company: TestAmerica	Date/Time: 8/9/13 1500	Received by:	Company: TA	Date/Time: 8-10-13 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 27831
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: Derrick Green

Cooler Received on 8-10-13 Opened on 8-10-13

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. 3.0 °C	Corrected Cooler Temp. 3.2 °C	
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC376062
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: MM

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27831-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27831-1	DR-DPT-42-10	Water	08/09/2013 0905	08/10/2013 0930
240-27831-2	DR-DPT-42-15	Water	08/09/2013 0930	08/10/2013 0930
240-27831-3	DR-DPT-42-20	Water	08/09/2013 0945	08/10/2013 0930
240-27831-4	DR-DPT-42-25	Water	08/09/2013 1015	08/10/2013 0930
240-27831-5	DR-DPT-42-30	Water	08/09/2013 1045	08/10/2013 0930
240-27831-6	DR-DPT-42-35	Water	08/09/2013 1100	08/10/2013 0930
240-27831-7TB	TB-080913	Water	08/09/2013 1145	08/10/2013 0930

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27831-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

HOLDTIME

SDG 240-27719-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-42-10	240-27831-1	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-31-35	240-28158-2	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-31-40	240-28158-3	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-31-45	240-28158-4	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-38-15	240-27760-1	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-30	240-27760-2	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-35	240-27760-3	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-40	240-27760-4	NM	08/08/2013	08/16/2013	08/16/2013	8	0	8
OV	UG/L	DR-DPT-40-20	240-27719-4	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-25	240-27719-5	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-30	240-27719-6	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-35	240-27719-7	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-40	240-27719-8	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-41-35	240-27719-1	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-31-30	240-28158-1	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-43B-10	240-28158-5	NM	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	TB-082013	240-28158-8	TB	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	TB-080913	240-27831-7	TB	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	TB-080813	240-27760-5	NM	08/08/2013	08/16/2013	08/16/2013	8	0	8
OV	UG/L	TB-080713	240-27719-9	TB	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-70-20	240-28270-1	NM	08/22/2013	08/28/2013	08/28/2013	6	0	6
OV	UG/L	DR-DPT-41-40	240-27719-2	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-43B-15	240-28158-6	NM	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	DR-DPT-41-45	240-27719-3	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-42-35	240-27831-6	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-30	240-27831-5	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-25	240-27831-4	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-20	240-27831-3	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-15	240-27831-2	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	TB-082213	240-28270-2	TB	08/22/2013	08/28/2013	08/28/2013	6	0	6
OV	UG/L	DR-DPT-43B-20	240-28158-7	NM	08/20/2013	08/29/2013	08/29/2013	9	0	9

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Lab File ID: BFB5262.D BFB Injection Date: 05/28/2013

Instrument ID: A3UX10 BFB Injection Time: 13:16

Analysis Batch No.: 87495

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	52.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	98.2	
175	5.0 - 9.0 % of mass 174	6.7	(6.9)1
176	95.0 - 101.0 % of mass 174	93.5	(95.2)1
177	5.0 - 9.0 % of mass 176	6.1	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-87495/8	UXX4658.D	05/28/2013	15:50
	STDA9 240-87495/9	UXX4659.D	05/28/2013	16:11
	STDA9 240-87495/10	UXX4660.D	05/28/2013	16:32
	STDA9 240-87495/11	UXX4661.D	05/28/2013	16:53
	STDA9 240-87495/12	UXX4662.D	05/28/2013	17:15
	STDA9 240-87495/13	UXX4663.D	05/28/2013	17:36

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27831-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-87495/13	UXX4663.D
Level 2	STDA9 240-87495/12	UXX4662.D
Level 3	STDA9 240-87495/11	UXX4661.D
Level 4	STDA9 240-87495/10	UXX4660.D
Level 5	STDA9 240-87495/9	UXX4659.D
Level 6	STDA9 240-87495/8	UXX4658.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.9351 0.7200	0.8183	0.9669	0.7435	0.8522	Ave		0.8393				12.0		15.0			
Ethyl ether	0.3526 0.2524	0.2870	0.3279	0.2696	0.3339	Ave		0.3039				13.0		15.0			
3-Chloro-1-propene	0.1632 0.1612	0.1539	0.1609	0.1639	0.1752	Ave		0.1630				4.2		15.0			
Diisopropyl ether	0.2436 0.2941	0.2470	0.2427	0.2569	0.2816	Ave		0.2610				8.3		15.0			
2-Chloro-1,3-butadiene	0.4470 0.5692	0.4651	0.4677	0.4894	0.5665	Ave		0.5008				11.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.7474 0.9445	0.7998	0.8028	0.8547	0.9344	Ave		0.8473				9.3		15.0			
Propionitrile	0.0183 0.0231	0.0204	0.0273	0.0252	0.0240	Ave		0.0230				14.0		15.0			
Ethyl acetate	0.1590 0.1647	0.1524	0.2142	0.1705	0.1575	Ave		0.1697				13.0		15.0			
Methacrylonitrile	0.1102 0.1289	0.1319	0.1213	0.1325	0.1332	Ave		0.1263				7.1		15.0			
Isobutyl alcohol	0.0076 0.0057	0.0068	0.0075	0.0083	0.0073	Ave		0.0072				12.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6746 0.8156	0.6951	0.7166	0.7363	0.8000	Ave		0.7397				7.7		15.0			
n-Heptane	0.0683 0.0638	0.0609	0.0626	0.0604	0.0641	Ave		0.0634				4.5		15.0			
n-Butanol	0.0050	0.0051	0.0047	0.0072	0.0067	Lin	-0.083	0.0070							0.9920		0.9900
Methyl methacrylate	0.1815 0.1582	0.1559	0.1663	0.1628	0.1584	Ave		0.1639				5.8		15.0			
2-Nitropropane	0.0181 0.0163	0.0192	0.0150	0.0189	0.0149	Ave		0.0170				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27831-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0764 0.0641	0.0838	0.0840	0.0919	0.0886	Ave		0.0815				12.0		15.0			
1,2,3-Trimethylbenzene	2.1912 2.8021	2.2708	2.3128	2.4773	2.5677	Ave		2.4370				9.3		15.0			
2-Methylnaphthalene	1.0000 0.8868	0.9617	1.0575	1.0106	1.0960	Ave		1.0021				7.3		15.0			
n-Butyl acetate	0.1536 0.1805	0.1506	0.1861	0.1673	0.1756	Ave		0.1690				8.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Lab File ID: BFB5311.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX10 BFB Injection Time: 12:26

Analysis Batch No.: 92306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	86.8	
175	5.0 - 9.0 % of mass 174	6.2	(7.1)1
176	95.0 - 101.0 % of mass 174	86.3	(99.4)1
177	5.0 - 9.0 % of mass 176	5.5	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92306/2	UXX5740.D	07/02/2013	12:55
	STD8260 240-92306/3	UXX5741.D	07/02/2013	13:16
	STD8260 240-92306/4	UXX5742.D	07/02/2013	13:37
	STD8260 240-92306/5	UXX5743.D	07/02/2013	13:59
	STD8260 240-92306/6	UXX5744.D	07/02/2013	14:20
	STD8260 240-92306/7	UXX5745.D	07/02/2013	14:41
	ICV 240-92306/8	UXX5746.D	07/02/2013	15:03

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27831-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92306/7	UXX5745.D
Level 2	STD8260 240-92306/6	UXX5744.D
Level 3	STD8260 240-92306/5	UXX5743.D
Level 4	STD8260 240-92306/4	UXX5742.D
Level 5	STD8260 240-92306/3	UXX5741.D
Level 6	STD8260 240-92306/2	UXX5740.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2977 0.2838	0.2577	0.2748	0.2528	0.2566	Ave		0.2706				6.6		15.0			
Chloromethane	0.4636 0.3885	0.4208	0.4187	0.3892	0.3928	Ave		0.4122			0.1000	7.1		15.0			
Vinyl chloride	0.3817 0.3523	0.3628	0.3635	0.3478	0.3489	Ave		0.3595				3.6		15.0			
Bromomethane	0.1738 0.1513	0.1661	0.1687	0.1771	0.1716	Ave		0.1681				5.4		15.0			
Chloroethane	0.2457 0.2275	0.2302	0.2304	0.2310	0.2376	Ave		0.2338				2.9		15.0			
Trichlorofluoromethane	0.3575 0.3719	0.3350	0.3525	0.3679	0.3820	Ave		0.3611				4.6		15.0			
Acrolein	0.0359 0.0431	0.0395	0.0411	0.0449	0.0462	Ave		0.0418				9.0		15.0			
1,1-Dichloroethene	0.3190 0.2928	0.2948	0.2913	0.2993	0.3010	Ave		0.2997				3.4		15.0			
Acetone	0.0740 0.0622	0.0776	0.0718	0.0736	0.0689	Ave		0.0713				7.4		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2062 0.2056	0.2022	0.2152	0.2144	0.2141	Ave		0.2096				2.7		15.0			
Iodomethane	0.4548 0.4274	0.4570	0.4317	0.4435	0.4405	Ave		0.4425				2.7		15.0			
Carbon disulfide	0.8923 0.9201	0.8872	0.8823	0.9357	0.9395	Ave		0.9095				2.8		15.0			
Acetonitrile	0.0167 0.0157	0.0178	0.0214	0.0237	0.0177	Qua	0.0061	0.0220	0						0.9940		0.9900
Methyl acetate	0.1969 0.2006	0.2062	0.2102	0.2165	0.2151	Ave		0.2076				3.8		15.0			
Methylene Chloride	0.7288 0.3199	0.5369	0.3954	0.3695	0.3438	Lin1	0.4289	0.3150							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27831-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0095 0.0104	0.0120	0.0145	0.0164	0.0130	Qua	-0.124	0.0171	0						0.9970		0.9900
Acrylonitrile	0.0905 0.1021	0.0983	0.1034	0.1068	0.1082	Ave		0.1016				6.4		15.0			
Methyl tert-butyl ether	0.7590 0.7679	0.7484	0.7512	0.8058	0.8208	Ave		0.7755				3.9		15.0			
trans-1,2-Dichloroethene	0.3358 0.3195	0.3308	0.3296	0.3254	0.3340	Ave		0.3292				1.8		15.0			
Hexane	0.0712 0.0637	0.0646	0.0668	0.0661	0.0671	Ave		0.0666				3.9		15.0			
1,1-Dichloroethane	0.5578 0.5246	0.5449	0.5273	0.5247	0.5369	Ave		0.5360			0.1000	2.5		15.0			
Vinyl acetate	0.0458 0.0460	0.0362	0.0441	0.0416	0.0442	Ave		0.0430				8.6		15.0			
2-Butanone	0.0991 0.0997	0.0968	0.1003	0.0974	0.1064	Ave		0.0999				3.4		15.0			
cis-1,2-Dichloroethene	0.3285 0.3322	0.3571	0.3290	0.3348	0.3453	Ave		0.3378				3.3		15.0			
2,2-Dichloropropane	0.2688 0.2905	0.2819	0.2776	0.2821	0.3040	Ave		0.2842				4.2		15.0			
Bromochloromethane	0.1521 0.1504	0.1506	0.1534	0.1499	0.1524	Ave		0.1515				0.9		15.0			
Tetrahydrofuran	0.0772 0.0698	0.0789	0.0767	0.0752	0.0716	Ave		0.0749				4.7		15.0			
Chloroform	0.4907 0.4900	0.5020	0.4890	0.4920	0.4962	Ave		0.4933				1.0		15.0			
1,1,1-Trichloroethane	0.4106 0.3726	0.3778	0.3695	0.3890	0.3851	Ave		0.3841				3.9		15.0			
Cyclohexane	0.5528 0.5297	0.5227	0.5349	0.5435	0.5429	Ave		0.5378				2.0		15.0			
1,1-Dichloropropene	0.3609 0.3601	0.3698	0.3664	0.3618	0.3692	Ave		0.3647				1.2		15.0			
Carbon tetrachloride	0.2610 0.2765	0.2656	0.2674	0.2761	0.2887	Ave		0.2725				3.7		15.0			
1,2-Dichloroethane	0.3474 0.3376	0.3583	0.3351	0.3500	0.3553	Ave		0.3473				2.7		15.0			
Benzene	1.1681 1.1119	1.1203	1.0964	1.1265	1.1340	Ave		1.1262				2.2		15.0			
Trichloroethene	0.3214 0.2780	0.2821	0.2900	0.2862	0.2843	Ave		0.2904				5.4		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27831-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloropropane	0.2454 0.2502	0.2581	0.2466	0.2561	0.2683	Ave		0.2541				3.4		15.0			
Methylcyclohexane	0.4919 0.4866	0.4934	0.4893	0.5052	0.5090	Ave		0.4959				1.8		15.0			
Dibromomethane	0.1412 0.1445	0.1506	0.1469	0.1502	0.1477	Ave		0.1468				2.4		15.0			
1,4-Dioxane	0.0014 0.0009	0.0011	0.0016	0.0020	0.0013	Ave		0.0014				26.0	*	15.0			
Bromodichloromethane	0.2890 0.3042	0.2800	0.2808	0.2937	0.3002	Ave		0.2913				3.4		15.0			
2-Chloroethyl vinyl ether	0.1328 0.1460	0.1268	0.1340	0.1400	0.1524	Ave		0.1387				6.8		15.0			
cis-1,3-Dichloropropene	0.3136 0.3654	0.2925	0.3234	0.3329	0.3608	Ave		0.3314				8.4		15.0			
4-Methyl-2-pentanone	0.1851 0.2307	0.1947	0.2072	0.2263	0.2356	Ave		0.2133				9.7		15.0			
Toluene	1.5717 1.7749	1.5621	1.5832	1.5919	1.6670	Ave		1.6251				5.1		15.0			
trans-1,3-Dichloropropene	0.3281 0.4436	0.3301	0.3424	0.3783	0.4187	Ave		0.3735				13.0		15.0			
Ethyl methacrylate	0.3469 0.4669	0.3719	0.3886	0.4197	0.4555	Ave		0.4082				12.0		15.0			
1,1,2-Trichloroethane	0.3016 0.3098	0.3088	0.3075	0.2994	0.3063	Ave		0.3056				1.4		15.0			
1,3-Dichloropropane	0.5636 0.5513	0.5066	0.5178	0.5309	0.5453	Ave		0.5359				4.0		15.0			
Tetrachloroethene	0.3249 0.3137	0.3109	0.3123	0.3155	0.3171	Ave		0.3157				1.6		15.0			
2-Hexanone	0.1784 0.2174	0.1735	0.1912	0.2073	0.2193	Ave		0.1979				10.0		15.0			
Dibromochloromethane	0.2360 0.2992	0.2543	0.2535	0.2707	0.2882	Ave		0.2670				8.9		15.0			
1,2-Dibromoethane	0.2969 0.3100	0.2975	0.2857	0.3063	0.3126	Ave		0.3015				3.3		15.0			
Chlorobenzene	1.1153 1.1370	1.1006	1.0569	1.0906	1.1038	Ave		1.1007			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2824 0.3322	0.2829	0.2918	0.3108	0.3194	Ave		0.3032				6.8		15.0			
Ethylbenzene	0.5758 0.6262	0.5863	0.6011	0.6014	0.6212	Ave		0.6020				3.2		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27831-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.7270 0.8215	0.7355	0.7415	0.7771	0.8022	Ave		0.7675				5.1		15.0			
o-Xylene	0.6796 0.7942	0.7047	0.7272	0.7639	0.7596	Ave		0.7382				5.7		15.0			
Styrene	1.1077 1.3987	1.1933	1.1883	1.2806	1.3155	Ave		1.2474				8.4		15.0			
Bromoform	0.1365 0.1881	0.1411	0.1461	0.1592	0.1772	Ave		0.1580			0.1000	13.0		15.0			
Isopropylbenzene	1.7511 2.0343	1.7718	1.8148	1.9530	1.9719	Ave		1.8828				6.3		15.0			
1,1,2,2-Tetrachloroethane	0.7449 0.7423	0.7656	0.8018	0.7659	0.7719	Ave		0.7654			0.3000	2.8		15.0			
Bromobenzene	0.8881 0.8401	0.8893	0.8519	0.8109	0.8110	Ave		0.8485				4.1		15.0			
1,2,3-Trichloropropane	0.2528 0.2485	0.2436	0.2471	0.2523	0.2472	Ave		0.2486				1.4		15.0			
trans-1,4-Dichloro-2-butene	0.1594 0.2065	0.1645	0.1863	0.1935	0.1991	Ave		0.1849				10.0		15.0			
n-Propylbenzene	0.8836 0.9348	0.9225	0.9442	0.9060	0.9061	Ave		0.9162				2.4		15.0			
2-Chlorotoluene	0.8471 0.8107	0.8035	0.8145	0.8068	0.8122	Ave		0.8158				1.9		15.0			
1,3,5-Trimethylbenzene	2.5762 2.8611	2.6002	2.7221	2.7556	2.8139	Ave		2.7215				4.2		15.0			
4-Chlorotoluene	0.8988 0.9081	0.8802	0.8823	0.8848	0.8823	Ave		0.8894				1.3		15.0			
tert-Butylbenzene	2.5038 2.4500	2.2239	2.4167	2.3292	2.3560	Ave		2.3799				4.2		15.0			
1,2,4-Trimethylbenzene	2.6043 2.8929	2.6775	2.7491	2.8000	2.8183	Ave		2.7570				3.8		15.0			
sec-Butylbenzene	3.0300 3.4431	3.1666	3.3039	3.3542	3.3916	Ave		3.2816				4.7		15.0			
1,3-Dichlorobenzene	1.5092 1.5056	1.5998	1.5710	1.5273	1.5059	Ave		1.5365				2.6		15.0			
p-Isopropyltoluene	2.4424 2.7807	2.5538	2.6635	2.6618	2.7434	Ave		2.6409				4.7		15.0			
1,4-Dichlorobenzene	1.7229 1.6045	1.6252	1.6225	1.5715	1.5870	Ave		1.6223				3.3		15.0			
n-Butylbenzene	2.0630 2.2382	2.0945	2.2927	2.3221	2.3183	Ave		2.2215				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27831-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4074 1.3553	1.4151	1.4245	1.4040	1.3915	Ave		1.3996				1.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0897 0.0915	0.0866	0.1008	0.1037	0.0925	Ave		0.0941				7.1		15.0			
1,3,5-Trichlorobenzene	0.9389 0.8233	0.9547	0.9599	0.9476	0.8670	Ave		0.9152				6.2		15.0			
1,2,4-Trichlorobenzene	0.8510 0.7437	0.8164	0.8427	0.8344	0.7483	Ave		0.8061				5.9		15.0			
Hexachlorobutadiene	0.2820 0.2374	0.2926	0.3073	0.2714	0.2509	Ave		0.2736				9.5		15.0			
Naphthalene	1.9175 1.8952	1.9376	2.0220	2.1068	1.9312	Ave		1.9684				4.1		15.0			
1,2,3-Trichlorobenzene	0.7657 0.6768	0.7464	0.7504	0.7341	0.6861	Ave		0.7266				5.0		15.0			
Dibromofluoromethane (Surr)	0.2502 0.2509	0.2370	0.2459	0.2475	0.2591	Ave		0.2484				2.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3197 0.2982	0.2804	0.2943	0.2970	0.3023	Ave		0.2987				4.3		15.0			
Toluene-d8 (Surr)	1.3686 1.4472	1.2543	1.3081	1.3123	1.3963	Ave		1.3478				5.2		15.0			
4-Bromofluorobenzene (Surr)	0.5086 0.5764	0.5161	0.5353	0.5693	0.5900	Ave		0.5493				6.2		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Lab File ID: BFB5354.D BFB Injection Date: 08/17/2013

Instrument ID: A3UX10 BFB Injection Time: 12:32

Analysis Batch No.: 97899

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.7	
75	30.0 - 60.0 % of mass 95	52.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	75.2	
175	5.0 - 9.0 % of mass 174	5.5	(7.3)1
176	95.0 - 101.0 % of mass 174	73.1	(97.2)1
177	5.0 - 9.0 % of mass 176	5.0	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97899/2	UXX6318.D	08/17/2013	13:02
	CCV 240-97899/3	UXX6319.D	08/17/2013	13:24
	LCS 240-97899/4	UXX6320.D	08/17/2013	13:46
	MB 240-97899/6	UXX6322.D	08/17/2013	14:29
DR-DPT-42-10	240-27831-1	UXX6334.D	08/17/2013	18:48
DR-DPT-42-15	240-27831-2	UXX6335.D	08/17/2013	19:10
DR-DPT-42-20	240-27831-3	UXX6336.D	08/17/2013	19:31
DR-DPT-42-25	240-27831-4	UXX6337.D	08/17/2013	19:52
DR-DPT-42-30	240-27831-5	UXX6338.D	08/17/2013	20:14
DR-DPT-42-35	240-27831-6	UXX6339.D	08/17/2013	20:35
TB-080913	240-27831-7	UXX6340.D	08/17/2013	20:57
	240-27638-B-1 MS	UXX6343.D	08/17/2013	22:00
	240-27638-B-1 MSD	UXX6344.D	08/17/2013	22:22

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Lab Sample ID: CCVIS 240-97899/2 Calibration Date: 08/17/2013 13:02

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6318.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.3008		1.00	0.0100	11.2	50.0
Chloromethane	Ave	0.4122	0.4315	0.1000	1.00	0.0100	4.7	50.0
Vinyl chloride	Ave	0.3595	0.3650		1.00	0.0100	1.5	20.0
Bromomethane	Ave	0.1681	0.1338		1.00	0.0100	-20.4	50.0
Chloroethane	Ave	0.2338	0.1504		1.00	0.0100	-35.7	50.0
Trichlorofluoromethane	Ave	0.3611	0.3629		1.00	0.0100	0.5	50.0
Acrolein	Ave	0.0418	0.0235		20.0	0.100	-43.8	50.0
1,1-Dichloroethene	Ave	0.2997	0.2865		1.00	0.0100	-4.4	20.0
Acetone	Ave	0.0713	0.0556		10.0	0.0200	-22.0	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2192		1.00	0.0100	4.6	50.0
Iodomethane	Ave	0.4425	0.4312		1.00	0.0100	-2.6	50.0
Carbon disulfide	Ave	0.9095	0.9633		1.00	0.0100	5.9	50.0
Acetonitrile	Qua		0.0110		20.0	0.100	-48.4	50.0
Methyl acetate	Ave	0.2076	0.1904		10.0	0.0200	-8.3	50.0
Methylene Chloride	Lin1		0.4122		1.00	0.0100	17.2	50.0
tert-Butyl alcohol	Qua		0.0061		50.0	0.200	-59.4*	50.0
Acrylonitrile	Ave	0.1016	0.0873		20.0	0.0200	-14.0	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7358		1.00	0.0100	-5.1	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3299		1.00	0.0100	0.2	50.0
Hexane	Ave	0.0666	0.0679		1.00	0.0100	1.9	20.0
1,1-Dichloroethane	Ave	0.5360	0.5514	0.1000	1.00	0.0100	2.9	50.0
Vinyl acetate	Ave	0.0430	0.0375		2.00	0.0100	-12.7	50.0
2-Butanone	Ave	0.0999	0.0908		10.0	0.0200	-9.2	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3198		1.00	0.0100	-5.3	50.0
2,2-Dichloropropane	Ave	0.2842	0.3908		1.00	0.0100	37.5	50.0
Bromochloromethane	Ave	0.1515	0.1455		1.00	0.0100	-3.9	50.0
Tetrahydrofuran	Ave	0.0749	0.0599		5.00	0.0100	-20.1	50.0
Chloroform	Ave	0.4933	0.5368		1.00	0.0100	8.8	20.0
1,1,1-Trichloroethane	Ave	0.3841	0.4740		1.00	0.0100	23.4	50.0
Cyclohexane	Ave	0.5378	0.5830		1.00	0.0100	8.4	50.0
1,1-Dichloropropene	Ave	0.3647	0.3894		1.00	0.0100	6.8	50.0
Carbon tetrachloride	Ave	0.2725	0.3890		1.00	0.0100	42.7	50.0
1,2-Dichloroethane	Ave	0.3473	0.4179		1.00	0.0100	20.3	50.0
Benzene	Ave	1.126	1.166		1.00	0.0100	3.6	50.0
Trichloroethene	Ave	0.2904	0.2799		1.00	0.0100	-3.6	50.0
1,2-Dichloropropane	Ave	0.2541	0.2764		1.00	0.0100	8.8	20.0
Methylcyclohexane	Ave	0.4959	0.4914		1.00	0.0100	-0.9	50.0
1,4-Dioxane	Ave	0.0014	0.0008		50.0	0.500	-41.3	50.0
Dibromomethane	Ave	0.1468	0.1488		1.00	0.0100	1.3	50.0
Bromodichloromethane	Ave	0.2913	0.3710		1.00	0.0100	27.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Lab Sample ID: CCVIS 240-97899/2 Calibration Date: 08/17/2013 13:02

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6318.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1297		10.0	0.0200	-6.5	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3732		1.00	0.0100	12.6	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2061		10.0	0.0200	-3.4	50.0
Toluene	Ave	1.625	1.833		1.00	0.0100	12.8	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4871		1.00	0.0100	30.4	50.0
Ethyl methacrylate	Ave	0.4082	0.4298		1.00	0.0100	5.3	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3227		1.00	0.0100	5.6	50.0
1,3-Dichloropropane	Ave	0.5359	0.5860		1.00	0.0100	9.3	50.0
Tetrachloroethene	Ave	0.3157	0.3344		1.00	0.0100	5.9	50.0
2-Hexanone	Ave	0.1979	0.2120		10.0	0.0200	7.1	50.0
Dibromochloromethane	Ave	0.2670	0.3620		1.00	0.0100	35.6	50.0
1,2-Dibromoethane	Ave	0.3015	0.3042		1.00	0.0100	0.9	50.0
Chlorobenzene	Ave	1.101	1.133	0.3000	1.00	0.0100	2.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.4056		1.00	0.0100	33.8	50.0
Ethylbenzene	Ave	0.6020	0.6382		1.00	0.0100	6.0	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7899		2.00	0.0200	2.9	50.0
o-Xylene	Ave	0.7382	0.7753		1.00	0.0100	5.0	50.0
Styrene	Ave	1.247	1.232		1.00	0.0100	-1.2	50.0
Bromoform	Ave	0.1580	0.2045	0.1000	1.00	0.0100	29.4	50.0
Isopropylbenzene	Ave	1.883	2.018		1.00	0.0100	7.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7174	0.3000	1.00	0.0100	-6.3	50.0
Bromobenzene	Ave	0.8485	0.7620		1.00	0.0100	-10.2	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2291		1.00	0.0100	-7.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1410		1.00	0.0100	-23.7	50.0
n-Propylbenzene	Ave	0.9162	0.8767		1.00	0.0100	-4.3	50.0
2-Chlorotoluene	Ave	0.8158	0.7957		1.00	0.0100	-2.5	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.824		1.00	0.0100	3.7	50.0
4-Chlorotoluene	Ave	0.8894	0.8442		1.00	0.0100	-5.1	50.0
tert-Butylbenzene	Ave	2.380	2.517		1.00	0.0100	5.8	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.842		1.00	0.0100	3.1	50.0
sec-Butylbenzene	Ave	3.282	3.200		1.00	0.0100	-2.5	50.0
1,3-Dichlorobenzene	Ave	1.536	1.488		1.00	0.0100	-3.1	50.0
p-Isopropyltoluene	Ave	2.641	2.615		1.00	0.0100	-1.0	50.0
1,4-Dichlorobenzene	Ave	1.622	1.595		1.00	0.0100	-1.7	50.0
n-Butylbenzene	Ave	2.221	2.255		1.00	0.0100	1.5	50.0
1,2-Dichlorobenzene	Ave	1.400	1.467		1.00	0.0100	4.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.1069		2.00	0.0100	13.6	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.8588		1.00	0.0100	-6.2	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.7384		1.00	0.0100	-8.4	50.0
Hexachlorobutadiene	Ave	0.2736	0.2299		1.00	0.0100	-16.0	50.0
Naphthalene	Ave	1.968	1.707		1.00	0.0100	-13.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Lab Sample ID: CCVIS 240-97899/2 Calibration Date: 08/17/2013 13:02

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX6318.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.6481		1.00	0.0100	-10.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2158		0.00869	0.0100	-13.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2714		0.00909	0.0100	-9.1	50.0
Toluene-d8 (Surr)	Ave	1.348	1.293		0.00960	0.0100	-4.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4729		0.00861	0.0100	-13.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Lab Sample ID: CCV 240-97899/3 Calibration Date: 08/17/2013 13:24

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX6319.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.4885		2.00	0.0100	-41.8	50.0
Ethyl ether	Ave	0.3039	0.2369		2.00	0.0100	-22.0	50.0
3-Chloro-1-propene	Ave	0.1630	0.1568		2.00	0.0100	-3.8	50.0
Diisopropyl ether	Ave	0.2610	0.2431		10.0	0.0500	-6.9	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5279		2.00	0.0100	5.4	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.7933		5.00	0.0100	-6.4	50.0
Ethyl acetate	Ave	0.1697	0.1924		4.00	0.0200	13.4	50.0
Propionitrile	Ave	0.0230	0.0235		4.00	0.0200	1.8	50.0
Methacrylonitrile	Ave	0.1263	0.1346		2.00	0.0100	6.5	50.0
Isobutyl alcohol	Ave	0.0072	0.0058		50.0	0.200	-18.9	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6050		5.00	0.0100	-18.2	50.0
n-Heptane	Ave	0.0634	0.0640		1.00	0.0100	1.0	50.0
n-Butanol	Lin		0.0045		50.0	0.200	-29.4	50.0
Methyl methacrylate	Ave	0.1639	0.1946		2.00	0.0100	18.8	50.0
2-Nitropropane	Ave	0.0170	0.0510		2.00	0.0200	199.4*	50.0
Cyclohexanone	Ave	0.0815	0.0522		20.0	0.100	-35.9	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.925		0.0120	0.0100	20.0	50.0
2-Methylnaphthalene	Ave	1.002	0.7547		5.00	0.0200	-24.7	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Lab File ID: UXX6322.D Lab Sample ID: MB 240-97899/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/17/2013 14:29

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97899/4	UXX6320.D	08/17/2013 13:46
DR-DPT-42-10	240-27831-1	UXX6334.D	08/17/2013 18:48
DR-DPT-42-15	240-27831-2	UXX6335.D	08/17/2013 19:10
DR-DPT-42-20	240-27831-3	UXX6336.D	08/17/2013 19:31
DR-DPT-42-25	240-27831-4	UXX6337.D	08/17/2013 19:52
DR-DPT-42-30	240-27831-5	UXX6338.D	08/17/2013 20:14
DR-DPT-42-35	240-27831-6	UXX6339.D	08/17/2013 20:35
TB-080913	240-27831-7	UXX6340.D	08/17/2013 20:57
	240-27638-B-1 MS	UXX6343.D	08/17/2013 22:00
	240-27638-B-1 MSD	UXX6344.D	08/17/2013 22:22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97899/6

Matrix: Water Lab File ID: UXX6322.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97899/6

Matrix: Water Lab File ID: UXX6322.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.81		1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	7.63	J	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27831-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97899/6

Matrix: Water | Lab File ID: UXX6322.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2013 14:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97899/6

Matrix: Water Lab File ID: UXX6322.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-42-10	240-27831-1	92	100	89	78
DR-DPT-42-15	240-27831-2	90	97	89	78
DR-DPT-42-20	240-27831-3	92	100	92	76
DR-DPT-42-25	240-27831-4	91	98	93	74
DR-DPT-42-30	240-27831-5	90	96	92	75
DR-DPT-42-35	240-27831-6	91	96	91	74
TB-080913	240-27831-7	94	97	91	74
	MB 240-97899/6	90	97	92	78
	LCS 240-97899/4	88	98	97	88
	240-27638-B-1 MS	88	99	96	85
	240-27638-B-1 MSD	89	99	95	87

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6320.D

Lab ID: LCS 240-97899/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.7	117	72-116	*
1,1,1-Trichloroethane	10.0	10.8	108	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.86	89	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.2	102	74-151	
1,1-Dichloroethane	10.0	9.44	94	82-115	
1,1-Dichloroethene	10.0	8.50	85	78-131	
1,1-Dichloropropene	10.0	9.44	94	83-114	
1,2,3-Trichlorobenzene	10.0	8.07	81	54-126	
1,2,3-Trichloropropane	10.0	8.93	89	73-129	
1,2,3-Trimethylbenzene	10.0	11.1	111	70-130	
1,2,4-Trichlorobenzene	10.0	7.87	79	48-135	
1,2,4-Trimethylbenzene	10.0	9.88	99	76-120	
1,2-Dibromo-3-Chloropropane	10.0	11.1	111	42-136	
1,2-Dichlorobenzene	10.0	9.21	92	81-110	
1,2-Dichloroethane	10.0	10.7	107	71-127	
1,2-Dichloropropane	10.0	9.93	99	81-115	
1,3-Dichlorobenzene	10.0	9.01	90	80-110	
1,3-Dichloropropane	10.0	10.1	101	79-116	
1,4-Dichlorobenzene	10.0	8.77	88	82-110	
2,2-Dichloropropane	10.0	12.3	123	50-129	
2-Chloroethyl vinyl ether	10.0	8.13 J	81	52-131	
2-Chlorotoluene	10.0	9.30	93	76-116	
2-Hexanone	20.0	19.1	96	55-133	
Bromobenzene	10.0	8.83	88	76-115	
Bromochloromethane	10.0	8.32	83	77-120	
4-Chlorotoluene	10.0	8.76	88	77-115	
p-Isopropyltoluene	10.0	9.84	98	74-120	
Acetone	20.0	14.3	72	43-136	
Benzene	10.0	9.31	93	83-112	
Bromoform	10.0	11.3	113	40-131	
Bromomethane	10.0	5.83	58	11-185	
Carbon disulfide	10.0	9.47	95	62-142	
Carbon tetrachloride	10.0	12.8	128	66-128	
Chlorobenzene	10.0	9.14	91	85-110	
Chloroethane	10.0	5.29	53	25-153	
Chloroform	10.0	9.51	95	79-117	
Chloromethane	10.0	8.17	82	44-126	
cis-1,2-Dichloroethene	10.0	8.79	88	80-113	
cis-1,3-Dichloropropene	10.0	10.4	104	61-115	
Hexachlorobutadiene	10.0	7.31	73	36-134	
Dibromomethane	10.0	9.83	98	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6320.D

Lab ID: LCS 240-97899/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.6	116	72-121	
Dichlorodifluoromethane	10.0	6.98	70	19-129	
Ethylbenzene	10.0	9.27	93	83-112	
1,2-Dibromoethane	10.0	9.02	90	79-113	
Diisopropyl ether	10.0	8.80 J	88	77-118	
Naphthalene	10.0	7.66	77	32-141	
m-Xylene & p-Xylene	20.0	18.4	92	83-113	
n-Butylbenzene	10.0	9.71	97	66-125	
Isopropylbenzene	10.0	9.28	93	75-114	
n-Propylbenzene	10.0	9.64	96	74-121	
2-Butanone	20.0	16.7	83	60-126	
4-Methyl-2-pentanone	20.0	19.0	95	63-128	
sec-Butylbenzene	10.0	9.26	93	70-117	
Methyl tert-butyl ether	10.0	8.60	86	52-144	
Methylene Chloride	10.0	10.5	105	66-131	
o-Xylene	10.0	9.52	95	83-113	
Styrene	10.0	8.73	87	79-114	
tert-Butylbenzene	10.0	8.81	88	71-115	
Tetrachloroethene	10.0	9.21	92	79-114	
Toluene	10.0	9.96	100	84-111	
trans-1,2-Dichloroethene	10.0	8.81	88	83-117	
trans-1,3-Dichloropropene	10.0	11.5	115	58-117	
Trichloroethene	10.0	8.58	86	76-117	
Trichlorofluoromethane	10.0	8.53	85	49-157	
Vinyl acetate	10.0	8.05	80	46-161	
Vinyl chloride	10.0	7.81	78	53-127	
tert-Butyl alcohol	200	90.4	45	70-130	*
Xylenes, Total	30.0	27.9	93	83-112	
Dibromochloromethane	10.0	12.0	120	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6343.D

Lab ID: 240-27638-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	7140	710 U	8630	121	64-118	F
1,1,1-Trichloroethane	7140	710 U	8040	113	68-121	
1,1,2,2-Tetrachloroethane	7140	590 J	6900	88	63-122	
1,1-Dichloroethane	7140	710 U	7110	100	79-116	
1,1-Dichloroethene	7140	710 U	6450	90	74-135	
1,1-Dichloropropene	7140	710 U	6850	96	80-114	
1,2,3-Trichloropropane	7140	710 U	6130	86	67-132	
1,2,4-Trimethylbenzene	7140	710 U	6920	97	67-124	
1,2-Dichlorobenzene	7140	17000	22100	77	75-111	
1,2-Dichloroethane	7140	350 J	8520	114	68-129	
1,2-Dichloropropane	7140	710 U	7370	103	78-115	
1,3-Dichlorobenzene	7140	710 U	6340	89	73-110	
1,3-Dichloropropane	7140	710 U	7450	104	74-118	
1,4-Dichlorobenzene	7140	710 U	6330	89	75-110	
2,2-Dichloropropane	7140	710 U	8320	116	38-127	
2-Chlorotoluene	7140	710 U	6470	91	69-117	
Bromobenzene	7140	710 U	6150	86	71-116	
Bromochloromethane	7140	710 U	6470	91	73-121	
4-Chlorotoluene	7140	710 U	6150	86	71-116	
p-Isopropyltoluene	7140	710 U	6860	96	64-122	
Acetone	14300	7100 U	11500	80	33-145	
Benzene	7140	790	7860	99	72-121	
Bromoform	7140	710 U	8220	115	32-128	
Bromomethane	7140	710 U	4530	63	10-186	
Carbon tetrachloride	7140	710 U	9480	133	59-129	F
Chlorobenzene	7140	420 J	7080	93	80-110	
Chloroethane	7140	710 U	4160	58	21-165	
Chloroform	7140	120 J	7370	101	76-118	
Chloromethane	7140	710 U	5650	79	33-132	
cis-1,2-Dichloroethene	7140	22000	28700	94	70-120	E
cis-1,3-Dichloropropene	7140	710 U	7500	105	51-110	
Dibromomethane	7140	710 U	7150	100	77-121	
Bromodichloromethane	7140	710 U	8460	118	67-120	
Dichlorodifluoromethane	7140	710 U	4690	66	17-128	
Ethylbenzene	7140	710 U	6720	94	75-116	
1,2-Dibromoethane	7140	710 U	6750	94	74-113	
m-Xylene & p-Xylene	14300	1400 U	13100	92	75-117	
n-Butylbenzene	7140	710 U	6900	97	56-127	
Isopropylbenzene	7140	710 U	6640	93	68-116	
n-Propylbenzene	7140	710 U	6580	92	64-124	
2-Butanone	14300	7100 U	11800	83	54-129	
sec-Butylbenzene	7140	710 U	6500	91	60-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6343.D

Lab ID: 240-27638-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methylene Chloride	7140	1200	8180	97	63-128	
o-Xylene	7140	710 U	6820	96	76-116	
Styrene	7140	710 U	6420	90	71-117	
tert-Butylbenzene	7140	710 U	6140	86	61-119	
Tetrachloroethene	7140	800	7330	91	70-117	
Toluene	7140	710 U	7380	103	78-114	
trans-1,2-Dichloroethene	7140	710 U	6580	92	80-119	
trans-1,3-Dichloropropene	7140	710 U	8320	116	46-116	
Trichloroethene	7140	460 J	6890	90	66-120	
Trichlorofluoromethane	7140	710 U	6490	91	46-157	
Vinyl chloride	7140	870	6690	82	49-130	
Xylenes, Total	21400	1400 U	19900	93	76-116	
Dibromochloromethane	7140	710 U	8600	120	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6344.D

Lab ID: 240-27638-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	7140	8960	125	4	30	64-118	F
1,1,1-Trichloroethane	7140	8450	118	5	30	68-121	
1,1,2,2-Tetrachloroethane	7140	7200	92	4	30	63-122	
1,1-Dichloroethane	7140	7500	105	5	30	79-116	
1,1-Dichloroethene	7140	6690	94	4	30	74-135	
1,1-Dichloropropene	7140	7020	98	2	30	80-114	
1,2,3-Trichloropropane	7140	6610	93	8	30	67-132	
1,2,4-Trimethylbenzene	7140	7200	101	4	30	67-124	
1,2-Dichlorobenzene	7140	23100	91	4	30	75-111	
1,2-Dichloroethane	7140	8620	116	1	30	68-129	
1,2-Dichloropropane	7140	7580	106	3	30	78-115	
1,3-Dichlorobenzene	7140	6810	95	7	30	73-110	
1,3-Dichloropropane	7140	7620	107	2	30	74-118	
1,4-Dichlorobenzene	7140	6690	94	6	30	75-110	
2,2-Dichloropropane	7140	8870	124	6	30	38-127	
2-Chlorotoluene	7140	6920	97	7	30	69-117	
Bromobenzene	7140	6370	89	4	30	71-116	
Bromochloromethane	7140	6750	94	4	30	73-121	
4-Chlorotoluene	7140	6640	93	8	30	71-116	
p-Isopropyltoluene	7140	7170	100	4	30	64-122	
Acetone	14300	11800	83	3	30	33-145	
Benzene	7140	8100	102	3	30	72-121	
Bromoform	7140	8320	116	1	30	32-128	
Bromomethane	7140	5260	74	15	30	10-186	
Carbon tetrachloride	7140	10000	141	6	30	59-129	F
Chlorobenzene	7140	7300	96	3	30	80-110	
Chloroethane	7140	4630	65	11	30	21-165	
Chloroform	7140	7730	106	5	30	76-118	
Chloromethane	7140	6280	88	11	30	33-132	
cis-1,2-Dichloroethene	7140	29700	109	4	30	70-120	E
cis-1,3-Dichloropropene	7140	7790	109	4	30	51-110	
Dibromomethane	7140	7500	105	5	30	77-121	
Bromodichloromethane	7140	8810	123	4	30	67-120	F
Dichlorodifluoromethane	7140	4940	69	5	30	17-128	
Ethylbenzene	7140	7030	98	5	30	75-116	
1,2-Dibromoethane	7140	7070	99	5	30	74-113	
m-Xylene & p-Xylene	14300	13500	94	3	30	75-117	
n-Butylbenzene	7140	7280	102	5	30	56-127	
Isopropylbenzene	7140	6840	96	3	30	68-116	
n-Propylbenzene	7140	6770	95	3	30	64-124	
2-Butanone	14300	13600	95	14	30	54-129	
sec-Butylbenzene	7140	6840	96	5	30	60-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX6344.D

Lab ID: 240-27638-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	7140	8680	104	6	30	63-128	
o-Xylene	7140	6980	98	2	30	76-116	
Styrene	7140	6700	94	4	30	71-117	
tert-Butylbenzene	7140	6430	90	5	30	61-119	
Tetrachloroethene	7140	7430	93	1	30	70-117	
Toluene	7140	7530	105	2	30	78-114	
trans-1,2-Dichloroethene	7140	6870	96	4	30	80-119	
trans-1,3-Dichloropropene	7140	8630	121	4	30	46-116	F
Trichloroethene	7140	7070	93	3	30	66-120	
Trichlorofluoromethane	7140	6920	97	6	30	46-157	
Vinyl chloride	7140	6900	85	3	30	49-130	
Xylenes, Total	21400	20500	96	3	30	76-116	
Dibromochloromethane	7140	8790	123	2	30	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Sample No.: STD8260 240-92306/4 Date Analyzed: 07/02/2013 13:37

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX5742.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1899526	5.20	1402128	7.87	826109	10.11
UPPER LIMIT		3799052	5.70	2804256	8.37	1652218	10.61
LOWER LIMIT		949763	4.70	701064	7.37	413055	9.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92306/8		1830940	5.20	1292823	7.87	693029	10.11
CCVIS 240-97899/2		1643377	5.20	1083543	7.87	633341	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Sample No.: CCVIS 240-97899/2 Date Analyzed: 08/17/2013 13:02

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX6318.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1643377	5.20	1083543	7.87	633341	10.12
UPPER LIMIT		3286754	5.70	2167086	8.37	1266682	10.62
LOWER LIMIT		821689	4.70	541772	7.37	316671	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-97899/3		1669245	5.20	1111583	7.87	532110	10.11
LCS 240-97899/4		1657152	5.20	1119515	7.87	606349	10.12
MB 240-97899/6		1516429	5.20	1030243	7.87	522591	10.12
240-27831-1	DR-DPT-42-10	1469637	5.20	1008160	7.87	476062	10.12
240-27831-2	DR-DPT-42-15	1499086	5.20	1035549	7.87	484360	10.12
240-27831-3	DR-DPT-42-20	1466215	5.20	999730	7.88	510658	10.11
240-27831-4	DR-DPT-42-25	1489235	5.20	995484	7.87	466572	10.12
240-27831-5	DR-DPT-42-30	1456500	5.20	967256	7.87	456301	10.11
240-27831-6	DR-DPT-42-35	1451158	5.20	967176	7.87	466355	10.12
240-27831-7	TB-080913	1432490	5.20	986754	7.87	471683	10.11
240-27638-B-1 MS		1568213	5.20	1072501	7.87	599691	10.11
240-27638-B-1 MSD		1568868	5.20	1102350	7.87	608257	10.11

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4
Area Limit = 50%-200% of internal standard area
DCB = 1,4-Dichlorobenzene-d4
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

SAMPLE ID DR-DPT-42-30

SAMPLE CALC for cis-1,2-dichloroethene

IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (ug/L)	Final Extract Volume (mL)	AVE RRF	CONCENTRATION PF*B
1456500	8	1243419	10	5	0.3378	202.18
				Sample Volume (mL)		
				5		

Sample Calculation

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27831-1

SDG No.:

Client Sample ID: DR-DPT-42-30 Lab Sample ID: 240-27831-5

Matrix: Water Lab File ID: UXX6338.D

Analysis Method: 8260B Date Collected: 08/09/2013 10:45

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2013 20:14

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97899 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	8.0	U	8.0	1.3
74-87-3	Chloromethane	8.0	U	8.0	2.4
156-59-2	cis-1,2-Dichloroethene	200		8.0	1.4
10061-01-5	cis-1,3-Dichloropropene	8.0	U	8.0	1.1
87-68-3	Hexachlorobutadiene	8.0	U	8.0	2.4
74-95-3	Dibromomethane	8.0	U	8.0	2.2
75-27-4	Bromodichloromethane	8.0	U	8.0	1.2
75-71-8	Dichlorodifluoromethane	8.0	U	8.0	2.5
100-41-4	Ethylbenzene	8.0	U	8.0	1.4
106-93-4	1,2-Dibromoethane	8.0	U	8.0	1.9
108-20-3	Diisopropyl ether	80	U	80	12
91-20-3	Naphthalene	8.0	U	8.0	1.9
179601-23-1	m-Xylene & p-Xylene	16	U	16	1.9
104-51-8	n-Butylbenzene	8.0	U	8.0	0.96
98-82-8	Isopropylbenzene	8.0	U	8.0	1.0
103-65-1	n-Propylbenzene	8.0	U	8.0	1.1
78-93-3	2-Butanone	80	U	80	4.6
108-10-1	4-Methyl-2-pentanone	80	U	80	2.6
135-98-8	sec-Butylbenzene	8.0	U	8.0	1.0
1634-04-4	Methyl tert-butyl ether	8.0	U	8.0	1.4
994-05-8	Tert-amyl-methyl ether (TAME)	40	U	40	0.54
75-09-2	Methylene Chloride	14	B	8.0	2.6
95-47-6	o-Xylene	8.0	U	8.0	1.1
100-42-5	Styrene	8.0	U	8.0	0.88
637-92-3	Ethyl-t-butyl ether (ETBE)	40	U	40	0.88
98-06-6	tert-Butylbenzene	8.0	U	8.0	1.0
127-18-4	Tetrachloroethene	8.0	U	8.0	2.3
108-88-3	Toluene	8.0	U	8.0	1.0
156-60-5	trans-1,2-Dichloroethene	2.0	J	8.0	1.5
10061-02-6	trans-1,3-Dichloropropene	8.0	U	8.0	1.5
79-01-6	Trichloroethene	89		8.0	1.4
75-69-4	Trichlorofluoromethane	8.0	U	8.0	1.7
108-05-4	Vinyl acetate	16	U	16	1.5
75-01-4	Vinyl chloride	120		8.0	1.8
75-65-0	tert-Butyl alcohol	400	U *	400	31
1330-20-7	Xylenes, Total	16	U	16	1.1

Report Date: 19-Aug-2013 10:11:23 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton
Target Compound Quantitation Report

Sample Calculation

Data File: \\NCChrom\ChromData\A3UX10\20130817-22592.b\UXX6338.D
Lims ID: 240-27831-A-5 Client ID: DR-DPT-42-30
Inject. Date: 17-Aug-2013 20:14:30 Dil. Factor: 8.0000
Sample Type: Client
Sample ID: 240-0022592-022
Misc. Info.:
Operator: 1644 Instrument ID: A3UX10
Purge Vol: 5.000 mL ALS Bottle#: 21
Lims Batch ID: 97899 Lims Sample ID: 22
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX10\20130817-22592.b\8260_10.m
Last Update: 19-Aug-2013 10:11:20 Calib Date: 02-Jul-2013 14:41:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX10\20130702-21321.b\UXX5745.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK004

First Level Reviewer: williamsla Date: 19-Aug-2013 10:08:44

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.197	5.199	-0.002	98	1456500	10.0	
* 2 Chlorobenzene-d5	117	7.872	7.874	-0.002	89	967256	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.108	10.110	-0.002	98	456301	10.0	
$ 5 Dibromofluoromethane (Surr)	113	4.629	4.628	0.001	58	326028	9.01	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.913	4.912	0.001	0	418966	9.63	
$ 7 Toluene-d8 (Surr)	98	6.558	6.557	0.001	94	1199130	9.20	
$ 8 4-Bromofluorobenzene (Surr)	95	8.984	8.983	0.001	87	399663	7.52	
12 Dichlorodifluoromethane	85		1.575					
13 Chloromethane	50		1.694					9
14 Vinyl chloride	62	1.801	1.800	0.001	99	797908	15.2	
16 Bromomethane	94		2.084					
17 Chloroethane	64		2.167					9
19 Trichlorofluoromethane	101		2.392					
23 1,1-Dichloroethene	96		2.806					9
24 Acetone	43	2.819	2.818	0.001	75	11496	1.11	
25 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.830					
27 Carbon disulfide	76		3.007					
31 Methylene Chloride	84	3.198	3.196	0.002	96	144627	1.79	
32 2-Methyl-2-propanol	59		3.256					
35 Methyl tert-butyl ether	73		3.421					
34 trans-1,2-Dichloroethene	96	3.422	3.433	-0.011	75	12127	0.2529	
37 1,1-Dichloroethane	63		3.764					
38 Vinyl acetate	86		3.788					
39 Isopropyl ether	87		3.815					
41 Tert-butyl ethyl ether	59		4.123					
42 2-Butanone (MEK)	43		4.238					9
43 cis-1,2-Dichloroethene	96	4.239	4.238	0.001	84	1243419	25.3	
44 2,2-Dichloropropane	77		4.250					
48 Chlorobromomethane	128		4.439					
50 Chloroform	83	4.499	4.498	0.001	56	8707	0.1212	

Sample Calculation

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27831-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0095 0.0104	0.0120	0.0145	0.0164	0.0130	Qua	-0.124	0.0171	0						0.9970		0.9900
Acrylonitrile	0.0905 0.1021	0.0983	0.1034	0.1068	0.1082	Ave		0.1016				6.4		15.0			
Methyl tert-butyl ether	0.7590 0.7679	0.7484	0.7512	0.8058	0.8208	Ave		0.7755				3.9		15.0			
trans-1,2-Dichloroethene	0.3358 0.3195	0.3308	0.3296	0.3254	0.3340	Ave		0.3292				1.8		15.0			
Hexane	0.0712 0.0637	0.0646	0.0668	0.0661	0.0671	Ave		0.0666				3.9		15.0			
1,1-Dichloroethane	0.5578 0.5246	0.5449	0.5273	0.5247	0.5369	Ave		0.5360			0.1000	2.5		15.0			
Vinyl acetate	0.0458 0.0460	0.0362	0.0441	0.0416	0.0442	Ave		0.0430				8.6		15.0			
2-Butanone	0.0991 0.0997	0.0968	0.1003	0.0974	0.1064	Ave		0.0999				3.4		15.0			
cis-1,2-Dichloroethene	0.3285 0.3322	0.3571	0.3290	0.3348	0.3453	Ave		0.3378				3.3		15.0			
2,2-Dichloropropane	0.2688 0.2905	0.2819	0.2776	0.2821	0.3040	Ave		0.2842				4.2		15.0			
Bromochloromethane	0.1521 0.1504	0.1506	0.1534	0.1499	0.1524	Ave		0.1515				0.9		15.0			
Tetrahydrofuran	0.0772 0.0698	0.0789	0.0767	0.0752	0.0716	Ave		0.0749				4.7		15.0			
Chloroform	0.4907 0.4900	0.5020	0.4890	0.4920	0.4962	Ave		0.4933				1.0		15.0			
1,1,1-Trichloroethane	0.4106 0.3726	0.3778	0.3695	0.3890	0.3851	Ave		0.3841				3.9		15.0			
Cyclohexane	0.5528 0.5297	0.5227	0.5349	0.5435	0.5429	Ave		0.5378				2.0		15.0			
1,1-Dichloropropene	0.3609 0.3601	0.3698	0.3664	0.3618	0.3692	Ave		0.3647				1.2		15.0			
Carbon tetrachloride	0.2610 0.2765	0.2656	0.2674	0.2761	0.2887	Ave		0.2725				3.7		15.0			
1,2-Dichloroethane	0.3474 0.3376	0.3583	0.3351	0.3500	0.3553	Ave		0.3473				2.7		15.0			
Benzene	1.1681 1.1119	1.1203	1.0964	1.1265	1.1340	Ave		1.1262				2.2		15.0			
Trichloroethene	0.3214 0.2780	0.2821	0.2900	0.2862	0.2843	Ave		0.2904				5.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Tetra Tech INC **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**NOVEMBER 7, 2013**
FROM:	**J. KALINYAK**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MIDDLE STATE AIRPORT (MSA) DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-27864-1

SAMPLES: 6 / Aqueous / VOC

DR-DPT-37-25	DR-DPT-37-30	DR-DPT-37-35
DR-DPT-37-40	DR-DPT-37-45	TB-081213

Overview

The sample set for Lockheed MSA Dump Road Source Areas, SDG 240-27864-1, consisted of six (6) aqueous samples, including one (1) trip blank sample. All aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. No field duplicate sample pairs were included in the sample delivery group (SDG).

The samples were collected by Tetra Tech on August 12, 2013 and analyzed by TestAmerica Laboratories, Inc., North Canton OH for the analyses. All analyses were conducted in accordance with EPA SW-846 Methods 8260B for VOCs, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank/preparation results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate results, internal standard recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- The VOC initial calibration average relative response factors (RRF) were less than the 0.05 criteria for tert-butyl alcohol and vinyl acetate on instrument A3UX11 on 08/16/13. Additionally, the continuing calibration verification (CCV) RRFs for tert-butyl alcohol and vinyl acetate were less than the 0.05 criteria for instrument A3UX11 on 08/19/13 @ 09:47 and 08/20/19 @ 10:56.
  Affected Samples: All samples
  Action: The affected sample non-detected results for tert-butyl alcohol and vinyl acetate were qualified rejected, (UR), and the positive tert-butyl alcohol result for sample DR-DPT-35-45 was qualified estimated, (J).

- Trimethyl silanol, detected as a tentatively identified compound (TIC), was qualified rejected, (R), in samples DR-DPT-37-30 and DR-DPT-37-35.

Minor Problems

- Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

- The VOC CCV percent differences (%Ds) were greater than the 20% and less than the 50% quality control limit for acetone and carbon disulfide for instrument A3UX11 on 08/19/13 @ 09:47.
  Affected Samples: DR-DPT-37-30 and TB-081213
  Actions: The sample DR-DPT-37-30 positive results for acetone and carbon disulfide were qualified estimated, (J). The sample TB-081213 non-detected results for acetone and carbon disulfide were not qualified.

- Results reported as TICs were qualified presumptively present, (NJ).

Notes

The laboratory reported detections for VOCs which were calibrated for but which were not analytes of interest as listed below.

Samples	Results
DR-DPT-37-25	cyclohexane
DR-DPT-37-30	1,4-dioxane, hexane
DR-DPT-37-45	1,4-dioxane
TB-081213	1,4-dioxane

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for methylene chloride, 2,2-dichloropropane, 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane, 4-isopropyltoluene, and naphthalene for instrument A3UX11 on 08/19/13 @ 09:47.
Affected Samples: DR-DPT-37-30 and TB-081213
Actions: The samples had non-detected results for methylene chloride, 2,2-dichloropropane, 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane, 4-isopropyltoluene, and naphthalene which were not qualified.

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for bromoform and 1,1,2,2-tetrachloroethane for instrument A3UX11 on 08/20/13 @ 10:56.
Affected Samples:
DR-DPT-37-25 DR-DPT-37-35 DR-DPT-37-40
DR-DPT-37-45
Actions: The samples had non-detected results for bromoform and 1,1,2,2-tetrachloroethane which were not qualified.

The matrix spike duplicate (MSD) percent recovery %R was less than the quality control limit for chlorobenzene for a spiked sample from another SDG (SDG 240-27914-C-2). No validation action was taken as the sample was from another SDG.

Samples were analyzed at dilutions for VOCs, as listed below, resulting in elevated levels for non-detected VOC analytes.

Sample	Dilution
DR-DPT-37-25	6.67X
DR-DPT-37-40	2.5X
DR-DPT-37-45	10X

The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

The laboratory report was missing forms for a BFB instrument performance check, CCV %D Form VIIs, and the internal standard recovery Form VIIIs for 08/20/13. The laboratory was contacted and the appropriate forms were provided.

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC tert-butyl alcohol and vinyl acetate non-detected sample results were rejected and a sample detected tert-butyl alcohol result was qualified due to initial calibration average RRF and CCV RRF criteria non-compliances. Sample VOC results were qualified for CCV %D non-compliances.

Other Factors Affecting Data Quality: Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J). Sample trimethyl silanol results were rejected as due to column bleed.

The data for these analyses were reviewed with reference to EPA SW-846 Methods 8260B and the Region III EPA Functional Guidelines for Organic Data Validation (9/94).

Tetra Tech
Joseph Kalinyak
Data Validator/Environmental Scientist

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Value Qualifier Key (Val Qual)

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	DR-DPT-37-25						DR-DPT-37-30					
SDG: 240-27864-1	LAB_ID	240-27864-1						240-27864-2					
FRACTION: OV	SAMP_DATE	8/12/2013						8/12/2013					
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1.5	U					0.23	U				
1,1,1-TRICHLOROETHANE		1.5	U					0.22	U				
1,1,2,2-TETRACHLOROETHANE		1.2	U					0.18	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		1.9	U					0.28	U				
1,1-DICHLOROETHANE		1	U					0.15	U				
1,1-DICHLOROETHENE		1.3	U					0.19	U				
1,1-DICHLOROPROPENE		0.87	U					0.13	U				
1,2,3-TRICHLOROBENZENE		1.1	U					0.17	U				
1,2,3-TRICHLOROPROPANE		2.9	U					0.43	U				
1,2,3-TRIMETHYLBENZENE		0.039	U					0.0059	U				
1,2,4-TRICHLOROBENZENE		1	U					0.15	U				
1,2,4-TRIMETHYLBENZENE		0.8	U					0.13	J	P			
1,2-DIBROMO-3-CHLOROPROPANE		4.5	U					0.67	U				
1,2-DIBROMOETHANE		1.6	U					0.24	U				
1,2-DICHLOROBENZENE		0.87	U					0.13	U				
1,2-DICHLOROETHANE		1.5	U					0.22	U				
1,2-DICHLOROPROPANE		1.2	U					0.18	U				
1,3-DICHLOROBENZENE		0.93	U					0.14	U				
1,3-DICHLOROPROPANE		1.1	U					0.16	U				
1,4-DICHLOROBENZENE		0.87	U					0.13	U				
1,4-DIOXANE											34	J	P
1-PENTENE											1.5	J	P
2,2-DICHLOROPROPANE		0.87	U					0.13	U				
2-BUTANONE		3.8	U					0.57	U				
2-CHLOROETHYL VINYL ETHER		6.6	U					0.99	U				
2-CHLOROTOLUENE		0.73	U					0.11	U				
2-HEXANONE		2.7	U					0.41	U				
4-CHLOROTOLUENE		1.2	U					0.18	U				
4-ISOPROPYLTOLUENE		0.8	U					0.12	U				
4-METHYL-2-PENTANONE		2.1	U					0.32	U				
ACETONE		7.3	U					5.1	J	CP			
BENZENE		0.87	U					0.13	U				
BROMOBENZENE		0.87	U					0.13	U				
BROMOCHLOROMETHANE		1.9	U					0.29	U				
BROMODICHLOROMETHANE		1	U					0.15	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-37-35			DR-DPT-37-40			DR-DPT-37-45					
SDG: 240-27864-1	LAB_ID	240-27864-3			240-27864-4			240-27864-5					
FRACTION: OV	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.58	U		2.3	U				
1,1,1-TRICHLOROETHANE		0.22	U		0.55	U		2.2	U				
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.45	U		1.8	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.7	U		2.8	U				
1,1-DICHLOROETHANE		0.15	U		0.38	U		1.5	U				
1,1-DICHLOROETHENE		0.19	U		0.48	U		1.9	U				
1,1-DICHLOROPROPENE		0.13	U		0.33	U		1.3	U				
1,2,3-TRICHLOROBENZENE		0.17	U		0.43	U		1.7	U				
1,2,3-TRICHLOROPROPANE		0.43	U		1.1	U		4.3	U				
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.015	U		0.059	U				
1,2,4-TRICHLOROBENZENE		0.15	U		0.38	U		1.5	U				
1,2,4-TRIMETHYLBENZENE		0.12	U		0.3	U		1.2	U				
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		1.7	U		6.7	U				
1,2-DIBROMOETHANE		0.24	U		0.6	U		2.4	U				
1,2-DICHLOROBENZENE		0.13	U		0.33	U		1.3	U				
1,2-DICHLOROETHANE		0.22	U		1.4	J	P	2.4	J	P			
1,2-DICHLOROPROPANE		0.18	U		0.45	U		1.8	U				
1,3-DICHLOROBENZENE		0.14	U		0.35	U		1.4	U				
1,3-DICHLOROPROPANE		0.16	U		0.4	U		1.6	U				
1,4-DICHLOROBENZENE		0.13	U		0.33	U		1.3	U				
1,4-DIOXANE											220	J	P
1-PENTENE													
2,2-DICHLOROPROPANE		0.13	U		0.33	U		1.3	U				
2-BUTANONE		0.57	U		1.6	J	P	5.7	U				
2-CHLOROETHYL VINYL ETHER		0.99	U		2.5	U		9.9	U				
2-CHLOROTOLUENE		0.11	U		0.28	U		1.1	U				
2-HEXANONE		0.41	U		1	U		4.1	U				
4-CHLOROTOLUENE		0.18	U		0.45	U		1.8	U				
4-ISOPROPYLTOLUENE		0.12	U		0.3	U		1.2	U				
4-METHYL-2-PENTANONE		0.32	U		0.8	U		3.2	U				
ACETONE		1.9	J	P	3.1	J	P	11	U				
BENZENE		0.13	U		0.79	J	P	2.5	J	P			
BROMOBENZENE		0.13	U		0.33	U		1.3	U				
BROMOCHLOROMETHANE		0.29	U		0.73	U		2.9	U				
BROMODICHLOROMETHANE		0.15	U		0.38	U		1.5	U				

PROJ_NO: 04882	NSAMPLE	TB-081213					
SDG: 240-27864-1	LAB_ID	240-27864-6					
FRACTION: OV	SAMP_DATE	8/12/2013					
MEDIA: WATER	QC_TYPE	NM			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U				
1,1,1-TRICHLOROETHANE		0.22	U				
1,1,2,2-TETRACHLOROETHANE		0.18	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U				
1,1-DICHLOROETHANE		0.15	U				
1,1-DICHLOROETHENE		0.19	U				
1,1-DICHLOROPROPENE		0.13	U				
1,2,3-TRICHLOROBENZENE		0.17	U				
1,2,3-TRICHLOROPROPANE		0.43	U				
1,2,3-TRIMETHYLBENZENE		0.0059	U				
1,2,4-TRICHLOROBENZENE		0.15	U				
1,2,4-TRIMETHYLBENZENE		0.12	U				
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U				
1,2-DIBROMOETHANE		0.24	U				
1,2-DICHLOROBENZENE		0.13	U				
1,2-DICHLOROETHANE		0.22	U				
1,2-DICHLOROPROPANE		0.18	U				
1,3-DICHLOROBENZENE		0.14	U				
1,3-DICHLOROPROPANE		0.16	U				
1,4-DICHLOROBENZENE		0.13	U				
1,4-DIOXANE					32	J	P
1-PENTENE							
2,2-DICHLOROPROPANE		0.13	U				
2-BUTANONE		0.57	U				
2-CHLOROETHYL VINYL ETHER		0.99	U				
2-CHLOROTOLUENE		0.11	U				
2-HEXANONE		0.41	U				
4-CHLOROTOLUENE		0.18	U				
4-ISOPROPYLTOLUENE		0.12	U				
4-METHYL-2-PENTANONE		0.32	U				
ACETONE		1.1	U				
BENZENE		0.13	U				
BROMOBENZENE		0.13	U				
BROMOCHLOROMETHANE		0.29	U				
BROMODICHLOROMETHANE		0.15	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-37-25						DR-DPT-37-30					
SDG: 240-27864-1	LAB_ID	240-27864-1						240-27864-2					
FRACTION: OV	SAMP_DATE	8/12/2013						8/12/2013					
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		4.3	U					0.64	U				
BROMOMETHANE		2.7	U					0.41	U				
CARBON DISULFIDE		1.1	J	P				1.7	J	C			
CARBON TETRACHLORIDE		0.87	U					0.13	U				
CHLOROBENZENE		1	U					0.15	U				
CHLORODIBROMOMETHANE		1.2	U					0.18	U				
CHLOROETHANE		1.9	U					0.29	U				
CHLOROFORM		1.1	U					0.16	U				
CHLOROMETHANE		2	U					0.3	U				
CIS-1,2-DICHLOROETHENE		160						8.5					
CIS-1,3-DICHLOROPROPENE		0.93	U					0.14	U				
CYCLOHEXANE					0.86	J	P						
DIBROMOMETHANE		1.9	U					0.28	U				
DICHLORODIFLUOROMETHANE		2.1	U					0.31	U				
DIISOPROPYL ETHER		10	U					1.5	U				
ETHYL TERT-BUTYL ETHER		0.73	U					0.11	U				
ETHYLBENZENE		1.1	U					0.17	U				
HEXACHLOROBUTADIENE		2	U					0.3	U				
HEXANE											0.35	J	P
ISOPROPYLBENZENE		0.87	U					0.13	U				
M+P-XYLENES		1.6	U					0.33	J	P			
METHYL TERT-BUTYL ETHER		1.1	U					0.17	U				
METHYLENE CHLORIDE		2.2	U					0.33	U				
NAPHTHALENE		1.6	U					0.24	U				
N-BUTYLBENZENE		0.8	U					0.12	U				
N-PROPYLBENZENE		0.93	U					0.14	U				
O-XYLENE		0.93	U					0.14	U				
SEC-BUTYLBENZENE		0.87	U					0.13	U				
STYRENE		0.73	U					0.11	U				
TERT-AMYL METHYL ETHER		0.45	U					0.067	U				
TERT-BUTYLBENZENE		0.87	U					0.13	U				
TERTIARY-BUTYL ALCOHOL		26	UR	C				4.1	J	CP			
TETRACHLOROETHENE		1.9	U					0.29	U				
TOLUENE		0.87	U					0.13	U				
TOTAL XYLENES		0.93	U					0.33	J	P			

PROJ_NO: 04882	NSAMPLE	DR-DPT-37-35			DR-DPT-37-40			DR-DPT-37-45					
SDG: 240-27864-1	LAB_ID	240-27864-3			240-27864-4			240-27864-5					
FRACTION: OV	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		0.64	U		1.6	U		6.4	U				
BROMOMETHANE		0.41	U		1	U		4.1	U				
CARBON DISULFIDE		1.4			2.5			3.7	J	P			
CARBON TETRACHLORIDE		0.13	U		0.33	U		1.3	U				
CHLOROBENZENE		0.15	U		0.38	U		1.5	U				
CHLORODIBROMOMETHANE		0.18	U		0.45	U		1.8	U				
CHLOROETHANE		0.29	U		0.73	U		2.9	U				
CHLOROFORM		0.16	U		0.48	J	P	1.6	U				
CHLOROMETHANE		0.3	U		0.75	U		3	U				
CIS-1,2-DICHLOROETHENE		21			88			260					
CIS-1,3-DICHLOROPROPENE		0.14	U		0.35	U		1.4	U				
CYCLOHEXANE													
DIBROMOMETHANE		0.28	U		0.7	U		2.8	U				
DICHLORODIFLUOROMETHANE		0.31	U		0.78	U		3.1	U				
DIISOPROPYL ETHER		1.5	U		3.8	U		15	U				
ETHYL TERT-BUTYL ETHER		0.11	U		0.28	U		1.1	U				
ETHYLBENZENE		0.17	U		0.43	U		1.7	U				
HEXACHLOROBUTADIENE		0.3	U		0.75	U		3	U				
HEXANE													
ISOPROPYLBENZENE		0.13	U		0.33	U		1.3	U				
M+P-XYLENES		0.24	U		0.6	U		2.4	U				
METHYL TERT-BUTYL ETHER		0.17	U		0.43	U		1.7	U				
METHYLENE CHLORIDE		0.33	U		0.83	U		3.3	U				
NAPHTHALENE		0.24	U		0.6	U		2.4	U				
N-BUTYLBENZENE		0.12	U		0.3	U		1.2	U				
N-PROPYLBENZENE		0.14	U		0.35	U		1.4	U				
O-XYLENE		0.14	U		0.35	U		1.4	U				
SEC-BUTYLBENZENE		0.13	U		0.33	U		1.3	U				
STYRENE		0.11	U		0.28	U		1.1	U				
TERT-AMYL METHYL ETHER		0.067	U		0.17	U		0.67	U				
TERT-BUTYLBENZENE		0.13	U		0.33	U		1.3	U				
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	9.8	UR	C	39	UR	C			
TETRACHLOROETHENE		0.29	U		0.73	U		2.9	U				
TOLUENE		0.13	U		0.34	J	P	1.3	U				
TOTAL XYLENES		0.14	U		0.35	U		1.4	U				

PROJ_NO: 04882	NSAMPLE	TB-081213					
SDG: 240-27864-1	LAB_ID	240-27864-6					
FRACTION: OV	SAMP_DATE	8/12/2013					
MEDIA: WATER	QC_TYPE	NM			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		0.64	U				
BROMOMETHANE		0.41	U				
CARBON DISULFIDE		0.13	U				
CARBON TETRACHLORIDE		0.13	U				
CHLOROBENZENE		0.15	U				
CHLORODIBROMOMETHANE		0.18	U				
CHLOROETHANE		0.29	U				
CHLOROFORM		0.16	U				
CHLOROMETHANE		0.3	U				
CIS-1,2-DICHLOROETHENE		0.36	J	P			
CIS-1,3-DICHLOROPROPENE		0.14	U				
CYCLOHEXANE							
DIBROMOMETHANE		0.28	U				
DICHLORODIFLUOROMETHANE		0.31	U				
DIISOPROPYL ETHER		1.5	U				
ETHYL TERT-BUTYL ETHER		0.11	U				
ETHYLBENZENE		0.17	U				
HEXACHLOROBUTADIENE		0.3	U				
HEXANE							
ISOPROPYLBENZENE		0.13	U				
M+P-XYLENES		0.24	U				
METHYL TERT-BUTYL ETHER		0.17	U				
METHYLENE CHLORIDE		0.33	U				
NAPHTHALENE		0.24	U				
N-BUTYLBENZENE		0.12	U				
N-PROPYLBENZENE		0.14	U				
O-XYLENE		0.14	U				
SEC-BUTYLBENZENE		0.13	U				
STYRENE		0.11	U				
TERT-AMYL METHYL ETHER		0.067	U				
TERT-BUTYLBENZENE		0.13	U				
TERTIARY-BUTYL ALCOHOL		3.9	UR	C			
TETRACHLOROETHENE		0.29	U				
TOLUENE		0.13	U				
TOTAL XYLENES		0.14	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-37-25						DR-DPT-37-30					
SDG: 240-27864-1	LAB_ID	240-27864-1						240-27864-2					
FRACTION: OV	SAMP_DATE	8/12/2013						8/12/2013					
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRANS-1,2-DICHLOROETHENE		1.3	U					0.41	J	P			
TRANS-1,3-DICHLOROPROPENE		1.3	U					0.19	U				
TRICHLOROETHENE		5.9	J	P				2.1					
TRICHLOROFLUOROMETHANE		1.4	U					0.21	U				
UNKNOWN													
VINYL ACETATE		1.3	UR	C				0.19	UR	C			
VINYL CHLORIDE		60						1.4					

PROJ_NO: 04882	NSAMPLE	DR-DPT-37-35			DR-DPT-37-40			DR-DPT-37-45					
SDG: 240-27864-1	LAB_ID	240-27864-3			240-27864-4			240-27864-5					
FRACTION: OV	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRANS-1,2-DICHLOROETHENE		1			0.6	J	P	1.9	U				
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.48	U		1.9	U				
TRICHLOROETHENE		9.7			21			73					
TRICHLOROFLUOROMETHANE		0.21	U		0.53	U		2.1	U				
UNKNOWN											11	NJ	Z1
VINYL ACETATE		0.19	UR	C	0.48	UR	C	1.9	UR	C			
VINYL CHLORIDE		3.6			52			130					

PROJ_NO: 04882	NSAMPLE	TB-081213					
SDG: 240-27864-1	LAB_ID	240-27864-6					
FRACTION: OV	SAMP_DATE	8/12/2013					
MEDIA: WATER	QC_TYPE	NM			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRANS-1,2-DICHLOROETHENE		0.19	U				
TRANS-1,3-DICHLOROPROPENE		0.19	U				
TRICHLOROETHENE		0.17	U				
TRICHLOROFLUOROMETHANE		0.21	U				
UNKNOWN							
VINYL ACETATE		0.19	UR	C			
VINYL CHLORIDE		0.26	J	P			

PROJ_NO: 04882	NSAMPLE	DR-DPT-37-30			DR-DPT-37-35			DR-DPT-37-40		
SDG: 240-27864-1	LAB_ID	240-27864-2			240-27864-3			240-27864-4		
FRACTION: TICOV	SAMP_DATE	8/12/2013			8/12/2013			8/12/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHANETHIOL		1.1	NJ	Z1						
METHYLCYCLOHEXANE								0.38	NJ	Z1
SILANOL, TRIMETHYL-		3.6	R	Z2	3.9	R	Z2			

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-25 | Lab Sample ID: 240-27864-1

Matrix: Water | Lab File ID: UXJ3420.D

Analysis Method: 8260B | Date Collected: 08/12/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 14:05

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98161 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	6.7	U	6.7	1.5
71-55-6	1,1,1-Trichloroethane	6.7	U	6.7	1.5
79-34-5	1,1,2,2-Tetrachloroethane	6.7	U	6.7	1.2
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	6.7	U	6.7	1.9
75-34-3	1,1-Dichloroethane	6.7	U	6.7	1.0
75-35-4	1,1-Dichloroethene	6.7	U	6.7	1.3
563-58-6	1,1-Dichloropropene	6.7	U	6.7	0.87
87-61-6	1,2,3-Trichlorobenzene	6.7	U	6.7	1.1
96-18-4	1,2,3-Trichloropropane	6.7	U	6.7	2.9
526-73-8	1,2,3-Trimethylbenzene	33	U	33	0.039
120-82-1	1,2,4-Trichlorobenzene	6.7	U	6.7	1.0
95-63-6	1,2,4-Trimethylbenzene	6.7	U	6.7	0.80
96-12-8	1,2-Dibromo-3-Chloropropane	13	U	13	4.5
95-50-1	1,2-Dichlorobenzene	6.7	U	6.7	0.87
107-06-2	1,2-Dichloroethane	6.7	U	6.7	1.5
78-87-5	1,2-Dichloropropane	6.7	U	6.7	1.2
541-73-1	1,3-Dichlorobenzene	6.7	U	6.7	0.93
142-28-9	1,3-Dichloropropane	6.7	U	6.7	1.1
106-46-7	1,4-Dichlorobenzene	6.7	U	6.7	0.87
594-20-7	2,2-Dichloropropane	6.7	U	6.7	0.87
110-75-8	2-Chloroethyl vinyl ether	67	U	67	6.6
95-49-8	2-Chlorotoluene	6.7	U	6.7	0.73
591-78-6	2-Hexanone	67	U	67	2.7
108-86-1	Bromobenzene	6.7	U	6.7	0.87
74-97-5	Bromochloromethane	6.7	U	6.7	1.9
106-43-4	4-Chlorotoluene	6.7	U	6.7	1.2
99-87-6	p-Isopropyltoluene	6.7	U	6.7	0.80
67-64-1	Acetone	67	U	67	7.3
71-43-2	Benzene	6.7	U	6.7	0.87
75-25-2	Bromoform	6.7	U *	6.7	4.3
74-83-9	Bromomethane	6.7	U	6.7	2.7
75-15-0	Carbon disulfide	1.1	J	6.7	0.87
56-23-5	Carbon tetrachloride	6.7	U	6.7	0.87
108-90-7	Chlorobenzene	6.7	U	6.7	1.0
75-00-3	Chloroethane	6.7	U	6.7	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-25 | Lab Sample ID: 240-27864-1

Matrix: Water | Lab File ID: UXJ3420.D

Analysis Method: 8260B | Date Collected: 08/12/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 14:05

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98161 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	6.7	U	6.7	1.1
74-87-3	Chloromethane	6.7	U	6.7	2.0
156-59-2	cis-1,2-Dichloroethene	160		6.7	1.1
10061-01-5	cis-1,3-Dichloropropene	6.7	U	6.7	0.93
87-68-3	Hexachlorobutadiene	6.7	U	6.7	2.0
74-95-3	Dibromomethane	6.7	U	6.7	1.9
75-27-4	Bromodichloromethane	6.7	U	6.7	1.0
75-71-8	Dichlorodifluoromethane	6.7	U	6.7	2.1
100-41-4	Ethylbenzene	6.7	U	6.7	1.1
106-93-4	1,2-Dibromoethane	6.7	U	6.7	1.6
108-20-3	Diisopropyl ether	67	U	67	10
91-20-3	Naphthalene	6.7	U	6.7	1.6
179601-23-1	m-Xylene & p-Xylene	13	U	13	1.6
104-51-8	n-Butylbenzene	6.7	U	6.7	0.80
98-82-8	Isopropylbenzene	6.7	U	6.7	0.87
103-65-1	n-Propylbenzene	6.7	U	6.7	0.93
78-93-3	2-Butanone	67	U	67	3.8
108-10-1	4-Methyl-2-pentanone	67	U	67	2.1
135-98-8	sec-Butylbenzene	6.7	U	6.7	0.87
1634-04-4	Methyl tert-butyl ether	6.7	U	6.7	1.1
994-05-8	Tert-amyl-methyl ether (TAME)	33	U	33	0.45
75-09-2	Methylene Chloride	6.7	U	6.7	2.2
95-47-6	o-Xylene	6.7	U	6.7	0.93
100-42-5	Styrene	6.7	U	6.7	0.73
637-92-3	Ethyl-t-butyl ether (ETBE)	33	U	33	0.73
98-06-6	tert-Butylbenzene	6.7	U	6.7	0.87
127-18-4	Tetrachloroethene	6.7	U	6.7	1.9
108-88-3	Toluene	6.7	U	6.7	0.87
156-60-5	trans-1,2-Dichloroethene	6.7	U	6.7	1.3
10061-02-6	trans-1,3-Dichloropropene	6.7	U	6.7	1.3
79-01-6	Trichloroethene	5.9	J	6.7	1.1
75-69-4	Trichlorofluoromethane	6.7	U	6.7	1.4
108-05-4	Vinyl acetate	13	U	13	1.3
75-01-4	Vinyl chloride	60		6.7	1.5
75-65-0	tert-Butyl alcohol	330	U	330	26
1330-20-7	Xylenes, Total	13	U	13	0.93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-25 Lab Sample ID: 240-27864-1

Matrix: Water Lab File ID: UXJ3420.D

Analysis Method: 8260B Date Collected: 08/12/2013 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 14:05

Soil Aliquot Vol: Dilution Factor: 6.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98161 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	6.7	U	6.7	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-25 Lab Sample ID: 240-27864-1

Matrix: Water Lab File ID: UXJ3420.D

Analysis Method: 8260B Date Collected: 08/12/2013 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 14:05

Soil Aliquot Vol: Dilution Factor: 6.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98161 Units: ug/L

Number TICs Found: 1 TIC Result Total: 0.86

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
110-82-7	Cyclohexane	4.99	0.86	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-30 Lab Sample ID: 240-27864-2

Matrix: Water Lab File ID: UXJ3399.D

Analysis Method: 8260B Date Collected: 08/12/2013 10:45

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 16:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	0.13	J	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	5.1	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.7		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-30 Lab Sample ID: 240-27864-2

Matrix: Water Lab File ID: UXJ3399.D

Analysis Method: 8260B Date Collected: 08/12/2013 10:45

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 16:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	8.5		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	0.33	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	0.41	J	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	2.1		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.4		1.0	0.22
75-65-0	tert-Butyl alcohol	4.1	J	50	3.9
1330-20-7	Xylenes, Total	0.33	J	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-30 | Lab Sample ID: 240-27864-2

Matrix: Water | Lab File ID: UXJ3399.D

Analysis Method: 8260B | Date Collected: 08/12/2013 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 16:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		63-129
460-00-4	4-Bromofluorobenzene (Surr)	90		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-30 Lab Sample ID: 240-27864-2

Matrix: Water Lab File ID: UXJ3399.D

Analysis Method: 8260B Date Collected: 08/12/2013 10:45

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 16:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

Number TICs Found: 5 TIC Result Total: 40.55

CAS NO.	COMPOUND NAME	RT	RESULT	Q
74-93-1	Methanethiol	2.22	1.1	T J N
109-67-1	1-Pentene	2.60	1.5	T J N
110-54-3	Hexane	3.90	0.35	J
1066-40-6	Silanol, trimethyl-	4.38	3.6	T J N
123-91-1	1,4-Dioxane	6.09	34	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-35 Lab Sample ID: 240-27864-3

Matrix: Water Lab File ID: UXJ3421.D

Analysis Method: 8260B Date Collected: 08/12/2013 11:20

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98161 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	1.9	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U *	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.4		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-35 Lab Sample ID: 240-27864-3

Matrix: Water Lab File ID: UXJ3421.D

Analysis Method: 8260B Date Collected: 08/12/2013 11:20

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98161 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	21		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0		1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	9.7		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	3.6		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-35 | Lab Sample ID: 240-27864-3

Matrix: Water | Lab File ID: UXJ3421.D

Analysis Method: 8260B | Date Collected: 08/12/2013 11:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 14:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98161 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-35 Lab Sample ID: 240-27864-3

Matrix: Water Lab File ID: UXJ3421.D

Analysis Method: 8260B Date Collected: 08/12/2013 11:20

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98161 Units: ug/L

Number TICs Found: 1 TIC Result Total: 3.9

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	3.9	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-40 | Lab Sample ID: 240-27864-4

Matrix: Water | Lab File ID: UXJ3422.D

Analysis Method: 8260B | Date Collected: 08/12/2013 13:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 14:53

Soil Aliquot Vol: | Dilution Factor: 2.5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98161 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	2.5	U	2.5	0.58
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	0.55
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.45
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	2.5	U	2.5	0.70
75-34-3	1,1-Dichloroethane	2.5	U	2.5	0.38
75-35-4	1,1-Dichloroethene	2.5	U	2.5	0.48
563-58-6	1,1-Dichloropropene	2.5	U	2.5	0.33
87-61-6	1,2,3-Trichlorobenzene	2.5	U	2.5	0.43
96-18-4	1,2,3-Trichloropropane	2.5	U	2.5	1.1
526-73-8	1,2,3-Trimethylbenzene	13	U	13	0.015
120-82-1	1,2,4-Trichlorobenzene	2.5	U	2.5	0.38
95-63-6	1,2,4-Trimethylbenzene	2.5	U	2.5	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.7
95-50-1	1,2-Dichlorobenzene	2.5	U	2.5	0.33
107-06-2	1,2-Dichloroethane	1.4	J	2.5	0.55
78-87-5	1,2-Dichloropropane	2.5	U	2.5	0.45
541-73-1	1,3-Dichlorobenzene	2.5	U	2.5	0.35
142-28-9	1,3-Dichloropropane	2.5	U	2.5	0.40
106-46-7	1,4-Dichlorobenzene	2.5	U	2.5	0.33
594-20-7	2,2-Dichloropropane	2.5	U	2.5	0.33
110-75-8	2-Chloroethyl vinyl ether	25	U	25	2.5
95-49-8	2-Chlorotoluene	2.5	U	2.5	0.28
591-78-6	2-Hexanone	25	U	25	1.0
108-86-1	Bromobenzene	2.5	U	2.5	0.33
74-97-5	Bromochloromethane	2.5	U	2.5	0.73
106-43-4	4-Chlorotoluene	2.5	U	2.5	0.45
99-87-6	p-Isopropyltoluene	2.5	U	2.5	0.30
67-64-1	Acetone	3.1	J	25	2.8
71-43-2	Benzene	0.79	J	2.5	0.33
75-25-2	Bromoform	2.5	U *	2.5	1.6
74-83-9	Bromomethane	2.5	U	2.5	1.0
75-15-0	Carbon disulfide	2.5		2.5	0.33
56-23-5	Carbon tetrachloride	2.5	U	2.5	0.33
108-90-7	Chlorobenzene	2.5	U	2.5	0.38
75-00-3	Chloroethane	2.5	U	2.5	0.73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-40 Lab Sample ID: 240-27864-4

Matrix: Water Lab File ID: UXJ3422.D

Analysis Method: 8260B Date Collected: 08/12/2013 13:50

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 14:53

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98161 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.48	J	2.5	0.40
74-87-3	Chloromethane	2.5	U	2.5	0.75
156-59-2	cis-1,2-Dichloroethene	88		2.5	0.43
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	0.35
87-68-3	Hexachlorobutadiene	2.5	U	2.5	0.75
74-95-3	Dibromomethane	2.5	U	2.5	0.70
75-27-4	Bromodichloromethane	2.5	U	2.5	0.38
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	0.78
100-41-4	Ethylbenzene	2.5	U	2.5	0.43
106-93-4	1,2-Dibromoethane	2.5	U	2.5	0.60
108-20-3	Diisopropyl ether	25	U	25	3.8
91-20-3	Naphthalene	2.5	U	2.5	0.60
179601-23-1	m-Xylene & p-Xylene	5.0	U	5.0	0.60
104-51-8	n-Butylbenzene	2.5	U	2.5	0.30
98-82-8	Isopropylbenzene	2.5	U	2.5	0.33
103-65-1	n-Propylbenzene	2.5	U	2.5	0.35
78-93-3	2-Butanone	1.6	J	25	1.4
108-10-1	4-Methyl-2-pentanone	25	U	25	0.80
135-98-8	sec-Butylbenzene	2.5	U	2.5	0.33
1634-04-4	Methyl tert-butyl ether	2.5	U	2.5	0.43
994-05-8	Tert-amyl-methyl ether (TAME)	13	U	13	0.17
75-09-2	Methylene Chloride	2.5	U	2.5	0.83
95-47-6	o-Xylene	2.5	U	2.5	0.35
100-42-5	Styrene	2.5	U	2.5	0.28
637-92-3	Ethyl-t-butyl ether (ETBE)	13	U	13	0.28
98-06-6	tert-Butylbenzene	2.5	U	2.5	0.33
127-18-4	Tetrachloroethene	2.5	U	2.5	0.73
108-88-3	Toluene	0.34	J	2.5	0.33
156-60-5	trans-1,2-Dichloroethene	0.60	J	2.5	0.48
10061-02-6	trans-1,3-Dichloropropene	2.5	U	2.5	0.48
79-01-6	Trichloroethene	21		2.5	0.43
75-69-4	Trichlorofluoromethane	2.5	U	2.5	0.53
108-05-4	Vinyl acetate	5.0	U	5.0	0.48
75-01-4	Vinyl chloride	52		2.5	0.55
75-65-0	tert-Butyl alcohol	130	U	130	9.8
1330-20-7	Xylenes, Total	5.0	U	5.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-40 Lab Sample ID: 240-27864-4

Matrix: Water Lab File ID: UXJ3422.D

Analysis Method: 8260B Date Collected: 08/12/2013 13:50

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 14:53

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98161 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	2.5	U	2.5	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	88		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-40 Lab Sample ID: 240-27864-4

Matrix: Water Lab File ID: UXJ3422.D

Analysis Method: 8260B Date Collected: 08/12/2013 13:50

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 14:53

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98161 Units: ug/L

Number TICs Found: 1 TIC Result Total: 0.38

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
108-87-2	Methylcyclohexane	5.96	0.38	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-45 | Lab Sample ID: 240-27864-5

Matrix: Water | Lab File ID: UXJ3423.D

Analysis Method: 8260B | Date Collected: 08/12/2013 14:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 15:16

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98161 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	10	U	10	2.3
71-55-6	1,1,1-Trichloroethane	10	U	10	2.2
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	1.8
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	10	U	10	2.8
75-34-3	1,1-Dichloroethane	10	U	10	1.5
75-35-4	1,1-Dichloroethene	10	U	10	1.9
563-58-6	1,1-Dichloropropene	10	U	10	1.3
87-61-6	1,2,3-Trichlorobenzene	10	U	10	1.7
96-18-4	1,2,3-Trichloropropane	10	U	10	4.3
526-73-8	1,2,3-Trimethylbenzene	50	U	50	0.059
120-82-1	1,2,4-Trichlorobenzene	10	U	10	1.5
95-63-6	1,2,4-Trimethylbenzene	10	U	10	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	20	U	20	6.7
95-50-1	1,2-Dichlorobenzene	10	U	10	1.3
107-06-2	1,2-Dichloroethane	2.4	J	10	2.2
78-87-5	1,2-Dichloropropane	10	U	10	1.8
541-73-1	1,3-Dichlorobenzene	10	U	10	1.4
142-28-9	1,3-Dichloropropane	10	U	10	1.6
106-46-7	1,4-Dichlorobenzene	10	U	10	1.3
594-20-7	2,2-Dichloropropane	10	U	10	1.3
110-75-8	2-Chloroethyl vinyl ether	100	U	100	9.9
95-49-8	2-Chlorotoluene	10	U	10	1.1
591-78-6	2-Hexanone	100	U	100	4.1
108-86-1	Bromobenzene	10	U	10	1.3
74-97-5	Bromochloromethane	10	U	10	2.9
106-43-4	4-Chlorotoluene	10	U	10	1.8
99-87-6	p-Isopropyltoluene	10	U	10	1.2
67-64-1	Acetone	100	U	100	11
71-43-2	Benzene	2.5	J	10	1.3
75-25-2	Bromoform	10	U *	10	6.4
74-83-9	Bromomethane	10	U	10	4.1
75-15-0	Carbon disulfide	3.7	J	10	1.3
56-23-5	Carbon tetrachloride	10	U	10	1.3
108-90-7	Chlorobenzene	10	U	10	1.5
75-00-3	Chloroethane	10	U	10	2.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-45 | Lab Sample ID: 240-27864-5

Matrix: Water | Lab File ID: UXJ3423.D

Analysis Method: 8260B | Date Collected: 08/12/2013 14:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 15:16

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98161 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	10	U	10	1.6
74-87-3	Chloromethane	10	U	10	3.0
156-59-2	cis-1,2-Dichloroethene	260		10	1.7
10061-01-5	cis-1,3-Dichloropropene	10	U	10	1.4
87-68-3	Hexachlorobutadiene	10	U	10	3.0
74-95-3	Dibromomethane	10	U	10	2.8
75-27-4	Bromodichloromethane	10	U	10	1.5
75-71-8	Dichlorodifluoromethane	10	U	10	3.1
100-41-4	Ethylbenzene	10	U	10	1.7
106-93-4	1,2-Dibromoethane	10	U	10	2.4
108-20-3	Diisopropyl ether	100	U	100	15
91-20-3	Naphthalene	10	U	10	2.4
179601-23-1	m-Xylene & p-Xylene	20	U	20	2.4
104-51-8	n-Butylbenzene	10	U	10	1.2
98-82-8	Isopropylbenzene	10	U	10	1.3
103-65-1	n-Propylbenzene	10	U	10	1.4
78-93-3	2-Butanone	100	U	100	5.7
108-10-1	4-Methyl-2-pentanone	100	U	100	3.2
135-98-8	sec-Butylbenzene	10	U	10	1.3
1634-04-4	Methyl tert-butyl ether	10	U	10	1.7
994-05-8	Tert-amyl-methyl ether (TAME)	50	U	50	0.67
75-09-2	Methylene Chloride	10	U	10	3.3
95-47-6	o-Xylene	10	U	10	1.4
100-42-5	Styrene	10	U	10	1.1
637-92-3	Ethyl-t-butyl ether (ETBE)	50	U	50	1.1
98-06-6	tert-Butylbenzene	10	U	10	1.3
127-18-4	Tetrachloroethene	10	U	10	2.9
108-88-3	Toluene	10	U	10	1.3
156-60-5	trans-1,2-Dichloroethene	10	U	10	1.9
10061-02-6	trans-1,3-Dichloropropene	10	U	10	1.9
79-01-6	Trichloroethene	73		10	1.7
75-69-4	Trichlorofluoromethane	10	U	10	2.1
108-05-4	Vinyl acetate	20	U	20	1.9
75-01-4	Vinyl chloride	130		10	2.2
75-65-0	tert-Butyl alcohol	500	U	500	39
1330-20-7	Xylenes, Total	20	U	20	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-45 Lab Sample ID: 240-27864-5

Matrix: Water Lab File ID: UXJ3423.D

Analysis Method: 8260B Date Collected: 08/12/2013 14:35

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 15:16

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98161 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	10	U	10	1.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-45 | Lab Sample ID: 240-27864-5

Matrix: Water | Lab File ID: UXJ3423.D

Analysis Method: 8260B | Date Collected: 08/12/2013 14:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 15:16

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98161 | Units: ug/L

Number TICs Found: 2 | TIC Result Total: 231

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	2.60	11	T J
123-91-1	1,4-Dioxane	6.08	220	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: TB-081213 Lab Sample ID: 240-27864-6

Matrix: Water Lab File ID: UXJ3403.D

Analysis Method: 8260B Date Collected: 08/12/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 18:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: TB-081213 Lab Sample ID: 240-27864-6

Matrix: Water Lab File ID: UXJ3403.D

Analysis Method: 8260B Date Collected: 08/12/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 18:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.36	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.26	J	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: TB-081213 Lab Sample ID: 240-27864-6

Matrix: Water Lab File ID: UXJ3403.D

Analysis Method: 8260B Date Collected: 08/12/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 18:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	97		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: TB-081213 Lab Sample ID: 240-27864-6

Matrix: Water Lab File ID: UXJ3403.D

Analysis Method: 8260B Date Collected: 08/12/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 18:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

Number TICs Found: 1 TIC Result Total: 32

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
123-91-1	1,4-Dioxane	6.07	32	J

FORM I-TIC 8260B

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 240-27864-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-081213	240-27864-6	NM	08/12/2013	08/19/2013	08/19/2013	7	0	7
OV	UG/L	DR-DPT-37-45	240-27864-5	NM	08/12/2013	08/20/2013	08/20/2013	8	0	8
OV	UG/L	DR-DPT-37-40	240-27864-4	NM	08/12/2013	08/20/2013	08/20/2013	8	0	8
OV	UG/L	DR-DPT-37-35	240-27864-3	NM	08/12/2013	08/20/2013	08/20/2013	8	0	8
OV	UG/L	DR-DPT-37-30	240-27864-2	NM	08/12/2013	08/19/2013	08/19/2013	7	0	7
OV	UG/L	DR-DPT-37-25	240-27864-1	NM	08/12/2013	08/20/2013	08/20/2013	8	0	8

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

240-27864 Chain of Custody

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	...anavage	Site Contact: Tony Apanavage	Date: 8/12/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			112IC04882
(301) 528-3021 Phone	TAT if different from Below 5 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			
P O #	☐ 1 day			Sampler: S. Cameron

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT-37-25	8/12/2013	1010	GW	Water	3		x	
DR-DPT-37-30	8/12/2013	1045	GW	Water	3		x	
DR-DPT-37-35	8/12/2013	1120	GW	Water	3		x	
DR-DPT-37-40	8/12/2013	1350	GW	Water	3		x	
DR-DPT-37-45	8/12/2013	1435	GW	Water	3		x	
DR-DPT-	8/12/2013		GW	Water	3		x	
DR-DPT-	8/12/2013		GW	Water	3		x	
DR-DPT-	8/12/2013		GW	Water	3		x	
DR-DPT-	8/12/2013		GW	Water	3		x	
DR-DPT-	8/12/2013		GW	Water	3		x	
DR-DPT-	8/12/2013		GW	Water	3		x	
TB-081213	8/12/2013		GW	Water	2		x	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/12/13 1530	[signature]	TestAmerica	8/12/13 1540
[signature]	TestAmerica	8/12/13 1630	[signature]	TA	8-13-13 920

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 27864

Client Tetra Tech Site Name

Cooler unpacked by: Chuck O. Green

Cooler Received on 8-13-13 Opened on 8-13-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

TestAmerica Cooler # Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF −1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. 2.8 °C	Corrected Cooler Temp. 2.8 °C	☐	See Multiple Cooler Form
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		
IR GUN# 8	(CF -0.°C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s)?	Yes	No
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Did all bottles arrive in good condition (Unbroken)?	Yes	No
7. Could all bottle labels be reconciled with the COC?	Yes	No
8. Were correct bottle(s) used for the test(s) indicated?	Yes	No
9. Sufficient quantity received to perform indicated analyses?	Yes	No
10. Were sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC376062
11. Were VOAs on the COC?	Yes	No
12. Were air bubbles >6 mm in any VOA vials?	Yes	No NA
13. Was a trip blank present in the cooler(s)?	Yes	No

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.

Sample(s) ____ were received in a broken container.

Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.

Time preserved: ____ Preservative(s) added/Lot number(s): ____

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-27864-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT
The samples were received on 08/13/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.8 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples DR-DPT-37-25 (240-27864-1), DR-DPT-37-30 (240-27864-2), DR-DPT-37-35 (240-27864-3), DR-DPT-37-40 (240-27864-4), DR-DPT-37-45 (240-27864-5) and TB-081213 (240-27864-6) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/19/2013 and 08/20/2013.

Samples DR-DPT-37-25 (240-27864-1)[6.67X], DR-DPT-37-40 (240-27864-4)[2.5X] and DR-DPT-37-45 (240-27864-5)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27864-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27864-1	DR-DPT-37-25	Water	08/12/2013 1010	08/13/2013 0910
240-27864-2	DR-DPT-37-30	Water	08/12/2013 1045	08/13/2013 0910
240-27864-3	DR-DPT-37-35	Water	08/12/2013 1120	08/13/2013 0910
240-27864-4	DR-DPT-37-40	Water	08/12/2013 1350	08/13/2013 0910
240-27864-5	DR-DPT-37-45	Water	08/12/2013 1435	08/13/2013 0910
240-27864-6	TB-081213	Water	08/12/2013 0000	08/13/2013 0910

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27864-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-27864-1

Lab Section	Qualifier	Description
GC/MS VOA		
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD exceeds the control limits
	F	MS or MSD exceeds the control limits
	E	Result exceeded calibration range.
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab File ID: BFB182.D BFB Injection Date: 08/16/2013

Instrument ID: A3UX11 BFB Injection Time: 14:53

Analysis Batch No.: 97870

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	27.9	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.0	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	77.0	
175	5.0 - 9.0 % of mass 174	5.6	(7.3)1
176	95.0 - 101.0 % of mass 174	75.2	(97.8)1
177	5.0 - 9.0 % of mass 176	5.4	(7.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97870/2	UXJ3342.D	08/16/2013	15:26
	STD8260 240-97870/3	UXJ3343.D	08/16/2013	15:50
	STD8260 240-97870/4	UXJ3344.D	08/16/2013	16:14
	STD8260 240-97870/5	UXJ3345.D	08/16/2013	16:38
	STD8260 240-97870/6	UXJ3346.D	08/16/2013	17:02
	STD8260 240-97870/7	UXJ3347.D	08/16/2013	17:25
	STD6 240-97870/8	UXJ3348.D	08/16/2013	17:49
	STD5 240-97870/9	UXJ3349.D	08/16/2013	18:13
	STD4 240-97870/10	UXJ3350.D	08/16/2013	18:36
	STD3 240-97870/11	UXJ3351.D	08/16/2013	19:00
	STD2 240-97870/12	UXJ3352.D	08/16/2013	19:23
	STD1 240-97870/13	UXJ3353.D	08/16/2013	19:47
	ICV 240-97870/14	UXJ3354.D	08/16/2013	20:11

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27864-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97870/7	UXJ3347.D
Level 2	STD8260 240-97870/6	UXJ3346.D
Level 3	STD8260 240-97870/5	UXJ3345.D
Level 4	STD8260 240-97870/4	UXJ3344.D
Level 5	STD8260 240-97870/3	UXJ3343.D
Level 6	STD8260 240-97870/2	UXJ3342.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2050 0.2069	0.2165	0.1905	0.1835	0.1962	Ave		0.1997				6.0		15.0			
Chloromethane	0.3836 0.3627	0.3744	0.3702	0.3585	0.3773	Ave		0.3711			0.1000	2.5		15.0			
Vinyl chloride	0.2970 0.2796	0.2816	0.2875	0.2788	0.2885	Ave		0.2855				2.4		15.0			
Bromomethane	0.0902 0.0928	0.0896	0.0882	0.0875	0.0852	Ave		0.0889				2.9		15.0			
Chloroethane	0.1253 0.1277	0.1308	0.1309	0.1239	0.1308	Ave		0.1282				2.4		15.0			
Trichlorofluoromethane	0.2678 0.2756	0.3067	0.2866	0.2745	0.2715	Ave		0.2804				5.1		15.0			
~~Acrolein~~	0.0410 0.0438	0.0438	0.0475	0.0482	0.0465	Ave		~~0.0451~~				6.0		15.0			
1,1-Dichloroethene	0.2532 0.2375	0.2478	0.2468	0.2446	0.2555	Ave		0.2476				2.6		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.0966 0.1399	0.1660	0.1326	0.1231	0.1275	Lin1	-0.014	0.1353							0.9940		0.9900
Acetone	0.3092 0.1071	0.2325	0.1721	0.1479	0.1289	Qua	0.3734	0.1375	0						1.0000		0.9900
Iodomethane	0.4129 0.3606	0.3709	0.3932	0.3933	0.4004	Ave		0.3885				5.0		15.0			
Carbon disulfide	0.7531 0.6075	0.7219	0.6836	0.6918	0.6835	Ave		0.6903				7.1		15.0			
~~Acetonitrile~~	0.0421 0.0334	0.0425	0.0426	0.0378	0.0368	Ave		~~0.0392~~				9.7		15.0			
Methyl acetate	0.3974 0.3192	0.3727	0.3681	0.3403	0.3439	Ave		0.3569				7.8		15.0			
Methylene Chloride	0.9491 0.2806	0.5689	0.4243	0.3380	0.3142	Lin1	0.6684	0.2703							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27864-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0210 0.0156	0.0209	0.0211	0.0210	0.0207	Ave		0.0200				11.0		15.0			
Acrylonitrile	0.1870 0.1457	0.1597	0.1621	0.1513	0.1512	Ave		0.1595				9.2		15.0			
trans-1,2-Dichloroethene	0.3533 0.3481	0.3265	0.3317	0.3389	0.3315	Ave		0.3383				3.1		15.0			
Methyl tert-butyl ether	0.9157 0.7559	0.7542	0.7730	0.7847	0.7711	Ave		0.7924				7.8		15.0			
Hexane	0.0451 0.0680	0.0773	0.0574	0.0681	0.0579	Lin1	-0.010	0.0654							0.9910		0.9900
1,1-Dichloroethane	0.8025 0.7508	0.7293	0.7254	0.7239	0.7105	Ave		0.7404			0.1000	4.5		15.0			
Vinyl acetate	0.0440 0.0495	0.0415	0.0482	0.0494	0.0501	Ave		0.0471				7.5		15.0			
2-Butanone	0.2005 0.1535	0.2003	0.1813	0.1847	0.1769	Ave		0.1829				9.5		15.0			
cis-1,2-Dichloroethene	0.3848 0.3690	0.3500	0.3592	0.3622	0.3649	Ave		0.3650				3.2		15.0			
2,2-Dichloropropane	0.3421 0.3268	0.3667	0.3653	0.3538	0.3552	Ave		0.3517				4.3		15.0			
Bromochloromethane	0.2257 0.2057	0.2118	0.1996	0.2003	0.2019	Ave		0.2075				4.8		15.0			
Tetrahydrofuran	0.1645 0.0965	0.1385	0.1158	0.1182	0.1091	Lin1	0.0767	0.0998							0.9950		0.9900
Chloroform	0.6517 0.6334	0.5981	0.6259	0.6108	0.6111	Ave		0.6218				3.1		15.0			
1,1,1-Trichloroethane	0.5102 0.4815	0.4629	0.4993	0.5043	0.4946	Ave		0.4921				3.5		15.0			
Cyclohexane	0.4992 0.6461	0.6130	0.5552	0.5930	0.5967	Ave		0.5839				8.7		15.0			
1,1-Dichloropropene	0.4438 0.4620	0.4196	0.4258	0.4347	0.4394	Ave		0.4375				3.4		15.0			
Carbon tetrachloride	0.4398 0.4455	0.4494	0.4270	0.4294	0.4398	Ave		0.4385				2.0		15.0			
Benzene	1.4334 1.4434	1.3464	1.3831	1.3517	1.3641	Ave		1.3870				3.0		15.0			
1,2-Dichloroethane	0.6202 0.5720	0.5573	0.5676	0.5564	0.5589	Ave		0.5721				4.3		15.0			
Trichloroethene	0.3938 0.4061	0.3696	0.3948	0.3853	0.4011	Ave		0.3918				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27864-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.2867 0.4356	0.3998	0.3263	0.3585	0.3855	Ave		0.3654				15.0		15.0			
1,2-Dichloropropane	0.4686 0.4171	0.4119	0.4140	0.4117	0.4108	Ave		0.4224				5.4		15.0			
Dibromomethane	0.2258 0.1875	0.1961	0.2070	0.1936	0.1955	Ave		0.2009				6.8		15.0			
1,4-Dioxane	0.0021	0.0025	0.0021	0.0024	0.0023	Ave		0.0023				8.1		15.0			
Bromodichloromethane	0.4259 0.4382	0.4007	0.4398	0.4113	0.4323	Ave		0.4247				3.7		15.0			
2-Chloroethyl vinyl ether	0.1674 0.1999	0.1676	0.1836	0.1888	0.1996	Ave		0.1845				7.9		15.0			
cis-1,3-Dichloropropene	0.4258 0.5097	0.4513	0.4726	0.4900	0.4938	Ave		0.4739				6.5		15.0			
4-Methyl-2-pentanone	0.3283 0.3278	0.3102	0.3353	0.3435	0.3475	Ave		0.3321				4.0		15.0			
Toluene	1.9738 2.1996	1.9199	2.0481	1.9932	2.1061	Ave		2.0401				4.9		15.0			
trans-1,3-Dichloropropene	0.5561 0.6042	0.5109	0.5712	0.5535	0.6213	Ave		0.5695				6.9		15.0			
Ethyl methacrylate	0.3733 0.4741	0.3854	0.4094	0.4308	0.5051	Ave		0.4297				12.0		15.0			
1,1,2-Trichloroethane	0.3726 0.3696	0.3942	0.4092	0.3712	0.3880	Ave		0.3841				4.1		15.0			
1,3-Dichloropropane	0.6458 0.6562	0.6480	0.6624	0.6374	0.6625	Ave		0.6520				1.5		15.0			
Tetrachloroethene	0.3366 0.3931	0.3605	0.3772	0.3618	0.3806	Ave		0.3683				5.4		15.0			
2-Hexanone	0.3457 0.2741	0.2638	0.2961	0.2980	0.3086	Ave		0.2977				9.7		15.0			
Dibromochloromethane	0.3797 0.4126	0.4179	0.4031	0.3981	0.4254	Ave		0.4062				4.0		15.0			
1,2-Dibromoethane	0.3707 0.3552	0.3627	0.3824	0.3517	0.3646	Ave		0.3645				3.0		15.0			
Chlorobenzene	1.3056 1.2616	1.2440	1.2606	1.1898	1.2600	Ave		1.2536			0.3000	3.0		15.0			
1,1,1,2-Tetrachloroethane	0.5187 0.4648	0.4407	0.4570	0.4455	0.4642	Ave		0.4652				6.0		15.0			
Ethylbenzene	0.5355 0.6600	0.5148	0.5782	0.6019	0.6572	Ave		0.5913				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27864-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6035 0.8215	0.6401	0.7252	0.7630	0.8230	Ave		0.7294				13.0		15.0			
o-Xylene	0.4762 0.6977	0.5965	0.6715	0.6753	0.6992	Ave		0.6361				14.0		15.0			
Styrene	0.8804 1.1787	0.9115	1.0905	1.0960	1.1784	Ave		1.0559				12.0		15.0			
Bromoform	0.1460 0.1361	0.1380	0.1257	0.1414	0.1505	Ave		0.1396			0.1000	6.2		15.0			
Isopropylbenzene	1.2466 1.5529	1.2639	1.4086	1.4368	1.5595	Ave		1.4114				9.6		15.0			
1,1,2,2-Tetrachloroethane	0.9587 0.7953	1.0655	0.9025	0.8644	0.8466	Ave		0.9055			0.3000	11.0		15.0			
Bromobenzene	1.1396 1.1159	1.1021	1.1178	1.1227	1.1382	Ave		1.1227				1.3		15.0			
1,2,3-Trichloropropane	0.3575 0.2637	0.3351	0.3244	0.2971	0.3012	Ave		0.3132				11.0		15.0			
trans-1,4-Dichloro-2-butene	0.2307 0.3110	0.3162	0.3231	0.3423	0.3074	Ave		0.3051				13.0		15.0			
n-Propylbenzene	0.9191 1.1733	1.0676	1.1471	1.0923	1.1433	Ave		1.0904				8.5		15.0			
2-Chlorotoluene	0.9723 1.0388	1.0833	0.9766	1.0638	1.0250	Ave		1.0267				4.4		15.0			
1,3,5-Trimethylbenzene	2.2255 3.0948	2.4704	2.7655	2.8790	3.0227	Ave		2.7430				12.0		15.0			
4-Chlorotoluene	0.9022 1.0802	1.0922	1.0204	1.0932	1.1027	Ave		1.0485				7.4		15.0			
tert-Butylbenzene	2.3013 2.5187	2.0190	2.5477	2.3018	2.3935	Ave		2.3470				8.2		15.0			
1,2,4-Trimethylbenzene	2.3778 3.0042	2.4562	2.7519	2.8622	2.8954	Ave		2.7246				9.3		15.0			
sec-Butylbenzene	2.3846 3.2334	2.6094	2.8211	2.9668	3.0465	Ave		2.8437				11.0		15.0			
1,3-Dichlorobenzene	1.8146 1.7530	1.6766	1.7132	1.6859	1.7001	Ave		1.7239				3.0		15.0			
p-Isopropyltoluene	1.7896 2.9109	2.1277	2.3539	2.4650	2.6051	Lin1	-1.400	2.8129							0.9960		0.9900
1,4-Dichlorobenzene	1.7782 1.7983	1.6803	1.7506	1.7134	1.7528	Ave		1.7456				2.5		15.0			
n-Butylbenzene	1.6781 2.1478	1.6030	1.5894	1.7118	1.8847	Ave		1.7691				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27864-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.6012 1.7185	1.6454	1.6361	1.6347	1.6381	Ave		1.6456				2.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1173 0.1360	0.1296	0.1578	0.1336	0.1458	Ave		0.1367				10.0		15.0			
1,3,5-Trichlorobenzene	1.0740 1.0627	1.0062	0.9283	0.9748	1.0091	Ave		1.0092				5.4		15.0			
1,2,4-Trichlorobenzene	0.8062 0.9580	0.7810	0.8479	0.8703	0.8928	Ave		0.8593				7.4		15.0			
Hexachlorobutadiene	0.3379 0.3800	0.4642	0.3382	0.3624	0.3737	Ave		0.3761				12.0		15.0			
Naphthalene	1.8724 2.4357	1.9574	2.0186	2.1470	2.4485	Ave		2.1466				11.0		15.0			
1,2,3-Trichlorobenzene	0.6297 0.8837	0.7184	0.7887	0.8500	0.8932	Ave		0.7939				13.0		15.0			
Dibromofluoromethane (Surr)	0.3664 0.3558	0.3145	0.3367	0.3468	0.3406	Ave		0.3435				5.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4791 0.4478	0.3961	0.4397	0.4403	0.4527	Ave		0.4426				6.1		15.0			
Toluene-d8 (Surr)	1.5671 1.8861	1.4287	1.6925	1.6839	1.8197	Ave		1.6797				9.9		15.0			
4-Bromofluorobenzene (Surr)	0.3557 0.3927	0.3559	0.3695	0.3822	0.4071	Ave		0.3772				5.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27864-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97870/13	UXJ3353.D
Level 2	STD2 240-97870/12	UXJ3352.D
Level 3	STD3 240-97870/11	UXJ3351.D
Level 4	STD4 240-97870/10	UXJ3350.D
Level 5	STD5 240-97870/9	UXJ3349.D
Level 6	STD6 240-97870/8	UXJ3348.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.2683 0.2447	0.2194	0.2342	0.2458	0.2389	Ave		0.2419				6.6		15.0			
Ethyl ether	0.4166 0.3363	0.3272	0.3580	0.3443	0.3257	Ave		0.3513				9.7		15.0			
3-Chloro-1-propene	0.1711 0.1594	0.1649	0.1607	0.1637	0.1626	Ave		0.1637				2.5		15.0			
Diisopropyl ether	0.2951 0.2879	0.2590	0.2753	0.2826	0.2723	Ave		0.2787				4.6		15.0			
2-Chloro-1,3-butadiene	0.8909 0.8067	0.7747	0.8019	0.7869	0.8028	Ave		0.8107				5.1		15.0			
Ethyl-t-butyl ether (ETBE)	1.2969 1.2223	1.0767	1.2033	1.1860	1.1554	Ave		1.1901				6.1		15.0			
Ethyl acetate	0.4121 0.3700	0.3322	0.3751	0.3629	0.3625	Ave		0.3691				7.0		15.0			
~~Propionitrile~~	0.0505 0.0472	0.0443	0.0487	0.0440	0.0440	Ave		0.~~0464~~				5.9		15.0			
Methacrylonitrile	0.2783 0.2434	0.2519	0.2401	0.2378	0.2377	Ave		0.2482				6.3		15.0			
Isobu~~tyl alcoh~~ol	0.0164 0.0113	0.0121	0.0129	0.0136	0.0123	Ave		~~0.0131~~				14.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6900 0.7425	0.6114	0.6799	0.6892	0.7000	Ave		0.6855				6.2		15.0			
~~n-Heptane~~	0.0493 0.0610	0.0648	0.0455	0.0478	0.0794	Ave		0.0580				~~22.0~~	~~*~~	15.0			
n~~-Buta~~nol	0.0080 0.0063	0.0099	0.0087	0.0109	0.0102	Qua	-0.239	~~0.0143~~	0						0.9960		0.9900
Methyl methacrylate	0.2857 0.3339	0.2857	0.2922	0.3108	0.3261	Ave		0.3057				6.9		15.0			
2-Nitropropane	0.1138 0.0943	0.0892	0.0956	0.0928	0.0925	Ave		0.0964				9.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27864-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1426 0.1291	0.1384	0.1537	0.1626	0.1663	Ave		0.1488				9.8		15.0			
1,2,3-Trimethylbenzene	2.0795 3.3094	1.9372	2.2909	2.5402	2.5808	Qua	0.4789	1.9657	0.0331						0.9990		0.9900
2-Methylnaphthalene	0.8153 1.3785	0.8449	0.8722	0.9460	1.0548	Qua	0.3760	0.7406	0.0079						1.0000		0.9900
n-Butyl acetate	0.3377 0.5103	0.3088	0.3478	0.4216	0.4644	Lin1	-0.602	0.4925							0.9930		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.1287		1.00	0.0100	-35.5	50.0
Chloromethane	Ave	0.3711	0.3145	0.1000	1.00	0.0100	-15.2	50.0
Vinyl chloride	Ave	0.2855	0.2363		1.00	0.0100	-17.2	20.0
Bromomethane	Ave	0.0889	0.0702		1.00	0.0100	-21.1	50.0
Chloroethane	Ave	0.1282	0.1203		1.00	0.0100	-6.1	50.0
Trichlorofluoromethane	Ave	0.2804	0.2325		1.00	0.0100	-17.1	50.0
1,1-Dichloroethene	Ave	0.2476	0.2329		1.00	0.0100	-5.9	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Linl		0.1207		1.00	0.0100	-9.7	50.0
Acetone	Qua		0.1235		10.0	0.0200	-19.6	50.0
Iodomethane	Ave	0.3885	0.3704		1.00	0.0100	-4.7	50.0
Carbon disulfide	Ave	0.6903	0.6294		1.00	0.0100	-8.8	50.0
Methyl acetate	Ave	0.3569	0.3691		10.0	0.0100	3.4	50.0
Methylene Chloride	Linl		0.3386		1.00	0.0100	0.5	50.0
tert-Butyl alcohol	Ave	0.0200	0.0157		50.0	0.200	-21.5	50.0
Methyl tert-butyl ether	Ave	0.7924	0.7415		1.00	0.0100	-6.4	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3252		1.00	0.0100	-3.9	50.0
Hexane	Linl		0.0594		1.00	0.0100	-7.6	20.0
1,1-Dichloroethane	Ave	0.7404	0.7131	0.1000	1.00	0.0100	-3.7	50.0
Vinyl acetate	Ave	0.0471	0.0420		2.00	0.0100	-10.9	50.0
2-Butanone	Ave	0.1829	0.1619		10.0	0.0200	-11.5	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.3452		1.00	0.0100	-5.4	50.0
2,2-Dichloropropane	Ave	0.3517	0.3227		1.00	0.0100	-8.2	50.0
Bromochloromethane	Ave	0.2075	0.1929		1.00	0.0100	-7.0	50.0
Tetrahydrofuran	Linl		0.0971		5.00	0.0100	-10.4	50.0
Chloroform	Ave	0.6218	0.6140		1.00	0.0100	-1.3	20.0
1,1,1-Trichloroethane	Ave	0.4921	0.4673		1.00	0.0100	-5.1	50.0
Cyclohexane	Ave	0.5839	0.5272		1.00	0.0100	-9.7	50.0
1,1-Dichloropropene	Ave	0.4375	0.4181		1.00	0.0100	-4.4	50.0
Carbon tetrachloride	Ave	0.4385	0.4112		1.00	0.0100	-6.2	50.0
1,2-Dichloroethane	Ave	0.5721	0.5534		1.00	0.0100	-3.3	50.0
Benzene	Ave	1.387	1.334		1.00	0.0100	-3.8	50.0
Trichloroethene	Ave	0.3918	0.3865		1.00	0.0100	-1.4	50.0
Methylcyclohexane	Ave	0.3654	0.3113		1.00	0.0100	-14.8	50.0
1,2-Dichloropropane	Ave	0.4224	0.4227		1.00	0.0100	0.0	20.0
Dibromomethane	Ave	0.2009	0.2036		1.00	0.0100	1.3	50.0
Bromodichloromethane	Ave	0.4247	0.4389		1.00	0.0100	3.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1845	0.1633		10.0	0.0100	-11.5	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4471		1.00	0.0100	-5.7	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.3155		10.0	0.0200	-5.0	50.0
Toluene	Ave	2.040	1.986		1.00	0.0100	-2.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
trans-1,3-Dichloropropene	Ave	0.5695	0.5490		1.00	0.0100	-3.6	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.3836		1.00	0.0100	-0.1	50.0
1,3-Dichloropropane	Ave	0.6520	0.6434		1.00	0.0100	-1.3	50.0
Tetrachloroethene	Ave	0.3683	0.3639		1.00	0.0100	-1.2	50.0
2-Hexanone	Ave	0.2977	0.2726		10.0	0.0200	-8.5	50.0
Dibromochloromethane	Ave	0.4062	0.4118		1.00	0.0100	1.4	50.0
1,2-Dibromoethane	Ave	0.3645	0.3367		1.00	0.0100	-7.7	50.0
Chlorobenzene	Ave	1.254	1.199	0.3000	1.00	0.0100	-4.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.4619		1.00	0.0100	-0.7	50.0
Ethylbenzene	Ave	0.5913	0.5816		1.00	0.0100	-1.6	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.7467		2.00	0.0200	2.4	50.0
o-Xylene	Ave	0.6361	0.6473		1.00	0.0100	1.8	50.0
Styrene	Ave	1.056	1.110		1.00	0.0100	5.1	50.0
Bromoform	Ave	0.1396	0.1502	0.1000	1.00	0.0100	7.6	50.0
Isopropylbenzene	Ave	1.411	1.390		1.00	0.0100	-1.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.7574	0.3000	1.00	0.0100	-16.4	50.0
Bromobenzene	Ave	1.123	1.055		1.00	0.0100	-6.0	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2891		1.00	0.0100	-7.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.2829		1.00	0.0200	-7.3	50.0
n-Propylbenzene	Ave	1.090	1.038		1.00	0.0100	-4.8	50.0
2-Chlorotoluene	Ave	1.027	0.9715		1.00	0.0100	-5.4	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.691		1.00	0.0100	-1.9	50.0
4-Chlorotoluene	Ave	1.048	0.9943		1.00	0.0100	-5.2	50.0
tert-Butylbenzene	Ave	2.347	2.193		1.00	0.0100	-6.5	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.528		1.00	0.0100	-7.2	50.0
sec-Butylbenzene	Ave	2.844	2.611		1.00	0.0100	-8.2	50.0
1,3-Dichlorobenzene	Ave	1.724	1.571		1.00	0.0100	-8.9	50.0
p-Isopropyltoluene	Lin1		2.299		1.00	0.0100	-13.3	50.0
1,4-Dichlorobenzene	Ave	1.746	1.652		1.00	0.0100	-5.4	50.0
n-Butylbenzene	Ave	1.769	1.599		1.00	0.0100	-9.6	50.0
1,2-Dichlorobenzene	Ave	1.646	1.501		1.00	0.0100	-8.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1208		2.00	0.0100	-11.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7631		1.00	0.0100	-11.2	50.0
Hexachlorobutadiene	Ave	0.3761	0.2697		1.00	0.0100	-28.3	50.0
Naphthalene	Ave	2.147	1.801		1.00	0.0100	-16.1	50.0
1,2,3-Trichlorobenzene	Ave	0.7939	0.7398		1.00	0.0100	-6.8	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.2912		0.00707	0.00834	-15.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3605		0.00679	0.00834	-18.6	50.0
Toluene-d8 (Surr)	Ave	1.680	1.563		0.00776	0.00834	-7.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.3899		0.00862	0.00834	3.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3513	0.3614		2.00	0.0100	2.9	50.0
Diisopropyl ether	Ave	0.2787	0.2903		10.0	0.0100	4.2	50.0
Isobutyl alcohol	Ave	0.0131	0.0096		50.0	0.500	-26.4	50.0
Cyclohexanone	Ave	0.1488	0.0210		20.0	0.200	-85.9*	50.0
1,2,3-Trimethylbenzene	Qua		2.606		0.0110	0.0100	9.8	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab File ID: BFB184A.D BFB Injection Date: 08/19/2013

Instrument ID: A3UX11 BFB Injection Time: 09:15

Analysis Batch No.: 97982

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.2	
75	30.0 - 60.0 % of mass 95	45.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.8	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	84.6	
175	5.0 - 9.0 % of mass 174	7.5	(8.8)1
176	95.0 - 101.0 % of mass 174	83.5	(98.7)1
177	5.0 - 9.0 % of mass 176	4.5	(5.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97982/2	UXJ3382.D	08/19/2013	09:47
	LCS 240-97982/4	UXJ3383.D	08/19/2013	10:11
	CCV 240-97982/3	UXJ3384.D	08/19/2013	10:35
	MB 240-97982/5	UXJ3386.D	08/19/2013	11:22
	240-27914-C-2 MS	UXJ3396.D	08/19/2013	15:22
	240-27914-C-2 MSD	UXJ3397.D	08/19/2013	15:46
DR-DPT-37-30	240-27864-2	UXJ3399.D	08/19/2013	16:33
TB-081213	240-27864-6	UXJ3403.D	08/19/2013	18:09

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: CCVIS 240-97982/2 Calibration Date: 08/19/2013 09:47

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3382.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.2277		1.00	0.0100	14.0	50.0
Chloromethane	Ave	0.3711	0.3821	0.1000	1.00	0.0100	3.0	50.0
Vinyl chloride	Ave	0.2855	0.2874		1.00	0.0100	0.7	20.0
Bromomethane	Ave	0.0889	0.0908		1.00	0.0100	2.1	50.0
Chloroethane	Ave	0.1282	0.1237		1.00	0.0100	-3.5	50.0
Trichlorofluoromethane	Ave	0.2804	0.2745		1.00	0.0100	-2.1	50.0
Acrolein	Ave	0.0451	0.0406		20.0	0.100	-10.1	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1469		1.00	0.0100	9.6	50.0
1,1-Dichloroethene	Ave	0.2476	0.2214		1.00	0.0100	-10.6	20.0
Acetone	Qua		0.1905		10.0	0.0200	36.9	50.0
Iodomethane	Ave	0.3885	0.3108		1.00	0.0100	-20.0	50.0
Carbon disulfide	Ave	0.6903	0.5257		1.00	0.0100	-23.8	50.0
Acetonitrile	Ave	0.0392	0.0381		20.0	0.100	-2.8	50.0
Methyl acetate	Ave	0.3569	0.3350		10.0	0.0200	-6.2	50.0
Methylene Chloride	Lin1		0.2780		1.00	0.0100	-21.9	50.0
tert-Butyl alcohol	Ave	0.0200	0.0170		50.0	0.200	-15.1	50.0
Acrylonitrile	Ave	0.1595	0.1472		20.0	0.0200	-7.7	50.0
Methyl tert-butyl ether	Ave	0.7924	0.7118		1.00	0.0100	-10.2	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3212		1.00	0.0100	-5.1	50.0
Hexane	Lin1		0.0714		1.00	0.0100	10.7	20.0
1,1-Dichloroethane	Ave	0.7404	0.6920	0.1000	1.00	0.0100	-6.5	50.0
Vinyl acetate	Ave	0.0471	0.0451		2.00	0.0100	-4.4	50.0
2,2-Dichloropropane	Ave	0.3517	0.2743		1.00	0.0100	-22.0	50.0
2-Butanone	Ave	0.1829	0.1744		10.0	0.0200	-4.7	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.3239		1.00	0.0100	-11.3	50.0
Bromochloromethane	Ave	0.2075	0.2022		1.00	0.0100	-2.5	50.0
Chloroform	Ave	0.6218	0.5847		1.00	0.0100	-6.0	20.0
Tetrahydrofuran	Lin1		0.0919		5.00	0.0100	-15.6	50.0
1,1,1-Trichloroethane	Ave	0.4921	0.4265		1.00	0.0100	-13.3	50.0
Cyclohexane	Ave	0.5839	0.5687		1.00	0.0100	-2.6	50.0
1,1-Dichloropropene	Ave	0.4375	0.3939		1.00	0.0100	-10.0	50.0
Carbon tetrachloride	Ave	0.4385	0.4114		1.00	0.0100	-6.2	50.0
1,2-Dichloroethane	Ave	0.5721	0.5016		1.00	0.0100	-12.3	50.0
Benzene	Ave	1.387	1.270		1.00	0.0100	-8.4	50.0
Trichloroethene	Ave	0.3918	0.3873		1.00	0.0100	-1.1	50.0
Methylcyclohexane	Ave	0.3654	0.3774		1.00	0.0100	3.3	50.0
1,2-Dichloropropane	Ave	0.4224	0.3825		1.00	0.0100	-9.4	20.0
Dibromomethane	Ave	0.2009	0.1802		1.00	0.0100	-10.3	50.0
1,4-Dioxane	Ave	0.0023	0.0010		50.0	0.500	-54.5*	50.0
Bromodichloromethane	Ave	0.4247	0.4145		1.00	0.0100	-2.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: CCVIS 240-97982/2 Calibration Date: 08/19/2013 09:47

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3382.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1845	0.1642		10.0	0.0200	-11.0	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4294		1.00	0.0100	-9.4	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.2994		10.0	0.0200	-9.9	50.0
Toluene	Ave	2.040	1.819		1.00	0.0100	-10.8	20.0
trans-1,3-Dichloropropene	Ave	0.5695	0.5119		1.00	0.0100	-10.1	50.0
Ethyl methacrylate	Ave	0.4297	0.3812		1.00	0.0100	-11.3	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.3482		1.00	0.0100	-9.4	50.0
1,3-Dichloropropane	Ave	0.6520	0.5605		1.00	0.0100	-14.0	50.0
Tetrachloroethene	Ave	0.3683	0.3826		1.00	0.0100	3.9	50.0
2-Hexanone	Ave	0.2977	0.2434		10.0	0.0200	-18.3	50.0
Dibromochloromethane	Ave	0.4062	0.4115		1.00	0.0100	1.3	50.0
1,2-Dibromoethane	Ave	0.3645	0.3346		1.00	0.0100	-8.2	50.0
Chlorobenzene	Ave	1.254	1.102	0.3000	1.00	0.0100	-12.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.4239		1.00	0.0100	-8.9	50.0
Ethylbenzene	Ave	0.5913	0.5392		1.00	0.0100	-8.8	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.6934		2.00	0.0200	-4.9	50.0
o-Xylene	Ave	0.6361	0.5728		1.00	0.0100	-10.0	50.0
Styrene	Ave	1.056	0.9628		1.00	0.0100	-8.8	50.0
Bromoform	Ave	0.1396	0.1622	0.1000	1.00	0.0100	16.2	50.0
Isopropylbenzene	Ave	1.411	1.166		1.00	0.0100	-17.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.7158	0.3000	1.00	0.0100	-20.9	50.0
Bromobenzene	Ave	1.123	0.9338		1.00	0.0100	-16.8	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2369		1.00	0.0100	-24.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.2615		1.00	0.0100	-14.3	50.0
n-Propylbenzene	Ave	1.090	0.8721		1.00	0.0100	-20.0	50.0
2-Chlorotoluene	Ave	1.027	0.8668		1.00	0.0100	-15.6	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.401		1.00	0.0100	-12.5	50.0
4-Chlorotoluene	Ave	1.048	0.8692		1.00	0.0100	-17.1	50.0
tert-Butylbenzene	Ave	2.347	1.877		1.00	0.0100	-20.0	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.466		1.00	0.0100	-9.5	50.0
sec-Butylbenzene	Ave	2.844	2.418		1.00	0.0100	-15.0	50.0
1,3-Dichlorobenzene	Ave	1.724	1.420		1.00	0.0100	-17.7	50.0
4-Isopropyltoluene	Lin1		2.028		1.00	0.0100	-22.9	50.0
1,4-Dichlorobenzene	Ave	1.746	1.614		1.00	0.0100	-7.6	50.0
n-Butylbenzene	Ave	1.769	1.463		1.00	0.0100	-17.3	50.0
1,2-Dichlorobenzene	Ave	1.646	1.447		1.00	0.0100	-12.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1343		2.00	0.0100	-1.8	50.0
1,3,5-Trichlorobenzene	Ave	1.009	0.8411		1.00	0.0100	-16.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7201		1.00	0.0100	-16.2	50.0
Hexachlorobutadiene	Ave	0.3761	0.3173		1.00	0.0100	-15.6	50.0
Naphthalene	Ave	2.147	1.674		1.00	0.0100	-22.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: CCVIS 240-97982/2 Calibration Date: 08/19/2013 09:47

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3382.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7939	0.6395		1.00	0.0100	-19.5	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.3129		0.00760	0.00834	-8.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3672		0.00692	0.00834	-17.0	50.0
Toluene-d8 (Surr)	Ave	1.680	1.517		0.00753	0.00834	-9.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.3560		0.00787	0.00834	-5.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: CCV 240-97982/3 Calibration Date: 08/19/2013 10:35

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3384.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2419	0.2140		2.00	0.0100	-11.5	50.0
Ethyl ether	Ave	0.3513	0.3089		2.00	0.0100	-12.1	50.0
3-Chloro-1-propene	Ave	0.1637	0.1606		2.00	0.0100	-1.9	50.0
Diisopropyl ether	Ave	0.2787	0.2756		10.0	0.0500	-1.1	50.0
2-Chloro-1,3-butadiene	Ave	0.8107	0.7289		2.00	0.0100	-10.1	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.190	1.073		5.00	0.0100	-9.9	50.0
Ethyl acetate	Ave	0.3691	0.3279		4.00	0.0200	-11.2	50.0
Propionitrile	Ave	0.0464	0.0451		4.00	0.0200	-3.0	50.0
Methacrylonitrile	Ave	0.2482	0.2080		2.00	0.0100	-16.2	50.0
Isobutyl alcohol	Ave	0.0131	0.0124		50.0	0.200	-5.7	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6855	0.6184		5.00	0.0100	-9.8	50.0
n-Heptane	Ave	0.0580	0.0505		1.00	0.0100	-12.9	50.0
n-Butanol	Qua		0.0054		50.0	0.200	-50.5*	50.0
Methyl methacrylate	Ave	0.3057	0.2673		2.00	0.0100	-12.6	50.0
2-Nitropropane	Ave	0.0964	0.0789		2.00	0.0200	-18.2	50.0
Cyclohexanone	Ave	0.1488	0.1074		20.0	0.100	-27.8*	50.0
1,2,3-Trimethylbenzene	Qua		2.125		0.00915	0.0100	-8.5	50.0
2-Methylnaphthalene	Qua		0.6683		5.00	0.0200	-24.5*	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab File ID: BFB185D.D BFB Injection Date: 08/20/2013

Instrument ID: A3UX11 BFB Injection Time: 10:26

Analysis Batch No.: 98161

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.3	
75	30.0 - 60.0 % of mass 95	45.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	80.4	
175	5.0 - 9.0 % of mass 174	6.6	(8.2)1
176	95.0 - 101.0 % of mass 174	79.3	(98.7)1
177	5.0 - 9.0 % of mass 176	4.9	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98161/2	UXJ3412.D	08/20/2013	10:56
	LCS 240-98161/4	UXJ3413.D	08/20/2013	11:19
	CCV 240-98161/3	UXJ3414.D	08/20/2013	11:43
	MB 240-98161/5	UXJ3416.D	08/20/2013	12:30
DR-DPT-37-25	240-27864-1	UXJ3420.D	08/20/2013	14:05
DR-DPT-37-35	240-27864-3	UXJ3421.D	08/20/2013	14:29
DR-DPT-37-40	240-27864-4	UXJ3422.D	08/20/2013	14:53
DR-DPT-37-45	240-27864-5	UXJ3423.D	08/20/2013	15:16
	240-28010-E-3 MS	UXJ3439.D	08/20/2013	21:35
	240-28010-H-3 MSD	UXJ3440.D	08/20/2013	21:58

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: CCVIS 240-98161/2 Calibration Date: 08/20/2013 10:56

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3412.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.2163		1.00	0.0100	8.3	50.0
Chloromethane	Ave	0.3711	0.4076	0.1000	1.00	0.0100	9.8	50.0
Vinyl chloride	Ave	0.2855	0.3225		1.00	0.0100	13.0	20.0
Bromomethane	Ave	0.0889	0.0941		1.00	0.0100	5.8	50.0
Chloroethane	Ave	0.1282	0.1286		1.00	0.0100	0.3	50.0
Trichlorofluoromethane	Ave	0.2804	0.2843		1.00	0.0100	1.4	50.0
~~Acrolein~~	Ave	0.0451	~~0.0341~~		20.0	0.100	~~-24.5~~	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1535		1.00	0.0100	14.4	50.0
1,1-Dichloroethene	Ave	0.2476	0.2472		1.00	0.0100	-0.1	20.0
Acetone	Qua		0.1416		10.0	0.0200	-4.8	50.0
Iodomethane	Ave	0.3885	0.3574		1.00	0.0100	-8.0	50.0
Carbon disulfide	Ave	0.6903	0.6184		1.00	0.0100	-10.4	50.0
~~Acetonitrile~~	Ave	0.0392	~~0.0389~~		20.0	0.100	-0.8	50.0
Methyl acetate	Ave	0.3569	0.3590		10.0	0.0200	0.6	50.0
Methylene Chloride	Lin1		0.3427		1.00	0.0100	2.1	50.0
tert-Butyl alcohol	Ave	0.0200	0.0166		50.0	0.200	-17.2	50.0
Acrylonitrile	Ave	0.1595	0.1529		20.0	0.0200	-4.1	50.0
Methyl tert-butyl ether	Ave	0.7924	0.7892		1.00	0.0100	-0.4	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3735		1.00	0.0100	10.4	50.0
Hexane	Lin1		0.0683		1.00	0.0100	5.9	20.0
1,1-Dichloroethane	Ave	0.7404	0.7444	0.1000	1.00	0.0100	0.5	50.0
Vinyl acetate	Ave	0.0471	0.0420		2.00	0.0100	-10.9	50.0
2-Butanone	Ave	0.1829	0.1765		10.0	0.0200	-3.5	50.0
2,2-Dichloropropane	Ave	0.3517	0.3340		1.00	0.0100	-5.0	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.3766		1.00	0.0100	3.2	50.0
Bromochloromethane	Ave	0.2075	0.2090		1.00	0.0100	0.7	50.0
Chloroform	Ave	0.6218	0.6336		1.00	0.0100	1.9	20.0
Tetrahydrofuran	Lin1		0.0921		5.00	0.0100	-15.4	50.0
1,1,1-Trichloroethane	Ave	0.4921	0.4656		1.00	0.0100	-5.4	50.0
Cyclohexane	Ave	0.5839	0.5742		1.00	0.0100	-1.6	50.0
1,1-Dichloropropene	Ave	0.4375	0.4309		1.00	0.0100	-1.5	50.0
Carbon tetrachloride	Ave	0.4385	0.4516		1.00	0.0100	3.0	50.0
1,2-Dichloroethane	Ave	0.5721	0.5444		1.00	0.0100	-4.8	50.0
Benzene	Ave	1.387	1.417		1.00	0.0100	2.2	50.0
Trichloroethene	Ave	0.3918	0.4207		1.00	0.0100	7.4	50.0
Methylcyclohexane	Ave	0.3654	0.3902		1.00	0.0100	6.8	50.0
1,2-Dichloropropane	Ave	0.4224	0.4105		1.00	0.0100	-2.8	20.0
Dibromomethane	Ave	0.2009	0.1873		1.00	0.0100	-6.8	50.0
~~1,4-Dioxane~~	Ave	0.0023	~~0.0008~~		50.0	0.500	~~-64.8*~~	50.0
Bromodichloromethane	Ave	0.4247	0.4473		1.00	0.0100	5.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: CCVIS 240-98161/2 Calibration Date: 08/20/2013 10:56

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3412.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1845	0.1684		10.0	0.0200	-8.7	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4752		1.00	0.0100	0.3	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.2971		10.0	0.0200	-10.5	50.0
Toluene	Ave	2.040	1.928		1.00	0.0100	-5.5	20.0
trans-1,3-Dichloropropene	Ave	0.5695	0.5296		1.00	0.0100	-7.0	50.0
Ethyl methacrylate	Ave	0.4297	0.3791		1.00	0.0100	-11.8	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.3696		1.00	0.0100	-3.8	50.0
1,3-Dichloropropane	Ave	0.6520	0.5777		1.00	0.0100	-11.4	50.0
Tetrachloroethene	Ave	0.3683	0.3961		1.00	0.0100	7.5	50.0
2-Hexanone	Ave	0.2977	0.2481		10.0	0.0200	-16.7	50.0
Dibromochloromethane	Ave	0.4062	0.4520		1.00	0.0100	11.3	50.0
1,2-Dibromoethane	Ave	0.3645	0.3405		1.00	0.0100	-6.6	50.0
Chlorobenzene	Ave	1.254	1.221	0.3000	1.00	0.0100	-2.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.4471		1.00	0.0100	-3.9	50.0
Ethylbenzene	Ave	0.5913	0.6016		1.00	0.0100	1.8	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.8098		2.00	0.0200	11.0	50.0
o-Xylene	Ave	0.6361	0.6343		1.00	0.0100	-0.3	50.0
Styrene	Ave	1.056	1.068		1.00	0.0100	1.2	50.0
Bromoform	Ave	0.1396	0.1714	0.1000	1.00	0.0100	22.8	50.0
Isopropylbenzene	Ave	1.411	1.344		1.00	0.0100	-4.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.7082	0.3000	1.00	0.0100	-21.8	50.0
Bromobenzene	Ave	1.123	0.9868		1.00	0.0100	-12.1	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2515		1.00	0.0100	-19.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.2274		1.00	0.0100	-25.5	50.0
n-Propylbenzene	Ave	1.090	1.032		1.00	0.0100	-5.3	50.0
2-Chlorotoluene	Ave	1.027	0.9154		1.00	0.0100	-10.8	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.602		1.00	0.0100	-5.1	50.0
4-Chlorotoluene	Ave	1.048	1.022		1.00	0.0100	-2.5	50.0
tert-Butylbenzene	Ave	2.347	2.183		1.00	0.0100	-7.0	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.602		1.00	0.0100	-4.5	50.0
sec-Butylbenzene	Ave	2.844	2.750		1.00	0.0100	-3.3	50.0
1,3-Dichlorobenzene	Ave	1.724	1.596		1.00	0.0100	-7.4	50.0
p-Isopropyltoluene	Lin1		2.291		1.00	0.0100	-13.6	50.0
1,4-Dichlorobenzene	Ave	1.746	1.678		1.00	0.0100	-3.9	50.0
n-Butylbenzene	Ave	1.769	1.633		1.00	0.0100	-7.7	50.0
1,2-Dichlorobenzene	Ave	1.646	1.628		1.00	0.0100	-1.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1364		2.00	0.0100	-0.2	50.0
1,3,5-Trichlorobenzene	Ave	1.009	0.9554		1.00	0.0100	-5.3	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7814		1.00	0.0100	-9.1	50.0
Hexachlorobutadiene	Ave	0.3761	0.3843		1.00	0.0100	2.2	50.0
Naphthalene	Ave	2.147	1.817		1.00	0.0100	-15.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: CCVIS 240-98161/2 Calibration Date: 08/20/2013 10:56

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3412.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7939	0.7236		1.00	0.0100	-8.9	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.3100		0.00753	0.00834	-9.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3747		0.00706	0.00834	-15.3	50.0
Toluene-d8 (Surr)	Ave	1.680	1.500		0.00745	0.00834	-10.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.3593		0.00794	0.00834	-4.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab Sample ID: CCV 240-98161/3 Calibration Date: 08/20/2013 11:43

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3414.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2419	0.2276		2.00	0.0100	-5.9	50.0
Ethyl ether	Ave	0.3513	0.3574		2.00	0.0100	1.7	50.0
3-Chloro-1-propene	Ave	0.1637	0.1752		2.00	0.0100	7.0	50.0
Diisopropyl ether	Ave	0.2787	0.2945		10.0	0.0500	5.6	50.0
2-Chloro-1,3-butadiene	Ave	0.8107	0.7989		2.00	0.0100	-1.5	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.190	1.207		5.00	0.0100	1.4	50.0
Ethyl acetate	Ave	0.3691	0.3719		4.00	0.0200	0.7	50.0
~~Propionitrile~~	Ave	0.0464	~~0.0440~~		4.00	0.0200	-5.2	50.0
Methacrylonitrile	Ave	0.2482	0.2348		2.00	0.0100	-5.4	50.0
~~Isobutyl alcohol~~	Ave	0.0131	~~0.0127~~		50.0	0.200	-3.2	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6855	0.6773		5.00	0.0100	-1.2	50.0
n-Heptane	Ave	0.0580	0.0612		1.00	0.0100	5.6	50.0
~~n-Butanol~~	Qua		~~0.0056~~		50.0	0.200	~~-49.5~~	50.0
Methyl methacrylate	Ave	0.3057	0.2893		2.00	0.0100	-5.4	50.0
2-Nitropropane	Ave	0.0964	0.0834		2.00	0.0200	-13.5	50.0
~~Cyclohexanone~~	Ave	0.1488	0.1092		20.0	0.100	~~-26.6~~	50.0
1,2,3-Trimethylbenzene	Qua		2.467		0.0105	0.0100	4.6	50.0
2-Methylnaphthalene	Qua		0.7961		5.00	0.0200	-11.7	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Lab File ID: UXJ3386.D Lab Sample ID: MB 240-97982/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 08/19/2013 11:22

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97982/4	UXJ3383.D	08/19/2013 10:11
	240-27914-C-2 MS	UXJ3396.D	08/19/2013 15:22
	240-27914-C-2 MSD	UXJ3397.D	08/19/2013 15:46
DR-DPT-37-30	240-27864-2	UXJ3399.D	08/19/2013 16:33
TB-081213	240-27864-6	UXJ3403.D	08/19/2013 18:09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97982/5

Matrix: Water Lab File ID: UXJ3386.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 11:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27864-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97982/5

Matrix: Water | Lab File ID: UXJ3386.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 11:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97982/5

Matrix: Water Lab File ID: UXJ3386.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 11:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97982/5

Matrix: Water Lab File ID: UXJ3386.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 11:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3383.D

Lab ID: LCS 240-97982/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.1	101	72-116	
1,1,1-Trichloroethane	10.0	9.49	95	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.37	84	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.7	107	74-151	
1,1-Dichloroethane	10.0	9.94	99	82-115	
1,1-Dichloroethene	10.0	8.84	88	78-131	
1,1-Dichloropropene	10.0	9.43	94	83-114	
1,2,3-Trichlorobenzene	10.0	9.42	94	54-126	
1,2,3-Trichloropropane	10.0	8.04	80	73-129	
1,2,3-Trimethylbenzene	10.0	10.7	107	70-130	
1,2,4-Trichlorobenzene	10.0	9.20	92	48-135	
1,2,4-Trimethylbenzene	10.0	9.08	91	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.2	102	42-136	
1,2-Dichlorobenzene	10.0	9.35	94	81-110	
1,2-Dichloroethane	10.0	9.17	92	71-127	
1,2-Dichloropropane	10.0	9.86	99	81-115	
1,3-Dichlorobenzene	10.0	9.25	93	80-110	
1,3-Dichloropropane	10.0	9.83	98	79-116	
1,4-Dichlorobenzene	10.0	9.51	95	82-110	
2,2-Dichloropropane	10.0	10.2	102	50-129	
2-Chloroethyl vinyl ether	10.0	8.22 J	82	52-131	
2-Chlorotoluene	10.0	9.48	95	76-116	
2-Hexanone	20.0	16.7	84	55-133	
Bromobenzene	10.0	9.03	90	76-115	
Bromochloromethane	10.0	9.41	94	77-120	
4-Chlorotoluene	10.0	9.61	96	77-115	
p-Isopropyltoluene	10.0	8.83	88	74-120	
Acetone	20.0	14.5	73	43-136	
Benzene	10.0	9.57	96	83-112	
Bromoform	10.0	11.4	114	40-131	
Bromomethane	10.0	8.45	85	11-185	
Carbon disulfide	10.0	8.55	86	62-142	
Carbon tetrachloride	10.0	10.3	103	66-128	
Chlorobenzene	10.0	9.58	96	85-110	
Chloroethane	10.0	9.13	91	25-153	
Chloroform	10.0	9.57	96	79-117	
Chloromethane	10.0	9.13	91	44-126	
cis-1,2-Dichloroethene	10.0	9.86	99	80-113	
cis-1,3-Dichloropropene	10.0	9.50	95	61-115	
Hexachlorobutadiene	10.0	8.73	87	36-134	
Dibromomethane	10.0	9.61	96	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3383.D

Lab ID: LCS 240-97982/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.3	103	72-121	
Dichlorodifluoromethane	10.0	6.47	65	19-129	
Ethylbenzene	10.0	9.96	100	83-112	
1,2-Dibromoethane	10.0	9.17	92	79-113	
Diisopropyl ether	10.0	10.5	105	77-118	
Naphthalene	10.0	7.87	79	32-141	
m-Xylene & p-Xylene	20.0	20.3	101	83-113	
n-Butylbenzene	10.0	9.46	95	66-125	
Isopropylbenzene	10.0	9.60	96	75-114	
n-Propylbenzene	10.0	9.81	98	74-121	
2-Butanone	20.0	16.9	84	60-126	
4-Methyl-2-pentanone	20.0	18.0	90	63-128	
sec-Butylbenzene	10.0	9.47	95	70-117	
Methyl tert-butyl ether	10.0	9.32	93	52-144	
Methylene Chloride	10.0	9.08	91	66-131	
o-Xylene	10.0	9.69	97	83-113	
Styrene	10.0	10.3	103	79-114	
tert-Butylbenzene	10.0	8.58	86	71-115	
Tetrachloroethene	10.0	10.3	103	79-114	
Toluene	10.0	9.59	96	84-111	
trans-1,2-Dichloroethene	10.0	9.72	97	83-117	
trans-1,3-Dichloropropene	10.0	8.94	89	58-117	
Trichloroethene	10.0	9.89	99	76-117	
Trichlorofluoromethane	10.0	8.55	86	49-157	
Vinyl acetate	10.0	11.6	116	46-161	
Vinyl chloride	10.0	8.68	87	53-127	
tert-Butyl alcohol	200	192	96	70-130	
Xylenes, Total	30.0	30.0	100	83-112	
Dibromochloromethane	10.0	10.6	106	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3396.D

Lab ID: 240-27914-C-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	1670	170 U	1700	102	64-118	
1,1,1-Trichloroethane	1670	170 U	1630	98	68-121	
1,1,2,2-Tetrachloroethane	1670	170 U	1480	89	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	1670	170 U	1810	108	70-152	
1,1-Dichloroethane	1670	170 U	1670	100	79-116	
1,1-Dichloroethene	1670	170 U	1680	101	74-135	
1,1-Dichloropropene	1670	170 U	1600	96	80-114	
1,2,3-Trichlorobenzene	1670	170 U	1510	91	45-129	
1,2,3-Trichloropropane	1670	170 U	1390	83	67-132	
1,2,3-Trimethylbenzene	1670	830 U	1800	108	70-130	
1,2,4-Trichlorobenzene	1670	170 U	1370	82	38-138	
1,2,4-Trimethylbenzene	1670	170 U	1540	93	67-124	
1,2-Dibromo-3-Chloropropane	1670	330 U	1550	93	32-139	
1,2-Dichlorobenzene	1670	170 U	1590	96	75-111	
1,2-Dichloroethane	1670	170 U	1570	94	68-129	
1,2-Dichloropropane	1670	170 U	1630	98	78-115	
1,3-Dichlorobenzene	1670	170 U	1510	91	73-110	
1,3-Dichloropropane	1670	170 U	1630	98	74-118	
1,4-Dichlorobenzene	1670	170 U	1540	92	75-110	
2,2-Dichloropropane	1670	170 U	1760	105	38-127	
2-Chloroethyl vinyl ether	1670	1700 U	1380 J	83	10-150	
2-Chlorotoluene	1670	170 U	1520	91	69-117	
2-Hexanone	3330	1700 U	2860	86	47-139	
Bromobenzene	1670	170 U	1510	91	71-116	
Bromochloromethane	1670	170 U	1600	96	73-121	
4-Chlorotoluene	1670	170 U	1630	98	71-116	
p-Isopropyltoluene	1670	170 U	1400	84	64-122	
Acetone	3330	1700 U	2530	76	33-145	
Benzene	1670	42 J	1680	98	72-121	
Bromoform	1670	170 U	2120	127	32-128	
Bromomethane	1670	170 U	1350	81	10-186	
Carbon disulfide	1670	54 J	1740	101	57-147	
Carbon tetrachloride	1670	170 U	1700	102	59-129	
Chlorobenzene	1670	5300	6900	98	80-110	E
Chloroethane	1670	170 U	1530	92	21-165	
Chloroform	1670	170 U	1660	99	76-118	
Chloromethane	1670	170 U	1420	85	33-132	
cis-1,2-Dichloroethene	1670	210	1880	100	70-120	
cis-1,3-Dichloropropene	1670	170 U	1650	99	51-110	
Hexachlorobutadiene	1670	170 U	1290	77	27-132	
Dibromomethane	1670	170 U	1660	100	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3396.D

Lab ID: 240-27914-C-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	1670	170 U	1760	105	67-120	
Dichlorodifluoromethane	1670	170 U	1090	65	17-128	
Ethylbenzene	1670	170 U	1740	104	75-116	
1,2-Dibromoethane	1670	170 U	1590	95	74-113	
Diisopropyl ether	1670	1700 U	1680 J	101	73-118	
Naphthalene	1670	170 U	1430	86	15-158	
m-Xylene & p-Xylene	3330	330 U	3630	109	75-117	
n-Butylbenzene	1670	170 U	1450	87	56-127	
Isopropylbenzene	1670	170 U	1600	96	68-116	
n-Propylbenzene	1670	170 U	1630	98	64-124	
2-Butanone	3330	1700 U	3060	92	54-129	
4-Methyl-2-pentanone	3330	1700 U	3300	99	56-131	
sec-Butylbenzene	1670	170 U	1500	90	60-119	
Methyl tert-butyl ether	1670	170 U	1630	98	46-144	
Methylene Chloride	1670	170 U	1500	90	63-128	
o-Xylene	1670	170 U	1700	102	76-116	
Styrene	1670	170 U	1730	104	71-117	
tert-Butylbenzene	1670	170 U	1470	88	61-119	
Tetrachloroethene	1670	170 U	1630	98	70-117	
Toluene	1670	170 U	1610	96	78-114	
trans-1,2-Dichloroethene	1670	170 U	1710	102	80-119	
trans-1,3-Dichloropropene	1670	170 U	1590	95	46-116	
Trichloroethene	1670	230	1950	103	66-120	
Trichlorofluoromethane	1670	170 U	1620	97	46-157	
Vinyl acetate	1670	330 U	2000	120	43-157	
Vinyl chloride	1670	210	1660	87	49-130	
tert-Butyl alcohol	33300	8300 U	29800	90	70-130	
Xylenes, Total	5000	330 U	5330	107	76-116	
Dibromochloromethane	1670	170 U	1850	111	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3397.D

Lab ID: 240-27914-C-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	1670	1530	92	10	30	64-118	
1,1,1-Trichloroethane	1670	1570	94	3	30	68-121	
1,1,2,2-Tetrachloroethane	1670	1390	83	6	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	1670	1920	115	6	30	70-152	
1,1-Dichloroethane	1670	1550	93	7	30	79-116	
1,1-Dichloroethene	1670	1630	98	3	30	74-135	
1,1-Dichloropropene	1670	1530	92	5	30	80-114	
1,2,3-Trichlorobenzene	1670	1470	88	2	30	45-129	
1,2,3-Trichloropropane	1670	1510	91	9	30	67-132	
1,2,3-Trimethylbenzene	1670	1670	100	7	30	70-130	
1,2,4-Trichlorobenzene	1670	1360	82	0	30	38-138	
1,2,4-Trimethylbenzene	1670	1460	88	5	30	67-124	
1,2-Dibromo-3-Chloropropane	1670	1730	104	11	30	32-139	
1,2-Dichlorobenzene	1670	1540	93	3	30	75-111	
1,2-Dichloroethane	1670	1480	89	6	30	68-129	
1,2-Dichloropropane	1670	1580	95	3	30	78-115	
1,3-Dichlorobenzene	1670	1480	89	2	30	73-110	
1,3-Dichloropropane	1670	1500	90	9	30	74-118	
1,4-Dichlorobenzene	1670	1510	91	2	30	75-110	
2,2-Dichloropropane	1670	1630	98	7	30	38-127	
2-Chloroethyl vinyl ether	1670	1330 J	80	4	30	10-150	
2-Chlorotoluene	1670	1340	80	13	30	69-117	
2-Hexanone	3330	2850	86	0	30	47-139	
Bromobenzene	1670	1450	87	4	30	71-116	
Bromochloromethane	1670	1480	89	8	30	73-121	
4-Chlorotoluene	1670	1460	88	11	30	71-116	
p-Isopropyltoluene	1670	1370	82	2	30	64-122	
Acetone	3330	2310	69	9	30	33-145	
Benzene	1670	1560	91	7	30	72-121	
Bromoform	1670	1950	117	9	30	32-128	
Bromomethane	1670	1050	63	25	30	10-186	
Carbon disulfide	1670	1640	95	6	30	57-147	
Carbon tetrachloride	1670	1610	97	5	30	59-129	
Chlorobenzene	1670	6410	68	7	30	80-110	F
Chloroethane	1670	1260	76	19	30	21-165	
Chloroform	1670	1480	89	11	30	76-118	
Chloromethane	1670	1250	75	13	30	33-132	
cis-1,2-Dichloroethene	1670	1770	93	6	30	70-120	
cis-1,3-Dichloropropene	1670	1480	89	11	30	51-110	
Hexachlorobutadiene	1670	1300	78	1	30	27-132	
Dibromomethane	1670	1550	93	7	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3397.D

Lab ID: 240-27914-C-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	1670	1620	97	8	30	67-120	
Dichlorodifluoromethane	1670	1150	69	5	30	17-128	
Ethylbenzene	1670	1640	98	6	30	75-116	
1,2-Dibromoethane	1670	1480	89	7	30	74-113	
Diisopropyl ether	1670	1620 J	97	3	30	73-118	
Naphthalene	1670	1390	84	2	30	15-158	
m-Xylene & p-Xylene	3330	3290	99	10	30	75-117	
n-Butylbenzene	1670	1450	87	0	30	56-127	
Isopropylbenzene	1670	1490	89	7	30	68-116	
n-Propylbenzene	1670	1490	89	9	30	64-124	
2-Butanone	3330	3010	90	2	30	54-129	
4-Methyl-2-pentanone	3330	3110	93	6	30	56-131	
sec-Butylbenzene	1670	1490	89	1	30	60-119	
Methyl tert-butyl ether	1670	1540	92	6	30	46-144	
Methylene Chloride	1670	1360	82	10	30	63-128	
o-Xylene	1670	1600	96	6	30	76-116	
Styrene	1670	1590	96	8	30	71-117	
tert-Butylbenzene	1670	1380	83	6	30	61-119	
Tetrachloroethene	1670	1620	97	1	30	70-117	
Toluene	1670	1510	90	6	30	78-114	
trans-1,2-Dichloroethene	1670	1600	96	7	30	80-119	
trans-1,3-Dichloropropene	1670	1520	91	5	30	46-116	
Trichloroethene	1670	1790	94	8	30	66-120	
Trichlorofluoromethane	1670	1540	92	5	30	46-157	
Vinyl acetate	1670	1820	109	9	30	43-157	
Vinyl chloride	1670	1580	83	5	30	49-130	
tert-Butyl alcohol	33300	29900	90	0	30	70-130	
Xylenes, Total	5000	4890	98	9	30	76-116	
Dibromochloromethane	1670	1640	99	12	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-37-25	240-27864-1	89	80	85	80
DR-DPT-37-30	240-27864-2	93	85	89	90
DR-DPT-37-35	240-27864-3	95	88	86	85
DR-DPT-37-40	240-27864-4	95	82	88	86
DR-DPT-37-45	240-27864-5	93	82	86	84
TB-081213	240-27864-6	97	83	87	86
	MB 240-97982/5	90	83	85	83
	LCS 240-97982/4	87	84	93	105
	240-27914-C-2 MS	89	85	91	104
	240-27914-C-2 MSD	89	83	92	101

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Sample No.: STD8260 240-97870/4 Date Analyzed: 08/16/2013 16:14

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3344.D Heated Purge: (Y/N) N

Calibration ID: 16865

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1950817	5.47	1433793	8.15	447870	10.40
UPPER LIMIT		3901634	5.97	2867586	8.65	895740	10.90
LOWER LIMIT		975409	4.97	716897	7.65	223935	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-97982/2		2094656	5.47	1513461	8.15	514978	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Sample No.: CCVIS 240-97982/2 Date Analyzed: 08/19/2013 09:47

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3382.D Heated Purge: (Y/N) N

Calibration ID: 16867

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2094656	5.47	1513461	8.15	514978	10.40
UPPER LIMIT		4189312	5.97	3026922	8.65	1029956	10.90
LOWER LIMIT		1047328	4.97	756731	7.65	257489	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-97982/4		2028496	5.47	1460983	8.15	490242	10.40
CCV 240-97982/3		2154378	5.47	1428113	8.15	410504	10.40
MB 240-97982/5		1885207	5.47	1354782	8.15	365958	10.40
240-27914-C-2 MS		1846892	5.47	1331947	8.15	448129	10.40
240-27914-C-2 MSD		1919699	5.47	1387051	8.15	452049	10.40
240-27864-2	DR-DPT-37-30	1812427	5.47	1291140	8.15	372382	10.40
240-27864-6	TB-081213	1743908	5.47	1264946	8.15	347997	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27864-1

SDG No.:

Sample No.: CCVIS 240-98161/2 Date Analyzed: 08/20/2013 10:56

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3412.D Heated Purge: (Y/N) N

Calibration ID: 16867

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1938823	5.47	1444384	8.15	488153	10.40
UPPER LIMIT		3877646	5.97	2888768	8.65	976306	10.90
LOWER LIMIT		969412	4.97	722192	7.65	244077	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-98161/4		1912117	5.47	1386049	8.15	488371	10.40
CCV 240-98161/3		2033665	5.47	1338755	8.15	364778	10.40
MB 240-98161/5		1763634	5.47	1268382	8.15	338274	10.40
240-27864-1	DR-DPT-37-25	1727302	5.47	1272676	8.15	324768	10.40
240-27864-3	DR-DPT-37-35	1682443	5.47	1271515	8.15	359031	10.40
240-27864-4	DR-DPT-37-40	1713905	5.47	1207819	8.15	349502	10.40
240-27864-5	DR-DPT-37-45	1705855	5.47	1203255	8.15	314482	10.40
240-28010-E-3 MS		1749745	5.47	1304297	8.15	447203	10.40
240-28010-H-3 MSD		1769063	5.47	1295531	8.15	435782	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

VOC CALCULATION	SAMPLE		
	DR-DPT-37-30		
TARGET ANALYTE	**cis-1,2-dichloroethene**		
ANALYTE RESPONSE	535444		
INTERNAL STANDARD	fluorobenzene		
I.S. RESPONSE	1812427		
I.S. CONCENTRATION	10	µg/l	
ANALYTE CAL. RF	0.365		
DILUTION FACTOR (DF)	1		
INITIAL SAMPLE VOLUME - V1	5	ml	
FINAL SAMPLE VOLUME - V2	5		
(ANALYTE RESPONSE) x (I.S. CONCENTRATION) X DF x V2 / (I.S. RESPONSE) x (CAL. R.F.) x V1	=	8.09	µg/l

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27864-1

SDG No.:

Client Sample ID: DR-DPT-37-30 | Lab Sample ID: 240-27864-2

Matrix: Water | Lab File ID: UXJ3399.D

Analysis Method: 8260B | Date Collected: 08/12/2013 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 16:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	8.5		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	0.33	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	0.41	J	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	2.1		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.4		1.0	0.22
75-65-0	tert-Butyl alcohol	4.1	J	50	3.9
1330-20-7	Xylenes, Total	0.33	J	2.0	0.14

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A3UX11\20130819-22617.b\UXJ3399.D		
Lims ID:	240-27864-B-2	Client ID:	DR-DPT-37-30
Inject. Date:	19-Aug-2013 16:33:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0022617-017		
Misc. Info.:	J30819A,8260LLUX11,,43582		
Operator:	43582	Instrument ID:	A3UX11
Purge Vol:	5.000 mL	ALS Bottle#:	18
Lims Batch ID:	97982	Lims Sample ID:	17
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A3UX11\20130819-22617.b\8260_11.m		
Last Update:	20-Aug-2013 09:16:32	Calib Date:	16-Aug-2013 19:47:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A3UX11\20130816-22585.b\UXJ3353.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK035		

First Level Reviewer: evansle Date: 20-Aug-2013 08:23:54

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.466	5.466	0.0	98	1812427	10.0	
* 2 Chlorobenzene-d5	117	8.152	8.152	0.0	85	1291140	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.401	10.401	0.0	95	372382	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.886	4.887	-0.001	99	481268	7.73	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.182	5.182	0.0	89	569091	7.09	
$ 6 Toluene-d8 (Surr)	98	6.839	6.839	0.0	94	1603002	7.39	
$ 7 4-Bromofluorobenzene (Surr)	95	9.265	9.265	0.0	90	366983	7.54	
8 Dichlorodifluoromethane	85		1.727					9
9 Chloromethane	50		1.881					9
10 Vinyl chloride	62	1.987	1.987	0.0	77	72101	1.39	
11 Bromomethane	94		2.295					
12 Chloroethane	64		2.390					9
14 Trichlorofluoromethane	101		2.615					
19 1,1-Dichloroethene	96		3.064					9
18 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.064					
17 Acetone	43	3.064	3.076	-0.012	93	191517	5.05	
23 Carbon disulfide	76	3.265	3.265	0.0	70	210734	1.68	
26 Methylene Chloride	84		3.443					9
27 2-Methyl-2-propanol	59	3.514	3.514	0.0	49	15066	4.15	
30 Methyl tert-butyl ether	73		3.680					9
29 trans-1,2-Dichloroethene	96	3.668	3.680	-0.012	84	25233	0.4115	
32 1,1-Dichloroethane	63		4.023					
33 Vinyl acetate	86		4.046					
34 Isopropyl ether	87		4.070					
37 Tert-butyl ethyl ether	59		4.378					9
39 2,2-Dichloropropane	77		4.508					
40 cis-1,2-Dichloroethene	96	4.508	4.508	0.0	72	565444	8.55	
38 2-Butanone (MEK)	43		4.508					
43 Chlorobromomethane	128		4.697					
45 Chloroform	83		4.756					9

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27864-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0210 0.0156	0.0209	0.0211	0.0210	0.0207	Ave		0.0200				11.0		15.0			
Acrylonitrile	0.1870 0.1457	0.1597	0.1621	0.1513	0.1512	Ave		0.1595				9.2		15.0			
trans-1,2-Dichloroethene	0.3533 0.3481	0.3265	0.3317	0.3389	0.3315	Ave		0.3383				3.1		15.0			
Methyl tert-butyl ether	0.9157 0.7559	0.7542	0.7730	0.7847	0.7711	Ave		0.7924				7.8		15.0			
Hexane	0.0451 0.0680	0.0773	0.0574	0.0681	0.0579	Lin1	-0.010	0.0654							0.9910		0.9900
1,1-Dichloroethane	0.8025 0.7508	0.7293	0.7254	0.7239	0.7105	Ave		0.7404			0.1000	4.5		15.0			
Vinyl acetate	0.0440 0.0495	0.0415	0.0482	0.0494	0.0501	Ave		0.0471				7.5		15.0			
2-Butanone	0.2005 0.1535	0.2003	0.1813	0.1847	0.1769	Ave		0.1829				9.5		15.0			
cis-1,2-Dichloroethene	0.3848 0.3690	0.3500	0.3592	0.3622	0.3649	Ave		0.3650				3.2		15.0			
2,2-Dichloropropane	0.3421 0.3268	0.3667	0.3653	0.3538	0.3552	Ave		0.3517				4.3		15.0			
Bromochloromethane	0.2257 0.2057	0.2118	0.1996	0.2003	0.2019	Ave		0.2075				4.8		15.0			
Tetrahydrofuran	0.1645 0.0965	0.1385	0.1158	0.1182	0.1091	Lin1	0.0767	0.0998							0.9950		0.9900
Chloroform	0.6517 0.6334	0.5981	0.6259	0.6108	0.6111	Ave		0.6218				3.1		15.0			
1,1,1-Trichloroethane	0.5102 0.4815	0.4629	0.4993	0.5043	0.4946	Ave		0.4921				3.5		15.0			
Cyclohexane	0.4992 0.6461	0.6130	0.5552	0.5930	0.5967	Ave		0.5839				8.7		15.0			
1,1-Dichloropropene	0.4438 0.4620	0.4196	0.4258	0.4347	0.4394	Ave		0.4375				3.4		15.0			
Carbon tetrachloride	0.4398 0.4455	0.4494	0.4270	0.4294	0.4398	Ave		0.4385				2.0		15.0			
Benzene	1.4334 1.4434	1.3464	1.3831	1.3517	1.3641	Ave		1.3870				3.0		15.0			
1,2-Dichloroethane	0.6202 0.5720	0.5573	0.5676	0.5564	0.5589	Ave		0.5721				4.3		15.0			
Trichloroethene	0.3938 0.4061	0.3696	0.3948	0.3853	0.4011	Ave		0.3918				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Tetra Tech INC **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**NOVEMBER 7, 2013**
FROM:	**J. KALINYAK**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MIDDLE STATE AIRPORT (MSA) DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-27914-1

SAMPLES: 6 / Aqueous / VOC

DR-DPT-35-20	DR-DPT-35-25	DR-DPT-35-30
DR-DPT-35-35	DR-DPT-35-40	DR-DPT-35-45

Overview

The sample set for Lockheed MSA Dump Road Source Areas, SDG 240-27914-1, consisted of six (6) aqueous samples. All aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. No field duplicate sample pairs were included in the sample delivery group (SDG).

The samples were collected by Tetra Tech on August 13, 2013 and analyzed by TestAmerica Laboratories, Inc., North Canton OH for the analyses. All analyses were conducted in accordance with EPA SW-846 Methods 8260B for VOCs, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank/preparation results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate results, internal standard recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- The VOC initial calibration average relative response factors (RRF) were less than the 0.05 criteria for tert-butyl alcohol and vinyl acetate on instrument A3UX11 on 08/16/13. Additionally, the continuing calibration verification (CCV) RRFs for tert-butyl alcohol and vinyl acetate were less than the 0.05 criteria for instrument A3UX11 on 08/19/13 @ 09:47.
  Affected Samples: All samples
  Action: The affected sample non-detected results for tert-butyl alcohol and vinyl acetate were qualified rejected, (UR), and the positive tert-butyl alcohol result for sample DR-DPT-35-45 was qualified estimated, (J).

- Trimethyl silanol, detected as a tentatively identified compound (TIC), was qualified rejected, (R), in sample DR-DPT-35-20.

Minor Problems

- Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

- The laboratory narrative noted that samples were received with bubbles >6mm in all of the sample vials for the samples listed below.

  Affected Samples:

  DR-DPT-35-20 DR-DPT-35-30 DR-DPT-35-35
  DR-DPT-35-40 DR-DPT-35-45

  Action: The affected sample positive and non-detected results were qualified estimated, (J) and (UJ), respectively, with the exception of the tert-butyl alcohol and vinyl acetate non-detected results which were rejected for RRF criteria non-compliances.

- The VOC CCV percent differences (%Ds) were greater than the 20% and less than the 50% quality control limit for acetone, carbon disulfide, and naphthalene for instrument A3UX11 on 08/19/13 @ 09:47.

  Affected Sample: All samples

  Actions: The sample positive results for acetone, carbon disulfide, and naphthalene were qualified estimated, (J). The sample non-detected results for acetone, carbon disulfide, and naphthalene were not qualified.

- Results reported as TICs were qualified presumptively present, (NJ).

Notes

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for methylene chloride, 2,2-dichloropropane, 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane, and 4-isopropyltoluene for instrument A3UX11 on 08/19/13 @ 09:47.

Affected Sample: All samples

Actions: The samples had non-detected results for methylene chloride, 2,2-dichloropropane, 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane, and 4-isopropyltoluene which were not qualified.

The matrix spike duplicate (MSD) percent recovery %R was less than the quality control limit for chlorobenzene for spiked sample DR-DPT-35-25.

Affected Sample: DR-DPT-35-25

Action: No validation action was taken as the matrix spike (MS) %R and the relative percent difference (RPD) for the MS and MSD chlorobenzene %Rs were compliant.

Samples were analyzed at dilutions for VOCs, as listed below, resulting in elevated levels for non-detected VOC analytes.

Sample	Dilution
DR-DPT-35-25	166.67X
DR-DPT-35-30	33.33X
DR-DPT-35-35	16.67X
DR-DPT-35-40	7.14X
DR-DPT-35-45	50X

The Chain of Custody record indicated a vial was submitted to the laboratory for the trip blank TB-081313 but the laboratory stated that no vials were received for the trip blank. This item is noted for completeness.

The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC tert-butyl alcohol and vinyl acetate non-detected sample results were rejected due to initial calibration average RRF and CCV RRF criteria non-compliances. Sample VOC results were qualified for CCV %D non-compliances.

Other Factors Affecting Data Quality: Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J). A sample trimethyl silanol result was rejected as due to column bleed.

The data for these analyses were reviewed with reference to EPA SW-846 Methods 8260B and the Region III EPA Functional Guidelines for Organic Data Validation (9/94).

Tetra Tech
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Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	DR-DPT-35-20			DR-DPT-35-25			DR-DPT-35-30			DR-DPT-35-35		
SDG: 240-27914-1	LAB_ID	240-27914-1			240-27914-2			240-27914-3			240-27914-4		
FRACTION: OV	SAMP_DATE	8/13/2013			8/13/2013			8/13/2013			8/13/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	UJ	Q	38	U		7.7	UJ	Q	3.8	UJ	Q
1,1,1-TRICHLOROETHANE		0.22	UJ	Q	37	U		7.3	UJ	Q	3.7	UJ	Q
1,1,2,2-TETRACHLOROETHANE		0.18	UJ	Q	30	U		6	UJ	Q	3	UJ	Q
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	UJ	Q	47	U		9.3	UJ	Q	4.7	UJ	Q
1,1-DICHLOROETHANE		0.15	UJ	Q	25	U		5	UJ	Q	2.5	UJ	Q
1,1-DICHLOROETHENE		0.19	UJ	Q	32	U		6.3	UJ	Q	3.2	UJ	Q
1,1-DICHLOROPROPENE		0.13	UJ	Q	22	U		4.3	UJ	Q	2.2	UJ	Q
1,2,3-TRICHLOROBENZENE		0.17	UJ	Q	28	U		5.7	UJ	Q	2.8	UJ	Q
1,2,3-TRICHLOROPROPANE		0.43	UJ	Q	72	U		14	UJ	Q	7.2	UJ	Q
1,2,3-TRIMETHYLBENZENE		0.0059	UJ	Q	0.98	U		0.2	UJ	Q	0.098	UJ	Q
1,2,4-TRICHLOROBENZENE		0.15	UJ	Q	25	U		5	UJ	Q	2.5	UJ	Q
1,2,4-TRIMETHYLBENZENE		0.39	J	PQ	20	U		4	UJ	Q	2.1	J	PQ
1,2-DIBROMO-3-CHLOROPROPANE		0.67	UJ	Q	110	U		22	UJ	Q	11	UJ	Q
1,2-DIBROMOETHANE		0.24	UJ	Q	40	U		8	UJ	Q	4	UJ	Q
1,2-DICHLOROBENZENE		2.1	J	Q	22	U		4.3	UJ	Q	2.6	J	PQ
1,2-DICHLOROETHANE		0.22	UJ	Q	37	U		7.3	UJ	Q	8.7	J	PQ
1,2-DICHLOROPROPANE		0.18	UJ	Q	30	U		6	UJ	Q	3	UJ	Q
1,3-DICHLOROBENZENE		0.14	UJ	Q	23	U		4.7	UJ	Q	2.3	UJ	Q
1,3-DICHLOROPROPANE		0.16	UJ	Q	27	U		5.3	UJ	Q	2.7	UJ	Q
1,4-DICHLOROBENZENE		0.13	UJ	Q	22	U		4.3	UJ	Q	2.2	UJ	Q
2,2-DICHLOROPROPANE		0.13	UJ	Q	22	U		4.3	UJ	Q	2.2	UJ	Q
2-BUTANONE		1.1	J	PQ	95	U		19	UJ	Q	9.5	UJ	Q
2-CHLOROETHYL VINYL ETHER		0.99	UJ	Q	170	U		33	UJ	Q	17	UJ	Q
2-CHLOROTOLUENE		0.11	UJ	Q	18	U		3.7	UJ	Q	1.8	UJ	Q
2-HEXANONE		0.41	UJ	Q	68	U		14	UJ	Q	6.8	UJ	Q
4-CHLOROTOLUENE		0.18	UJ	Q	30	U		6	UJ	Q	3	UJ	Q
4-ISOPROPYLTOLUENE		0.12	UJ	Q	20	U		4	UJ	Q	2	UJ	Q
4-METHYL-2-PENTANONE		0.32	UJ	Q	53	U		11	UJ	Q	5.3	UJ	Q
ACETONE		6.8	J	CPQ	180	U		37	UJ	Q	18	UJ	Q
BENZENE		2.3	J	Q	42	J	P	9.1	J	PQ	5.4	J	PQ
BROMOBENZENE		0.13	UJ	Q	22	U		4.3	UJ	Q	2.2	UJ	Q
BROMOCHLOROMETHANE		0.29	UJ	Q	48	U		9.7	UJ	Q	4.8	UJ	Q
BROMODICHLOROMETHANE		0.15	UJ	Q	25	U		5	UJ	Q	2.5	UJ	Q
BROMOFORM		0.64	UJ	Q	110	U		21	UJ	Q	11	UJ	Q
BROMOMETHANE		0.41	UJ	Q	68	U		14	UJ	Q	6.8	UJ	Q

PROJ_NO: 04882	NSAMPLE	DR-DPT-35-40			DR-DPT-35-45		
SDG: 240-27914-1	LAB_ID	240-27914-5			240-27914-6		
FRACTION: OV	SAMP_DATE	8/13/2013			8/13/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1.6	UJ	Q	12	UJ	Q
1,1,1-TRICHLOROETHANE		1.6	UJ	Q	11	UJ	Q
1,1,2,2-TETRACHLOROETHANE		1.3	UJ	Q	9	UJ	Q
1,1,2-TRICHLOROTRIFLUOROETHANE		2	UJ	Q	14	UJ	Q
1,1-DICHLOROETHANE		1.1	UJ	Q	7.5	UJ	Q
1,1-DICHLOROETHENE		1.4	UJ	Q	9.5	UJ	Q
1,1-DICHLOROPROPENE		0.93	UJ	Q	6.5	UJ	Q
1,2,3-TRICHLOROBENZENE		1.2	UJ	Q	8.5	UJ	Q
1,2,3-TRICHLOROPROPANE		3.1	UJ	Q	22	UJ	Q
1,2,3-TRIMETHYLBENZENE		0.042	UJ	Q	0.3	UJ	Q
1,2,4-TRICHLOROBENZENE		1.1	UJ	Q	7.5	UJ	Q
1,2,4-TRIMETHYLBENZENE		0.86	UJ	Q	6	UJ	Q
1,2-DIBROMO-3-CHLOROPROPANE		4.8	UJ	Q	34	UJ	Q
1,2-DIBROMOETHANE		1.7	UJ	Q	12	UJ	Q
1,2-DICHLOROBENZENE		1.5	J	PQ	6.5	UJ	Q
1,2-DICHLOROETHANE		15	J	Q	46	J	PQ
1,2-DICHLOROPROPANE		1.3	UJ	Q	9	UJ	Q
1,3-DICHLOROBENZENE		1	UJ	Q	7	UJ	Q
1,3-DICHLOROPROPANE		1.1	UJ	Q	8	UJ	Q
1,4-DICHLOROBENZENE		0.93	UJ	Q	6.5	UJ	Q
2,2-DICHLOROPROPANE		0.93	UJ	Q	6.5	UJ	Q
2-BUTANONE		4.1	UJ	Q	29	UJ	Q
2-CHLOROETHYL VINYL ETHER		7.1	UJ	Q	50	UJ	Q
2-CHLOROTOLUENE		0.79	UJ	Q	5.5	UJ	Q
2-HEXANONE		2.9	UJ	Q	21	UJ	Q
4-CHLOROTOLUENE		1.3	UJ	Q	9	UJ	Q
4-ISOPROPYLTOLUENE		0.86	UJ	Q	6	UJ	Q
4-METHYL-2-PENTANONE		2.3	UJ	Q	16	UJ	Q
ACETONE		7.9	UJ	Q	55	UJ	Q
BENZENE		6.4	J	PQ	13	J	PQ
BROMOBENZENE		0.93	UJ	Q	6.5	UJ	Q
BROMOCHLOROMETHANE		2.1	UJ	Q	15	UJ	Q
BROMODICHLOROMETHANE		1.1	UJ	Q	7.5	UJ	Q
BROMOFORM		4.6	UJ	Q	32	UJ	Q
BROMOMETHANE		2.9	UJ	Q	21	UJ	Q

PROJ_NO: 04882	NSAMPLE	DR-DPT-35-20			DR-DPT-35-25			DR-DPT-30			DR-DPT-35-35		
SDG: 240-27914-1	LAB_ID	240-27914-1			240-27914-2			240-27914-3			240-27914-4		
FRACTION: OV	SAMP_DATE	8/13/2013			8/13/2013			8/13/2013			8/13/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1.3	J	CQ	54	J	CP	12	J	CPQ	5.5	J	CPQ
CARBON TETRACHLORIDE		0.13	UJ	Q	22	U		4.3	UJ	Q	2.2	UJ	Q
CHLOROBENZENE		0.15	UJ	Q	5300			470	J	Q	93	J	Q
CHLORODIBROMOMETHANE		0.18	UJ	Q	30	U		6	UJ	Q	3	UJ	Q
CHLOROETHANE		0.29	UJ	Q	48	U		9.7	UJ	Q	4.8	UJ	Q
CHLOROFORM		0.16	UJ	Q	27	U		5.3	UJ	Q	2.7	UJ	Q
CHLOROMETHANE		0.3	UJ	Q	50	U		10	UJ	Q	5	UJ	Q
CIS-1,2-DICHLOROETHENE		1.2	J	Q	210			550	J	Q	160	J	Q
CIS-1,3-DICHLOROPROPENE		0.14	UJ	Q	23	U		4.7	UJ	Q	2.3	UJ	Q
DIBROMOMETHANE		0.28	UJ	Q	47	U		9.3	UJ	Q	4.7	UJ	Q
DICHLORODIFLUOROMETHANE		0.31	UJ	Q	52	U		10	UJ	Q	5.2	UJ	Q
DIISOPROPYL ETHER		2.7	J	PQ	250	U		50	UJ	Q	25	UJ	Q
ETHYL TERT-BUTYL ETHER		0.11	UJ	Q	18	U		3.7	UJ	Q	1.8	UJ	Q
ETHYLBENZENE		0.17	UJ	Q	28	U		5.7	UJ	Q	2.8	UJ	Q
HEXACHLOROBUTADIENE		0.3	UJ	Q	50	U		10	UJ	Q	5	UJ	Q
ISOPROPYLBENZENE		0.2	J	PQ	22	U		4.3	UJ	Q	2.2	UJ	Q
M+P-XYLENES		0.4	J	PQ	40	U		8	UJ	Q	4	UJ	Q
METHYL TERT-BUTYL ETHER		0.17	UJ	Q	28	U		5.7	UJ	Q	2.8	UJ	Q
METHYLENE CHLORIDE		0.33	UJ	Q	55	U		11	UJ	Q	5.5	UJ	Q
NAPHTHALENE		0.26	J	CPQ	40	U		8	UJ	Q	4	UJ	Q
N-BUTYLBENZENE		0.12	UJ	Q	20	U		4	UJ	Q	2	UJ	Q
N-PROPYLBENZENE		0.15	J	PQ	23	U		4.7	UJ	Q	2.3	UJ	Q
O-XYLENE		0.14	UJ	Q	23	U		4.7	UJ	Q	2.3	UJ	Q
SEC-BUTYLBENZENE		0.13	UJ	Q	22	U		4.3	UJ	Q	2.2	UJ	Q
STYRENE		0.11	UJ	Q	18	U		3.7	UJ	Q	1.8	UJ	Q
TERT-AMYL METHYL ETHER		0.067	UJ	Q	11	U		2.2	UJ	Q	1.1	UJ	Q
TERT-BUTYLBENZENE		0.13	UJ	Q	22	U		4.3	UJ	Q	2.2	UJ	Q
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	650	UR	C	130	UR	C	65	UR	C
TETRACHLOROETHENE		0.3	J	PQ	48	U		9.7	UJ	Q	4.8	UJ	Q
TOLUENE		0.35	J	PQ	22	U		4.3	UJ	Q	2.2	UJ	Q
TOTAL XYLENES		0.4	J	PQ	23	U		4.7	UJ	Q	2.3	UJ	Q
TRANS-1,2-DICHLOROETHENE		2.1	J	Q	32	U		6.3	UJ	Q	5	J	PQ
TRANS-1,3-DICHLOROPROPENE		0.19	UJ	Q	32	U		6.3	UJ	Q	3.2	UJ	Q
TRICHLOROETHENE		1.1	J	Q	230			110	J	Q	23	J	Q
TRICHLOROFLUOROMETHANE		0.21	UJ	Q	35	U		7	UJ	Q	3.5	UJ	Q

PROJ_NO: 04882	NSAMPLE	DR-DPT-35-40			DR-DPT-35-45		
SDG: 240-27914-1	LAB_ID	240-27914-5			240-27914-6		
FRACTION: OV	SAMP_DATE	8/13/2013			8/13/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		4	J	CPQ	16	J	CPQ
CARBON TETRACHLORIDE		0.93	UJ	Q	6.5	UJ	Q
CHLOROBENZENE		220	J	Q	34	J	PQ
CHLORODIBROMOMETHANE		1.3	UJ	Q	9	UJ	Q
CHLOROETHANE		2.1	UJ	Q	21	J	PQ
CHLOROFORM		1.1	UJ	Q	8	UJ	Q
CHLOROMETHANE		2.1	UJ	Q	15	UJ	Q
CIS-1,2-DICHLOROETHENE		170	J	Q	860	J	Q
CIS-1,3-DICHLOROPROPENE		1	UJ	Q	7	UJ	Q
DIBROMOMETHANE		2	UJ	Q	14	UJ	Q
DICHLORODIFLUOROMETHANE		2.2	UJ	Q	16	UJ	Q
DIISOPROPYL ETHER		11	UJ	Q	75	UJ	Q
ETHYL TERT-BUTYL ETHER		0.79	UJ	Q	5.5	UJ	Q
ETHYLBENZENE		1.2	UJ	Q	8.5	UJ	Q
HEXACHLOROBUTADIENE		2.1	UJ	Q	15	UJ	Q
ISOPROPYLBENZENE		0.93	UJ	Q	6.5	UJ	Q
M+P-XYLENES		1.7	UJ	Q	12	UJ	Q
METHYL TERT-BUTYL ETHER		1.2	UJ	Q	8.5	UJ	Q
METHYLENE CHLORIDE		2.4	UJ	Q	17	UJ	Q
NAPHTHALENE		1.7	UJ	Q	12	UJ	Q
N-BUTYLBENZENE		0.86	UJ	Q	6	UJ	Q
N-PROPYLBENZENE		1	UJ	Q	7	UJ	Q
O-XYLENE		1	UJ	Q	7	UJ	Q
SEC-BUTYLBENZENE		0.93	UJ	Q	6.5	UJ	Q
STYRENE		0.79	UJ	Q	5.5	UJ	Q
TERT-AMYL METHYL ETHER		0.48	UJ	Q	3.4	UJ	Q
TERT-BUTYLBENZENE		0.93	UJ	Q	6.5	UJ	Q
TERTIARY-BUTYL ALCOHOL		28	UR	C	230	J	CPQ
TETRACHLOROETHENE		2.1	UJ	Q	15	UJ	Q
TOLUENE		1.3	J	PQ	6.5	UJ	Q
TOTAL XYLENES		1	UJ	Q	7	UJ	Q
TRANS-1,2-DICHLOROETHENE		3.9	J	PQ	12	J	PQ
TRANS-1,3-DICHLOROPROPENE		1.4	UJ	Q	9.5	UJ	Q
TRICHLOROETHENE		32	J	Q	110	J	Q
TRICHLOROFLUOROMETHANE		1.5	UJ	Q	11	UJ	Q

PROJ_NO: 04882	NSAMPLE	DR-DPT-35-20			DR-DPT-35-25			DR-DPT-35-30			DR-DPT-35-35		
SDG: 240-27914-1	LAB_ID	240-27914-1			240-27914-2			240-27914-3			240-27914-4		
FRACTION: OV	SAMP_DATE	8/13/2013			8/13/2013			8/13/2013			8/13/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C	32	UR	C	6.3	UR	C	3.2	UR	C
VINYL CHLORIDE		0.63	J	PQ	210			160	J	Q	77	J	Q

PROJ_NO: 04882	NSAMPLE	DR-DPT-35-40			DR-DPT-35-45		
SDG: 240-27914-1	LAB_ID	240-27914-5			240-27914-6		
FRACTION: OV	SAMP_DATE	8/13/2013			8/13/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		1.4	UR	C	9.5	UR	C
VINYL CHLORIDE		170	J	Q	720	J	Q

PROJ_NO: 04882	NSAMPLE	DR-DPT-35-20			DR-DPT-35-20A			DR-DPT-35-25			DR-DPT-35-30		
SDG: 240-27914-1	LAB_ID	240-27914-1			240-27914-1			240-27914-2			240-27914-3		
FRACTION: TICOV	SAMP_DATE	8/13/2013			8/13/2013			8/13/2013			8/13/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE		69						5800					
1-HEXANOL, 2-ETHYL-		2.4	NJ	Z1									
CYCLOHEXANE		1.9											
DIMETHYL SULFIDE											55	NJ	Z1
METHANETHIOL													
N-BUTANOL		20	J	P									
SILANOL, TRIMETHYL-		8.6	R	Z2									
TETRAHYDROFURAN		3	J	P									
UNKNOWN		1.3	NJ	Z1	1.2	NJ	Z1						

PROJ_NO: 04882	NSAMPLE	DR-DPT-35-35			DR-DPT-35-40		
SDG: 240-27914-1	LAB_ID	240-27914-4			240-27914-5		
FRACTION: TICOV	SAMP_DATE	8/13/2013			8/13/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE							
1-HEXANOL, 2-ETHYL-							
CYCLOHEXANE					2.2	J	P
DIMETHYL SULFIDE							
METHANETHIOL		28	NJ	Z1			
N-BUTANOL							
SILANOL, TRIMETHYL-							
TETRAHYDROFURAN							
UNKNOWN		17	NJ	Z1			

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-20 | Lab Sample ID: 240-27914-1

Matrix: Water | Lab File ID: UXJ3404.D

Analysis Method: 8260B | Date Collected: 08/13/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 18:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	0.39	J	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	2.1		1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	6.8	J	10	1.1
71-43-2	Benzene	2.3		1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.3		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-20 | Lab Sample ID: 240-27914-1

Matrix: Water | Lab File ID: UXJ3404.D

Analysis Method: 8260B | Date Collected: 08/13/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 18:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.2		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	2.7	J	10	1.5
91-20-3	Naphthalene	0.26	J	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	0.40	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	0.20	J	1.0	0.13
103-65-1	n-Propylbenzene	0.15	J	1.0	0.14
78-93-3	2-Butanone	1.1	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	0.30	J	1.0	0.29
108-88-3	Toluene	0.35	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	2.1		1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.1		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.63	J	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	0.40	J	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-20 Lab Sample ID: 240-27914-1

Matrix: Water Lab File ID: UXJ3404.D

Analysis Method: 8260B Date Collected: 08/13/2013 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 18:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-20 Lab Sample ID: 240-27914-1

Matrix: Water Lab File ID: UXJ3404.D

Analysis Method: 8260B Date Collected: 08/13/2013 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 18:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

Number TICs Found: 10 TIC Result Total: 110

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	8.6	T J N
109-99-9	Tetrahydrofuran	4.76	3.0	J
110-82-7	Cyclohexane	4.99	1.9	
71-36-3	n-Butanol	5.67	20	J
123-91-1	1,4-Dioxane	6.07	69	
	Unknown	9.62	1.3	T J
104-76-7	1-Hexanol, 2-ethyl-	10.58	2.4	T J N
	Unknown	10.66	1.3	T J
	Unknown	12.52	1.3	T J
	Unknown	13.32	1.2	T J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-25 | Lab Sample ID: 240-27914-2

Matrix: Water | Lab File ID: UXJ3405.D

Analysis Method: 8260B | Date Collected: 08/13/2013 10:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 18:56

Soil Aliquot Vol: | Dilution Factor: 166.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	170	U	170	38
71-55-6	1,1,1-Trichloroethane	170	U	170	37
79-34-5	1,1,2,2-Tetrachloroethane	170	U	170	30
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	170	U	170	47
75-34-3	1,1-Dichloroethane	170	U	170	25
75-35-4	1,1-Dichloroethene	170	U	170	32
563-58-6	1,1-Dichloropropene	170	U	170	22
87-61-6	1,2,3-Trichlorobenzene	170	U	170	28
96-18-4	1,2,3-Trichloropropane	170	U	170	72
526-73-8	1,2,3-Trimethylbenzene	830	U	830	0.98
120-82-1	1,2,4-Trichlorobenzene	170	U	170	25
95-63-6	1,2,4-Trimethylbenzene	170	U	170	20
96-12-8	1,2-Dibromo-3-Chloropropane	330	U	330	110
95-50-1	1,2-Dichlorobenzene	170	U	170	22
107-06-2	1,2-Dichloroethane	170	U	170	37
78-87-5	1,2-Dichloropropane	170	U	170	30
541-73-1	1,3-Dichlorobenzene	170	U	170	23
142-28-9	1,3-Dichloropropane	170	U	170	27
106-46-7	1,4-Dichlorobenzene	170	U	170	22
594-20-7	2,2-Dichloropropane	170	U	170	22
110-75-8	2-Chloroethyl vinyl ether	1700	U	1700	170
95-49-8	2-Chlorotoluene	170	U	170	18
591-78-6	2-Hexanone	1700	U	1700	68
108-86-1	Bromobenzene	170	U	170	22
74-97-5	Bromochloromethane	170	U	170	48
106-43-4	4-Chlorotoluene	170	U	170	30
99-87-6	p-Isopropyltoluene	170	U	170	20
67-64-1	Acetone	1700	U	1700	180
71-43-2	Benzene	42	J	170	22
75-25-2	Bromoform	170	U	170	110
74-83-9	Bromomethane	170	U	170	68
75-15-0	Carbon disulfide	54	J	170	22
56-23-5	Carbon tetrachloride	170	U	170	22
108-90-7	Chlorobenzene	5300		170	25
75-00-3	Chloroethane	170	U	170	48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-25 | Lab Sample ID: 240-27914-2

Matrix: Water | Lab File ID: UXJ3405.D

Analysis Method: 8260B | Date Collected: 08/13/2013 10:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 18:56

Soil Aliquot Vol: | Dilution Factor: 166.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	170	U	170	27
74-87-3	Chloromethane	170	U	170	50
156-59-2	cis-1,2-Dichloroethene	210		170	28
10061-01-5	cis-1,3-Dichloropropene	170	U	170	23
87-68-3	Hexachlorobutadiene	170	U	170	50
74-95-3	Dibromomethane	170	U	170	47
75-27-4	Bromodichloromethane	170	U	170	25
75-71-8	Dichlorodifluoromethane	170	U	170	52
100-41-4	Ethylbenzene	170	U	170	28
106-93-4	1,2-Dibromoethane	170	U	170	40
108-20-3	Diisopropyl ether	1700	U	1700	250
91-20-3	Naphthalene	170	U	170	40
179601-23-1	m-Xylene & p-Xylene	330	U	330	40
104-51-8	n-Butylbenzene	170	U	170	20
98-82-8	Isopropylbenzene	170	U	170	22
103-65-1	n-Propylbenzene	170	U	170	23
78-93-3	2-Butanone	1700	U	1700	95
108-10-1	4-Methyl-2-pentanone	1700	U	1700	53
135-98-8	sec-Butylbenzene	170	U	170	22
1634-04-4	Methyl tert-butyl ether	170	U	170	28
994-05-8	Tert-amyl-methyl ether (TAME)	830	U	830	11
75-09-2	Methylene Chloride	170	U	170	55
95-47-6	o-Xylene	170	U	170	23
100-42-5	Styrene	170	U	170	18
637-92-3	Ethyl-t-butyl ether (ETBE)	830	U	830	18
98-06-6	tert-Butylbenzene	170	U	170	22
127-18-4	Tetrachloroethene	170	U	170	48
108-88-3	Toluene	170	U	170	22
156-60-5	trans-1,2-Dichloroethene	170	U	170	32
10061-02-6	trans-1,3-Dichloropropene	170	U	170	32
79-01-6	Trichloroethene	230		170	28
75-69-4	Trichlorofluoromethane	170	U	170	35
108-05-4	Vinyl acetate	330	U	330	32
75-01-4	Vinyl chloride	210		170	37
75-65-0	tert-Butyl alcohol	8300	U	8300	650
1330-20-7	Xylenes, Total	330	U	330	23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-25 Lab Sample ID: 240-27914-2

Matrix: Water Lab File ID: UXJ3405.D

Analysis Method: 8260B Date Collected: 08/13/2013 10:30

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 18:56

Soil Aliquot Vol: Dilution Factor: 166.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	170	U	170	30

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-25 | Lab Sample ID: 240-27914-2

Matrix: Water | Lab File ID: UXJ3405.D

Analysis Method: 8260B | Date Collected: 08/13/2013 10:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 18:56

Soil Aliquot Vol: | Dilution Factor: 166.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 5800

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
123-91-1	1,4-Dioxane	6.08	5800	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-30 Lab Sample ID: 240-27914-3

Matrix: Water Lab File ID: UXJ3406.D

Analysis Method: 8260B Date Collected: 08/13/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 19:20

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	33	U	33	7.7
71-55-6	1,1,1-Trichloroethane	33	U	33	7.3
79-34-5	1,1,2,2-Tetrachloroethane	33	U	33	6.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	33	U	33	9.3
75-34-3	1,1-Dichloroethane	33	U	33	5.0
75-35-4	1,1-Dichloroethene	33	U	33	6.3
563-58-6	1,1-Dichloropropene	33	U	33	4.3
87-61-6	1,2,3-Trichlorobenzene	33	U	33	5.7
96-18-4	1,2,3-Trichloropropane	33	U	33	14
526-73-8	1,2,3-Trimethylbenzene	170	U	170	0.20
120-82-1	1,2,4-Trichlorobenzene	33	U	33	5.0
95-63-6	1,2,4-Trimethylbenzene	33	U	33	4.0
96-12-8	1,2-Dibromo-3-Chloropropane	67	U	67	22
95-50-1	1,2-Dichlorobenzene	33	U	33	4.3
107-06-2	1,2-Dichloroethane	33	U	33	7.3
78-87-5	1,2-Dichloropropane	33	U	33	6.0
541-73-1	1,3-Dichlorobenzene	33	U	33	4.7
142-28-9	1,3-Dichloropropane	33	U	33	5.3
106-46-7	1,4-Dichlorobenzene	33	U	33	4.3
594-20-7	2,2-Dichloropropane	33	U	33	4.3
110-75-8	2-Chloroethyl vinyl ether	330	U	330	33
95-49-8	2-Chlorotoluene	33	U	33	3.7
591-78-6	2-Hexanone	330	U	330	14
108-86-1	Bromobenzene	33	U	33	4.3
74-97-5	Bromochloromethane	33	U	33	9.7
106-43-4	4-Chlorotoluene	33	U	33	6.0
99-87-6	p-Isopropyltoluene	33	U	33	4.0
67-64-1	Acetone	330	U	330	37
71-43-2	Benzene	9.1	J	33	4.3
75-25-2	Bromoform	33	U	33	21
74-83-9	Bromomethane	33	U	33	14
75-15-0	Carbon disulfide	12	J	33	4.3
56-23-5	Carbon tetrachloride	33	U	33	4.3
108-90-7	Chlorobenzene	470		33	5.0
75-00-3	Chloroethane	33	U	33	9.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-30 Lab Sample ID: 240-27914-3

Matrix: Water Lab File ID: UXJ3406.D

Analysis Method: 8260B Date Collected: 08/13/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 19:20

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	33	U	33	5.3
74-87-3	Chloromethane	33	U	33	10
156-59-2	cis-1,2-Dichloroethene	550		33	5.7
10061-01-5	cis-1,3-Dichloropropene	33	U	33	4.7
87-68-3	Hexachlorobutadiene	33	U	33	10
74-95-3	Dibromomethane	33	U	33	9.3
75-27-4	Bromodichloromethane	33	U	33	5.0
75-71-8	Dichlorodifluoromethane	33	U	33	10
100-41-4	Ethylbenzene	33	U	33	5.7
106-93-4	1,2-Dibromoethane	33	U	33	8.0
108-20-3	Diisopropyl ether	330	U	330	50
91-20-3	Naphthalene	33	U	33	8.0
179601-23-1	m-Xylene & p-Xylene	67	U	67	8.0
104-51-8	n-Butylbenzene	33	U	33	4.0
98-82-8	Isopropylbenzene	33	U	33	4.3
103-65-1	n-Propylbenzene	33	U	33	4.7
78-93-3	2-Butanone	330	U	330	19
108-10-1	4-Methyl-2-pentanone	330	U	330	11
135-98-8	sec-Butylbenzene	33	U	33	4.3
1634-04-4	Methyl tert-butyl ether	33	U	33	5.7
994-05-8	Tert-amyl-methyl ether (TAME)	170	U	170	2.2
75-09-2	Methylene Chloride	33	U	33	11
95-47-6	o-Xylene	33	U	33	4.7
100-42-5	Styrene	33	U	33	3.7
637-92-3	Ethyl-t-butyl ether (ETBE)	170	U	170	3.7
98-06-6	tert-Butylbenzene	33	U	33	4.3
127-18-4	Tetrachloroethene	33	U	33	9.7
108-88-3	Toluene	33	U	33	4.3
156-60-5	trans-1,2-Dichloroethene	33	U	33	6.3
10061-02-6	trans-1,3-Dichloropropene	33	U	33	6.3
79-01-6	Trichloroethene	110		33	5.7
75-69-4	Trichlorofluoromethane	33	U	33	7.0
108-05-4	Vinyl acetate	67	U	67	6.3
75-01-4	Vinyl chloride	160		33	7.3
75-65-0	tert-Butyl alcohol	1700	U	1700	130
1330-20-7	Xylenes, Total	67	U	67	4.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-30 Lab Sample ID: 240-27914-3

Matrix: Water Lab File ID: UXJ3406.D

Analysis Method: 8260B Date Collected: 08/13/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 19:20

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	33	U	33	6.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		63-129
460-00-4	4-Bromofluorobenzene (Surr)	90		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	98		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-30 Lab Sample ID: 240-27914-3

Matrix: Water Lab File ID: UXJ3406.D

Analysis Method: 8260B Date Collected: 08/13/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 19:20

Soil Aliquot Vol: Dilution Factor: 33.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

Number TICs Found: 1 TIC Result Total: 55

CAS NO.	COMPOUND NAME	RT	RESULT	Q
75-18-3	Dimethyl sulfide	2.93	55	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-35 | Lab Sample ID: 240-27914-4

Matrix: Water | Lab File ID: UXJ3407.D

Analysis Method: 8260B | Date Collected: 08/13/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 19:43

Soil Aliquot Vol: | Dilution Factor: 16.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	17	U	17	3.8
71-55-6	1,1,1-Trichloroethane	17	U	17	3.7
79-34-5	1,1,2,2-Tetrachloroethane	17	U	17	3.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	17	U	17	4.7
75-34-3	1,1-Dichloroethane	17	U	17	2.5
75-35-4	1,1-Dichloroethene	17	U	17	3.2
563-58-6	1,1-Dichloropropene	17	U	17	2.2
87-61-6	1,2,3-Trichlorobenzene	17	U	17	2.8
96-18-4	1,2,3-Trichloropropane	17	U	17	7.2
526-73-8	1,2,3-Trimethylbenzene	83	U	83	0.098
120-82-1	1,2,4-Trichlorobenzene	17	U	17	2.5
95-63-6	1,2,4-Trimethylbenzene	2.1	J	17	2.0
96-12-8	1,2-Dibromo-3-Chloropropane	33	U	33	11
95-50-1	1,2-Dichlorobenzene	2.6	J	17	2.2
107-06-2	1,2-Dichloroethane	8.7	J	17	3.7
78-87-5	1,2-Dichloropropane	17	U	17	3.0
541-73-1	1,3-Dichlorobenzene	17	U	17	2.3
142-28-9	1,3-Dichloropropane	17	U	17	2.7
106-46-7	1,4-Dichlorobenzene	17	U	17	2.2
594-20-7	2,2-Dichloropropane	17	U	17	2.2
110-75-8	2-Chloroethyl vinyl ether	170	U	170	17
95-49-8	2-Chlorotoluene	17	U	17	1.8
591-78-6	2-Hexanone	170	U	170	6.8
108-86-1	Bromobenzene	17	U	17	2.2
74-97-5	Bromochloromethane	17	U	17	4.8
106-43-4	4-Chlorotoluene	17	U	17	3.0
99-87-6	p-Isopropyltoluene	17	U	17	2.0
67-64-1	Acetone	170	U	170	18
71-43-2	Benzene	5.4	J	17	2.2
75-25-2	Bromoform	17	U	17	11
74-83-9	Bromomethane	17	U	17	6.8
75-15-0	Carbon disulfide	5.5	J	17	2.2
56-23-5	Carbon tetrachloride	17	U	17	2.2
108-90-7	Chlorobenzene	93		17	2.5
75-00-3	Chloroethane	17	U	17	4.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-35 | Lab Sample ID: 240-27914-4

Matrix: Water | Lab File ID: UXJ3407.D

Analysis Method: 8260B | Date Collected: 08/13/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 19:43

Soil Aliquot Vol: | Dilution Factor: 16.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	17	U	17	2.7
74-87-3	Chloromethane	17	U	17	5.0
156-59-2	cis-1,2-Dichloroethene	160		17	2.8
10061-01-5	cis-1,3-Dichloropropene	17	U	17	2.3
87-68-3	Hexachlorobutadiene	17	U	17	5.0
74-95-3	Dibromomethane	17	U	17	4.7
75-27-4	Bromodichloromethane	17	U	17	2.5
75-71-8	Dichlorodifluoromethane	17	U	17	5.2
100-41-4	Ethylbenzene	17	U	17	2.8
106-93-4	1,2-Dibromoethane	17	U	17	4.0
108-20-3	Diisopropyl ether	170	U	170	25
91-20-3	Naphthalene	17	U	17	4.0
179601-23-1	m-Xylene & p-Xylene	33	U	33	4.0
104-51-8	n-Butylbenzene	17	U	17	2.0
98-82-8	Isopropylbenzene	17	U	17	2.2
103-65-1	n-Propylbenzene	17	U	17	2.3
78-93-3	2-Butanone	170	U	170	9.5
108-10-1	4-Methyl-2-pentanone	170	U	170	5.3
135-98-8	sec-Butylbenzene	17	U	17	2.2
1634-04-4	Methyl tert-butyl ether	17	U	17	2.8
994-05-8	Tert-amyl-methyl ether (TAME)	83	U	83	1.1
75-09-2	Methylene Chloride	17	U	17	5.5
95-47-6	o-Xylene	17	U	17	2.3
100-42-5	Styrene	17	U	17	1.8
637-92-3	Ethyl-t-butyl ether (ETBE)	83	U	83	1.8
98-06-6	tert-Butylbenzene	17	U	17	2.2
127-18-4	Tetrachloroethene	17	U	17	4.8
108-88-3	Toluene	17	U	17	2.2
156-60-5	trans-1,2-Dichloroethene	5.0	J	17	3.2
10061-02-6	trans-1,3-Dichloropropene	17	U	17	3.2
79-01-6	Trichloroethene	23		17	2.8
75-69-4	Trichlorofluoromethane	17	U	17	3.5
108-05-4	Vinyl acetate	33	U	33	3.2
75-01-4	Vinyl chloride	77		17	3.7
75-65-0	tert-Butyl alcohol	830	U	830	65
1330-20-7	Xylenes, Total	33	U	33	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-35 Lab Sample ID: 240-27914-4

Matrix: Water Lab File ID: UXJ3407.D

Analysis Method: 8260B Date Collected: 08/13/2013 11:30

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 19:43

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	17	U	17	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	88		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-35 Lab Sample ID: 240-27914-4

Matrix: Water Lab File ID: UXJ3407.D

Analysis Method: 8260B Date Collected: 08/13/2013 11:30

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 19:43

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

Number TICs Found: 4 TIC Result Total: 79

CAS NO.	COMPOUND NAME	RT	RESULT	Q
74-93-1	Methanethiol	2.22	28	T J N
	Unknown	2.62	17	T J
	Unknown	2.76	17	T J
	Unknown	4.39	17	T J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-40 | Lab Sample ID: 240-27914-5

Matrix: Water | Lab File ID: UXJ3408.D

Analysis Method: 8260B | Date Collected: 08/13/2013 13:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:07

Soil Aliquot Vol: | Dilution Factor: 7.14

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	7.1	U	7.1	1.6
71-55-6	1,1,1-Trichloroethane	7.1	U	7.1	1.6
79-34-5	1,1,2,2-Tetrachloroethane	7.1	U	7.1	1.3
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	7.1	U	7.1	2.0
75-34-3	1,1-Dichloroethane	7.1	U	7.1	1.1
75-35-4	1,1-Dichloroethene	7.1	U	7.1	1.4
563-58-6	1,1-Dichloropropene	7.1	U	7.1	0.93
87-61-6	1,2,3-Trichlorobenzene	7.1	U	7.1	1.2
96-18-4	1,2,3-Trichloropropane	7.1	U	7.1	3.1
526-73-8	1,2,3-Trimethylbenzene	36	U	36	0.042
120-82-1	1,2,4-Trichlorobenzene	7.1	U	7.1	1.1
95-63-6	1,2,4-Trimethylbenzene	7.1	U	7.1	0.86
96-12-8	1,2-Dibromo-3-Chloropropane	14	U	14	4.8
95-50-1	1,2-Dichlorobenzene	1.5	J	7.1	0.93
107-06-2	1,2-Dichloroethane	15		7.1	1.6
78-87-5	1,2-Dichloropropane	7.1	U	7.1	1.3
541-73-1	1,3-Dichlorobenzene	7.1	U	7.1	1.0
142-28-9	1,3-Dichloropropane	7.1	U	7.1	1.1
106-46-7	1,4-Dichlorobenzene	7.1	U	7.1	0.93
594-20-7	2,2-Dichloropropane	7.1	U	7.1	0.93
110-75-8	2-Chloroethyl vinyl ether	71	U	71	7.1
95-49-8	2-Chlorotoluene	7.1	U	7.1	0.79
591-78-6	2-Hexanone	71	U	71	2.9
108-86-1	Bromobenzene	7.1	U	7.1	0.93
74-97-5	Bromochloromethane	7.1	U	7.1	2.1
106-43-4	4-Chlorotoluene	7.1	U	7.1	1.3
99-87-6	p-Isopropyltoluene	7.1	U	7.1	0.86
67-64-1	Acetone	71	U	71	7.9
71-43-2	Benzene	6.4	J	7.1	0.93
75-25-2	Bromoform	7.1	U	7.1	4.6
74-83-9	Bromomethane	7.1	U	7.1	2.9
75-15-0	Carbon disulfide	4.0	J	7.1	0.93
56-23-5	Carbon tetrachloride	7.1	U	7.1	0.93
108-90-7	Chlorobenzene	220		7.1	1.1
75-00-3	Chloroethane	7.1	U	7.1	2.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-40 | Lab Sample ID: 240-27914-5

Matrix: Water | Lab File ID: UXJ3408.D

Analysis Method: 8260B | Date Collected: 08/13/2013 13:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:07

Soil Aliquot Vol: | Dilution Factor: 7.14

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	7.1	U	7.1	1.1
74-87-3	Chloromethane	7.1	U	7.1	2.1
156-59-2	cis-1,2-Dichloroethene	170		7.1	1.2
10061-01-5	cis-1,3-Dichloropropene	7.1	U	7.1	1.0
87-68-3	Hexachlorobutadiene	7.1	U	7.1	2.1
74-95-3	Dibromomethane	7.1	U	7.1	2.0
75-27-4	Bromodichloromethane	7.1	U	7.1	1.1
75-71-8	Dichlorodifluoromethane	7.1	U	7.1	2.2
100-41-4	Ethylbenzene	7.1	U	7.1	1.2
106-93-4	1,2-Dibromoethane	7.1	U	7.1	1.7
108-20-3	Diisopropyl ether	71	U	71	11
91-20-3	Naphthalene	7.1	U	7.1	1.7
179601-23-1	m-Xylene & p-Xylene	14	U	14	1.7
104-51-8	n-Butylbenzene	7.1	U	7.1	0.86
98-82-8	Isopropylbenzene	7.1	U	7.1	0.93
103-65-1	n-Propylbenzene	7.1	U	7.1	1.0
78-93-3	2-Butanone	71	U	71	4.1
108-10-1	4-Methyl-2-pentanone	71	U	71	2.3
135-98-8	sec-Butylbenzene	7.1	U	7.1	0.93
1634-04-4	Methyl tert-butyl ether	7.1	U	7.1	1.2
994-05-8	Tert-amyl-methyl ether (TAME)	36	U	36	0.48
75-09-2	Methylene Chloride	7.1	U	7.1	2.4
95-47-6	o-Xylene	7.1	U	7.1	1.0
100-42-5	Styrene	7.1	U	7.1	0.79
637-92-3	Ethyl-t-butyl ether (ETBE)	36	U	36	0.79
98-06-6	tert-Butylbenzene	7.1	U	7.1	0.93
127-18-4	Tetrachloroethene	7.1	U	7.1	2.1
108-88-3	Toluene	1.3	J	7.1	0.93
156-60-5	trans-1,2-Dichloroethene	3.9	J	7.1	1.4
10061-02-6	trans-1,3-Dichloropropene	7.1	U	7.1	1.4
79-01-6	Trichloroethene	32		7.1	1.2
75-69-4	Trichlorofluoromethane	7.1	U	7.1	1.5
108-05-4	Vinyl acetate	14	U	14	1.4
75-01-4	Vinyl chloride	170		7.1	1.6
75-65-0	tert-Butyl alcohol	360	U	360	28
1330-20-7	Xylenes, Total	14	U	14	1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-40 Lab Sample ID: 240-27914-5

Matrix: Water Lab File ID: UXJ3408.D

Analysis Method: 8260B Date Collected: 08/13/2013 13:15

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 20:07

Soil Aliquot Vol: Dilution Factor: 7.14

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	7.1	U	7.1	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-40 | Lab Sample ID: 240-27914-5

Matrix: Water | Lab File ID: UXJ3408.D

Analysis Method: 8260B | Date Collected: 08/13/2013 13:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:07

Soil Aliquot Vol: | Dilution Factor: 7.14

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 2.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
110-82-7	Cyclohexane	4.99	2.2	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-45 | Lab Sample ID: 240-27914-6

Matrix: Water | Lab File ID: UXJ3409.D

Analysis Method: 8260B | Date Collected: 08/13/2013 14:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:31

Soil Aliquot Vol: | Dilution Factor: 50

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	50	U	50	12
71-55-6	1,1,1-Trichloroethane	50	U	50	11
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	9.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	50	U	50	14
75-34-3	1,1-Dichloroethane	50	U	50	7.5
75-35-4	1,1-Dichloroethene	50	U	50	9.5
563-58-6	1,1-Dichloropropene	50	U	50	6.5
87-61-6	1,2,3-Trichlorobenzene	50	U	50	8.5
96-18-4	1,2,3-Trichloropropane	50	U	50	22
526-73-8	1,2,3-Trimethylbenzene	250	U	250	0.30
120-82-1	1,2,4-Trichlorobenzene	50	U	50	7.5
95-63-6	1,2,4-Trimethylbenzene	50	U	50	6.0
96-12-8	1,2-Dibromo-3-Chloropropane	100	U	100	34
95-50-1	1,2-Dichlorobenzene	50	U	50	6.5
107-06-2	1,2-Dichloroethane	46	J	50	11
78-87-5	1,2-Dichloropropane	50	U	50	9.0
541-73-1	1,3-Dichlorobenzene	50	U	50	7.0
142-28-9	1,3-Dichloropropane	50	U	50	8.0
106-46-7	1,4-Dichlorobenzene	50	U	50	6.5
594-20-7	2,2-Dichloropropane	50	U	50	6.5
110-75-8	2-Chloroethyl vinyl ether	500	U	500	50
95-49-8	2-Chlorotoluene	50	U	50	5.5
591-78-6	2-Hexanone	500	U	500	21
108-86-1	Bromobenzene	50	U	50	6.5
74-97-5	Bromochloromethane	50	U	50	15
106-43-4	4-Chlorotoluene	50	U	50	9.0
99-87-6	p-Isopropyltoluene	50	U	50	6.0
67-64-1	Acetone	500	U	500	55
71-43-2	Benzene	13	J	50	6.5
75-25-2	Bromoform	50	U	50	32
74-83-9	Bromomethane	50	U	50	21
75-15-0	Carbon disulfide	16	J	50	6.5
56-23-5	Carbon tetrachloride	50	U	50	6.5
108-90-7	Chlorobenzene	34	J	50	7.5
75-00-3	Chloroethane	21	J	50	15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-45 | Lab Sample ID: 240-27914-6

Matrix: Water | Lab File ID: UXJ3409.D

Analysis Method: 8260B | Date Collected: 08/13/2013 14:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:31

Soil Aliquot Vol: | Dilution Factor: 50

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	50	U	50	8.0
74-87-3	Chloromethane	50	U	50	15
156-59-2	cis-1,2-Dichloroethene	860		50	8.5
10061-01-5	cis-1,3-Dichloropropene	50	U	50	7.0
87-68-3	Hexachlorobutadiene	50	U	50	15
74-95-3	Dibromomethane	50	U	50	14
75-27-4	Bromodichloromethane	50	U	50	7.5
75-71-8	Dichlorodifluoromethane	50	U	50	16
100-41-4	Ethylbenzene	50	U	50	8.5
106-93-4	1,2-Dibromoethane	50	U	50	12
108-20-3	Diisopropyl ether	500	U	500	75
91-20-3	Naphthalene	50	U	50	12
179601-23-1	m-Xylene & p-Xylene	100	U	100	12
104-51-8	n-Butylbenzene	50	U	50	6.0
98-82-8	Isopropylbenzene	50	U	50	6.5
103-65-1	n-Propylbenzene	50	U	50	7.0
78-93-3	2-Butanone	500	U	500	29
108-10-1	4-Methyl-2-pentanone	500	U	500	16
135-98-8	sec-Butylbenzene	50	U	50	6.5
1634-04-4	Methyl tert-butyl ether	50	U	50	8.5
994-05-8	Tert-amyl-methyl ether (TAME)	250	U	250	3.4
75-09-2	Methylene Chloride	50	U	50	17
95-47-6	o-Xylene	50	U	50	7.0
100-42-5	Styrene	50	U	50	5.5
637-92-3	Ethyl-t-butyl ether (ETBE)	250	U	250	5.5
98-06-6	tert-Butylbenzene	50	U	50	6.5
127-18-4	Tetrachloroethene	50	U	50	15
108-88-3	Toluene	50	U	50	6.5
156-60-5	trans-1,2-Dichloroethene	12	J	50	9.5
10061-02-6	trans-1,3-Dichloropropene	50	U	50	9.5
79-01-6	Trichloroethene	110		50	8.5
75-69-4	Trichlorofluoromethane	50	U	50	11
108-05-4	Vinyl acetate	100	U	100	9.5
75-01-4	Vinyl chloride	720		50	11
75-65-0	tert-Butyl alcohol	230	J	2500	200
1330-20-7	Xylenes, Total	100	U	100	7.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-45 Lab Sample ID: 240-27914-6

Matrix: Water Lab File ID: UXJ3409.D

Analysis Method: 8260B Date Collected: 08/13/2013 14:05

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 20:31

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	50	U	50	9.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-45 Lab Sample ID: 240-27914-6

Matrix: Water Lab File ID: UXJ3409.D

Analysis Method: 8260B Date Collected: 08/13/2013 14:05

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 20:31

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 240-27914-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-35-45	240-27914-6	NM	08/13/2013	08/19/2013	08/19/2013	6	0	6
OV	UG/L	DR-DPT-35-40	240-27914-5	NM	08/13/2013	08/19/2013	08/19/2013	6	0	6
OV	UG/L	DR-DPT-35-35	240-27914-4	NM	08/13/2013	08/19/2013	08/19/2013	6	0	6
OV	UG/L	DR-DPT-35-30	240-27914-3	NM	08/13/2013	08/19/2013	08/19/2013	6	0	6
OV	UG/L	DR-DPT-35-25	240-27914-2	NM	08/13/2013	08/19/2013	08/19/2013	6	0	6
OV	UG/L	DR-DPT-35-20	240-27914-1	NM	08/13/2013	08/19/2013	08/19/2013	6	0	6

4.2

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/13/13	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			112IC04882
(301) 528-3021 Phone	TAT if different from Below: 5 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			
P O #	☐ 1 day			Sampler: S. Cameron

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT-35-20	8/13/2013	1010	GW	Water	3		x	
DR-DPT-35-25	8/13/2013	1030	GW	Water	3		x	
DR-DPT-35-30	8/13/2013	1105	GW	Water	3		x	
DR-DPT-35-35	8/13/2013	1130	GW	Water	3		x	
DR-DPT-35-40	8/13/2013	1315	GW	Water	3		x	
DR-DPT-35-45	8/13/2013	1405	GW	Water	3		x	
DR-DPT-	8/13/2013		GW	Water	3		x	
DR-DPT-	8/13/2013		GW	Water	3		x	
DR-DPT-	8/13/2013		GW	Water	3		x	
DR-DPT-	8/13/2013		GW	Water	3		x	
DR-DPT-	8/13/2013		GW	Water	3		x	
TB-081313	8/13/2013	X	GW	Water	2		x	

240-27914 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/13/13 1520	[signature]	Test America	8/13/13 / 1544
[signature]	Test America	8/13/13/1700	[signature]	TA	8-14-13 920

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 27914**
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by:

Cooler Received on 8-14-13 Opened on 8-14-13

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. 4.2 °C	Corrected Cooler Temp. 4.2 °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC376062
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? (Yes) No NA
13. Was a trip blank present in the cooler(s)? Yes (No)

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: CR

All vials except 2x40 (DPT-35-25 @ 1030) have bubbles 7.6mm.

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-27914-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/14/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.2 C.

All the vials for each sample had a bubble greater than 6mm in them, except for 2X40mL vials for sample DR-DPT 35-25.

The following sample was listed on the Chain of Custody (COC); however, no sample volume was received: TB-081313.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-35-20 (240-27914-1), DR-DPT-35-25 (240-27914-2), DR-DPT-35-30 (240-27914-3), DR-DPT-35-35 (240-27914-4), DR-DPT-35-40 (240-27914-5) and DR-DPT-35-45 (240-27914-6) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/19/2013.

Samples DR-DPT-35-25 (240-27914-2)[166.67X], DR-DPT-35-30 (240-27914-3)[33.33X], DR-DPT-35-35 (240-27914-4)[16.67X], DR-DPT-35-40 (240-27914-5)[7.14X] and DR-DPT-35-45 (240-27914-6)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample(s) submitted for volatiles analysis was received with insufficient preservation (pH >2): DR-DPT-35-45 (240-27914-6).

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27914-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27914-1	DR-DPT-35-20	Water	08/13/2013 1010	08/14/2013 0920
240-27914-2	DR-DPT-35-25	Water	08/13/2013 1030	08/14/2013 0920
240-27914-3	DR-DPT-35-30	Water	08/13/2013 1105	08/14/2013 0920
240-27914-4	DR-DPT-35-35	Water	08/13/2013 1130	08/14/2013 0920
240-27914-5	DR-DPT-35-40	Water	08/13/2013 1315	08/14/2013 0920
240-27914-6	DR-DPT-35-45	Water	08/13/2013 1405	08/14/2013 0920

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27914-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-27914-1

Lab Section	Qualifier	Description
GC/MS VOA		
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	E	Result exceeded calibration range.
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Lab File ID: BFB182.D BFB Injection Date: 08/16/2013

Instrument ID: A3UX11 BFB Injection Time: 14:53

Analysis Batch No.: 97870

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	27.9	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.0	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	77.0	
175	5.0 - 9.0 % of mass 174	5.6	(7.3)1
176	95.0 - 101.0 % of mass 174	75.2	(97.8)1
177	5.0 - 9.0 % of mass 176	5.4	(7.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97870/2	UXJ3342.D	08/16/2013	15:26
	STD8260 240-97870/3	UXJ3343.D	08/16/2013	15:50
	STD8260 240-97870/4	UXJ3344.D	08/16/2013	16:14
	STD8260 240-97870/5	UXJ3345.D	08/16/2013	16:38
	STD8260 240-97870/6	UXJ3346.D	08/16/2013	17:02
	STD8260 240-97870/7	UXJ3347.D	08/16/2013	17:25
	STD6 240-97870/8	UXJ3348.D	08/16/2013	17:49
	STD5 240-97870/9	UXJ3349.D	08/16/2013	18:13
	STD4 240-97870/10	UXJ3350.D	08/16/2013	18:36
	STD3 240-97870/11	UXJ3351.D	08/16/2013	19:00
	STD2 240-97870/12	UXJ3352.D	08/16/2013	19:23
	STD1 240-97870/13	UXJ3353.D	08/16/2013	19:47
	ICV 240-97870/14	UXJ3354.D	08/16/2013	20:11

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27914-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97870/7	UXJ3347.D
Level 2	STD8260 240-97870/6	UXJ3346.D
Level 3	STD8260 240-97870/5	UXJ3345.D
Level 4	STD8260 240-97870/4	UXJ3344.D
Level 5	STD8260 240-97870/3	UXJ3343.D
Level 6	STD8260 240-97870/2	UXJ3342.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2050 0.2069	0.2165	0.1905	0.1835	0.1962	Ave		0.1997				6.0		15.0			
Chloromethane	0.3836 0.3627	0.3744	0.3702	0.3585	0.3773	Ave		0.3711			0.1000	2.5		15.0			
Vinyl chloride	0.2970 0.2796	0.2816	0.2875	0.2788	0.2885	Ave		0.2855				2.4		15.0			
Bromomethane	0.0902 0.0928	0.0896	0.0882	0.0875	0.0852	Ave		0.0889				2.9		15.0			
Chloroethane	0.1253 0.1277	0.1308	0.1309	0.1239	0.1308	Ave		0.1282				2.4		15.0			
Trichlorofluoromethane	0.2678 0.2756	0.3067	0.2866	0.2745	0.2715	Ave		0.2804				5.1		15.0			
~~Acrolein~~	0.0410 0.0438	0.0438	0.0475	0.0482	0.0465	Ave		~~0.0451~~				6.0		15.0			
1,1-Dichloroethene	0.2532 0.2375	0.2478	0.2468	0.2446	0.2555	Ave		0.2476				2.6		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.0966 0.1399	0.1660	0.1326	0.1231	0.1275	Lin1	-0.014	0.1353							0.9940		0.9900
Acetone	0.3092 0.1071	0.2325	0.1721	0.1479	0.1289	Qua	0.3734	0.1375	0						1.0000		0.9900
Iodomethane	0.4129 0.3606	0.3709	0.3932	0.3933	0.4004	Ave		0.3885				5.0		15.0			
Carbon disulfide	0.7531 0.6075	0.7219	0.6836	0.6918	0.6835	Ave		0.6903				7.1		15.0			
~~Acetonitrile~~	0.0421 0.0334	0.0425	0.0426	0.0378	0.0368	Ave		~~0.0392~~				9.7		15.0			
Methyl acetate	0.3974 0.3192	0.3727	0.3681	0.3403	0.3439	Ave		~~0.3569~~				7.8		15.0			
Methylene Chloride	0.9491 0.2806	0.5689	0.4243	0.3380	0.3142	Lin1	0.6684	0.2703							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27914-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0210 0.0156	0.0209	0.0211	0.0210	0.0207	Ave		0.0200				11.0		15.0			
Acrylonitrile	0.1870 0.1457	0.1597	0.1621	0.1513	0.1512	Ave		0.1595				9.2		15.0			
trans-1,2-Dichloroethene	0.3533 0.3481	0.3265	0.3317	0.3389	0.3315	Ave		0.3383				3.1		15.0			
Methyl tert-butyl ether	0.9157 0.7559	0.7542	0.7730	0.7847	0.7711	Ave		0.7924				7.8		15.0			
Hexane	0.0451 0.0680	0.0773	0.0574	0.0681	0.0579	Lin1	-0.010	0.0654							0.9910		0.9900
1,1-Dichloroethane	0.8025 0.7508	0.7293	0.7254	0.7239	0.7105	Ave		0.7404			0.1000	4.5		15.0			
Vinyl acetate	0.0440 0.0495	0.0415	0.0482	0.0494	0.0501	Ave		0.0471				7.5		15.0			
2-Butanone	0.2005 0.1535	0.2003	0.1813	0.1847	0.1769	Ave		0.1829				9.5		15.0			
cis-1,2-Dichloroethene	0.3848 0.3690	0.3500	0.3592	0.3622	0.3649	Ave		0.3650				3.2		15.0			
2,2-Dichloropropane	0.3421 0.3268	0.3667	0.3653	0.3538	0.3552	Ave		0.3517				4.3		15.0			
Bromochloromethane	0.2257 0.2057	0.2118	0.1996	0.2003	0.2019	Ave		0.2075				4.8		15.0			
Tetrahydrofuran	0.1645 0.0965	0.1385	0.1158	0.1182	0.1091	Lin1	0.0767	0.0998							0.9950		0.9900
Chloroform	0.6517 0.6334	0.5981	0.6259	0.6108	0.6111	Ave		0.6218				3.1		15.0			
1,1,1-Trichloroethane	0.5102 0.4815	0.4629	0.4993	0.5043	0.4946	Ave		0.4921				3.5		15.0			
Cyclohexane	0.4992 0.6461	0.6130	0.5552	0.5930	0.5967	Ave		0.5839				8.7		15.0			
1,1-Dichloropropene	0.4438 0.4620	0.4196	0.4258	0.4347	0.4394	Ave		0.4375				3.4		15.0			
Carbon tetrachloride	0.4398 0.4455	0.4494	0.4270	0.4294	0.4398	Ave		0.4385				2.0		15.0			
Benzene	1.4334 1.4434	1.3464	1.3831	1.3517	1.3641	Ave		1.3870				3.0		15.0			
1,2-Dichloroethane	0.6202 0.5720	0.5573	0.5676	0.5564	0.5589	Ave		0.5721				4.3		15.0			
Trichloroethene	0.3938 0.4061	0.3696	0.3948	0.3853	0.4011	Ave		0.3918				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27914-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.2867 0.4356	0.3998	0.3263	0.3585	0.3855	Ave		0.3654				15.0		15.0			
1,2-Dichloropropane	0.4686 0.4171	0.4119	0.4140	0.4117	0.4108	Ave		0.4224				5.4		15.0			
Dibromomethane	0.2258 0.1875	0.1961	0.2070	0.1936	0.1955	Ave		0.2009				6.8		15.0			
1,4-Dioxane	0.0021	0.0025	0.0021	0.0024	0.0023	Ave		0.0023				8.1		15.0			
Bromodichloromethane	0.4259 0.4382	0.4007	0.4398	0.4113	0.4323	Ave		0.4247				3.7		15.0			
2-Chloroethyl vinyl ether	0.1674 0.1999	0.1676	0.1836	0.1888	0.1996	Ave		0.1845				7.9		15.0			
cis-1,3-Dichloropropene	0.4258 0.5097	0.4513	0.4726	0.4900	0.4938	Ave		0.4739				6.5		15.0			
4-Methyl-2-pentanone	0.3283 0.3278	0.3102	0.3353	0.3435	0.3475	Ave		0.3321				4.0		15.0			
Toluene	1.9738 2.1996	1.9199	2.0481	1.9932	2.1061	Ave		2.0401				4.9		15.0			
trans-1,3-Dichloropropene	0.5561 0.6042	0.5109	0.5712	0.5535	0.6213	Ave		0.5695				6.9		15.0			
Ethyl methacrylate	0.3733 0.4741	0.3854	0.4094	0.4308	0.5051	Ave		0.4297				12.0		15.0			
1,1,2-Trichloroethane	0.3726 0.3696	0.3942	0.4092	0.3712	0.3880	Ave		0.3841				4.1		15.0			
1,3-Dichloropropane	0.6458 0.6562	0.6480	0.6624	0.6374	0.6625	Ave		0.6520				1.5		15.0			
Tetrachloroethene	0.3366 0.3931	0.3605	0.3772	0.3618	0.3806	Ave		0.3683				5.4		15.0			
2-Hexanone	0.3457 0.2741	0.2638	0.2961	0.2980	0.3086	Ave		0.2977				9.7		15.0			
Dibromochloromethane	0.3797 0.4126	0.4179	0.4031	0.3981	0.4254	Ave		0.4062				4.0		15.0			
1,2-Dibromoethane	0.3707 0.3552	0.3627	0.3824	0.3517	0.3646	Ave		0.3645				3.0		15.0			
Chlorobenzene	1.3056 1.2616	1.2440	1.2606	1.1898	1.2600	Ave		1.2536			0.3000	3.0		15.0			
1,1,1,2-Tetrachloroethane	0.5187 0.4648	0.4407	0.4570	0.4455	0.4642	Ave		0.4652				6.0		15.0			
Ethylbenzene	0.5355 0.6600	0.5148	0.5782	0.6019	0.6572	Ave		0.5913				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27914-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6035 0.8215	0.6401	0.7252	0.7630	0.8230	Ave		0.7294				13.0		15.0			
o-Xylene	0.4762 0.6977	0.5965	0.6715	0.6753	0.6992	Ave		0.6361				14.0		15.0			
Styrene	0.8804 1.1787	0.9115	1.0905	1.0960	1.1784	Ave		1.0559				12.0		15.0			
Bromoform	0.1460 0.1361	0.1380	0.1257	0.1414	0.1505	Ave		0.1396			0.1000	6.2		15.0			
Isopropylbenzene	1.2466 1.5529	1.2639	1.4086	1.4368	1.5595	Ave		1.4114				9.6		15.0			
1,1,2,2-Tetrachloroethane	0.9587 0.7953	1.0655	0.9025	0.8644	0.8466	Ave		0.9055			0.3000	11.0		15.0			
Bromobenzene	1.1396 1.1159	1.1021	1.1178	1.1227	1.1382	Ave		1.1227				1.3		15.0			
1,2,3-Trichloropropane	0.3575 0.2637	0.3351	0.3244	0.2971	0.3012	Ave		0.3132				11.0		15.0			
trans-1,4-Dichloro-2-butene	0.2307 0.3110	0.3162	0.3231	0.3423	0.3074	Ave		0.3051				13.0		15.0			
n-Propylbenzene	0.9191 1.1733	1.0676	1.1471	1.0923	1.1433	Ave		1.0904				8.5		15.0			
2-Chlorotoluene	0.9723 1.0388	1.0833	0.9766	1.0638	1.0250	Ave		1.0267				4.4		15.0			
1,3,5-Trimethylbenzene	2.2255 3.0948	2.4704	2.7655	2.8790	3.0227	Ave		2.7430				12.0		15.0			
4-Chlorotoluene	0.9022 1.0802	1.0922	1.0204	1.0932	1.1027	Ave		1.0485				7.4		15.0			
tert-Butylbenzene	2.3013 2.5187	2.0190	2.5477	2.3018	2.3935	Ave		2.3470				8.2		15.0			
1,2,4-Trimethylbenzene	2.3778 3.0042	2.4562	2.7519	2.8622	2.8954	Ave		2.7246				9.3		15.0			
sec-Butylbenzene	2.3846 3.2334	2.6094	2.8211	2.9668	3.0465	Ave		2.8437				11.0		15.0			
1,3-Dichlorobenzene	1.8146 1.7530	1.6766	1.7132	1.6859	1.7001	Ave		1.7239				3.0		15.0			
p-Isopropyltoluene	1.7896 2.9109	2.1277	2.3539	2.4650	2.6051	Linl	-1.400	2.8129							0.9960		0.9900
1,4-Dichlorobenzene	1.7782 1.7983	1.6803	1.7506	1.7134	1.7528	Ave		1.7456				2.5		15.0			
n-Butylbenzene	1.6781 2.1478	1.6030	1.5894	1.7118	1.8847	Ave		1.7691				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27914-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.6012 1.7185	1.6454	1.6361	1.6347	1.6381	Ave		1.6456				2.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1173 0.1360	0.1296	0.1578	0.1336	0.1458	Ave		0.1367				10.0		15.0			
1,3,5-Trichlorobenzene	1.0740 1.0627	1.0062	0.9283	0.9748	1.0091	Ave		1.0092				5.4		15.0			
1,2,4-Trichlorobenzene	0.8062 0.9580	0.7810	0.8479	0.8703	0.8928	Ave		0.8593				7.4		15.0			
Hexachlorobutadiene	0.3379 0.3800	0.4642	0.3382	0.3624	0.3737	Ave		0.3761				12.0		15.0			
Naphthalene	1.8724 2.4357	1.9574	2.0186	2.1470	2.4485	Ave		2.1466				11.0		15.0			
1,2,3-Trichlorobenzene	0.6297 0.8837	0.7184	0.7887	0.8500	0.8932	Ave		0.7939				13.0		15.0			
Dibromofluoromethane (Surr)	0.3664 0.3558	0.3145	0.3367	0.3468	0.3406	Ave		0.3435				5.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4791 0.4478	0.3961	0.4397	0.4403	0.4527	Ave		0.4426				6.1		15.0			
Toluene-d8 (Surr)	1.5671 1.8861	1.4287	1.6925	1.6839	1.8197	Ave		1.6797				9.9		15.0			
4-Bromofluorobenzene (Surr)	0.3557 0.3927	0.3559	0.3695	0.3822	0.4071	Ave		0.3772				5.5		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27914-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97870/13	UXJ3353.D
Level 2	STD2 240-97870/12	UXJ3352.D
Level 3	STD3 240-97870/11	UXJ3351.D
Level 4	STD4 240-97870/10	UXJ3350.D
Level 5	STD5 240-97870/9	UXJ3349.D
Level 6	STD6 240-97870/8	UXJ3348.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.2683 0.2447	0.2194	0.2342	0.2458	0.2389	Ave		0.2419				6.6		15.0			
Ethyl ether	0.4166 0.3363	0.3272	0.3580	0.3443	0.3257	Ave		0.3513				9.7		15.0			
3-Chloro-1-propene	0.1711 0.1594	0.1649	0.1607	0.1637	0.1626	Ave		0.1637				2.5		15.0			
Diisopropyl ether	0.2951 0.2879	0.2590	0.2753	0.2826	0.2723	Ave		0.2787				4.6		15.0			
2-Chloro-1,3-butadiene	0.8909 0.8067	0.7747	0.8019	0.7869	0.8028	Ave		0.8107				5.1		15.0			
Ethyl-t-butyl ether (ETBE)	1.2969 1.2223	1.0767	1.2033	1.1860	1.1554	Ave		1.1901				6.1		15.0			
Ethyl acetate	0.4121 0.3700	0.3322	0.3751	0.3629	0.3625	Ave		0.3691				7.0		15.0			
~~Propionitrile~~	0.0505 0.0472	0.0443	0.0487	0.0440	0.0440	Ave		~~0.0464~~				5.9		15.0			
Methacrylonitrile	0.2783 0.2434	0.2519	0.2401	0.2378	0.2377	Ave		0.2482				6.3		15.0			
~~Isobutyl alcohol~~	0.0164 0.0113	0.0121	0.0129	0.0136	0.0123	Ave		~~0.0131~~				14.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6900 0.7425	0.6114	0.6799	0.6892	0.7000	Ave		0.6855				6.2		15.0			
~~n-Heptane~~	0.0493 0.0610	0.0648	0.0455	0.0478	0.0794	Ave		0.0580				~~22.6~~ *		15.0			
~~n-Butanol~~	0.0080 0.0063	0.0099	0.0087	0.0109	0.0102	Qua	-0.239	~~0.0143~~	0						0.9960		0.9900
Methyl methacrylate	0.2857 0.3339	0.2857	0.2922	0.3108	0.3261	Ave		0.3057				6.9		15.0			
2-Nitropropane	0.1138 0.0943	0.0892	0.0956	0.0928	0.0925	Ave		0.0964				9.1		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27914-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1426 0.1291	0.1384	0.1537	0.1626	0.1663	Ave		0.1488				9.8		15.0			
1,2,3-Trimethylbenzene	2.0795 3.3094	1.9372	2.2909	2.5402	2.5808	Qua	0.4789	1.9657	0.0331						0.9990		0.9900
2-Methylnaphthalene	0.8153 1.3785	0.8449	0.8722	0.9460	1.0548	Qua	0.3760	0.7406	0.0079						1.0000		0.9900
n-Butyl acetate	0.3377 0.5103	0.3088	0.3478	0.4216	0.4644	Lin1	-0.602	0.4925							0.9930		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.1287		1.00	0.0100	-35.5	50.0
Chloromethane	Ave	0.3711	0.3145	0.1000	1.00	0.0100	-15.2	50.0
Vinyl chloride	Ave	0.2855	0.2363		1.00	0.0100	-17.2	20.0
Bromomethane	Ave	0.0889	0.0702		1.00	0.0100	-21.1	50.0
Chloroethane	Ave	0.1282	0.1203		1.00	0.0100	-6.1	50.0
Trichlorofluoromethane	Ave	0.2804	0.2325		1.00	0.0100	-17.1	50.0
1,1-Dichloroethene	Ave	0.2476	0.2329		1.00	0.0100	-5.9	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1207		1.00	0.0100	-9.7	50.0
Acetone	Qua		0.1235		10.0	0.0200	-19.6	50.0
Iodomethane	Ave	0.3885	0.3704		1.00	0.0100	-4.7	50.0
Carbon disulfide	Ave	0.6903	0.6294		1.00	0.0100	-8.8	50.0
Methyl acetate	Ave	0.3569	0.3691		10.0	0.0100	3.4	50.0
Methylene Chloride	Lin1		0.3386		1.00	0.0100	0.5	50.0
tert-Butyl alcohol	Ave	0.0200	0.0157		50.0	0.200	-21.5	50.0
Methyl tert-butyl ether	Ave	0.7924	0.7415		1.00	0.0100	-6.4	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3252		1.00	0.0100	-3.9	50.0
Hexane	Lin1		0.0594		1.00	0.0100	-7.6	20.0
1,1-Dichloroethane	Ave	0.7404	0.7131	0.1000	1.00	0.0100	-3.7	50.0
Vinyl acetate	Ave	0.0471	0.0420		2.00	0.0100	-10.9	50.0
2-Butanone	Ave	0.1829	0.1619		10.0	0.0200	-11.5	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.3452		1.00	0.0100	-5.4	50.0
2,2-Dichloropropane	Ave	0.3517	0.3227		1.00	0.0100	-8.2	50.0
Bromochloromethane	Ave	0.2075	0.1929		1.00	0.0100	-7.0	50.0
Tetrahydrofuran	Lin1		0.0971		5.00	0.0100	-10.4	50.0
Chloroform	Ave	0.6218	0.6140		1.00	0.0100	-1.3	20.0
1,1,1-Trichloroethane	Ave	0.4921	0.4673		1.00	0.0100	-5.1	50.0
Cyclohexane	Ave	0.5839	0.5272		1.00	0.0100	-9.7	50.0
1,1-Dichloropropene	Ave	0.4375	0.4181		1.00	0.0100	-4.4	50.0
Carbon tetrachloride	Ave	0.4385	0.4112		1.00	0.0100	-6.2	50.0
1,2-Dichloroethane	Ave	0.5721	0.5534		1.00	0.0100	-3.3	50.0
Benzene	Ave	1.387	1.334		1.00	0.0100	-3.8	50.0
Trichloroethene	Ave	0.3918	0.3865		1.00	0.0100	-1.4	50.0
Methylcyclohexane	Ave	0.3654	0.3113		1.00	0.0100	-14.8	50.0
1,2-Dichloropropane	Ave	0.4224	0.4227		1.00	0.0100	0.0	20.0
Dibromomethane	Ave	0.2009	0.2036		1.00	0.0100	1.3	50.0
Bromodichloromethane	Ave	0.4247	0.4389		1.00	0.0100	3.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1845	0.1633		10.0	0.0100	-11.5	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4471		1.00	0.0100	-5.7	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.3155		10.0	0.0200	-5.0	50.0
Toluene	Ave	2.040	1.986		1.00	0.0100	-2.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
trans-1,3-Dichloropropene	Ave	0.5695	0.5490		1.00	0.0100	-3.6	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.3836		1.00	0.0100	-0.1	50.0
1,3-Dichloropropane	Ave	0.6520	0.6434		1.00	0.0100	-1.3	50.0
Tetrachloroethene	Ave	0.3683	0.3639		1.00	0.0100	-1.2	50.0
2-Hexanone	Ave	0.2977	0.2726		10.0	0.0200	-8.5	50.0
Dibromochloromethane	Ave	0.4062	0.4118		1.00	0.0100	1.4	50.0
1,2-Dibromoethane	Ave	0.3645	0.3367		1.00	0.0100	-7.7	50.0
Chlorobenzene	Ave	1.254	1.199	0.3000	1.00	0.0100	-4.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.4619		1.00	0.0100	-0.7	50.0
Ethylbenzene	Ave	0.5913	0.5816		1.00	0.0100	-1.6	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.7467		2.00	0.0200	2.4	50.0
o-Xylene	Ave	0.6361	0.6473		1.00	0.0100	1.8	50.0
Styrene	Ave	1.056	1.110		1.00	0.0100	5.1	50.0
Bromoform	Ave	0.1396	0.1502	0.1000	1.00	0.0100	7.6	50.0
Isopropylbenzene	Ave	1.411	1.390		1.00	0.0100	-1.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.7574	0.3000	1.00	0.0100	-16.4	50.0
Bromobenzene	Ave	1.123	1.055		1.00	0.0100	-6.0	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2891		1.00	0.0100	-7.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.2829		1.00	0.0200	-7.3	50.0
n-Propylbenzene	Ave	1.090	1.038		1.00	0.0100	-4.8	50.0
2-Chlorotoluene	Ave	1.027	0.9715		1.00	0.0100	-5.4	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.691		1.00	0.0100	-1.9	50.0
4-Chlorotoluene	Ave	1.048	0.9943		1.00	0.0100	-5.2	50.0
tert-Butylbenzene	Ave	2.347	2.193		1.00	0.0100	-6.5	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.528		1.00	0.0100	-7.2	50.0
sec-Butylbenzene	Ave	2.844	2.611		1.00	0.0100	-8.2	50.0
1,3-Dichlorobenzene	Ave	1.724	1.571		1.00	0.0100	-8.9	50.0
p-Isopropyltoluene	Lin1		2.299		1.00	0.0100	-13.3	50.0
1,4-Dichlorobenzene	Ave	1.746	1.652		1.00	0.0100	-5.4	50.0
n-Butylbenzene	Ave	1.769	1.599		1.00	0.0100	-9.6	50.0
1,2-Dichlorobenzene	Ave	1.646	1.501		1.00	0.0100	-8.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1208		2.00	0.0100	-11.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7631		1.00	0.0100	-11.2	50.0
Hexachlorobutadiene	Ave	0.3761	0.2697		1.00	0.0100	-28.3	50.0
Naphthalene	Ave	2.147	1.801		1.00	0.0100	-16.1	50.0
1,2,3-Trichlorobenzene	Ave	0.7939	0.7398		1.00	0.0100	-6.8	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.2912		0.00707	0.00834	-15.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3605		0.00679	0.00834	-18.6	50.0
Toluene-d8 (Surr)	Ave	1.680	1.563		0.00776	0.00834	-7.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.3899		0.00862	0.00834	3.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3513	0.3614		2.00	0.0100	2.9	50.0
Diisopropyl ether	Ave	0.2787	0.2903		10.0	0.0100	4.2	50.0
Isobutyl alcohol	Ave	0.0131	0.0096		50.0	0.500	-26.4	50.0
Cyclohexanone	Ave	0.1488	0.0210		20.0	0.200	-85.9*	50.0
1,2,3-Trimethylbenzene	Qua		2.606		0.0110	0.0100	9.8	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Lab File ID: BFB184A.D BFB Injection Date: 08/19/2013

Instrument ID: A3UX11 BFB Injection Time: 09:15

Analysis Batch No.: 97982

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.2	
75	30.0 - 60.0 % of mass 95	45.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.8	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	84.6	
175	5.0 - 9.0 % of mass 174	7.5	(8.8)1
176	95.0 - 101.0 % of mass 174	83.5	(98.7)1
177	5.0 - 9.0 % of mass 176	4.5	(5.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-97982/2	UXJ3382.D	08/19/2013	09:47
	LCS 240-97982/4	UXJ3383.D	08/19/2013	10:11
	CCV 240-97982/3	UXJ3384.D	08/19/2013	10:35
	MB 240-97982/5	UXJ3386.D	08/19/2013	11:22
DR-DPT-35-25 MS	240-27914-2 MS	UXJ3396.D	08/19/2013	15:22
DR-DPT-35-25 MSD	240-27914-2 MSD	UXJ3397.D	08/19/2013	15:46
DR-DPT-35-20	240-27914-1	UXJ3404.D	08/19/2013	18:32
DR-DPT-35-25	240-27914-2	UXJ3405.D	08/19/2013	18:56
DR-DPT-35-30	240-27914-3	UXJ3406.D	08/19/2013	19:20
DR-DPT-35-35	240-27914-4	UXJ3407.D	08/19/2013	19:43
DR-DPT-35-40	240-27914-5	UXJ3408.D	08/19/2013	20:07
DR-DPT-35-45	240-27914-6	UXJ3409.D	08/19/2013	20:31

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Lab Sample ID: CCVIS 240-97982/2 Calibration Date: 08/19/2013 09:47

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3382.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.2277		1.00	0.0100	14.0	50.0
Chloromethane	Ave	0.3711	0.3821	0.1000	1.00	0.0100	3.0	50.0
Vinyl chloride	Ave	0.2855	0.2874		1.00	0.0100	0.7	20.0
Bromomethane	Ave	0.0889	0.0908		1.00	0.0100	2.1	50.0
Chloroethane	Ave	0.1282	0.1237		1.00	0.0100	-3.5	50.0
Trichlorofluoromethane	Ave	0.2804	0.2745		1.00	0.0100	-2.1	50.0
Acrolein	Ave	0.0451	0.0406		20.0	0.100	-10.1	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1469		1.00	0.0100	9.6	50.0
1,1-Dichloroethene	Ave	0.2476	0.2214		1.00	0.0100	-10.6	20.0
Acetone	Qua		0.1905		10.0	0.0200	36.9	50.0
Iodomethane	Ave	0.3885	0.3108		1.00	0.0100	-20.0	50.0
Carbon disulfide	Ave	0.6903	0.5257		1.00	0.0100	-23.8	50.0
Acetonitrile	Ave	0.0392	0.0381		20.0	0.100	-2.8	50.0
Methyl acetate	Ave	0.3569	0.3350		10.0	0.0200	-6.2	50.0
Methylene Chloride	Lin1		0.2780		1.00	0.0100	-21.9	50.0
tert-Butyl alcohol	Ave	0.0200	0.0170		50.0	0.200	-15.1	50.0
Acrylonitrile	Ave	0.1595	0.1472		20.0	0.0200	-7.7	50.0
Methyl tert-butyl ether	Ave	0.7924	0.7118		1.00	0.0100	-10.2	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3212		1.00	0.0100	-5.1	50.0
Hexane	Lin1		0.0714		1.00	0.0100	10.7	20.0
1,1-Dichloroethane	Ave	0.7404	0.6920	0.1000	1.00	0.0100	-6.5	50.0
Vinyl acetate	Ave	0.0471	0.0451		2.00	0.0100	-4.4	50.0
2,2-Dichloropropane	Ave	0.3517	0.2743		1.00	0.0100	-22.0	50.0
2-Butanone	Ave	0.1829	0.1744		10.0	0.0200	-4.7	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.3239		1.00	0.0100	-11.3	50.0
Bromochloromethane	Ave	0.2075	0.2022		1.00	0.0100	-2.5	50.0
Chloroform	Ave	0.6218	0.5847		1.00	0.0100	-6.0	20.0
Tetrahydrofuran	Lin1		0.0919		5.00	0.0100	-15.6	50.0
1,1,1-Trichloroethane	Ave	0.4921	0.4265		1.00	0.0100	-13.3	50.0
Cyclohexane	Ave	0.5839	0.5687		1.00	0.0100	-2.6	50.0
1,1-Dichloropropene	Ave	0.4375	0.3939		1.00	0.0100	-10.0	50.0
Carbon tetrachloride	Ave	0.4385	0.4114		1.00	0.0100	-6.2	50.0
1,2-Dichloroethane	Ave	0.5721	0.5016		1.00	0.0100	-12.3	50.0
Benzene	Ave	1.387	1.270		1.00	0.0100	-8.4	50.0
Trichloroethene	Ave	0.3918	0.3873		1.00	0.0100	-1.1	50.0
Methylcyclohexane	Ave	0.3654	0.3774		1.00	0.0100	3.3	50.0
1,2-Dichloropropane	Ave	0.4224	0.3825		1.00	0.0100	-9.4	20.0
Dibromomethane	Ave	0.2009	0.1802		1.00	0.0100	-10.3	50.0
1,4-Dioxane	Ave	0.0023	0.0010		50.0	0.500	-54.5*	50.0
Bromodichloromethane	Ave	0.4247	0.4145		1.00	0.0100	-2.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Lab Sample ID: CCVIS 240-97982/2 Calibration Date: 08/19/2013 09:47

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3382.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1845	0.1642		10.0	0.0200	-11.0	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4294		1.00	0.0100	-9.4	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.2994		10.0	0.0200	-9.9	50.0
Toluene	Ave	2.040	1.819		1.00	0.0100	-10.8	20.0
trans-1,3-Dichloropropene	Ave	0.5695	0.5119		1.00	0.0100	-10.1	50.0
Ethyl methacrylate	Ave	0.4297	0.3812		1.00	0.0100	-11.3	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.3482		1.00	0.0100	-9.4	50.0
1,3-Dichloropropane	Ave	0.6520	0.5605		1.00	0.0100	-14.0	50.0
Tetrachloroethene	Ave	0.3683	0.3826		1.00	0.0100	3.9	50.0
2-Hexanone	Ave	0.2977	0.2434		10.0	0.0200	-18.3	50.0
Dibromochloromethane	Ave	0.4062	0.4115		1.00	0.0100	1.3	50.0
1,2-Dibromoethane	Ave	0.3645	0.3346		1.00	0.0100	-8.2	50.0
Chlorobenzene	Ave	1.254	1.102	0.3000	1.00	0.0100	-12.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.4239		1.00	0.0100	-8.9	50.0
Ethylbenzene	Ave	0.5913	0.5392		1.00	0.0100	-8.8	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.6934		2.00	0.0200	-4.9	50.0
o-Xylene	Ave	0.6361	0.5728		1.00	0.0100	-10.0	50.0
Styrene	Ave	1.056	0.9628		1.00	0.0100	-8.8	50.0
Bromoform	Ave	0.1396	0.1622	0.1000	1.00	0.0100	16.2	50.0
Isopropylbenzene	Ave	1.411	1.166		1.00	0.0100	-17.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.7158	0.3000	1.00	0.0100	-20.9	50.0
Bromobenzene	Ave	1.123	0.9338		1.00	0.0100	-16.8	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2369		1.00	0.0100	-24.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.2615		1.00	0.0100	-14.3	50.0
n-Propylbenzene	Ave	1.090	0.8721		1.00	0.0100	-20.0	50.0
2-Chlorotoluene	Ave	1.027	0.8668		1.00	0.0100	-15.6	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.401		1.00	0.0100	-12.5	50.0
4-Chlorotoluene	Ave	1.048	0.8692		1.00	0.0100	-17.1	50.0
tert-Butylbenzene	Ave	2.347	1.877		1.00	0.0100	-20.0	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.466		1.00	0.0100	-9.5	50.0
sec-Butylbenzene	Ave	2.844	2.418		1.00	0.0100	-15.0	50.0
1,3-Dichlorobenzene	Ave	1.724	1.420		1.00	0.0100	-17.7	50.0
p-Isopropyltoluene	Lin1		2.028		1.00	0.0100	-22.9	50.0
1,4-Dichlorobenzene	Ave	1.746	1.614		1.00	0.0100	-7.6	50.0
n-Butylbenzene	Ave	1.769	1.463		1.00	0.0100	-17.3	50.0
1,2-Dichlorobenzene	Ave	1.646	1.447		1.00	0.0100	-12.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1343		2.00	0.0100	-1.8	50.0
1,3,5-Trichlorobenzene	Ave	1.009	0.8411		1.00	0.0100	-16.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7201		1.00	0.0100	-16.2	50.0
Hexachlorobutadiene	Ave	0.3761	0.3173		1.00	0.0100	-15.6	50.0
Naphthalene	Ave	2.147	1.674		1.00	0.0100	-22.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Lab Sample ID: CCVIS 240-97982/2 Calibration Date: 08/19/2013 09:47

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3382.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7939	0.6395		1.00	0.0100	-19.5	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.3129		0.00760	0.00834	-8.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3672		0.00692	0.00834	-17.0	50.0
Toluene-d8 (Surr)	Ave	1.680	1.517		0.00753	0.00834	-9.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.3560		0.00787	0.00834	-5.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Lab Sample ID: CCV 240-97982/3 Calibration Date: 08/19/2013 10:35

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3384.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2419	0.2140		2.00	0.0100	-11.5	50.0
Ethyl ether	Ave	0.3513	0.3089		2.00	0.0100	-12.1	50.0
3-Chloro-1-propene	Ave	0.1637	0.1606		2.00	0.0100	-1.9	50.0
Diisopropyl ether	Ave	0.2787	0.2756		10.0	0.0500	-1.1	50.0
2-Chloro-1,3-butadiene	Ave	0.8107	0.7289		2.00	0.0100	-10.1	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.190	1.073		5.00	0.0100	-9.9	50.0
Ethyl acetate	Ave	0.3691	0.3279		4.00	0.0200	-11.2	50.0
~~Propionitrile~~	Ave	0.0464	~~0.0451~~		4.00	0.0200	-3.0	50.0
Methacrylonitrile	Ave	0.2482	0.2080		2.00	0.0100	-16.2	50.0
~~Isobutyl alcohol~~	Ave	0.0131	~~0.0124~~		50.0	0.200	-5.7	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6855	0.6184		5.00	0.0100	-9.8	50.0
n-Heptane	Ave	0.0580	0.0505		1.00	0.0100	-12.9	50.0
~~n-Butanol~~	Qua		~~0.0054~~		50.0	0.200	~~-50.5~~	50.0
Methyl methacrylate	Ave	0.3057	0.2673		2.00	0.0100	-12.6	50.0
2-Nitropropane	Ave	0.0964	0.0789		2.00	0.0200	-18.2	50.0
~~Cyclohexanone~~	Ave	0.1488	0.1074		20.0	0.100	~~-27.8~~	50.0
1,2,3-Trimethylbenzene	Qua		2.125		0.00915	0.0100	-8.5	50.0
~~2-Methylnaphthalene~~	Qua		0.6683		5.00	0.0200	~~-24.5~~	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Lab File ID: UXJ3386.D Lab Sample ID: MB 240-97982/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 08/19/2013 11:22

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-97982/4	UXJ3383.D	08/19/2013 10:11
DR-DPT-35-25 MS	240-27914-2 MS	UXJ3396.D	08/19/2013 15:22
DR-DPT-35-25 MSD	240-27914-2 MSD	UXJ3397.D	08/19/2013 15:46
DR-DPT-35-20	240-27914-1	UXJ3404.D	08/19/2013 18:32
DR-DPT-35-25	240-27914-2	UXJ3405.D	08/19/2013 18:56
DR-DPT-35-30	240-27914-3	UXJ3406.D	08/19/2013 19:20
DR-DPT-35-35	240-27914-4	UXJ3407.D	08/19/2013 19:43
DR-DPT-35-40	240-27914-5	UXJ3408.D	08/19/2013 20:07
DR-DPT-35-45	240-27914-6	UXJ3409.D	08/19/2013 20:31

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97982/5

Matrix: Water | Lab File ID: UXJ3386.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 11:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97982/5

Matrix: Water | Lab File ID: UXJ3386.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 11:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-97982/5

Matrix: Water | Lab File ID: UXJ3386.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 11:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-97982/5

Matrix: Water Lab File ID: UXJ3386.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 11:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 97982 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3383.D

Lab ID: LCS 240-97982/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.1	101	72-116	
1,1,1-Trichloroethane	10.0	9.49	95	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.37	84	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.7	107	74-151	
1,1-Dichloroethane	10.0	9.94	99	82-115	
1,1-Dichloroethene	10.0	8.84	88	78-131	
1,1-Dichloropropene	10.0	9.43	94	83-114	
1,2,3-Trichlorobenzene	10.0	9.42	94	54-126	
1,2,3-Trichloropropane	10.0	8.04	80	73-129	
1,2,3-Trimethylbenzene	10.0	10.7	107	70-130	
1,2,4-Trichlorobenzene	10.0	9.20	92	48-135	
1,2,4-Trimethylbenzene	10.0	9.08	91	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.2	102	42-136	
1,2-Dichlorobenzene	10.0	9.35	94	81-110	
1,2-Dichloroethane	10.0	9.17	92	71-127	
1,2-Dichloropropane	10.0	9.86	99	81-115	
1,3-Dichlorobenzene	10.0	9.25	93	80-110	
1,3-Dichloropropane	10.0	9.83	98	79-116	
1,4-Dichlorobenzene	10.0	9.51	95	82-110	
2,2-Dichloropropane	10.0	10.2	102	50-129	
2-Chloroethyl vinyl ether	10.0	8.22 J	82	52-131	
2-Chlorotoluene	10.0	9.48	95	76-116	
2-Hexanone	20.0	16.7	84	55-133	
Bromobenzene	10.0	9.03	90	76-115	
Bromochloromethane	10.0	9.41	94	77-120	
4-Chlorotoluene	10.0	9.61	96	77-115	
p-Isopropyltoluene	10.0	8.83	88	74-120	
Acetone	20.0	14.5	73	43-136	
Benzene	10.0	9.57	96	83-112	
Bromoform	10.0	11.4	114	40-131	
Bromomethane	10.0	8.45	85	11-185	
Carbon disulfide	10.0	8.55	86	62-142	
Carbon tetrachloride	10.0	10.3	103	66-128	
Chlorobenzene	10.0	9.58	96	85-110	
Chloroethane	10.0	9.13	91	25-153	
Chloroform	10.0	9.57	96	79-117	
Chloromethane	10.0	9.13	91	44-126	
cis-1,2-Dichloroethene	10.0	9.86	99	80-113	
cis-1,3-Dichloropropene	10.0	9.50	95	61-115	
Hexachlorobutadiene	10.0	8.73	87	36-134	
Dibromomethane	10.0	9.61	96	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3383.D

Lab ID: LCS 240-97982/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.3	103	72-121	
Dichlorodifluoromethane	10.0	6.47	65	19-129	
Ethylbenzene	10.0	9.96	100	83-112	
1,2-Dibromoethane	10.0	9.17	92	79-113	
Diisopropyl ether	10.0	10.5	105	77-118	
Naphthalene	10.0	7.87	79	32-141	
m-Xylene & p-Xylene	20.0	20.3	101	83-113	
n-Butylbenzene	10.0	9.46	95	66-125	
Isopropylbenzene	10.0	9.60	96	75-114	
n-Propylbenzene	10.0	9.81	98	74-121	
2-Butanone	20.0	16.9	84	60-126	
4-Methyl-2-pentanone	20.0	18.0	90	63-128	
sec-Butylbenzene	10.0	9.47	95	70-117	
Methyl tert-butyl ether	10.0	9.32	93	52-144	
Methylene Chloride	10.0	9.08	91	66-131	
o-Xylene	10.0	9.69	97	83-113	
Styrene	10.0	10.3	103	79-114	
tert-Butylbenzene	10.0	8.58	86	71-115	
Tetrachloroethene	10.0	10.3	103	79-114	
Toluene	10.0	9.59	96	84-111	
trans-1,2-Dichloroethene	10.0	9.72	97	83-117	
trans-1,3-Dichloropropene	10.0	8.94	89	58-117	
Trichloroethene	10.0	9.89	99	76-117	
Trichlorofluoromethane	10.0	8.55	86	49-157	
Vinyl acetate	10.0	11.6	116	46-161	
Vinyl chloride	10.0	8.68	87	53-127	
tert-Butyl alcohol	200	192	96	70-130	
Xylenes, Total	30.0	30.0	100	83-112	
Dibromochloromethane	10.0	10.6	106	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3396.D

Lab ID: 240-27914-2 MS Client ID: DR-DPT-35-25 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	1670	170 U	1700	102	64-118	
1,1,1-Trichloroethane	1670	170 U	1630	98	68-121	
1,1,2,2-Tetrachloroethane	1670	170 U	1480	89	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	1670	170 U	1810	108	70-152	
1,1-Dichloroethane	1670	170 U	1670	100	79-116	
1,1-Dichloroethene	1670	170 U	1680	101	74-135	
1,1-Dichloropropene	1670	170 U	1600	96	80-114	
1,2,3-Trichlorobenzene	1670	170 U	1510	91	45-129	
1,2,3-Trichloropropane	1670	170 U	1390	83	67-132	
1,2,3-Trimethylbenzene	1670	830 U	1800	108	70-130	
1,2,4-Trichlorobenzene	1670	170 U	1370	82	38-138	
1,2,4-Trimethylbenzene	1670	170 U	1540	93	67-124	
1,2-Dibromo-3-Chloropropane	1670	330 U	1550	93	32-139	
1,2-Dichlorobenzene	1670	170 U	1590	96	75-111	
1,2-Dichloroethane	1670	170 U	1570	94	68-129	
1,2-Dichloropropane	1670	170 U	1630	98	78-115	
1,3-Dichlorobenzene	1670	170 U	1510	91	73-110	
1,3-Dichloropropane	1670	170 U	1630	98	74-118	
1,4-Dichlorobenzene	1670	170 U	1540	92	75-110	
2,2-Dichloropropane	1670	170 U	1760	105	38-127	
2-Chloroethyl vinyl ether	1670	1700 U	1380 J	83	10-150	
2-Chlorotoluene	1670	170 U	1520	91	69-117	
2-Hexanone	3330	1700 U	2860	86	47-139	
Bromobenzene	1670	170 U	1510	91	71-116	
Bromochloromethane	1670	170 U	1600	96	73-121	
4-Chlorotoluene	1670	170 U	1630	98	71-116	
p-Isopropyltoluene	1670	170 U	1400	84	64-122	
Acetone	3330	1700 U	2530	76	33-145	
Benzene	1670	42 J	1680	98	72-121	
Bromoform	1670	170 U	2120	127	32-128	
Bromomethane	1670	170 U	1350	81	10-186	
Carbon disulfide	1670	54 J	1740	101	57-147	
Carbon tetrachloride	1670	170 U	1700	102	59-129	
Chlorobenzene	1670	5300	6900	98	80-110	E
Chloroethane	1670	170 U	1530	92	21-165	
Chloroform	1670	170 U	1660	99	76-118	
Chloromethane	1670	170 U	1420	85	33-132	
cis-1,2-Dichloroethene	1670	210	1880	100	70-120	
cis-1,3-Dichloropropene	1670	170 U	1650	99	51-110	
Hexachlorobutadiene	1670	170 U	1290	77	27-132	
Dibromomethane	1670	170 U	1660	100	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3396.D

Lab ID: 240-27914-2 MS Client ID: DR-DPT-35-25 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	1670	170 U	1760	105	67-120	
Dichlorodifluoromethane	1670	170 U	1090	65	17-128	
Ethylbenzene	1670	170 U	1740	104	75-116	
1,2-Dibromoethane	1670	170 U	1590	95	74-113	
Diisopropyl ether	1670	1700 U	1680 J	101	73-118	
Naphthalene	1670	170 U	1430	86	15-158	
m-Xylene & p-Xylene	3330	330 U	3630	109	75-117	
n-Butylbenzene	1670	170 U	1450	87	56-127	
Isopropylbenzene	1670	170 U	1600	96	68-116	
n-Propylbenzene	1670	170 U	1630	98	64-124	
2-Butanone	3330	1700 U	3060	92	54-129	
4-Methyl-2-pentanone	3330	1700 U	3300	99	56-131	
sec-Butylbenzene	1670	170 U	1500	90	60-119	
Methyl tert-butyl ether	1670	170 U	1630	98	46-144	
Methylene Chloride	1670	170 U	1500	90	63-128	
o-Xylene	1670	170 U	1700	102	76-116	
Styrene	1670	170 U	1730	104	71-117	
tert-Butylbenzene	1670	170 U	1470	88	61-119	
Tetrachloroethene	1670	170 U	1630	98	70-117	
Toluene	1670	170 U	1610	96	78-114	
trans-1,2-Dichloroethene	1670	170 U	1710	102	80-119	
trans-1,3-Dichloropropene	1670	170 U	1590	95	46-116	
Trichloroethene	1670	230	1950	103	66-120	
Trichlorofluoromethane	1670	170 U	1620	97	46-157	
Vinyl acetate	1670	330 U	2000	120	43-157	
Vinyl chloride	1670	210	1660	87	49-130	
tert-Butyl alcohol	33300	8300 U	29800	90	70-130	
Xylenes, Total	5000	330 U	5330	107	76-116	
Dibromochloromethane	1670	170 U	1850	111	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3397.D

Lab ID: 240-27914-2 MSD Client ID: DR-DPT-35-25 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	1670	1530	92	10	30	64-118	
1,1,1-Trichloroethane	1670	1570	94	3	30	68-121	
1,1,2,2-Tetrachloroethane	1670	1390	83	6	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	1670	1920	115	6	30	70-152	
1,1-Dichloroethane	1670	1550	93	7	30	79-116	
1,1-Dichloroethene	1670	1630	98	3	30	74-135	
1,1-Dichloropropene	1670	1530	92	5	30	80-114	
1,2,3-Trichlorobenzene	1670	1470	88	2	30	45-129	
1,2,3-Trichloropropane	1670	1510	91	9	30	67-132	
1,2,3-Trimethylbenzene	1670	1670	100	7	30	70-130	
1,2,4-Trichlorobenzene	1670	1360	82	0	30	38-138	
1,2,4-Trimethylbenzene	1670	1460	88	5	30	67-124	
1,2-Dibromo-3-Chloropropane	1670	1730	104	11	30	32-139	
1,2-Dichlorobenzene	1670	1540	93	3	30	75-111	
1,2-Dichloroethane	1670	1480	89	6	30	68-129	
1,2-Dichloropropane	1670	1580	95	3	30	78-115	
1,3-Dichlorobenzene	1670	1480	89	2	30	73-110	
1,3-Dichloropropane	1670	1500	90	9	30	74-118	
1,4-Dichlorobenzene	1670	1510	91	2	30	75-110	
2,2-Dichloropropane	1670	1630	98	7	30	38-127	
2-Chloroethyl vinyl ether	1670	1330 J	80	4	30	10-150	
2-Chlorotoluene	1670	1340	80	13	30	69-117	
2-Hexanone	3330	2850	86	0	30	47-139	
Bromobenzene	1670	1450	87	4	30	71-116	
Bromochloromethane	1670	1480	89	8	30	73-121	
4-Chlorotoluene	1670	1460	88	11	30	71-116	
p-Isopropyltoluene	1670	1370	82	2	30	64-122	
Acetone	3330	2310	69	9	30	33-145	
Benzene	1670	1560	91	7	30	72-121	
Bromoform	1670	1950	117	9	30	32-128	
Bromomethane	1670	1050	63	25	30	10-186	
Carbon disulfide	1670	1640	95	6	30	57-147	
Carbon tetrachloride	1670	1610	97	5	30	59-129	
Chlorobenzene	1670	6410	68	7	30	80-110	F
Chloroethane	1670	1260	76	19	30	21-165	
Chloroform	1670	1480	89	11	30	76-118	
Chloromethane	1670	1250	75	13	30	33-132	
cis-1,2-Dichloroethene	1670	1770	93	6	30	70-120	
cis-1,3-Dichloropropene	1670	1480	89	11	30	51-110	
Hexachlorobutadiene	1670	1300	78	1	30	27-132	
Dibromomethane	1670	1550	93	7	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3397.D

Lab ID: 240-27914-2 MSD Client ID: DR-DPT-35-25 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	1670	1620	97	8	30	67-120	
Dichlorodifluoromethane	1670	1150	69	5	30	17-128	
Ethylbenzene	1670	1640	98	6	30	75-116	
1,2-Dibromoethane	1670	1480	89	7	30	74-113	
Diisopropyl ether	1670	1620 J	97	3	30	73-118	
Naphthalene	1670	1390	84	2	30	15-158	
m-Xylene & p-Xylene	3330	3290	99	10	30	75-117	
n-Butylbenzene	1670	1450	87	0	30	56-127	
Isopropylbenzene	1670	1490	89	7	30	68-116	
n-Propylbenzene	1670	1490	89	9	30	64-124	
2-Butanone	3330	3010	90	2	30	54-129	
4-Methyl-2-pentanone	3330	3110	93	6	30	56-131	
sec-Butylbenzene	1670	1490	89	1	30	60-119	
Methyl tert-butyl ether	1670	1540	92	6	30	46-144	
Methylene Chloride	1670	1360	82	10	30	63-128	
o-Xylene	1670	1600	96	6	30	76-116	
Styrene	1670	1590	96	8	30	71-117	
tert-Butylbenzene	1670	1380	83	6	30	61-119	
Tetrachloroethene	1670	1620	97	1	30	70-117	
Toluene	1670	1510	90	6	30	78-114	
trans-1,2-Dichloroethene	1670	1600	96	7	30	80-119	
trans-1,3-Dichloropropene	1670	1520	91	5	30	46-116	
Trichloroethene	1670	1790	94	8	30	66-120	
Trichlorofluoromethane	1670	1540	92	5	30	46-157	
Vinyl acetate	1670	1820	109	9	30	43-157	
Vinyl chloride	1670	1580	83	5	30	49-130	
tert-Butyl alcohol	33300	29900	90	0	30	70-130	
Xylenes, Total	5000	4890	98	9	30	76-116	
Dibromochloromethane	1670	1640	99	12	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-35-20	240-27914-1	93	82	85	85
DR-DPT-35-25	240-27914-2	92	80	85	81
DR-DPT-35-30	240-27914-3	98	86	90	90
DR-DPT-35-35	240-27914-4	95	86	88	85
DR-DPT-35-40	240-27914-5	92	81	85	89
DR-DPT-35-45	240-27914-6	94	84	86	84
	MB 240-97982/5	90	83	85	83
	LCS 240-97982/4	87	84	93	105
DR-DPT-35-25 MS	240-27914-2 MS	89	85	91	104
DR-DPT-35-25 MSD	240-27914-2 MSD	89	83	92	101

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Sample No.: STD8260 240-97870/4 Date Analyzed: 08/16/2013 16:14

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3344.D Heated Purge: (Y/N) N

Calibration ID: 16865

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1950817	5.47	1433793	8.15	447870	10.40
UPPER LIMIT		3901634	5.97	2867586	8.65	895740	10.90
LOWER LIMIT		975409	4.97	716897	7.65	223935	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-97982/2		2094656	5.47	1513461	8.15	514978	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27914-1

SDG No.:

Sample No.: CCVIS 240-97982/2 Date Analyzed: 08/19/2013 09:47

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): UXJ3382.D Heated Purge: (Y/N) N

Calibration ID: 16867

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2094656	5.47	1513461	8.15	514978	10.40
UPPER LIMIT		4189312	5.97	3026922	8.65	1029956	10.90
LOWER LIMIT		1047328	4.97	756731	7.65	257489	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-97982/4		2028496	5.47	1460983	8.15	490242	10.40
CCV 240-97982/3		2154378	5.47	1428113	8.15	410504	10.40
MB 240-97982/5		1885207	5.47	1354782	8.15	365958	10.40
240-27914-2 MS	DR-DPT-35-25 MS	1846892	5.47	1331947	8.15	448129	10.40
240-27914-2 MSD	DR-DPT-35-25 MSD	1919699	5.47	1387051	8.15	452049	10.40
240-27914-1	DR-DPT-35-20	1760747	5.47	1282511	8.15	370736	10.40
240-27914-2	DR-DPT-35-25	1781891	5.47	1281920	8.15	357380	10.40
240-27914-3	DR-DPT-35-30	1724071	5.47	1227657	8.15	358343	10.40
240-27914-4	DR-DPT-35-35	1720241	5.47	1248772	8.15	347337	10.40
240-27914-5	DR-DPT-35-40	1752311	5.47	1239219	8.15	356769	10.40
240-27914-6	DR-DPT-35-45	1713728	5.47	1235342	8.15	339428	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

VOC CALCULATION	SAMPLE		
	DR-DPT-35-45		
TARGET ANALYTE	**trichloroethene**		
ANALYTE RESPONSE	142280		
INTERNAL STANDARD	fluorobenzene		
I.S. RESPONSE	1713728		
I.S. CONCENTRATION	10	µg/l	
ANALYTE CAL. RF	0.3918		
DILUTION FACTOR (DF)	50		
INITIAL SAMPLE VOLUME - V1	5	ml	
FINAL SAMPLE VOLUME - V2	5		
(ANALYTE RESPONSE) x (I.S. CONCENTRATION) X DF x V2 / (I.S. RESPONSE) x (CAL. R.F.) x V1	=	105.95	µg/l

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27914-1

SDG No.:

Client Sample ID: DR-DPT-35-45 | Lab Sample ID: 240-27914-6

Matrix: Water | Lab File ID: UXJ3409.D

Analysis Method: 8260B | Date Collected: 08/13/2013 14:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:31

Soil Aliquot Vol: | Dilution Factor: 50

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 97982 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	50	U	50	8.0
74-87-3	Chloromethane	50	U	50	15
156-59-2	cis-1,2-Dichloroethene	860		50	8.5
10061-01-5	cis-1,3-Dichloropropene	50	U	50	7.0
87-68-3	Hexachlorobutadiene	50	U	50	15
74-95-3	Dibromomethane	50	U	50	14
75-27-4	Bromodichloromethane	50	U	50	7.5
75-71-8	Dichlorodifluoromethane	50	U	50	16
100-41-4	Ethylbenzene	50	U	50	8.5
106-93-4	1,2-Dibromoethane	50	U	50	12
108-20-3	Diisopropyl ether	500	U	500	75
91-20-3	Naphthalene	50	U	50	12
179601-23-1	m-Xylene & p-Xylene	100	U	100	12
104-51-8	n-Butylbenzene	50	U	50	6.0
98-82-8	Isopropylbenzene	50	U	50	6.5
103-65-1	n-Propylbenzene	50	U	50	7.0
78-93-3	2-Butanone	500	U	500	29
108-10-1	4-Methyl-2-pentanone	500	U	500	16
135-98-8	sec-Butylbenzene	50	U	50	6.5
1634-04-4	Methyl tert-butyl ether	50	U	50	8.5
994-05-8	Tert-amyl-methyl ether (TAME)	250	U	250	3.4
75-09-2	Methylene Chloride	50	U	50	17
95-47-6	o-Xylene	50	U	50	7.0
100-42-5	Styrene	50	U	50	5.5
637-92-3	Ethyl-t-butyl ether (ETBE)	250	U	250	5.5
98-06-6	tert-Butylbenzene	50	U	50	6.5
127-18-4	Tetrachloroethene	50	U	50	15
108-88-3	Toluene	50	U	50	6.5
156-60-5	trans-1,2-Dichloroethene	12	J	50	9.5
10061-02-6	trans-1,3-Dichloropropene	50	U	50	9.5
79-01-6	Trichloroethene	110		50	8.5
75-69-4	Trichlorofluoromethane	50	U	50	11
108-05-4	Vinyl acetate	100	U	100	9.5
75-01-4	Vinyl chloride	720		50	11
75-65-0	tert-Butyl alcohol	230	J	2500	200
1330-20-7	Xylenes, Total	100	U	100	7.0

Report Date: 20-Aug-2013 17:25:05 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX11\20130819-22617.b\UXJ3409.D
Lims ID: 240-27914-A-6 Client ID: DR-DPT-35-45
Inject. Date: 19-Aug-2013 20:31:30 Dil. Factor: 50.0000
Sample Type: Client
Sample ID: 240-0022617-027
Misc. Info.: J30819A,8260LLUX11,,43582
Operator: 43582 Instrument ID: A3UX11
Purge Vol: 5.000 mL ALS Bottle#: 28
Lims Batch ID: 97982 Lims Sample ID: 27
Detector: MS SCAN

Method: \\Ncchrom\ChromData\A3UX11\20130819-22617.b\8260_11.m
Last Update: 20-Aug-2013 09:26:05 Calib Date: 16-Aug-2013 19:47:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX11\20130816-22585.b\UXJ3353.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK017

First Level Reviewer: stillert Date: 20-Aug-2013 17:25:04

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.466	5.466	0.0	98	1713728	10.0	
* 2 Chlorobenzene-d5	117	8.152	8.152	0.0	84	1235342	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.400	10.401	-0.001	96	339428	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.898	4.887	0.011	96	459469	7.81	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.182	5.182	0.0	89	533883	7.04	
$ 6 Toluene-d8 (Surr)	98	6.839	6.839	0.0	94	1494444	7.20	
$ 7 4-Bromofluorobenzene (Surr)	95	9.265	9.265	-0.001	88	326886	7.02	
8 Dichlorodifluoromethane	85		1.727					
9 Chloromethane	50		1.881					9
10 Vinyl chloride	62	1.987	1.987	0.0	84	700104	14.3	
11 Bromomethane	94		2.295					
12 Chloroethane	64	2.390	2.390	0.0	35	9297	0.4231	
14 Trichlorofluoromethane	101		2.615					
19 1,1-Dichloroethene	96		3.064					9
18 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.064					
17 Acetone	43		3.076					
23 Carbon disulfide	76	3.265	3.265	0.0	98	38201	0.3229	
26 Methylene Chloride	84	3.443	3.443	0.0	88	120020	0.1183	
27 2-Methyl-2-propanol	59	3.514	3.514	0.0	52	15691	4.57	
30 Methyl tert-butyl ether	73		3.680					
29 trans-1,2-Dichloroethene	96	3.679	3.680	-0.001	75	13689	0.2361	
32 1,1-Dichloroethane	63		4.023					9
33 Vinyl acetate	86		4.046					
34 Isopropyl ether	87		4.070					
37 Tert-butyl ethyl ether	59		4.378					9
39 2,2-Dichloropropane	77		4.508					9
40 cis-1,2-Dichloroethene	96	4.508	4.508	0.0	73	1081361	17.3	
38 2-Butanone (MEK)	43		4.508					
43 Chlorobromomethane	128		4.697					
45 Chloroform	83		4.756					9

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
46 1,1,1-Trichloroethane	97		4.934					
48 1,1-Dichloropropene	75		5.064					
49 Carbon tetrachloride	117		5.076					
52 Benzene	78	5.253	5.242	0.011	79	61267	0.2578	
51 1,2-Dichloroethane	62	5.241	5.242	-0.001	79	90788	0.9260	
53 Tert-amyl methyl ether	73		5.324					9
56 Trichloroethene	130	5.786	5.786	0.0	83	142280	2.12	
59 1,2-Dichloropropane	63		5.975					
61 Dibromomethane	93		6.070					
63 Dichlorobromomethane	83		6.188					
65 2-Chloroethyl vinyl ether	63		6.437					
66 cis-1,3-Dichloropropene	75		6.579					
67 4-Methyl-2-pentanone (MIBK)	43		6.709					9
68 Toluene	91		6.898					
69 trans-1,3-Dichloropropene	75		7.064					
72 Tetrachloroethene	164		7.395					
73 1,3-Dichloropropane	76		7.395					9
74 2-Hexanone	43		7.454					9
76 Chlorodibromomethane	129		7.608					
77 Ethylene Dibromide	107		7.726					
79 Chlorobenzene	112	8.176	8.176	0.0	76	106308	0.6865	
80 1,1,1,2-Tetrachloroethane	131		8.247					
81 Ethylbenzene	106		8.271					9
82 m-Xylene & p-Xylene	106		8.389					
83 o-Xylene	106		8.768					
84 Styrene	104		8.768					9
85 Bromoform	173		8.957					
86 Isopropylbenzene	105		9.111					9
88 1,1,2,2-Tetrachloroethane	83		9.383					
89 Bromobenzene	156		9.419					
90 1,2,3-Trichloropropane	110		9.430					
92 N-Propylbenzene	120		9.513					9
93 2-Chlorotoluene	126		9.608					
95 4-Chlorotoluene	126		9.714					
96 tert-Butylbenzene	119		10.010					
97 1,2,4-Trimethylbenzene	105		10.057					9
98 sec-Butylbenzene	105		10.223					9
99 1,3-Dichlorobenzene	146		10.341					9
100 4-Isopropyltoluene	119		10.365					9
101 1,4-Dichlorobenzene	146		10.424					9
102 1,2,3-Trimethylbenzene	105		10.472					
103 n-Butylbenzene	91		10.767					9
104 1,2-Dichlorobenzene	146		10.803					
105 1,2-Dibromo-3-Chloropropane	157		11.572					
107 1,2,4-Trichlorobenzene	180		12.412					
108 Hexachlorobutadiene	225		12.590					
109 Naphthalene	128		12.673					9
110 1,2,3-Trichlorobenzene	180		12.945					
S 114 Xylenes, Total	106		16.530					

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27914-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0210 0.0156	0.0209	0.0211	0.0210	0.0207	Ave		0.0200				11.0		15.0			
Acrylonitrile	0.1870 0.1457	0.1597	0.1621	0.1513	0.1512	Ave		0.1595				9.2		15.0			
trans-1,2-Dichloroethene	0.3533 0.3481	0.3265	0.3317	0.3389	0.3315	Ave		0.3383				3.1		15.0			
Methyl tert-butyl ether	0.9157 0.7559	0.7542	0.7730	0.7847	0.7711	Ave		0.7924				7.8		15.0			
Hexane	0.0451 0.0680	0.0773	0.0574	0.0681	0.0579	Lin1	-0.010	0.0654							0.9910		0.9900
1,1-Dichloroethane	0.8025 0.7508	0.7293	0.7254	0.7239	0.7105	Ave		0.7404			0.1000	4.5		15.0			
Vinyl acetate	0.0440 0.0495	0.0415	0.0482	0.0494	0.0501	Ave		0.0471				7.5		15.0			
2-Butanone	0.2005 0.1535	0.2003	0.1813	0.1847	0.1769	Ave		0.1829				9.5		15.0			
cis-1,2-Dichloroethene	0.3848 0.3690	0.3500	0.3592	0.3622	0.3649	Ave		0.3650				3.2		15.0			
2,2-Dichloropropane	0.3421 0.3268	0.3667	0.3653	0.3538	0.3552	Ave		0.3517				4.3		15.0			
Bromochloromethane	0.2257 0.2057	0.2118	0.1996	0.2003	0.2019	Ave		0.2075				4.8		15.0			
Tetrahydrofuran	0.1645 0.0965	0.1385	0.1158	0.1182	0.1091	Lin1	0.0767	0.0998							0.9950		0.9900
Chloroform	0.6517 0.6334	0.5981	0.6259	0.6108	0.6111	Ave		0.6218				3.1		15.0			
1,1,1-Trichloroethane	0.5102 0.4815	0.4629	0.4993	0.5043	0.4946	Ave		0.4921				3.5		15.0			
Cyclohexane	0.4992 0.6461	0.6130	0.5552	0.5930	0.5967	Ave		0.5839				8.7		15.0			
1,1-Dichloropropene	0.4438 0.4620	0.4196	0.4258	0.4347	0.4394	Ave		0.4375				3.4		15.0			
Carbon tetrachloride	0.4398 0.4455	0.4494	0.4270	0.4294	0.4398	Ave		0.4385				2.0		15.0			
Benzene	1.4334 1.4434	1.3464	1.3831	1.3517	1.3641	Ave		1.3870				3.0		15.0			
1,2-Dichloroethane	0.6202 0.5720	0.5573	0.5676	0.5564	0.5589	Ave		0.5721				4.3		15.0			
Trichloroethene	0.3938 0.4061	0.3696	0.3948	0.3853	0.4011	Ave		0.3918				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Tetra Tech INC **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**NOVEMBER 7, 2013**
FROM:	**J. KALINYAK**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MIDDLE STATE AIRPORT (MSA) DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-27964-1

SAMPLES: 9 / Aqueous / VOC

DR-DPT-33-15	DR-DPT-33-25	DR-DPT-33-30
DR-DPT-33-40	DR-DPT-33-45	DR-DPT-34-15
DR-DPT-34-35	DR-DPT-34-40	DR-DPT-34-45

Overview

The sample set for Lockheed MSA Dump Road Source Areas, SDG 240-27964-1, consisted of nine (9) aqueous samples. All aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. No field duplicate sample pairs were included in the sample delivery group (SDG).

The samples were collected by Tetra Tech on August 14, 2013 and analyzed by TestAmerica Laboratories, Inc., North Canton OH for the analyses. All analyses were conducted in accordance with EPA SW-846 Methods 8260B for VOCs, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank/preparation results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate results, internal standard recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- The VOC initial calibration average relative response factors (RRF) were less than the 0.05 criteria for tert-butyl alcohol and vinyl acetate on instrument A3UX17 on 08/17/13. The continuing calibration verification (CCV) RRFs for tert-butyl alcohol and vinyl acetate were less than the 0.05 criteria for instrument A3UX17 on 08/20/13 @ 13:40, and on 08/21/13 @ 12:34.
  Affected Samples: All samples
  Action: The affected sample non-detected results for tert-butyl alcohol and vinyl acetate were qualified rejected, (UR).

Minor Problems

- Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

- The laboratory narrative noted that samples were received with bubbles >6mm in 3 of 3 sample vials for the samples listed below.

  Affected Samples:

DR-DPT-33-40	DR-DPT-33-45	DR-DPT-34-35
DR-DPT-34-40	DR-DPT-34-45.	

  Action: The affected sample positive and non-detected results were qualified estimated, (J) and (UJ), respectively, with the exception of the tert-butyl alcohol and vinyl acetate non-detected results which were rejected for RRF criteria non-compliances.

- The following laboratory VOC contaminants were detected in the method blanks and the trip blank sample at the maximum concentrations indicated below.

Analytes	Maximum Conc. µg/l	Action Level µg/l
Methylene chloride [1]	1.53	15.3
Benzene [1]	0.130	0.650

  [1] Method blank MB 240-98372/6 affecting samples DR-DPT-33-15 and DR-DPT-34-15.

  An action level of ten times the maximum level for methylene chloride and five times the maximum level for benzene has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results less than the action level were qualified non-detected, (B), for blank contamination.

Notes

Samples were analyzed at dilutions for VOCs, as listed below, resulting in elevated levels for non-detected VOC analytes.

Sample	Dilution
DR-DPT-33-25	18.18X
DR-DPT-33-30	100X
DR-DPT-33-40	333.33X
DR-DPT-33-45	66.67X
DR-DPT-34-15	2500X
DR-DPT-34-35	500X
DR-DPT-34-40	833.33X
DR-DPT-34-45	40X

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for tert-butyl alcohol, vinyl acetate, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene for instrument A3UX17 on 08/20/13 @ 13:40.

Affected Samples:

DR-DPT-33-25	DR-DPT-33-30	DR-DPT-33-40
DR-DPT-33-45	DR-DPT-34-35	DR-DPT-34-40
DR-DPT-34-45		

Actions: The samples had non-detected results for 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene which were not qualified. The sample non-detected tert-butyl alcohol and vinyl acetate results were rejected for RRF criteria non-compliances and no further action was necessary.

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for bromomethane, chloroethane, tert-butyl alcohol, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene for instrument A3UX17 on 08/21/13 @ 12:34.

Affected Samples: DR-DPT-33-15 and DR-DPT-34-15

Actions: The samples had non-detected results for bromomethane, chloroethane, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene which were not qualified. The sample non-detected tert-butyl alcohol results were rejected for RRF criteria non-compliances and no further action was necessary.

The MS and MSD %Rs and the MS/MSD VOC analyte RPDs were non-compliant for many VOC analytes for spiked samples from another SDG (SDG samples 240-28014-B-3 and 240-28014-B-4). No validation action was taken as the samples were not from this SDG.

The Chain of Custody record indicated a vial was submitted to the laboratory for the trip blank TB-081413 but the laboratory stated that no vials were received for the trip blank. This item is noted for completeness.

The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC tert-butyl alcohol and vinyl acetate non-detected sample results were rejected due to initial calibration average RRF and CCV RRF criteria non-compliances. VOC samples results were qualified for bubbles >6mm in the sample vials received by the laboratory. Sample VOC results were qualified for blank contamination.

Other Factors Affecting Data Quality: Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to EPA SW-846 Methods 8260B and the Region III EPA Functional Guidelines for Organic Data Validation (9/94).

Tetra Tech
Joseph Kalinyak
Data Validator/Environmental Scientist

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	DR-DPT-33-15			DR-DPT-33-25			DR-DPT-33-30					
SDG: 240-27964-1	LAB_ID	240-27964-2			240-27964-3			240-27964-4					
FRACTION: OV	SAMP_DATE	8/14/2013			8/14/2013			8/14/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		4.2	U		23	U				
1,1,1-TRICHLOROETHANE		0.22	U		4	U		22	U				
1,1,2,2-TETRACHLOROETHANE		0.18	U		3.3	U		18	U				
1,1,2-TRICHLOROETHANE											27	J	P
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		5.1	U		28	U				
1,1-DICHLOROETHANE		0.15	U		2.7	U		15	U				
1,1-DICHLOROETHENE		0.19	U		3.5	U		19	U				
1,1-DICHLOROPROPENE		0.13	U		2.4	U		13	U				
1,2,3-TRICHLOROBENZENE		0.17	U		3.1	U		17	U				
1,2,3-TRICHLOROPROPANE		0.43	U		7.8	U		43	U				
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.11	U		0.59	U				
1,2,4-TRICHLOROBENZENE		0.15	U		2.7	U		15	U				
1,2,4-TRIMETHYLBENZENE		0.12	U		2.2	U		12	U				
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		12	U		67	U				
1,2-DIBROMOETHANE		0.24	U		4.4	U		24	U				
1,2-DICHLOROBENZENE		0.13	U		2.4	U		13	U				
1,2-DICHLOROETHANE		0.22	U		4	U		22	U				
1,2-DICHLOROPROPANE		0.18	U		3.3	U		18	U				
1,3-DICHLOROBENZENE		0.14	U		2.5	U		14	U				
1,3-DICHLOROPROPANE		0.16	U		2.9	U		16	U				
1,4-DICHLOROBENZENE		0.13	U		2.4	U		13	U				
2,2-DICHLOROPROPANE		0.13	U		2.4	U		13	U				
2-BUTANONE		0.57	U		10	U		57	U				
2-CHLOROETHYL VINYL ETHER		0.99	U		18	U		99	U				
2-CHLOROTOLUENE		0.11	U		2	U		11	U				
2-HEXANONE		0.41	U		7.5	U		41	U				
4-CHLOROTOLUENE		0.18	U		3.3	U		18	U				
4-ISOPROPYLTOLUENE		0.12	U		2.2	U		12	U				
4-METHYL-2-PENTANONE		0.32	U		5.8	U		32	U				
ACETONE		1.7	J	P	20	U		110	U				
BENZENE		0.25	B	A	2.4	U		13	U				
BROMOBENZENE		0.13	U		2.4	U		13	U				
BROMOCHLOROMETHANE		0.29	U		5.3	U		29	U				
BROMODICHLOROMETHANE		0.15	U		2.7	U		15	U				
BROMOFORM		0.64	U		12	U		64	U				
BROMOMETHANE		0.41	U		7.5	U		41	U				

PROJ_NO: 04882	NSAMPLE	DR-DPT-33-40			DR-DPT-33-45			DR-DPT-34-15			DR-DPT-34-35		
SDG: 240-27964-1	LAB_ID	240-27964-6			240-27964-8			240-27964-1			240-27964-5		
FRACTION: OV	SAMP_DATE	8/14/2013			8/14/2013			8/14/2013			8/14/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		77	UJ	Q	15	UJ	Q	580	U		120	UJ	Q
1,1,1-TRICHLOROETHANE		73	UJ	Q	15	UJ	Q	550	U		110	UJ	Q
1,1,2,2-TETRACHLOROETHANE		60	UJ	Q	12	UJ	Q	450	U		90	UJ	Q
1,1,2-TRICHLOROETHANE													
1,1,2-TRICHLOROTRIFLUOROETHANE		93	UJ	Q	19	UJ	Q	700	U		140	UJ	Q
1,1-DICHLOROETHANE		50	UJ	Q	10	UJ	Q	380	U		75	UJ	Q
1,1-DICHLOROETHENE		63	UJ	Q	13	UJ	Q	480	U		95	UJ	Q
1,1-DICHLOROPROPENE		43	UJ	Q	8.7	UJ	Q	330	U		65	UJ	Q
1,2,3-TRICHLOROBENZENE		57	UJ	Q	11	UJ	Q	430	U		85	UJ	Q
1,2,3-TRICHLOROPROPANE		140	UJ	Q	29	UJ	Q	1100	U		220	UJ	Q
1,2,3-TRIMETHYLBENZENE		2	UJ	Q	0.39	UJ	Q	15	U		3	UJ	Q
1,2,4-TRICHLOROBENZENE		50	UJ	Q	10	UJ	Q	380	U		75	UJ	Q
1,2,4-TRIMETHYLBENZENE		40	UJ	Q	8	UJ	Q	300	U		60	UJ	Q
1,2-DIBROMO-3-CHLOROPROPANE		220	UJ	Q	45	UJ	Q	1700	U		340	UJ	Q
1,2-DIBROMOETHANE		80	UJ	Q	16	UJ	Q	600	U		120	UJ	Q
1,2-DICHLOROBENZENE		43	UJ	Q	8.7	UJ	Q	330	U		65	UJ	Q
1,2-DICHLOROETHANE		73	UJ	Q	15	UJ	Q	550	U		110	UJ	Q
1,2-DICHLOROPROPANE		60	UJ	Q	12	UJ	Q	450	U		90	UJ	Q
1,3-DICHLOROBENZENE		47	UJ	Q	9.3	UJ	Q	350	U		70	UJ	Q
1,3-DICHLOROPROPANE		53	UJ	Q	11	UJ	Q	400	U		80	UJ	Q
1,4-DICHLOROBENZENE		43	UJ	Q	8.7	UJ	Q	330	U		65	UJ	Q
2,2-DICHLOROPROPANE		43	UJ	Q	8.7	UJ	Q	330	U		65	UJ	Q
2-BUTANONE		190	UJ	Q	38	UJ	Q	1400	U		290	UJ	Q
2-CHLOROETHYL VINYL ETHER		330	UJ	Q	66	UJ	Q	2500	U		500	UJ	Q
2-CHLOROTOLUENE		37	UJ	Q	7.3	UJ	Q	280	U		55	UJ	Q
2-HEXANONE		140	UJ	Q	27	UJ	Q	1000	U		210	UJ	Q
4-CHLOROTOLUENE		60	UJ	Q	12	UJ	Q	450	U		90	UJ	Q
4-ISOPROPYLTOLUENE		40	UJ	Q	8	UJ	Q	300	U		60	UJ	Q
4-METHYL-2-PENTANONE		110	UJ	Q	21	UJ	Q	800	U		160	UJ	Q
ACETONE		370	UJ	Q	73	UJ	Q	7000	J	P	550	UJ	Q
BENZENE		43	UJ	Q	9.4	J	PQ	660	B	A	80	J	PQ
BROMOBENZENE		43	UJ	Q	8.7	UJ	Q	330	U		65	UJ	Q
BROMOCHLOROMETHANE		97	UJ	Q	19	UJ	Q	730	U		150	UJ	Q
BROMODICHLOROMETHANE		50	UJ	Q	10	UJ	Q	380	U		75	UJ	Q
BROMOFORM		210	UJ	Q	43	UJ	Q	1600	U		320	UJ	Q
BROMOMETHANE		140	UJ	Q	27	UJ	Q	1000	U		210	UJ	Q

PROJ_NO: 04882	NSAMPLE	DR-DPT-34-40			DR-DPT-34-45					
SDG: 240-27964-1	LAB_ID	240-27964-7			240-27964-9					
FRACTION: OV	SAMP_DATE	8/14/2013			8/14/2013					
MEDIA: WATER	QC_TYPE	NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		190	UJ	Q	9.2	UJ	Q			
1,1,1-TRICHLOROETHANE		180	UJ	Q	8.8	UJ	Q			
1,1,2,2-TETRACHLOROETHANE		150	UJ	Q	7.2	UJ	Q			
1,1,2-TRICHLOROETHANE								14	J	PQ
1,1,2-TRICHLOROTRIFLUOROETHANE		230	UJ	Q	11	UJ	Q			
1,1-DICHLOROETHANE		120	UJ	Q	6	UJ	Q			
1,1-DICHLOROETHENE		160	UJ	Q	7.6	UJ	Q			
1,1-DICHLOROPROPENE		110	UJ	Q	5.2	UJ	Q			
1,2,3-TRICHLOROBENZENE		140	UJ	Q	6.8	UJ	Q			
1,2,3-TRICHLOROPROPANE		360	UJ	Q	17	UJ	Q			
1,2,3-TRIMETHYLBENZENE		4.9	UJ	Q	0.24	UJ	Q			
1,2,4-TRICHLOROBENZENE		120	UJ	Q	6	UJ	Q			
1,2,4-TRIMETHYLBENZENE		100	UJ	Q	4.8	UJ	Q			
1,2-DIBROMO-3-CHLOROPROPANE		560	UJ	Q	27	UJ	Q			
1,2-DIBROMOETHANE		200	UJ	Q	9.6	UJ	Q			
1,2-DICHLOROBENZENE		110	UJ	Q	5.2	UJ	Q			
1,2-DICHLOROETHANE		180	UJ	Q	10	J	PQ			
1,2-DICHLOROPROPANE		150	UJ	Q	7.2	UJ	Q			
1,3-DICHLOROBENZENE		120	UJ	Q	5.6	UJ	Q			
1,3-DICHLOROPROPANE		130	UJ	Q	6.4	UJ	Q			
1,4-DICHLOROBENZENE		110	UJ	Q	5.2	UJ	Q			
2,2-DICHLOROPROPANE		110	UJ	Q	5.2	UJ	Q			
2-BUTANONE		470	UJ	Q	98	J	PQ			
2-CHLOROETHYL VINYL ETHER		820	UJ	Q	40	UJ	Q			
2-CHLOROTOLUENE		92	UJ	Q	4.4	UJ	Q			
2-HEXANONE		340	UJ	Q	16	UJ	Q			
4-CHLOROTOLUENE		150	UJ	Q	7.2	UJ	Q			
4-ISOPROPYLTOLUENE		100	UJ	Q	4.8	UJ	Q			
4-METHYL-2-PENTANONE		270	UJ	Q	13	UJ	Q			
ACETONE		920	UJ	Q	54	J	PQ			
BENZENE		120	J	PQ	9.9	J	PQ			
BROMOBENZENE		110	UJ	Q	5.2	UJ	Q			
BROMOCHLOROMETHANE		240	UJ	Q	12	UJ	Q			
BROMODICHLOROMETHANE		120	UJ	Q	6	UJ	Q			
BROMOFORM		530	UJ	Q	26	UJ	Q			
BROMOMETHANE		340	UJ	Q	16	UJ	Q			

PROJ_NO: 04882	NSAMPLE	DR-DPT-33-15			DR-DPT-33-25			DR-DPT-33-30					
SDG: 240-27964-1	LAB_ID	240-27964-2			240-27964-3			240-27964-4					
FRACTION: OV	SAMP_DATE	8/14/2013			8/14/2013			8/14/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U		2.4	U		13	U				
CARBON TETRACHLORIDE		0.13	U		2.4	U		13	U				
CHLOROBENZENE		0.15	U		2.7	U		15	U				
CHLORODIBROMOMETHANE		0.18	U		3.3	U		18	U				
CHLOROETHANE		0.29	U		5.3	U		29	U				
CHLOROFORM		0.16	U		2.9	U		16	U				
CHLOROMETHANE		0.3	U		5.5	U		30	U				
CIS-1,2-DICHLOROETHENE		0.17	U		100			760					
CIS-1,3-DICHLOROPROPENE		0.14	U		2.5	U		14	U				
DIBROMOMETHANE		0.28	U		5.1	U		28	U				
DICHLORODIFLUOROMETHANE		0.31	U		5.6	U		31	U				
DIISOPROPYL ETHER		1.5	U		27	U		150	U				
ETHYL TERT-BUTYL ETHER		0.11	U		2	U		11	U				
ETHYLBENZENE		0.17	U		3.1	U		17	U				
HEXACHLOROBUTADIENE		0.3	U		5.5	U		30	U				
ISOPROPYLBENZENE		0.13	U		2.4	U		13	U				
M+P-XYLENES		0.24	U		4.4	U		24	U				
METHYL TERT-BUTYL ETHER		0.17	U		3.1	U		17	U				
METHYLENE CHLORIDE		0.33	U		6	U		33	U				
NAPHTHALENE		0.24	U		4.4	U		24	U				
N-BUTYLBENZENE		0.12	U		2.2	U		12	U				
N-PROPYLBENZENE		0.14	U		2.5	U		14	U				
O-XYLENE		0.14	U		2.5	U		14	U				
SEC-BUTYLBENZENE		0.13	U		2.4	U		13	U				
STYRENE		0.11	U		2	U		11	U				
TERT-AMYL METHYL ETHER		0.067	U		1.2	U		6.7	U				
TERT-BUTYLBENZENE		0.13	U		2.4	U		13	U				
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	71	UR	C	390	UR	C			
TETRACHLOROETHENE		0.29	U		5.3	U		29	U				
TOLUENE		0.13	U		2.4	U		13	U				
TOTAL XYLENES		0.14	U		2.5	U		14	U				
TRANS-1,2-DICHLOROETHENE		0.19	U		3.5	U		19	U				
TRANS-1,3-DICHLOROPROPENE		0.19	U		3.5	U		19	U				
TRICHLOROETHENE		0.17	U		480			2400					
TRICHLOROFLUOROMETHANE		0.21	U		3.8	U		21	U				
VINYL ACETATE		0.19	UR	C	3.5	UR	C	19	UR	C			

PROJ_NO: 04882	NSAMPLE	DR-DPT-33-40			DR-DPT-33-45			DR-DPT-34-15			DR-DPT-34-35		
SDG: 240-27964-1	LAB_ID	240-27964-6			240-27964-8			240-27964-1			240-27964-5		
FRACTION: OV	SAMP_DATE	8/14/2013			8/14/2013			8/14/2013			8/14/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE	43	UJ	Q	8.7	UJ	Q	330	U		65	UJ	Q
CARBON TETRACHLORIDE	43	UJ	Q	8.7	UJ	Q	330	U		65	UJ	Q
CHLOROBENZENE	50	UJ	Q	10	UJ	Q	380	U		75	UJ	Q
CHLORODIBROMOMETHANE	60	UJ	Q	12	UJ	Q	450	U		90	UJ	Q
CHLOROETHANE	97	UJ	Q	19	UJ	Q	730	U		150	UJ	Q
CHLOROFORM	53	UJ	Q	11	UJ	Q	400	U		1000	J	Q
CHLOROMETHANE	100	UJ	Q	20	UJ	Q	750	U		150	UJ	Q
CIS-1,2-DICHLOROETHENE	4200	J	Q	900	J	Q	75000			2100	J	Q
CIS-1,3-DICHLOROPROPENE	47	UJ	Q	9.3	UJ	Q	350	U		70	UJ	Q
DIBROMOMETHANE	93	UJ	Q	19	UJ	Q	700	U		140	UJ	Q
DICHLORODIFLUOROMETHANE	100	UJ	Q	21	UJ	Q	780	U		160	UJ	Q
DIISOPROPYL ETHER	500	UJ	Q	100	UJ	Q	3800	U		750	UJ	Q
ETHYL TERT-BUTYL ETHER	37	UJ	Q	7.3	UJ	Q	280	U		55	UJ	Q
ETHYLBENZENE	57	UJ	Q	11	UJ	Q	430	U		85	UJ	Q
HEXACHLOROBUTADIENE	100	UJ	Q	20	UJ	Q	750	U		150	UJ	Q
ISOPROPYLBENZENE	43	UJ	Q	8.7	UJ	Q	330	U		65	UJ	Q
M+P-XYLENES	80	UJ	Q	16	UJ	Q	670	J	P	120	UJ	Q
METHYL TERT-BUTYL ETHER	57	UJ	Q	11	UJ	Q	430	U		85	UJ	Q
METHYLENE CHLORIDE	110	UJ	Q	22	UJ	Q	4800	B	A	170	UJ	Q
NAPHTHALENE	80	UJ	Q	16	UJ	Q	600	U		120	UJ	Q
N-BUTYLBENZENE	40	UJ	Q	8	UJ	Q	300	U		60	UJ	Q
N-PROPYLBENZENE	47	UJ	Q	9.3	UJ	Q	350	U		70	UJ	Q
O-XYLENE	47	UJ	Q	9.3	UJ	Q	350	U		70	UJ	Q
SEC-BUTYLBENZENE	43	UJ	Q	8.7	UJ	Q	330	U		65	UJ	Q
STYRENE	37	UJ	Q	7.3	UJ	Q	280	U		55	UJ	Q
TERT-AMYL METHYL ETHER	22	UJ	Q	4.5	UJ	Q	170	U		34	UJ	Q
TERT-BUTYLBENZENE	43	UJ	Q	8.7	UJ	Q	330	U		65	UJ	Q
TERTIARY-BUTYL ALCOHOL	1300	UR	C	260	UR	C	9800	UR	C	2000	UR	C
TETRACHLOROETHENE	97	UJ	Q	19	UJ	Q	730	U		150	UJ	Q
TOLUENE	43	UJ	Q	8.7	UJ	Q	37000			310	J	PQ
TOTAL XYLENES	47	UJ	Q	9.3	UJ	Q	670	J	P	70	UJ	Q
TRANS-1,2-DICHLOROETHENE	71	J	PQ	13	UJ	Q	480	U		95	UJ	Q
TRANS-1,3-DICHLOROPROPENE	63	UJ	Q	13	UJ	Q	480	U		95	UJ	Q
TRICHLOROETHENE	9900	J	Q	1600	J	Q	430	U		7800	J	Q
TRICHLOROFLUOROMETHANE	70	UJ	Q	14	UJ	Q	530	U		110	UJ	Q
VINYL ACETATE	63	UR	C	13	UR	C	480	UR	C	95	UR	C

PROJ_NO: 04882	NSAMPLE	DR-DPT-34-40			DR-DPT-34-45					
SDG: 240-27964-1	LAB_ID	240-27964-7			240-27964-9					
FRACTION: OV	SAMP_DATE	8/14/2013			8/14/2013					
MEDIA: WATER	QC_TYPE	NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		110	UJ	Q	24	J	PQ			
CARBON TETRACHLORIDE		110	UJ	Q	5.2	UJ	Q			
CHLOROBENZENE		120	UJ	Q	6	UJ	Q			
CHLORODIBROMOMETHANE		150	UJ	Q	7.2	UJ	Q			
CHLOROETHANE		240	UJ	Q	12	UJ	Q			
CHLOROFORM		1700	J	Q	270	J	Q			
CHLOROMETHANE		250	UJ	Q	12	UJ	Q			
CIS-1,2-DICHLOROETHENE		3600	J	Q	820	J	Q			
CIS-1,3-DICHLOROPROPENE		120	UJ	Q	5.6	UJ	Q			
DIBROMOMETHANE		230	UJ	Q	11	UJ	Q			
DICHLORODIFLUOROMETHANE		260	UJ	Q	12	UJ	Q			
DIISOPROPYL ETHER		1200	UJ	Q	60	UJ	Q			
ETHYL TERT-BUTYL ETHER		92	UJ	Q	4.4	UJ	Q			
ETHYLBENZENE		140	UJ	Q	6.8	UJ	Q			
HEXACHLOROBUTADIENE		250	UJ	Q	12	UJ	Q			
ISOPROPYLBENZENE		110	UJ	Q	5.2	UJ	Q			
M+P-XYLENES		200	UJ	Q	9.6	UJ	Q			
METHYL TERT-BUTYL ETHER		140	UJ	Q	6.8	UJ	Q			
METHYLENE CHLORIDE		270	UJ	Q	80	J	Q			
NAPHTHALENE		200	UJ	Q	9.6	UJ	Q			
N-BUTYLBENZENE		100	UJ	Q	4.8	UJ	Q			
N-PROPYLBENZENE		120	UJ	Q	5.6	UJ	Q			
O-XYLENE		120	J	PQ	5.6	UJ	Q			
SEC-BUTYLBENZENE		110	UJ	Q	5.2	UJ	Q			
STYRENE		92	UJ	Q	4.4	UJ	Q			
TERT-AMYL METHYL ETHER		56	UJ	Q	2.7	UJ	Q			
TERT-BUTYLBENZENE		110	UJ	Q	5.2	UJ	Q			
TERTIARY-BUTYL ALCOHOL		3200	UR	C	160	UR	C			
TETRACHLOROETHENE		240	UJ	Q	12	UJ	Q			
TOLUENE		3100	J	Q	110	J	Q			
TOTAL XYLENES		120	J	PQ	5.6	UJ	Q			
TRANS-1,2-DICHLOROETHENE		160	UJ	Q	7.6	UJ	Q			
TRANS-1,3-DICHLOROPROPENE		160	UJ	Q	7.6	UJ	Q			
TRICHLOROETHENE		16000	J	Q	1000	J	Q			
TRICHLOROFLUOROMETHANE		170	UJ	Q	8.4	UJ	Q			
VINYL ACETATE		160	UR	C	7.6	UR	C			

PROJ_NO: 04882	NSAMPLE	DR-DPT-33-15			DR-DPT-33-25			DR-DPT-33-30					
SDG: 240-27964-1	LAB_ID	240-27964-2			240-27964-3			240-27964-4					
FRACTION: OV	SAMP_DATE	8/14/2013			8/14/2013			8/14/2013					
MEDIA: WATER	QC_TYPE	NM			NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL CHLORIDE		0.22	U		7.8	J	P	27	J	P			

PROJ_NO: 04882	NSAMPLE	DR-DPT-33-40			DR-DPT-33-45			DR-DPT-34-15			DR-DPT-34-35		
SDG: 240-27964-1	LAB_ID	240-27964-6			240-27964-8			240-27964-1			240-27964-5		
FRACTION: OV	SAMP_DATE	8/14/2013			8/14/2013			8/14/2013			8/14/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL CHLORIDE		460	J	Q	110	J	Q	87000			520	J	Q

PROJ_NO: 04882	NSAMPLE	DR-DPT-34-40			DR-DPT-34-45					
SDG: 240-27964-1	LAB_ID	240-27964-7			240-27964-9					
FRACTION: OV	SAMP_DATE	8/14/2013			8/14/2013					
MEDIA: WATER	QC_TYPE	NM			NM			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL CHLORIDE		400	J	PQ	210	J	Q			

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-15 Lab Sample ID: 240-27964-2

Matrix: Water Lab File ID: UXR7132.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 15:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	1.7	J	10	1.1
71-43-2	Benzene	0.25	J B	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-15 Lab Sample ID: 240-27964-2

Matrix: Water Lab File ID: UXR7132.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 15:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-15 Lab Sample ID: 240-27964-2

Matrix: Water Lab File ID: UXR7132.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 15:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	96		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-15 Lab Sample ID: 240-27964-2

Matrix: Water Lab File ID: UXR7132.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 15:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-25 Lab Sample ID: 240-27964-3

Matrix: Water Lab File ID: UXR7082.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:50

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 17:59

Soil Aliquot Vol: Dilution Factor: 18.18

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	18	U	18	4.2
71-55-6	1,1,1-Trichloroethane	18	U	18	4.0
79-34-5	1,1,2,2-Tetrachloroethane	18	U	18	3.3
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	18	U	18	5.1
75-34-3	1,1-Dichloroethane	18	U	18	2.7
75-35-4	1,1-Dichloroethene	18	U	18	3.5
563-58-6	1,1-Dichloropropene	18	U	18	2.4
87-61-6	1,2,3-Trichlorobenzene	18	U	18	3.1
96-18-4	1,2,3-Trichloropropane	18	U	18	7.8
526-73-8	1,2,3-Trimethylbenzene	91	U	91	0.11
120-82-1	1,2,4-Trichlorobenzene	18	U	18	2.7
95-63-6	1,2,4-Trimethylbenzene	18	U	18	2.2
96-12-8	1,2-Dibromo-3-Chloropropane	36	U	36	12
95-50-1	1,2-Dichlorobenzene	18	U	18	2.4
107-06-2	1,2-Dichloroethane	18	U	18	4.0
78-87-5	1,2-Dichloropropane	18	U	18	3.3
541-73-1	1,3-Dichlorobenzene	18	U	18	2.5
142-28-9	1,3-Dichloropropane	18	U	18	2.9
106-46-7	1,4-Dichlorobenzene	18	U	18	2.4
594-20-7	2,2-Dichloropropane	18	U	18	2.4
110-75-8	2-Chloroethyl vinyl ether	180	U	180	18
95-49-8	2-Chlorotoluene	18	U	18	2.0
591-78-6	2-Hexanone	180	U	180	7.5
108-86-1	Bromobenzene	18	U	18	2.4
74-97-5	Bromochloromethane	18	U	18	5.3
106-43-4	4-Chlorotoluene	18	U	18	3.3
99-87-6	p-Isopropyltoluene	18	U	18	2.2
67-64-1	Acetone	180	U	180	20
71-43-2	Benzene	18	U	18	2.4
75-25-2	Bromoform	18	U	18	12
74-83-9	Bromomethane	18	U	18	7.5
75-15-0	Carbon disulfide	18	U	18	2.4
56-23-5	Carbon tetrachloride	18	U	18	2.4
108-90-7	Chlorobenzene	18	U	18	2.7
75-00-3	Chloroethane	18	U	18	5.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-25 | Lab Sample ID: 240-27964-3

Matrix: Water | Lab File ID: UXR7082.D

Analysis Method: 8260B | Date Collected: 08/14/2013 11:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 17:59

Soil Aliquot Vol: | Dilution Factor: 18.18

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	18	U	18	2.9
74-87-3	Chloromethane	18	U	18	5.5
156-59-2	cis-1,2-Dichloroethene	100		18	3.1
10061-01-5	cis-1,3-Dichloropropene	18	U	18	2.5
87-68-3	Hexachlorobutadiene	18	U	18	5.5
74-95-3	Dibromomethane	18	U	18	5.1
75-27-4	Bromodichloromethane	18	U	18	2.7
75-71-8	Dichlorodifluoromethane	18	U	18	5.6
100-41-4	Ethylbenzene	18	U	18	3.1
106-93-4	1,2-Dibromoethane	18	U	18	4.4
108-20-3	Diisopropyl ether	180	U	180	27
91-20-3	Naphthalene	18	U	18	4.4
179601-23-1	m-Xylene & p-Xylene	36	U	36	4.4
104-51-8	n-Butylbenzene	18	U	18	2.2
98-82-8	Isopropylbenzene	18	U	18	2.4
103-65-1	n-Propylbenzene	18	U	18	2.5
78-93-3	2-Butanone	180	U	180	10
108-10-1	4-Methyl-2-pentanone	180	U	180	5.8
135-98-8	sec-Butylbenzene	18	U	18	2.4
1634-04-4	Methyl tert-butyl ether	18	U	18	3.1
994-05-8	Tert-amyl-methyl ether (TAME)	91	U	91	1.2
75-09-2	Methylene Chloride	18	U	18	6.0
95-47-6	o-Xylene	18	U	18	2.5
100-42-5	Styrene	18	U	18	2.0
637-92-3	Ethyl-t-butyl ether (ETBE)	91	U	91	2.0
98-06-6	tert-Butylbenzene	18	U	18	2.4
127-18-4	Tetrachloroethene	18	U	18	5.3
108-88-3	Toluene	18	U	18	2.4
156-60-5	trans-1,2-Dichloroethene	18	U	18	3.5
10061-02-6	trans-1,3-Dichloropropene	18	U	18	3.5
79-01-6	Trichloroethene	480		18	3.1
75-69-4	Trichlorofluoromethane	18	U	18	3.8
108-05-4	Vinyl acetate	36	U	36	3.5
75-01-4	Vinyl chloride	7.8	J	18	4.0
75-65-0	tert-Butyl alcohol	910	U	910	71
1330-20-7	Xylenes, Total	36	U	36	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-25 Lab Sample ID: 240-27964-3

Matrix: Water Lab File ID: UXR7082.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:50

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 17:59

Soil Aliquot Vol: Dilution Factor: 18.18

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	18	U	18	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-25 Lab Sample ID: 240-27964-3

Matrix: Water Lab File ID: UXR7082.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:50

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 17:59

Soil Aliquot Vol: Dilution Factor: 18.18

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-30 | Lab Sample ID: 240-27964-4

Matrix: Water | Lab File ID: UXR7083.D

Analysis Method: 8260B | Date Collected: 08/14/2013 12:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 18:21

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	100	U	100	23
71-55-6	1,1,1-Trichloroethane	100	U	100	22
79-34-5	1,1,2,2-Tetrachloroethane	100	U	100	18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	100	U	100	28
75-34-3	1,1-Dichloroethane	100	U	100	15
75-35-4	1,1-Dichloroethene	100	U	100	19
563-58-6	1,1-Dichloropropene	100	U	100	13
87-61-6	1,2,3-Trichlorobenzene	100	U	100	17
96-18-4	1,2,3-Trichloropropane	100	U	100	43
526-73-8	1,2,3-Trimethylbenzene	500	U	500	0.59
120-82-1	1,2,4-Trichlorobenzene	100	U	100	15
95-63-6	1,2,4-Trimethylbenzene	100	U	100	12
96-12-8	1,2-Dibromo-3-Chloropropane	200	U	200	67
95-50-1	1,2-Dichlorobenzene	100	U	100	13
107-06-2	1,2-Dichloroethane	100	U	100	22
78-87-5	1,2-Dichloropropane	100	U	100	18
541-73-1	1,3-Dichlorobenzene	100	U	100	14
142-28-9	1,3-Dichloropropane	100	U	100	16
106-46-7	1,4-Dichlorobenzene	100	U	100	13
594-20-7	2,2-Dichloropropane	100	U	100	13
110-75-8	2-Chloroethyl vinyl ether	1000	U	1000	99
95-49-8	2-Chlorotoluene	100	U	100	11
591-78-6	2-Hexanone	1000	U	1000	41
108-86-1	Bromobenzene	100	U	100	13
74-97-5	Bromochloromethane	100	U	100	29
106-43-4	4-Chlorotoluene	100	U	100	18
99-87-6	p-Isopropyltoluene	100	U	100	12
67-64-1	Acetone	1000	U	1000	110
71-43-2	Benzene	100	U	100	13
75-25-2	Bromoform	100	U	100	64
74-83-9	Bromomethane	100	U	100	41
75-15-0	Carbon disulfide	100	U	100	13
56-23-5	Carbon tetrachloride	100	U	100	13
108-90-7	Chlorobenzene	100	U	100	15
75-00-3	Chloroethane	100	U	100	29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-30 | Lab Sample ID: 240-27964-4

Matrix: Water | Lab File ID: UXR7083.D

Analysis Method: 8260B | Date Collected: 08/14/2013 12:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 18:21

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	100	U	100	16
74-87-3	Chloromethane	100	U	100	30
156-59-2	cis-1,2-Dichloroethene	760		100	17
10061-01-5	cis-1,3-Dichloropropene	100	U	100	14
87-68-3	Hexachlorobutadiene	100	U	100	30
74-95-3	Dibromomethane	100	U	100	28
75-27-4	Bromodichloromethane	100	U	100	15
75-71-8	Dichlorodifluoromethane	100	U	100	31
100-41-4	Ethylbenzene	100	U	100	17
106-93-4	1,2-Dibromoethane	100	U	100	24
108-20-3	Diisopropyl ether	1000	U	1000	150
91-20-3	Naphthalene	100	U	100	24
179601-23-1	m-Xylene & p-Xylene	200	U	200	24
104-51-8	n-Butylbenzene	100	U	100	12
98-82-8	Isopropylbenzene	100	U	100	13
103-65-1	n-Propylbenzene	100	U	100	14
78-93-3	2-Butanone	1000	U	1000	57
108-10-1	4-Methyl-2-pentanone	1000	U	1000	32
135-98-8	sec-Butylbenzene	100	U	100	13
1634-04-4	Methyl tert-butyl ether	100	U	100	17
994-05-8	Tert-amyl-methyl ether (TAME)	500	U	500	6.7
75-09-2	Methylene Chloride	100	U	100	33
95-47-6	o-Xylene	100	U	100	14
100-42-5	Styrene	100	U	100	11
637-92-3	Ethyl-t-butyl ether (ETBE)	500	U	500	11
98-06-6	tert-Butylbenzene	100	U	100	13
127-18-4	Tetrachloroethene	100	U	100	29
108-88-3	Toluene	100	U	100	13
156-60-5	trans-1,2-Dichloroethene	100	U	100	19
10061-02-6	trans-1,3-Dichloropropene	100	U	100	19
79-01-6	Trichloroethene	2400		100	17
75-69-4	Trichlorofluoromethane	100	U	100	21
108-05-4	Vinyl acetate	200	U	200	19
75-01-4	Vinyl chloride	27	J	100	22
75-65-0	tert-Butyl alcohol	5000	U	5000	390
1330-20-7	Xylenes, Total	200	U	200	14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-30 Lab Sample ID: 240-27964-4

Matrix: Water Lab File ID: UXR7083.D

Analysis Method: 8260B Date Collected: 08/14/2013 12:10

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 18:21

Soil Aliquot Vol: Dilution Factor: 100

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	100	U	100	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-30 | Lab Sample ID: 240-27964-4

Matrix: Water | Lab File ID: UXR7083.D

Analysis Method: 8260B | Date Collected: 08/14/2013 12:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 18:21

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 27

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
79-00-5	1,1,2-Trichloroethane	7.58	27	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-40 | Lab Sample ID: 240-27964-6

Matrix: Water | Lab File ID: UXR7085.D

Analysis Method: 8260B | Date Collected: 08/14/2013 13:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 19:05

Soil Aliquot Vol: | Dilution Factor: 333.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	330	U	330	77
71-55-6	1,1,1-Trichloroethane	330	U	330	73
79-34-5	1,1,2,2-Tetrachloroethane	330	U	330	60
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	330	U	330	93
75-34-3	1,1-Dichloroethane	330	U	330	50
75-35-4	1,1-Dichloroethene	330	U	330	63
563-58-6	1,1-Dichloropropene	330	U	330	43
87-61-6	1,2,3-Trichlorobenzene	330	U	330	57
96-18-4	1,2,3-Trichloropropane	330	U	330	140
526-73-8	1,2,3-Trimethylbenzene	1700	U	1700	2.0
120-82-1	1,2,4-Trichlorobenzene	330	U	330	50
95-63-6	1,2,4-Trimethylbenzene	330	U	330	40
96-12-8	1,2-Dibromo-3-Chloropropane	670	U	670	220
95-50-1	1,2-Dichlorobenzene	330	U	330	43
107-06-2	1,2-Dichloroethane	330	U	330	73
78-87-5	1,2-Dichloropropane	330	U	330	60
541-73-1	1,3-Dichlorobenzene	330	U	330	47
142-28-9	1,3-Dichloropropane	330	U	330	53
106-46-7	1,4-Dichlorobenzene	330	U	330	43
594-20-7	2,2-Dichloropropane	330	U	330	43
110-75-8	2-Chloroethyl vinyl ether	3300	U	3300	330
95-49-8	2-Chlorotoluene	330	U	330	37
591-78-6	2-Hexanone	3300	U	3300	140
108-86-1	Bromobenzene	330	U	330	43
74-97-5	Bromochloromethane	330	U	330	97
106-43-4	4-Chlorotoluene	330	U	330	60
99-87-6	p-Isopropyltoluene	330	U	330	40
67-64-1	Acetone	3300	U	3300	370
71-43-2	Benzene	330	U	330	43
75-25-2	Bromoform	330	U	330	210
74-83-9	Bromomethane	330	U	330	140
75-15-0	Carbon disulfide	330	U	330	43
56-23-5	Carbon tetrachloride	330	U	330	43
108-90-7	Chlorobenzene	330	U	330	50
75-00-3	Chloroethane	330	U	330	97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-40 Lab Sample ID: 240-27964-6

Matrix: Water Lab File ID: UXR7085.D

Analysis Method: 8260B Date Collected: 08/14/2013 13:20

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 19:05

Soil Aliquot Vol: Dilution Factor: 333.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	330	U	330	53
74-87-3	Chloromethane	330	U	330	100
156-59-2	cis-1,2-Dichloroethene	4200		330	57
10061-01-5	cis-1,3-Dichloropropene	330	U	330	47
87-68-3	Hexachlorobutadiene	330	U	330	100
74-95-3	Dibromomethane	330	U	330	93
75-27-4	Bromodichloromethane	330	U	330	50
75-71-8	Dichlorodifluoromethane	330	U	330	100
100-41-4	Ethylbenzene	330	U	330	57
106-93-4	1,2-Dibromoethane	330	U	330	80
108-20-3	Diisopropyl ether	3300	U	3300	500
91-20-3	Naphthalene	330	U	330	80
179601-23-1	m-Xylene & p-Xylene	670	U	670	80
104-51-8	n-Butylbenzene	330	U	330	40
98-82-8	Isopropylbenzene	330	U	330	43
103-65-1	n-Propylbenzene	330	U	330	47
78-93-3	2-Butanone	3300	U	3300	190
108-10-1	4-Methyl-2-pentanone	3300	U	3300	110
135-98-8	sec-Butylbenzene	330	U	330	43
1634-04-4	Methyl tert-butyl ether	330	U	330	57
994-05-8	Tert-amyl-methyl ether (TAME)	1700	U	1700	22
75-09-2	Methylene Chloride	330	U	330	110
95-47-6	o-Xylene	330	U	330	47
100-42-5	Styrene	330	U	330	37
637-92-3	Ethyl-t-butyl ether (ETBE)	1700	U	1700	37
98-06-6	tert-Butylbenzene	330	U	330	43
127-18-4	Tetrachloroethene	330	U	330	97
108-88-3	Toluene	330	U	330	43
156-60-5	trans-1,2-Dichloroethene	71	J	330	63
10061-02-6	trans-1,3-Dichloropropene	330	U	330	63
79-01-6	Trichloroethene	9900		330	57
75-69-4	Trichlorofluoromethane	330	U	330	70
108-05-4	Vinyl acetate	670	U	670	63
75-01-4	Vinyl chloride	460		330	73
75-65-0	tert-Butyl alcohol	17000	U	17000	1300
1330-20-7	Xylenes, Total	670	U	670	47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-40 | Lab Sample ID: 240-27964-6

Matrix: Water | Lab File ID: UXR7085.D

Analysis Method: 8260B | Date Collected: 08/14/2013 13:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 19:05

Soil Aliquot Vol: | Dilution Factor: 333.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	330	U	330	60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	86		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-40 Lab Sample ID: 240-27964-6

Matrix: Water Lab File ID: UXR7085.D

Analysis Method: 8260B Date Collected: 08/14/2013 13:20

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 19:05

Soil Aliquot Vol: Dilution Factor: 333.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-45 | Lab Sample ID: 240-27964-8

Matrix: Water | Lab File ID: UXR7087.D

Analysis Method: 8260B | Date Collected: 08/14/2013 14:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 19:49

Soil Aliquot Vol: | Dilution Factor: 66.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	67	U	67	15
71-55-6	1,1,1-Trichloroethane	67	U	67	15
79-34-5	1,1,2,2-Tetrachloroethane	67	U	67	12
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	67	U	67	19
75-34-3	1,1-Dichloroethane	67	U	67	10
75-35-4	1,1-Dichloroethene	67	U	67	13
563-58-6	1,1-Dichloropropene	67	U	67	8.7
87-61-6	1,2,3-Trichlorobenzene	67	U	67	11
96-18-4	1,2,3-Trichloropropane	67	U	67	29
526-73-8	1,2,3-Trimethylbenzene	330	U	330	0.39
120-82-1	1,2,4-Trichlorobenzene	67	U	67	10
95-63-6	1,2,4-Trimethylbenzene	67	U	67	8.0
96-12-8	1,2-Dibromo-3-Chloropropane	130	U	130	45
95-50-1	1,2-Dichlorobenzene	67	U	67	8.7
107-06-2	1,2-Dichloroethane	67	U	67	15
78-87-5	1,2-Dichloropropane	67	U	67	12
541-73-1	1,3-Dichlorobenzene	67	U	67	9.3
142-28-9	1,3-Dichloropropane	67	U	67	11
106-46-7	1,4-Dichlorobenzene	67	U	67	8.7
594-20-7	2,2-Dichloropropane	67	U	67	8.7
110-75-8	2-Chloroethyl vinyl ether	670	U	670	66
95-49-8	2-Chlorotoluene	67	U	67	7.3
591-78-6	2-Hexanone	670	U	670	27
108-86-1	Bromobenzene	67	U	67	8.7
74-97-5	Bromochloromethane	67	U	67	19
106-43-4	4-Chlorotoluene	67	U	67	12
99-87-6	p-Isopropyltoluene	67	U	67	8.0
67-64-1	Acetone	670	U	670	73
71-43-2	Benzene	9.4	J	67	8.7
75-25-2	Bromoform	67	U	67	43
74-83-9	Bromomethane	67	U	67	27
75-15-0	Carbon disulfide	67	U	67	8.7
56-23-5	Carbon tetrachloride	67	U	67	8.7
108-90-7	Chlorobenzene	67	U	67	10
75-00-3	Chloroethane	67	U	67	19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-45 | Lab Sample ID: 240-27964-8

Matrix: Water | Lab File ID: UXR7087.D

Analysis Method: 8260B | Date Collected: 08/14/2013 14:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 19:49

Soil Aliquot Vol: | Dilution Factor: 66.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	67	U	67	11
74-87-3	Chloromethane	67	U	67	20
156-59-2	cis-1,2-Dichloroethene	900		67	11
10061-01-5	cis-1,3-Dichloropropene	67	U	67	9.3
87-68-3	Hexachlorobutadiene	67	U	67	20
74-95-3	Dibromomethane	67	U	67	19
75-27-4	Bromodichloromethane	67	U	67	10
75-71-8	Dichlorodifluoromethane	67	U	67	21
100-41-4	Ethylbenzene	67	U	67	11
106-93-4	1,2-Dibromoethane	67	U	67	16
108-20-3	Diisopropyl ether	670	U	670	100
91-20-3	Naphthalene	67	U	67	16
179601-23-1	m-Xylene & p-Xylene	130	U	130	16
104-51-8	n-Butylbenzene	67	U	67	8.0
98-82-8	Isopropylbenzene	67	U	67	8.7
103-65-1	n-Propylbenzene	67	U	67	9.3
78-93-3	2-Butanone	670	U	670	38
108-10-1	4-Methyl-2-pentanone	670	U	670	21
135-98-8	sec-Butylbenzene	67	U	67	8.7
1634-04-4	Methyl tert-butyl ether	67	U	67	11
994-05-8	Tert-amyl-methyl ether (TAME)	330	U	330	4.5
75-09-2	Methylene Chloride	67	U	67	22
95-47-6	o-Xylene	67	U	67	9.3
100-42-5	Styrene	67	U	67	7.3
637-92-3	Ethyl-t-butyl ether (ETBE)	330	U	330	7.3
98-06-6	tert-Butylbenzene	67	U	67	8.7
127-18-4	Tetrachloroethene	67	U	67	19
108-88-3	Toluene	67	U	67	8.7
156-60-5	trans-1,2-Dichloroethene	67	U	67	13
10061-02-6	trans-1,3-Dichloropropene	67	U	67	13
79-01-6	Trichloroethene	1600		67	11
75-69-4	Trichlorofluoromethane	67	U	67	14
108-05-4	Vinyl acetate	130	U	130	13
75-01-4	Vinyl chloride	110		67	15
75-65-0	tert-Butyl alcohol	3300	U	3300	260
1330-20-7	Xylenes, Total	130	U	130	9.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-45 Lab Sample ID: 240-27964-8

Matrix: Water Lab File ID: UXR7087.D

Analysis Method: 8260B Date Collected: 08/14/2013 14:05

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 19:49

Soil Aliquot Vol: Dilution Factor: 66.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	67	U	67	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	88		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-33-45 Lab Sample ID: 240-27964-8

Matrix: Water Lab File ID: UXR7087.D

Analysis Method: 8260B Date Collected: 08/14/2013 14:05

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 19:49

Soil Aliquot Vol: Dilution Factor: 66.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-15 Lab Sample ID: 240-27964-1

Matrix: Water Lab File ID: UXR7131.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 15:01

Soil Aliquot Vol: Dilution Factor: 2500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	2500	U	2500	580
71-55-6	1,1,1-Trichloroethane	2500	U	2500	550
79-34-5	1,1,2,2-Tetrachloroethane	2500	U	2500	450
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	2500	U	2500	700
75-34-3	1,1-Dichloroethane	2500	U	2500	380
75-35-4	1,1-Dichloroethene	2500	U	2500	480
563-58-6	1,1-Dichloropropene	2500	U	2500	330
87-61-6	1,2,3-Trichlorobenzene	2500	U	2500	430
96-18-4	1,2,3-Trichloropropane	2500	U	2500	1100
526-73-8	1,2,3-Trimethylbenzene	13000	U	13000	15
120-82-1	1,2,4-Trichlorobenzene	2500	U	2500	380
95-63-6	1,2,4-Trimethylbenzene	2500	U	2500	300
96-12-8	1,2-Dibromo-3-Chloropropane	5000	U	5000	1700
95-50-1	1,2-Dichlorobenzene	2500	U	2500	330
107-06-2	1,2-Dichloroethane	2500	U	2500	550
78-87-5	1,2-Dichloropropane	2500	U	2500	450
541-73-1	1,3-Dichlorobenzene	2500	U	2500	350
142-28-9	1,3-Dichloropropane	2500	U	2500	400
106-46-7	1,4-Dichlorobenzene	2500	U	2500	330
594-20-7	2,2-Dichloropropane	2500	U	2500	330
110-75-8	2-Chloroethyl vinyl ether	25000	U	25000	2500
95-49-8	2-Chlorotoluene	2500	U	2500	280
591-78-6	2-Hexanone	25000	U	25000	1000
108-86-1	Bromobenzene	2500	U	2500	330
74-97-5	Bromochloromethane	2500	U	2500	730
106-43-4	4-Chlorotoluene	2500	U	2500	450
99-87-6	p-Isopropyltoluene	2500	U	2500	300
67-64-1	Acetone	7000	J	25000	2800
71-43-2	Benzene	660	J B	2500	330
75-25-2	Bromoform	2500	U	2500	1600
74-83-9	Bromomethane	2500	U	2500	1000
75-15-0	Carbon disulfide	2500	U	2500	330
56-23-5	Carbon tetrachloride	2500	U	2500	330
108-90-7	Chlorobenzene	2500	U	2500	380
75-00-3	Chloroethane	2500	U	2500	730

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-15 Lab Sample ID: 240-27964-1

Matrix: Water Lab File ID: UXR7131.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 15:01

Soil Aliquot Vol: Dilution Factor: 2500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	2500	U	2500	400
74-87-3	Chloromethane	2500	U	2500	750
156-59-2	cis-1,2-Dichloroethene	75000		2500	430
10061-01-5	cis-1,3-Dichloropropene	2500	U	2500	350
87-68-3	Hexachlorobutadiene	2500	U	2500	750
74-95-3	Dibromomethane	2500	U	2500	700
75-27-4	Bromodichloromethane	2500	U	2500	380
75-71-8	Dichlorodifluoromethane	2500	U	2500	780
100-41-4	Ethylbenzene	2500	U	2500	430
106-93-4	1,2-Dibromoethane	2500	U	2500	600
108-20-3	Diisopropyl ether	25000	U	25000	3800
91-20-3	Naphthalene	2500	U	2500	600
179601-23-1	m-Xylene & p-Xylene	670	J	5000	600
104-51-8	n-Butylbenzene	2500	U	2500	300
98-82-8	Isopropylbenzene	2500	U	2500	330
103-65-1	n-Propylbenzene	2500	U	2500	350
78-93-3	2-Butanone	25000	U	25000	1400
108-10-1	4-Methyl-2-pentanone	25000	U	25000	800
135-98-8	sec-Butylbenzene	2500	U	2500	330
1634-04-4	Methyl tert-butyl ether	2500	U	2500	430
994-05-8	Tert-amyl-methyl ether (TAME)	13000	U	13000	170
75-09-2	Methylene Chloride	4800	B	2500	830
95-47-6	o-Xylene	2500	U	2500	350
100-42-5	Styrene	2500	U	2500	280
637-92-3	Ethyl-t-butyl ether (ETBE)	13000	U	13000	280
98-06-6	tert-Butylbenzene	2500	U	2500	330
127-18-4	Tetrachloroethene	2500	U	2500	730
108-88-3	Toluene	37000		2500	330
156-60-5	trans-1,2-Dichloroethene	2500	U	2500	480
10061-02-6	trans-1,3-Dichloropropene	2500	U	2500	480
79-01-6	Trichloroethene	2500	U	2500	430
75-69-4	Trichlorofluoromethane	2500	U	2500	530
108-05-4	Vinyl acetate	5000	U	5000	480
75-01-4	Vinyl chloride	87000		2500	550
75-65-0	tert-Butyl alcohol	130000	U	130000	9800
1330-20-7	Xylenes, Total	670	J	5000	350

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-15 Lab Sample ID: 240-27964-1

Matrix: Water Lab File ID: UXR7131.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 15:01

Soil Aliquot Vol: Dilution Factor: 2500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	2500	U	2500	450

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-117
2037-26-5	Toluene-d8 (Surr)	81		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-15 Lab Sample ID: 240-27964-1

Matrix: Water Lab File ID: UXR7131.D

Analysis Method: 8260B Date Collected: 08/14/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 15:01

Soil Aliquot Vol: Dilution Factor: 2500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-35 | Lab Sample ID: 240-27964-5

Matrix: Water | Lab File ID: UXR7084.D

Analysis Method: 8260B | Date Collected: 08/14/2013 13:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 18:43

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	500	U	500	120
71-55-6	1,1,1-Trichloroethane	500	U	500	110
79-34-5	1,1,2,2-Tetrachloroethane	500	U	500	90
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	500	U	500	140
75-34-3	1,1-Dichloroethane	500	U	500	75
75-35-4	1,1-Dichloroethene	500	U	500	95
563-58-6	1,1-Dichloropropene	500	U	500	65
87-61-6	1,2,3-Trichlorobenzene	500	U	500	85
96-18-4	1,2,3-Trichloropropane	500	U	500	220
526-73-8	1,2,3-Trimethylbenzene	2500	U	2500	3.0
120-82-1	1,2,4-Trichlorobenzene	500	U	500	75
95-63-6	1,2,4-Trimethylbenzene	500	U	500	60
96-12-8	1,2-Dibromo-3-Chloropropane	1000	U	1000	340
95-50-1	1,2-Dichlorobenzene	500	U	500	65
107-06-2	1,2-Dichloroethane	500	U	500	110
78-87-5	1,2-Dichloropropane	500	U	500	90
541-73-1	1,3-Dichlorobenzene	500	U	500	70
142-28-9	1,3-Dichloropropane	500	U	500	80
106-46-7	1,4-Dichlorobenzene	500	U	500	65
594-20-7	2,2-Dichloropropane	500	U	500	65
110-75-8	2-Chloroethyl vinyl ether	5000	U	5000	500
95-49-8	2-Chlorotoluene	500	U	500	55
591-78-6	2-Hexanone	5000	U	5000	210
108-86-1	Bromobenzene	500	U	500	65
74-97-5	Bromochloromethane	500	U	500	150
106-43-4	4-Chlorotoluene	500	U	500	90
99-87-6	p-Isopropyltoluene	500	U	500	60
67-64-1	Acetone	5000	U	5000	550
71-43-2	Benzene	80	J	500	65
75-25-2	Bromoform	500	U	500	320
74-83-9	Bromomethane	500	U	500	210
75-15-0	Carbon disulfide	500	U	500	65
56-23-5	Carbon tetrachloride	500	U	500	65
108-90-7	Chlorobenzene	500	U	500	75
75-00-3	Chloroethane	500	U	500	150

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-35 Lab Sample ID: 240-27964-5

Matrix: Water Lab File ID: UXR7084.D

Analysis Method: 8260B Date Collected: 08/14/2013 13:02

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 18:43

Soil Aliquot Vol: Dilution Factor: 500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1000		500	80
74-87-3	Chloromethane	500	U	500	150
156-59-2	cis-1,2-Dichloroethene	2100		500	85
10061-01-5	cis-1,3-Dichloropropene	500	U	500	70
87-68-3	Hexachlorobutadiene	500	U	500	150
74-95-3	Dibromomethane	500	U	500	140
75-27-4	Bromodichloromethane	500	U	500	75
75-71-8	Dichlorodifluoromethane	500	U	500	160
100-41-4	Ethylbenzene	500	U	500	85
106-93-4	1,2-Dibromoethane	500	U	500	120
108-20-3	Diisopropyl ether	5000	U	5000	750
91-20-3	Naphthalene	500	U	500	120
179601-23-1	m-Xylene & p-Xylene	1000	U	1000	120
104-51-8	n-Butylbenzene	500	U	500	60
98-82-8	Isopropylbenzene	500	U	500	65
103-65-1	n-Propylbenzene	500	U	500	70
78-93-3	2-Butanone	5000	U	5000	290
108-10-1	4-Methyl-2-pentanone	5000	U	5000	160
135-98-8	sec-Butylbenzene	500	U	500	65
1634-04-4	Methyl tert-butyl ether	500	U	500	85
994-05-8	Tert-amyl-methyl ether (TAME)	2500	U	2500	34
75-09-2	Methylene Chloride	500	U	500	170
95-47-6	o-Xylene	500	U	500	70
100-42-5	Styrene	500	U	500	55
637-92-3	Ethyl-t-butyl ether (ETBE)	2500	U	2500	55
98-06-6	tert-Butylbenzene	500	U	500	65
127-18-4	Tetrachloroethene	500	U	500	150
108-88-3	Toluene	310	J	500	65
156-60-5	trans-1,2-Dichloroethene	500	U	500	95
10061-02-6	trans-1,3-Dichloropropene	500	U	500	95
79-01-6	Trichloroethene	7800		500	85
75-69-4	Trichlorofluoromethane	500	U	500	110
108-05-4	Vinyl acetate	1000	U	1000	95
75-01-4	Vinyl chloride	520		500	110
75-65-0	tert-Butyl alcohol	25000	U	25000	2000
1330-20-7	Xylenes, Total	1000	U	1000	70

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-35 Lab Sample ID: 240-27964-5

Matrix: Water Lab File ID: UXR7084.D

Analysis Method: 8260B Date Collected: 08/14/2013 13:02

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 18:43

Soil Aliquot Vol: Dilution Factor: 500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	500	U	500	90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-35 Lab Sample ID: 240-27964-5

Matrix: Water Lab File ID: UXR7084.D

Analysis Method: 8260B Date Collected: 08/14/2013 13:02

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 18:43

Soil Aliquot Vol: Dilution Factor: 500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-40 | Lab Sample ID: 240-27964-7

Matrix: Water | Lab File ID: UXR7086.D

Analysis Method: 8260B | Date Collected: 08/14/2013 13:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 19:27

Soil Aliquot Vol: | Dilution Factor: 833.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	830	U	830	190
71-55-6	1,1,1-Trichloroethane	830	U	830	180
79-34-5	1,1,2,2-Tetrachloroethane	830	U	830	150
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	830	U	830	230
75-34-3	1,1-Dichloroethane	830	U	830	120
75-35-4	1,1-Dichloroethene	830	U	830	160
563-58-6	1,1-Dichloropropene	830	U	830	110
87-61-6	1,2,3-Trichlorobenzene	830	U	830	140
96-18-4	1,2,3-Trichloropropane	830	U	830	360
526-73-8	1,2,3-Trimethylbenzene	4200	U	4200	4.9
120-82-1	1,2,4-Trichlorobenzene	830	U	830	120
95-63-6	1,2,4-Trimethylbenzene	830	U	830	100
96-12-8	1,2-Dibromo-3-Chloropropane	1700	U	1700	560
95-50-1	1,2-Dichlorobenzene	830	U	830	110
107-06-2	1,2-Dichloroethane	830	U	830	180
78-87-5	1,2-Dichloropropane	830	U	830	150
541-73-1	1,3-Dichlorobenzene	830	U	830	120
142-28-9	1,3-Dichloropropane	830	U	830	130
106-46-7	1,4-Dichlorobenzene	830	U	830	110
594-20-7	2,2-Dichloropropane	830	U	830	110
110-75-8	2-Chloroethyl vinyl ether	8300	U	8300	820
95-49-8	2-Chlorotoluene	830	U	830	92
591-78-6	2-Hexanone	8300	U	8300	340
108-86-1	Bromobenzene	830	U	830	110
74-97-5	Bromochloromethane	830	U	830	240
106-43-4	4-Chlorotoluene	830	U	830	150
99-87-6	p-Isopropyltoluene	830	U	830	100
67-64-1	Acetone	8300	U	8300	920
71-43-2	Benzene	120	J	830	110
75-25-2	Bromoform	830	U	830	530
74-83-9	Bromomethane	830	U	830	340
75-15-0	Carbon disulfide	830	U	830	110
56-23-5	Carbon tetrachloride	830	U	830	110
108-90-7	Chlorobenzene	830	U	830	120
75-00-3	Chloroethane	830	U	830	240

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-40 Lab Sample ID: 240-27964-7

Matrix: Water Lab File ID: UXR7086.D

Analysis Method: 8260B Date Collected: 08/14/2013 13:40

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 19:27

Soil Aliquot Vol: Dilution Factor: 833.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1700		830	130
74-87-3	Chloromethane	830	U	830	250
156-59-2	cis-1,2-Dichloroethene	3600		830	140
10061-01-5	cis-1,3-Dichloropropene	830	U	830	120
87-68-3	Hexachlorobutadiene	830	U	830	250
74-95-3	Dibromomethane	830	U	830	230
75-27-4	Bromodichloromethane	830	U	830	120
75-71-8	Dichlorodifluoromethane	830	U	830	260
100-41-4	Ethylbenzene	830	U	830	140
106-93-4	1,2-Dibromoethane	830	U	830	200
108-20-3	Diisopropyl ether	8300	U	8300	1200
91-20-3	Naphthalene	830	U	830	200
179601-23-1	m-Xylene & p-Xylene	1700	U	1700	200
104-51-8	n-Butylbenzene	830	U	830	100
98-82-8	Isopropylbenzene	830	U	830	110
103-65-1	n-Propylbenzene	830	U	830	120
78-93-3	2-Butanone	8300	U	8300	470
108-10-1	4-Methyl-2-pentanone	8300	U	8300	270
135-98-8	sec-Butylbenzene	830	U	830	110
1634-04-4	Methyl tert-butyl ether	830	U	830	140
994-05-8	Tert-amyl-methyl ether (TAME)	4200	U	4200	56
75-09-2	Methylene Chloride	830	U	830	270
95-47-6	o-Xylene	120	J	830	120
100-42-5	Styrene	830	U	830	92
637-92-3	Ethyl-t-butyl ether (ETBE)	4200	U	4200	92
98-06-6	tert-Butylbenzene	830	U	830	110
127-18-4	Tetrachloroethene	830	U	830	240
108-88-3	Toluene	3100		830	110
156-60-5	trans-1,2-Dichloroethene	830	U	830	160
10061-02-6	trans-1,3-Dichloropropene	830	U	830	160
79-01-6	Trichloroethene	16000		830	140
75-69-4	Trichlorofluoromethane	830	U	830	170
108-05-4	Vinyl acetate	1700	U	1700	160
75-01-4	Vinyl chloride	400	J	830	180
75-65-0	tert-Butyl alcohol	42000	U	42000	3200
1330-20-7	Xylenes, Total	120	J	1700	120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-40 Lab Sample ID: 240-27964-7

Matrix: Water Lab File ID: UXR7086.D

Analysis Method: 8260B Date Collected: 08/14/2013 13:40

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 19:27

Soil Aliquot Vol: Dilution Factor: 833.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	830	U	830	150

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	99		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-40 Lab Sample ID: 240-27964-7

Matrix: Water Lab File ID: UXR7086.D

Analysis Method: 8260B Date Collected: 08/14/2013 13:40

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 19:27

Soil Aliquot Vol: Dilution Factor: 833.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-45 Lab Sample ID: 240-27964-9

Matrix: Water Lab File ID: UXR7088.D

Analysis Method: 8260B Date Collected: 08/14/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 20:11

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	40	U	40	9.2
71-55-6	1,1,1-Trichloroethane	40	U	40	8.8
79-34-5	1,1,2,2-Tetrachloroethane	40	U	40	7.2
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	40	U	40	11
75-34-3	1,1-Dichloroethane	40	U	40	6.0
75-35-4	1,1-Dichloroethene	40	U	40	7.6
563-58-6	1,1-Dichloropropene	40	U	40	5.2
87-61-6	1,2,3-Trichlorobenzene	40	U	40	6.8
96-18-4	1,2,3-Trichloropropane	40	U	40	17
526-73-8	1,2,3-Trimethylbenzene	200	U	200	0.24
120-82-1	1,2,4-Trichlorobenzene	40	U	40	6.0
95-63-6	1,2,4-Trimethylbenzene	40	U	40	4.8
96-12-8	1,2-Dibromo-3-Chloropropane	80	U	80	27
95-50-1	1,2-Dichlorobenzene	40	U	40	5.2
107-06-2	1,2-Dichloroethane	10	J	40	8.8
78-87-5	1,2-Dichloropropane	40	U	40	7.2
541-73-1	1,3-Dichlorobenzene	40	U	40	5.6
142-28-9	1,3-Dichloropropane	40	U	40	6.4
106-46-7	1,4-Dichlorobenzene	40	U	40	5.2
594-20-7	2,2-Dichloropropane	40	U	40	5.2
110-75-8	2-Chloroethyl vinyl ether	400	U	400	40
95-49-8	2-Chlorotoluene	40	U	40	4.4
591-78-6	2-Hexanone	400	U	400	16
108-86-1	Bromobenzene	40	U	40	5.2
74-97-5	Bromochloromethane	40	U	40	12
106-43-4	4-Chlorotoluene	40	U	40	7.2
99-87-6	p-Isopropyltoluene	40	U	40	4.8
67-64-1	Acetone	54	J	400	44
71-43-2	Benzene	9.9	J	40	5.2
75-25-2	Bromoform	40	U	40	26
74-83-9	Bromomethane	40	U	40	16
75-15-0	Carbon disulfide	24	J	40	5.2
56-23-5	Carbon tetrachloride	40	U	40	5.2
108-90-7	Chlorobenzene	40	U	40	6.0
75-00-3	Chloroethane	40	U	40	12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-45 Lab Sample ID: 240-27964-9

Matrix: Water Lab File ID: UXR7088.D

Analysis Method: 8260B Date Collected: 08/14/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 20:11

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	270		40	6.4
74-87-3	Chloromethane	40	U	40	12
156-59-2	cis-1,2-Dichloroethene	820		40	6.8
10061-01-5	cis-1,3-Dichloropropene	40	U	40	5.6
87-68-3	Hexachlorobutadiene	40	U	40	12
74-95-3	Dibromomethane	40	U	40	11
75-27-4	Bromodichloromethane	40	U	40	6.0
75-71-8	Dichlorodifluoromethane	40	U	40	12
100-41-4	Ethylbenzene	40	U	40	6.8
106-93-4	1,2-Dibromoethane	40	U	40	9.6
108-20-3	Diisopropyl ether	400	U	400	60
91-20-3	Naphthalene	40	U	40	9.6
179601-23-1	m-Xylene & p-Xylene	80	U	80	9.6
104-51-8	n-Butylbenzene	40	U	40	4.8
98-82-8	Isopropylbenzene	40	U	40	5.2
103-65-1	n-Propylbenzene	40	U	40	5.6
78-93-3	2-Butanone	98	J	400	23
108-10-1	4-Methyl-2-pentanone	400	U	400	13
135-98-8	sec-Butylbenzene	40	U	40	5.2
1634-04-4	Methyl tert-butyl ether	40	U	40	6.8
994-05-8	Tert-amyl-methyl ether (TAME)	200	U	200	2.7
75-09-2	Methylene Chloride	80		40	13
95-47-6	o-Xylene	40	U	40	5.6
100-42-5	Styrene	40	U	40	4.4
637-92-3	Ethyl-t-butyl ether (ETBE)	200	U	200	4.4
98-06-6	tert-Butylbenzene	40	U	40	5.2
127-18-4	Tetrachloroethene	40	U	40	12
108-88-3	Toluene	110		40	5.2
156-60-5	trans-1,2-Dichloroethene	40	U	40	7.6
10061-02-6	trans-1,3-Dichloropropene	40	U	40	7.6
79-01-6	Trichloroethene	1000		40	6.8
75-69-4	Trichlorofluoromethane	40	U	40	8.4
108-05-4	Vinyl acetate	80	U	80	7.6
75-01-4	Vinyl chloride	210		40	8.8
75-65-0	tert-Butyl alcohol	2000	U	2000	160
1330-20-7	Xylenes, Total	80	U	80	5.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-45 Lab Sample ID: 240-27964-9

Matrix: Water Lab File ID: UXR7088.D

Analysis Method: 8260B Date Collected: 08/14/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 20:11

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	40	U	40	7.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-45 Lab Sample ID: 240-27964-9

Matrix: Water Lab File ID: UXR7088.D

Analysis Method: 8260B Date Collected: 08/14/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 20:11

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

Number TICs Found: 1 TIC Result Total: 14

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
79-00-5	1,1,2-Trichloroethane	7.58	14	J

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 240-27964-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-34-45	240-27964-9	NM	08/14/2013	08/20/2013	08/20/2013	6	0	6
OV	UG/L	DR-DPT-34-40	240-27964-7	NM	08/14/2013	08/20/2013	08/20/2013	6	0	6
OV	UG/L	DR-DPT-34-35	240-27964-5	NM	08/14/2013	08/20/2013	08/20/2013	6	0	6
OV	UG/L	DR-DPT-34-15	240-27964-1	NM	08/14/2013	08/21/2013	08/21/2013	7	0	7
OV	UG/L	DR-DPT-33-45	240-27964-8	NM	08/14/2013	08/20/2013	08/20/2013	6	0	6
OV	UG/L	DR-DPT-33-40	240-27964-6	NM	08/14/2013	08/20/2013	08/20/2013	6	0	6
OV	UG/L	DR-DPT-33-30	240-27964-4	NM	08/14/2013	08/20/2013	08/20/2013	6	0	6
OV	UG/L	DR-DPT-33-25	240-27964-3	NM	08/14/2013	08/20/2013	08/20/2013	6	0	6
OV	UG/L	DR-DPT-33-15	240-27964-2	NM	08/14/2013	08/21/2013	08/21/2013	7	0	7

3.4

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/14/13	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) (5 days)			112IC04882
(301) 528-3021 Phone	TAT if different from Below: Standard			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			Sampler: S. Cameron
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT- 34-15	8/14/2013	1105	GW	Water	3		x	
DR-DPT- 33-15	8/14/2013	1115	GW	Water	3		x	
DR-DPT- 33-25	8/14/2013	1150	GW	Water	3		x	
DR-DPT- 33-30	8/14/2013	1210	GW	Water	3		x	
DR-DPT- 34-35 *	8/14/2013	1302	GW	Water	3		x	
DR-DPT- 33-40 *	8/14/2013	1320	GW	Water	3		x	
DR-DPT- 34-40 *	8/14/2013	1340	GW	Water	3		x	
DR-DPT- 33-45 *	8/14/2013	1405	GW	Water	3		x	
DR-DPT- 34-45 *	8/14/2013	1440	GW	Water	3		x	
DR-DPT-	8/14/2013		GW	Water	3		x	
DR-DPT-	8/14/2013		GW	Water	3		x	
TB-081413	8/14/2013		GW	Water	2		x	

240-27964 Chain of Custody

Preservation Used: (1= Ice) 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
(X) Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client (X) Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: TAT 5 days

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/14/13 1630	[signature]	TestAmerica	8/14/13 1530
Relinquished by: [signature]	Company: TestAmerica	Date/Time: 8/14/13 1650	Received by: [signature]	Company: TA	Date/Time: 8-15-13 910
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

* Air bubbles >6mm
9/11/13

TestAmerica Canton Sample Receipt Form/Narrative Login # : 27964
Canton Facility

Client Xtratech Site Name

Cooler Received on 8-15-13 Opened on 8-15-13

Cooler unpacked by:

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other

TestAmerica Cooler # Foam Box (Client Cooler) Box Other

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF −1 °C) Observed Cooler Temp. °C	Corrected Cooler Temp. °C	
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. 3.4 °C	Corrected Cooler Temp. 3.4 °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. °C	Corrected Cooler Temp. °C	
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. °C	Corrected Cooler Temp. °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC376062
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? (Yes) No NA
13. Was a trip blank present in the cooler(s)? Yes (No)

Contacted PM JWN Date 8/15/13 by JWN via (Verbal) Voice Mail Other
Concerning #14

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

Did not receive TB-081413.

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) 3 @ each (DPT-34-35, 33-40, 34-40, 33-45, 34-45) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-27964-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/15/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.4 C.

The following sample was listed on the Chain of Custody (COC); however, no sample volume was received: TB-081413

The following volatile samples were received with a bubble greater than 6mm in 3 of 3 sample vials: DR-DPT-33-40 (240-27964-6), DR-DPT-33-45 (240-27964-8), DR-DPT-34-35 (240-27964-5), DR-DPT-34-40 (240-27964-7), DR-DPT-34-45 (240-27964-9)

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-34-15 (240-27964-1), DR-DPT-33-15 (240-27964-2), DR-DPT-33-25 (240-27964-3), DR-DPT-33-30 (240-27964-4), DR-DPT-34-35 (240-27964-5), DR-DPT-33-40 (240-27964-6), DR-DPT-34-40 (240-27964-7), DR-DPT-33-45 (240-27964-8) and DR-DPT-34-45 (240-27964-9) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/20/2013 and 08/21/2013.

Methylene Chloride was detected in method blank MB 240-98372/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Benzene was detected in method blank MB 240-98372/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-34-15 (240-27964-1)[2500X], DR-DPT-33-25 (240-27964-3)[18.18X], DR-DPT-33-30 (240-27964-4)[100X], DR-DPT-34-35 (240-27964-5)[500X], DR-DPT-33-40 (240-27964-6)[333.33X], DR-DPT-34-40 (240-27964-7)[833.33X], DR-DPT-33-45 (240-27964-8)[66.67X] and DR-DPT-34-45 (240-27964-9)[40X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27964-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-27964-1	DR-DPT-34-15	Water	08/14/2013 1105	08/15/2013 0910
240-27964-2	DR-DPT-33-15	Water	08/14/2013 1115	08/15/2013 0910
240-27964-3	DR-DPT-33-25	Water	08/14/2013 1150	08/15/2013 0910
240-27964-4	DR-DPT-33-30	Water	08/14/2013 1210	08/15/2013 0910
240-27964-5	DR-DPT-34-35	Water	08/14/2013 1302	08/15/2013 0910
240-27964-6	DR-DPT-33-40	Water	08/14/2013 1320	08/15/2013 0910
240-27964-7	DR-DPT-34-40	Water	08/14/2013 1340	08/15/2013 0910
240-27964-8	DR-DPT-33-45	Water	08/14/2013 1405	08/15/2013 0910
240-27964-9	DR-DPT-34-45	Water	08/14/2013 1440	08/15/2013 0910

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-27964-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-27964-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	E	Result exceeded calibration range.
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	F	RPD of the MS and MSD exceeds the control limits
	N	This flag indicates the presumptive evidence of a compound.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab File ID: BFB414.D BFB Injection Date: 08/17/2013

Instrument ID: A3UX17 BFB Injection Time: 15:32

Analysis Batch No.: 97903

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	42.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	89.6	
175	5.0 - 9.0 % of mass 174	6.2	(6.9)1
176	95.0 - 101.0 % of mass 174	89.6	(100.0)1
177	5.0 - 9.0 % of mass 176	5.4	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97903/2	UXR7004.D	08/17/2013	15:56
	STD8260 240-97903/3	UXR7005.D	08/17/2013	16:18
	STD8260 240-97903/4	UXR7006.D	08/17/2013	16:41
	STD8260 240-97903/5	UXR7007.D	08/17/2013	17:03
	STD8260 240-97903/6	UXR7008.D	08/17/2013	17:25
	STD8260 240-97903/7	UXR7009.D	08/17/2013	17:48
	STDA9 240-97903/8	UXR7010.D	08/17/2013	18:10
	STDA9 240-97903/9	UXR7011.D	08/17/2013	18:32
	STDA9 240-97903/10	UXR7012.D	08/17/2013	18:54
	STDA9 240-97903/11	UXR7013.D	08/17/2013	19:16
	STDA9 240-97903/12	UXR7014.D	08/17/2013	19:39
	STDA9 240-97903/13	UXR7015.D	08/17/2013	20:01
	ICV 240-97903/14	UXR7016.D	08/17/2013	20:23

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27964-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97903/7	UXR7009.D
Level 2	STD8260 240-97903/6	UXR7008.D
Level 3	STD8260 240-97903/5	UXR7007.D
Level 4	STD8260 240-97903/4	UXR7006.D
Level 5	STD8260 240-97903/3	UXR7005.D
Level 6	STD8260 240-97903/2	UXR7004.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3204 0.2926	0.2676	0.2764	0.2861	0.2872	Ave		0.2884				6.2		15.0			
Chloromethane	0.4139 0.3439	0.3668	0.3596	0.3531	0.3711	Ave		0.3681			0.1000	6.6		15.0			
Vinyl chloride	0.3940 0.3125	0.3245	0.3155	0.3332	0.3243	Ave		0.3340				9.1		15.0			
Bromomethane	0.1734 0.0852	0.1389	0.1172	0.1098	0.1078	Qua	0.0082	0.1248	-0.001						0.9990		0.9900
Chloroethane	0.1149 0.0795	0.1143	0.1007	0.0850	0.1011	Ave		0.0993				15.0		15.0			
Trichlorofluoromethane	0.2573 0.2239	0.2306	0.2276	0.2301	0.2270	Ave		0.2327				5.3		15.0			
~~Acrolein~~	0.0416 0.0342	0.0317	0.0345	0.0350	0.0348	Ave		~~0.0353~~				9.4		15.0			
1,1-Dichloroethene	0.2818 0.2716	0.2599	0.2612	0.2809	0.2682	Ave		0.2706				3.5		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2259 0.2105	0.1993	0.2023	0.2185	0.2130	Ave		0.2116				4.7		15.0			
Acetone	0.1943 0.0801	0.1013	0.0910	0.0876	0.0830	Lin1	0.1117	0.0795							1.0000		0.9900
Iodomethane	0.3883 0.3571	0.3803	0.3822	0.3812	0.3768	Ave		0.3777				2.8		15.0			
Carbon disulfide	0.7719 0.7593	0.6773	0.7122	0.7680	0.7537	Ave		0.7404				5.1		15.0			
~~Acetonitrile~~	0.0466 0.0335	0.0340	0.0368	0.0346	0.0344	Ave		~~0.0366~~				14.0		15.0			
Methyl acetate	0.2649 0.2101	0.2094	0.2214	0.2237	0.2177	Ave		0.2245				9.2		15.0			
Methylene Chloride	1.0972 0.2798	0.4538	0.3555	0.3214	0.2971	Lin1	0.4062	0.2728							1.0000		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27964-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0240 0.0204	0.0208	0.0212	0.0221	0.0216	Ave		0.0217				5.9		15.0			
Acrylonitrile	0.1371 0.1043	0.1034	0.1113	0.1144	0.1096	Ave		0.1133				11.0		15.0			
Methyl tert-butyl ether	0.7668 0.7487	0.7032	0.7304	0.7764	0.7508	Ave		0.7461				3.5		15.0			
trans-1,2-Dichloroethene	0.3148 0.2849	0.2867	0.2853	0.2966	0.2863	Ave		0.2924				4.0		15.0			
Hexane	0.0992 0.0780	0.0708	0.0695	0.0827	0.0800	Ave		0.0800				13.0		15.0			
1,1-Dichloroethane	0.5339 0.4884	0.4788	0.4796	0.5057	0.4874	Ave		0.4956			0.1000	4.3		15.0			
Vinyl acetate	0.0353 0.0410	0.0341	0.0395	0.0436	0.0431	Ave		0.0394				10.0		15.0			
2,2-Dichloropropane	0.2891 0.2547	0.2421	0.2517	0.2761	0.2630	Ave		0.2628				6.6		15.0			
cis-1,2-Dichloroethene	0.3348 0.2979	0.2915	0.3010	0.3187	0.3034	Ave		0.3079				5.2		15.0			
2-Butanone	0.1550 0.1121	0.1165	0.1152	0.1221	0.1194	Ave		0.1234				13.0		15.0			
Bromochloromethane	0.1627 0.1407	0.1371	0.1393	0.1472	0.1412	Ave		0.1447				6.5		15.0			
Tetrahydrofuran	0.1433 0.0739	0.0937	0.0801	0.0838	0.0777	Lin1	0.0363	0.0747							0.9990		0.9900
Chloroform	0.4968 0.4344	0.4333	0.4317	0.4548	0.4433	Ave		0.4491				5.6		15.0			
1,1,1-Trichloroethane	0.3491 0.3450	0.3369	0.3423	0.3732	0.3542	Ave		0.3501				3.6		15.0			
Cyclohexane	0.6528 0.5796	0.5383	0.5348	0.6061	0.5879	Ave		0.5833				7.6		15.0			
1,1-Dichloropropene	0.3835 0.3611	0.3385	0.3509	0.3855	0.3654	Ave		0.3641				5.0		15.0			
Carbon tetrachloride	0.3117 0.3191	0.2879	0.2913	0.3292	0.3199	Ave		0.3098				5.4		15.0			
Benzene	1.4198 1.1202	1.1585	1.1063	1.1850	1.1333	Ave		1.1872				9.9		15.0			
1,2-Dichloroethane	0.3511 0.3344	0.3323	0.3346	0.3528	0.3411	Ave		0.3411				2.6		15.0			
Trichloroethene	0.3448 0.2857	0.2917	0.2853	0.3070	0.2909	Ave		0.3009				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27964-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.5453 0.5080	0.4552	0.4671	0.5291	0.5232	Ave		0.5046				7.1		15.0			
1,2-Dichloropropane	0.2805 0.2809	0.2698	0.2732	0.2999	0.2828	Ave		0.2812				3.7		15.0			
~~1,4-Dioxane~~	0.0031 0.0025	0.0029	0.0029	0.0029	0.0027	Ave		~~0.0028~~				6.9		15.0			
Dibromomethane	0.1442 0.1421	0.1403	0.1425	0.1520	0.1431	Ave		0.1440				2.8		15.0			
Bromodichloromethane	0.3119 0.3254	0.2892	0.2930	0.3231	0.3176	Ave		0.3100				5.0		15.0			
2-Chloroethyl vinyl ether	0.1316 0.1591	0.1239	0.1453	0.1553	0.1616	Ave		0.1461				11.0		15.0			
cis-1,3-Dichloropropene	0.3392 0.4287	0.3324	0.3686	0.4103	0.4121	Ave		0.3819				11.0		15.0			
4-Methyl-2-pentanone	0.2607 0.2377	0.2157	0.2417	0.2472	0.2493	Ave		0.2420				6.2		15.0			
Toluene	1.6522 1.4698	1.4513	1.4774	1.5492	1.5164	Ave		1.5194				4.9		15.0			
trans-1,3-Dichloropropene	0.3213 0.4538	0.3447	0.3782	0.4331	0.4465	Ave		0.3963				14.0		15.0			
Ethyl methacrylate	0.4007 0.4327	0.3691	0.3814	0.4268	0.4329	Ave		0.4073				6.8		15.0			
1,1,2-Trichloroethane	0.3167 0.2763	0.2853	0.2849	0.2935	0.2866	Ave		0.2905				4.8		15.0			
Tetrachloroethene	0.3325 0.3049	0.3095	0.3044	0.3290	0.3164	Ave		0.3161				3.9		15.0			
1,3-Dichloropropane	0.5272 0.4996	0.4841	0.4918	0.5267	0.5162	Ave		0.5076				3.6		15.0			
2-Hexanone	0.1971 0.2006	0.1820	0.1978	0.2079	0.2150	Ave		0.2001				5.6		15.0			
Dibromochloromethane	0.2402 0.3001	0.2430	0.2552	0.2811	0.2927	Ave		0.2687				9.7		15.0			
1,2-Dibromoethane	0.2911 0.2813	0.2846	0.2815	0.2929	0.2953	Ave		0.2878				2.1		15.0			
Chlorobenzene	1.1274 0.9807	0.9718	0.9671	1.0149	1.0027	Ave		1.0107			0.3000	5.9		15.0			
1,1,1,2-Tetrachloroethane	0.3060 0.3269	0.2962	0.3098	0.3339	0.3317	Ave		0.3174				4.9		15.0			
Ethylbenzene	0.5443 0.5315	0.5042	0.5217	0.5506	0.5482	Ave		0.5334				3.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27964-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6588 0.6727	0.6095	0.6454	0.6967	0.6838	Ave		0.6612				4.7		15.0			
o-Xylene	0.5652 0.6364	0.5841	0.6074	0.6647	0.6500	Ave		0.6180				6.3		15.0			
Styrene	0.8997 1.0677	0.8939	0.9726	1.0763	1.0831	Ave		0.9989				8.9		15.0			
Bromoform	0.1401 0.1923	0.1362	0.1490	0.1704	0.1835	Ave		0.1619			0.1000	15.0		15.0			
Isopropylbenzene	1.5085 1.6272	1.4364	1.5259	1.6642	1.6725	Ave		1.5725				6.1		15.0			
1,1,2,2-Tetrachloroethane	0.6899 0.5937	0.6221	0.6118	0.6565	0.6264	Ave		0.6334			0.3000	5.4		15.0			
Bromobenzene	0.8428 0.7434	0.7732	0.7399	0.7988	0.7642	Ave		0.7771				5.0		15.0			
1,2,3-Trichloropropane	0.2256 0.1928	0.2102	0.2058	0.2230	0.2026	Ave		0.2100				6.0		15.0			
trans-1,4-Dichloro-2-butene	0.1193 0.1579	0.1115	0.1100	0.1265	0.1387	Ave		0.1273				14.0		15.0			
n-Propylbenzene	0.8083 0.8092	0.7417	0.7798	0.8729	0.8206	Ave		0.8054				5.4		15.0			
2-Chlorotoluene	0.7298 0.6717	0.6515	0.6649	0.7468	0.6980	Ave		0.6938				5.5		15.0			
1,3,5-Trimethylbenzene	2.1369 2.3790	2.1516	2.2670	2.4960	2.4224	Ave		2.3088				6.4		15.0			
4-Chlorotoluene	0.7933 0.7186	0.7058	0.7223	0.7864	0.7387	Ave		0.7442				5.0		15.0			
tert-Butylbenzene	2.0917 2.2012	2.0079	2.0434	2.2852	2.1947	Ave		2.1373				5.0		15.0			
1,2,4-Trimethylbenzene	2.1622 2.4480	2.1730	2.2959	2.5240	2.4090	Ave		2.3353				6.4		15.0			
sec-Butylbenzene	2.8644 2.9340	2.6593	2.7372	3.0508	2.9003	Ave		2.8577				4.9		15.0			
1,3-Dichlorobenzene	1.6000 1.4148	1.3939	1.3950	1.4783	1.4105	Ave		1.4487				5.5		15.0			
p-Isopropyltoluene	2.3644 2.5719	2.2377	2.3885	2.6865	2.5733	Ave		2.4704				6.8		15.0			
1,4-Dichlorobenzene	1.6117 1.4458	1.4717	1.4339	1.5395	1.4513	Ave		1.4923				4.7		15.0			
n-Butylbenzene	1.9979 2.1246	1.8316	1.8865	2.1547	2.0745	Ave		2.0116				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27964-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.5271 1.3033	1.3237	1.3061	1.3852	1.3171	Ave		1.3604				6.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1057 0.0982	0.0874	0.0888	0.0978	0.1015	Ave		0.0966				7.4		15.0			
1,3,5-Trichlorobenzene	1.1940 0.9716	1.0178	1.0187	1.0770	1.0108	Ave		1.0483				7.5		15.0			
1,2,4-Trichlorobenzene	1.1068 0.7641	0.9118	0.8790	0.9473	0.8677	Ave		0.9128				12.0		15.0			
Hexachlorobutadiene	0.6127 0.3153	0.4584	0.4366	0.4435	0.3631	Qua	0.1528	0.4230	-0.003						0.9980		0.9900
Naphthalene	2.0370 1.3497	1.6368	1.6979	1.8755	1.7777	Ave		1.7291				13.0		15.0			
1,2,3-Trichlorobenzene	1.1380 0.5313	0.8347	0.7936	0.8280	0.7164	Qua	-0.050	0.9072	-0.009						1.0000		0.9900
Dibromofluoromethane (Surr)	0.2446 0.2246	0.2310	0.2246	0.2337	0.2289	Ave		0.2312				3.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3381 0.2592	0.2726	0.2664	0.2732	0.2645	Ave		0.2790				11.0		15.0			
Toluene-d8 (Surr)	1.4464 1.2376	1.3008	1.2447	1.2828	1.2699	Ave		1.2971				5.9		15.0			
4-Bromofluorobenzene (Surr)	0.5369 0.4602	0.4610	0.4532	0.4686	0.4753	Ave		0.4759				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27964-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 18:10 Calibration End Date: 08/17/2013 20:01 Calibration ID: 16934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-97903/13	UXR7015.D
Level 2	STDA9 240-97903/12	UXR7014.D
Level 3	STDA9 240-97903/11	UXR7013.D
Level 4	STDA9 240-97903/10	UXR7012.D
Level 5	STDA9 240-97903/9	UXR7011.D
Level 6	STDA9 240-97903/8	UXR7010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4058 0.3150	0.2923	0.3314	0.3073	0.3098	Ave		0.3269				12.0		15.0			
Ethyl ether	0.2556 0.2493	0.2351	0.2562	0.2555	0.2582	Ave		0.2516				3.4		15.0			
3-Chloro-1-propene	0.1295 0.1407	0.1107	0.1227	0.1277	0.1381	Ave		0.1282				8.5		15.0			
Diisopropyl ether	0.2598 0.2542	0.2248	0.2497	0.2520	0.2611	Ave		0.2503				5.3		15.0			
2-Chloro-1,3-butadiene	0.4633 0.4486	0.4063	0.4234	0.4362	0.4556	Ave		0.4389				4.9		15.0			
Ethyl-t-butyl ether (ETBE)	0.8518 0.8690	0.7673	0.8096	0.8401	0.8700	Ave		0.8346				4.8		15.0			
Ethyl acetate	0.2494 0.2478	0.2117	0.2363	0.2410	0.2507	Ave		0.2395				6.1		15.0			
Propionitrile	0.0428 0.0394	0.0395	0.0384	0.0398	0.0403	Ave		0.0400				3.7		15.0			
Methacrylonitrile	0.1716 0.1599	0.1460	0.1626	0.1550	0.1635	Ave		0.1598				5.4		15.0			
Isobutyl alcohol	0.0115 0.0099	0.0089	0.0093	0.0098	0.0102	Ave		0.0099				8.9		15.0			
Tert-amyl-methyl ether (TAME)	0.6806 0.7154	0.5918	0.6571	0.6769	0.7228	Ave		0.6741				7.0		15.0			
n-Heptane	0.0793 0.0787	0.0664	0.0707	0.0732	0.0794	Ave		0.0746				7.3		15.0			
n-Butanol	0.0100 0.0096	0.0086	0.0090	0.0096	0.0098	Ave		0.0094				5.5		15.0			
Methyl methacrylate	0.2118 0.2263	0.1740	0.2034	0.2126	0.2275	Ave		0.2093				9.4		15.0			
2-Nitropropane	0.0419 0.0509	0.0409	0.0407	0.0447	0.0503	Ave		0.0449				10.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27964-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 18:10 Calibration End Date: 08/17/2013 20:01 Calibration ID: 16934

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0934 0.1169	0.0892	0.1098	0.1147	0.1227	Ave		0.1078				13.0		15.0			
1,2,3-Trimethylbenzene	2.2268 2.4130	1.8784	2.1822	2.2922	2.4829	Ave		2.2459				9.5		15.0			
2-Methylnaphthalene	0.8375	1.0311	1.0420	1.0385	0.8614	Ave		0.9621				11.0		15.0			
n-Butyl acetate	0.1966 0.2372	0.1786	0.2194	0.2183	0.2332	Ave		0.2139				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: ICV 240-97903/14 Calibration Date: 08/17/2013 20:23

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7016.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2884	0.1788		1.00	0.0100	-38.0	50.0
Chloromethane	Ave	0.3681	0.3054	0.1000	1.00	0.0100	-17.0	50.0
Vinyl chloride	Ave	0.3340	0.2779		1.00	0.0100	-16.8	20.0
Bromomethane	Qua		0.0984		1.00	0.0100	-16.2	50.0
Chloroethane	Ave	0.0993	0.0941		1.00	0.0100	-5.2	50.0
Trichlorofluoromethane	Ave	0.2327	0.2092		1.00	0.0100	-10.1	50.0
1,1-Dichloroethene	Ave	0.2706	0.2560		1.00	0.0100	-5.4	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2151		1.00	0.0100	1.7	50.0
Acetone	Lin1		0.0745		10.0	0.0200	-13.3	50.0
Iodomethane	Ave	0.3777	0.3783		1.00	0.0100	0.2	50.0
Carbon disulfide	Ave	0.7404	0.7176		1.00	0.0100	-3.1	50.0
Methyl acetate	Ave	0.2245	0.2175		10.0	0.0100	-3.1	50.0
Methylene Chloride	Lin1		0.3178		1.00	0.0100	1.6	50.0
tert-Butyl alcohol	Ave	0.0217	0.0196		50.0	0.200	-9.9	50.0
Methyl tert-butyl ether	Ave	0.7461	0.7094		1.00	0.0100	-4.9	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2736		1.00	0.0100	-6.4	50.0
Hexane	Ave	0.0800	0.0738		1.00	0.0100	-7.9	20.0
1,1-Dichloroethane	Ave	0.4956	0.4741	0.1000	1.00	0.0100	-4.3	50.0
Vinyl acetate	Ave	0.0394	0.0378		2.00	0.0100	-4.1	50.0
2,2-Dichloropropane	Ave	0.2628	0.2377		1.00	0.0100	-9.5	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.2900		1.00	0.0100	-5.8	50.0
2-Butanone	Ave	0.1234	0.1100		10.0	0.0200	-10.9	50.0
Bromochloromethane	Ave	0.1447	0.1357		1.00	0.0100	-6.3	50.0
Tetrahydrofuran	Lin1		0.0720		5.00	0.0100	-8.5	50.0
Chloroform	Ave	0.4491	0.4279		1.00	0.0100	-4.7	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3357		1.00	0.0100	-4.1	50.0
Cyclohexane	Ave	0.5833	0.5169		1.00	0.0100	-11.4	50.0
1,1-Dichloropropene	Ave	0.3641	0.3417		1.00	0.0100	-6.2	50.0
Carbon tetrachloride	Ave	0.3098	0.2982		1.00	0.0100	-3.8	50.0
Benzene	Ave	1.187	1.115		1.00	0.0100	-6.1	50.0
1,2-Dichloroethane	Ave	0.3411	0.3309		1.00	0.0100	-3.0	50.0
Trichloroethene	Ave	0.3009	0.2858		1.00	0.0100	-5.0	50.0
Methylcyclohexane	Ave	0.5046	0.4443		1.00	0.0100	-12.0	50.0
1,2-Dichloropropane	Ave	0.2812	0.2746		1.00	0.0100	-2.3	20.0
Dibromomethane	Ave	0.1440	0.1427		1.00	0.0100	-0.9	50.0
Bromodichloromethane	Ave	0.3100	0.2949		1.00	0.0100	-4.9	50.0
2-Chloroethyl vinyl ether	Ave	0.1461	0.1388		10.0	0.0100	-5.0	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3585		1.00	0.0100	-6.1	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2260		10.0	0.0200	-6.6	50.0
Toluene	Ave	1.519	1.455		1.00	0.0100	-4.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: ICV 240-97903/14 Calibration Date: 08/17/2013 20:23

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7016.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
trans-1,3-Dichloropropene	Ave	0.3963	0.3741		1.00	0.0100	-5.6	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2822		1.00	0.0100	-2.9	50.0
Tetrachloroethene	Ave	0.3161	0.3037		1.00	0.0100	-3.9	50.0
1,3-Dichloropropane	Ave	0.5076	0.4956		1.00	0.0100	-2.4	50.0
2-Hexanone	Ave	0.2001	0.1905		10.0	0.0200	-4.8	50.0
Dibromochloromethane	Ave	0.2687	0.2567		1.00	0.0100	-4.5	50.0
1,2-Dibromoethane	Ave	0.2878	0.2786		1.00	0.0100	-3.2	50.0
Chlorobenzene	Ave	1.011	0.9713	0.3000	1.00	0.0100	-3.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.3102		1.00	0.0100	-2.3	50.0
Ethylbenzene	Ave	0.5334	0.5211		1.00	0.0100	-2.3	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6540		2.00	0.0200	-1.1	50.0
o-Xylene	Ave	0.6180	0.6259		1.00	0.0100	1.3	50.0
Styrene	Ave	0.999	1.033		1.00	0.0100	3.5	50.0
Bromoform	Ave	0.1619	0.1550	0.1000	1.00	0.0100	-4.3	50.0
Isopropylbenzene	Ave	1.572	1.546		1.00	0.0100	-1.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.5894	0.3000	1.00	0.0100	-6.9	50.0
Bromobenzene	Ave	0.7771	0.7523		1.00	0.0100	-3.2	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.1974		1.00	0.0100	-6.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.1258		1.00	0.0200	-1.2	50.0
n-Propylbenzene	Ave	0.8054	0.8140		1.00	0.0100	1.1	50.0
2-Chlorotoluene	Ave	0.6938	0.6855		1.00	0.0100	-1.2	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.312		1.00	0.0100	0.1	50.0
4-Chlorotoluene	Ave	0.7442	0.7263		1.00	0.0100	-2.4	50.0
tert-Butylbenzene	Ave	2.137	2.095		1.00	0.0100	-2.0	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.330		1.00	0.0100	-0.2	50.0
sec-Butylbenzene	Ave	2.858	2.760		1.00	0.0100	-3.4	50.0
1,3-Dichlorobenzene	Ave	1.449	1.386		1.00	0.0100	-4.3	50.0
p-Isopropyltoluene	Ave	2.470	2.536		1.00	0.0100	2.7	50.0
1,4-Dichlorobenzene	Ave	1.492	1.412		1.00	0.0100	-5.4	50.0
n-Butylbenzene	Ave	2.012	1.936		1.00	0.0100	-3.8	50.0
1,2-Dichlorobenzene	Ave	1.360	1.286		1.00	0.0100	-5.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0819		2.00	0.0100	-15.2	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.7212		1.00	0.0100	-21.0	50.0
Hexachlorobutadiene	Qua		0.3195		1.00	0.0100	-24.3	50.0
Naphthalene	Ave	1.729	1.190		1.00	0.0100	-31.2	50.0
1,2,3-Trichlorobenzene	Qua		0.5244		1.00	0.0100	-37.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2109		0.00813	0.00891	-8.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2384		0.00761	0.00891	-14.6	50.0
Toluene-d8 (Surr)	Ave	1.297	1.203		0.00827	0.00891	-7.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4700		0.00880	0.00891	-1.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: ICV 240-97903/14 Calibration Date: 08/17/2013 20:23

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7016.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2516	0.2483		2.00	0.0100	-1.3	50.0
Diisopropyl ether	Ave	0.2503	0.2484		10.0	0.0100	-0.7	50.0
Isobutyl alcohol	Ave	0.0099	0.0094		50.0	0.500	-5.4	50.0
Cyclohexanone	Ave	0.1078	0.0229		20.0	0.200	-78.7*	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.332		0.0104	0.0100	3.8	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab File ID: BFB418.D BFB Injection Date: 08/20/2013

Instrument ID: A3UX17 BFB Injection Time: 13:14

Analysis Batch No.: 98201

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.1	
75	30.0 - 60.0 % of mass 95	44.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	85.3	
175	5.0 - 9.0 % of mass 174	6.1	(7.1)1
176	95.0 - 101.0 % of mass 174	82.6	(96.8)1
177	5.0 - 9.0 % of mass 176	5.5	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98201/2	UXR7071.D	08/20/2013	13:40
	CCV 240-98201/3	UXR7072.D	08/20/2013	14:03
	LCS 240-98201/4	UXR7073.D	08/20/2013	14:25
	MB 240-98201/6	UXR7075.D	08/20/2013	15:10
DR-DPT-33-25	240-27964-3	UXR7082.D	08/20/2013	17:59
DR-DPT-33-30	240-27964-4	UXR7083.D	08/20/2013	18:21
DR-DPT-34-35	240-27964-5	UXR7084.D	08/20/2013	18:43
DR-DPT-33-40	240-27964-6	UXR7085.D	08/20/2013	19:05
DR-DPT-34-40	240-27964-7	UXR7086.D	08/20/2013	19:27
DR-DPT-33-45	240-27964-8	UXR7087.D	08/20/2013	19:49
DR-DPT-34-45	240-27964-9	UXR7088.D	08/20/2013	20:11
	240-28014-B-3 MS	UXR7097.D	08/20/2013	23:29
	240-28014-B-3 MSD	UXR7098.D	08/20/2013	23:51

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: CCVIS 240-98201/2 Calibration Date: 08/20/2013 13:40

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7071.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2884	0.2447		1.00	0.0100	-15.1	50.0
Chloromethane	Ave	0.3681	0.3358	0.1000	1.00	0.0100	-8.8	50.0
Vinyl chloride	Ave	0.3340	0.3014		1.00	0.0100	-9.8	20.0
Bromomethane	Qua		0.1058		1.00	0.0100	-9.4	50.0
Chloroethane	Ave	0.0993	0.0849		1.00	0.0100	-14.4	50.0
Trichlorofluoromethane	Ave	0.2327	0.2226		1.00	0.0100	-4.4	50.0
Acrolein	Ave	0.0353	0.0273		20.0	0.100	-22.6	50.0
1,1-Dichloroethene	Ave	0.2706	0.2674		1.00	0.0100	-1.2	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2196		1.00	0.0100	3.8	50.0
Acetone	Lin1		0.0753		10.0	0.0200	-12.2	50.0
Iodomethane	Ave	0.3777	0.3621		1.00	0.0100	-4.1	50.0
Carbon disulfide	Ave	0.7404	0.6825		1.00	0.0100	-7.8	50.0
Acetonitrile	Ave	0.0366	0.0328		20.0	0.100	-10.4	50.0
Methyl acetate	Ave	0.2245	0.2053		10.0	0.0200	-8.6	50.0
Methylene Chloride	Lin1		0.3617		1.00	0.0100	17.7	50.0
tert-Butyl alcohol	Ave	0.0217	0.0167		50.0	0.200	-23.2	50.0
Acrylonitrile	Ave	0.1133	0.1019		20.0	0.0200	-10.1	50.0
Methyl tert-butyl ether	Ave	0.7461	0.6714		1.00	0.0100	-10.0	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2897		1.00	0.0100	-0.9	50.0
Hexane	Ave	0.0800	0.0738		1.00	0.0100	-7.8	20.0
1,1-Dichloroethane	Ave	0.4956	0.4711	0.1000	1.00	0.0100	-4.9	50.0
Vinyl acetate	Ave	0.0394	0.0290		2.00	0.0100	-26.4	50.0
2,2-Dichloropropane	Ave	0.2628	0.2273		1.00	0.0100	-13.5	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.3007		1.00	0.0100	-2.3	50.0
2-Butanone	Ave	0.1234	0.1084		10.0	0.0200	-12.2	50.0
Bromochloromethane	Ave	0.1447	0.1444		1.00	0.0100	-0.2	50.0
Tetrahydrofuran	Lin1		0.0719		5.00	0.0100	-8.6	50.0
Chloroform	Ave	0.4491	0.4408		1.00	0.0100	-1.8	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3354		1.00	0.0100	-4.2	50.0
Cyclohexane	Ave	0.5833	0.5492		1.00	0.0100	-5.8	50.0
1,1-Dichloropropene	Ave	0.3641	0.3608		1.00	0.0100	-0.9	50.0
Carbon tetrachloride	Ave	0.3098	0.3037		1.00	0.0100	-2.0	50.0
Benzene	Ave	1.187	1.138		1.00	0.0100	-4.2	50.0
1,2-Dichloroethane	Ave	0.3411	0.3470		1.00	0.0100	1.7	50.0
Trichloroethene	Ave	0.3009	0.2948		1.00	0.0100	-2.0	50.0
Methylcyclohexane	Ave	0.5046	0.4822		1.00	0.0100	-4.5	50.0
1,2-Dichloropropane	Ave	0.2812	0.2756		1.00	0.0100	-2.0	20.0
1,4-Dioxane	Ave	0.0028	0.0026		50.0	0.500	-9.2	50.0
Dibromomethane	Ave	0.1440	0.1419		1.00	0.0100	-1.5	50.0
Bromodichloromethane	Ave	0.3100	0.2891		1.00	0.0100	-6.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: CCVIS 240-98201/2 Calibration Date: 08/20/2013 13:40

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7071.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1461	0.1350		10.0	0.0200	-7.6	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3552		1.00	0.0100	-7.0	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2097		10.0	0.0200	-13.4	50.0
Toluene	Ave	1.519	1.525		1.00	0.0100	0.3	20.0
trans-1,3-Dichloropropene	Ave	0.3963	0.3630		1.00	0.0100	-8.4	50.0
Ethyl methacrylate	Ave	0.4073	0.3785		1.00	0.0100	-7.1	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2835		1.00	0.0100	-2.4	50.0
Tetrachloroethene	Ave	0.3161	0.3288		1.00	0.0100	4.0	50.0
1,3-Dichloropropane	Ave	0.5076	0.5052		1.00	0.0100	-0.5	50.0
2-Hexanone	Ave	0.2001	0.1778		10.0	0.0200	-11.1	50.0
Dibromochloromethane	Ave	0.2687	0.2596		1.00	0.0100	-3.4	50.0
1,2-Dibromoethane	Ave	0.2878	0.2879		1.00	0.0100	0.0	50.0
Chlorobenzene	Ave	1.011	1.011	0.3000	1.00	0.0100	-0.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.3139		1.00	0.0100	-1.1	50.0
Ethylbenzene	Ave	0.5334	0.5342		1.00	0.0100	0.1	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6789		2.00	0.0200	2.7	50.0
o-Xylene	Ave	0.6180	0.6409		1.00	0.0100	3.7	50.0
Styrene	Ave	0.999	1.038		1.00	0.0100	3.9	50.0
Bromoform	Ave	0.1619	0.1518	0.1000	1.00	0.0100	-6.2	50.0
Isopropylbenzene	Ave	1.572	1.574		1.00	0.0100	0.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.5805	0.3000	1.00	0.0100	-8.4	50.0
Bromobenzene	Ave	0.7771	0.7557		1.00	0.0100	-2.7	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.1970		1.00	0.0100	-6.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.1183		1.00	0.0100	-7.1	50.0
n-Propylbenzene	Ave	0.8054	0.8095		1.00	0.0100	0.5	50.0
2-Chlorotoluene	Ave	0.6938	0.6885		1.00	0.0100	-0.8	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.266		1.00	0.0100	-1.9	50.0
4-Chlorotoluene	Ave	0.7442	0.7317		1.00	0.0100	-1.7	50.0
tert-Butylbenzene	Ave	2.137	2.059		1.00	0.0100	-3.7	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.285		1.00	0.0100	-2.2	50.0
sec-Butylbenzene	Ave	2.858	2.751		1.00	0.0100	-3.7	50.0
1,3-Dichlorobenzene	Ave	1.449	1.386		1.00	0.0100	-4.3	50.0
p-Isopropyltoluene	Ave	2.470	2.405		1.00	0.0100	-2.7	50.0
1,4-Dichlorobenzene	Ave	1.492	1.460		1.00	0.0100	-2.1	50.0
n-Butylbenzene	Ave	2.012	1.841		1.00	0.0100	-8.5	50.0
1,2-Dichlorobenzene	Ave	1.360	1.305		1.00	0.0100	-4.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0708		2.00	0.0100	-26.7	50.0
1,3,5-Trichlorobenzene	Ave	1.048	0.9233		1.00	0.0100	-11.9	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.6966		1.00	0.0100	-23.7	50.0
Hexachlorobutadiene	Qua		0.3304		1.00	0.0100	-21.4	50.0
Naphthalene	Ave	1.729	1.090		1.00	0.0100	-37.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: CCVIS 240-98201/2 Calibration Date: 08/20/2013 13:40

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7071.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua		0.5146		1.00	0.0100	-38.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2052		0.00791	0.00891	-11.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2353		0.00751	0.00891	-15.7	50.0
Toluene-d8 (Surr)	Ave	1.297	1.154		0.00793	0.00891	-11.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4383		0.00821	0.00891	-7.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: CCV 240-98201/3 Calibration Date: 08/20/2013 14:03

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7072.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3269	0.2989		2.00	0.0100	-8.6	50.0
Ethyl ether	Ave	0.2516	0.2385		2.00	0.0100	-5.2	50.0
3-Chloro-1-propene	Ave	0.1282	0.1197		2.00	0.0100	-6.6	50.0
Diisopropyl ether	Ave	0.2503	0.2430		10.0	0.0500	-2.9	50.0
2-Chloro-1,3-butadiene	Ave	0.4389	0.4261		2.00	0.0100	-2.9	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8346	0.7310		5.00	0.0100	-12.4	50.0
Ethyl acetate	Ave	0.2395	0.2200		4.00	0.0200	-8.1	50.0
Propionitrile	Ave	0.0400	~~0.0350~~		4.00	0.0200	-12.6	50.0
Methacrylonitrile	Ave	0.1598	0.1428		2.00	0.0100	-10.6	50.0
Isobutyl alcohol	Ave	0.0099	~~0.0091~~		50.0	0.200	-8.2	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6741	0.5897		5.00	0.0100	-12.5	50.0
n-Heptane	Ave	0.0746	0.0767		1.00	0.0100	2.7	50.0
~~n-Butanol~~	Ave	0.0094	~~0.0070~~		50.0	0.200	~~-26.0~~	50.0
Methyl methacrylate	Ave	0.2093	0.1908		2.00	0.0100	-8.8	50.0
2-Nitropropane	Ave	0.0449	~~0.0363~~		2.00	0.0200	-19.3	50.0
Cyclohexanone	Ave	0.1078	0.0875		20.0	0.100	-18.8	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.241		0.00998	0.0100	-0.2	50.0
2-Methylnaphthalene	Ave	0.9621			5.00	0.0200		

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab File ID: BFB421.D BFB Injection Date: 08/21/2013

Instrument ID: A3UX17 BFB Injection Time: 12:08

Analysis Batch No.: 98372

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.6	
75	30.0 - 60.0 % of mass 95	42.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.4	(0.4)1
174	50.0 - 120.00 % of mass 95	83.1	
175	5.0 - 9.0 % of mass 174	5.5	(6.6)1
176	95.0 - 101.0 % of mass 174	82.6	(99.5)1
177	5.0 - 9.0 % of mass 176	5.4	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98372/2	UXR7126.D	08/21/2013	12:34
	CCV 240-98372/3	UXR7127.D	08/21/2013	12:57
	LCS 240-98372/4	UXR7128.D	08/21/2013	13:19
	MB 240-98372/6	UXR7130.D	08/21/2013	14:04
DR-DPT-34-15	240-27964-1	UXR7131.D	08/21/2013	15:01
DR-DPT-33-15	240-27964-2	UXR7132.D	08/21/2013	15:23
	240-28014-B-4 MS	UXR7151.D	08/21/2013	22:21
	240-28014-B-4 MSD	UXR7152.D	08/21/2013	22:43

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: CCVIS 240-98372/2 Calibration Date: 08/21/2013 12:34

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7126.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2884	0.2509		1.00	0.0100	-13.0	50.0
Chloromethane	Ave	0.3681	0.2996	0.1000	1.00	0.0100	-18.6	50.0
Vinyl chloride	Ave	0.3340	0.2966		1.00	0.0100	-11.2	20.0
Bromomethane	Qua		0.0898		1.00	0.0100	-24.1	50.0
Chloroethane	Ave	0.0993	0.0608		1.00	0.0100	-38.8	50.0
Trichlorofluoromethane	Ave	0.2327	0.2142		1.00	0.0100	-8.0	50.0
Acrolein	Ave	0.0353	0.0424		20.0	0.100	-20.3	50.0
1,1-Dichloroethene	Ave	0.2706	0.2600		1.00	0.0100	-3.9	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2159		1.00	0.0100	2.1	50.0
Acetone	Lin1		0.0762		10.0	0.0200	-11.2	50.0
Iodomethane	Ave	0.3777	0.3339		1.00	0.0100	-11.6	50.0
Carbon disulfide	Ave	0.7404	0.6233		1.00	0.0100	-15.8	50.0
Acetonitrile	Ave	0.0366	0.0340		20.0	0.100	-7.3	50.0
Methyl acetate	Ave	0.2245	0.1980		10.0	0.0200	-11.8	50.0
Methylene Chloride	Lin1		0.3424		1.00	0.0100	10.6	50.0
tert-Butyl alcohol	Ave	0.0217	0.0154		50.0	0.200	-28.9	50.0
Acrylonitrile	Ave	0.1133	0.1085		20.0	0.0200	-4.3	50.0
Methyl tert-butyl ether	Ave	0.7461	0.6294		1.00	0.0100	-15.6	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2788		1.00	0.0100	-4.7	50.0
Hexane	Ave	0.0800	0.0682		1.00	0.0100	-14.8	20.0
1,1-Dichloroethane	Ave	0.4956	0.4503	0.1000	1.00	0.0100	-9.2	50.0
Vinyl acetate	Ave	0.0394	0.0452		2.00	0.0100	14.6	50.0
2,2-Dichloropropane	Ave	0.2628	0.2132		1.00	0.0100	-18.9	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.2826		1.00	0.0100	-8.2	50.0
2-Butanone	Ave	0.1234	0.1083		10.0	0.0200	-12.3	50.0
Bromochloromethane	Ave	0.1447	0.1441		1.00	0.0100	-0.4	50.0
Tetrahydrofuran	Lin1		0.0714		5.00	0.0100	-9.3	50.0
Chloroform	Ave	0.4491	0.4283		1.00	0.0100	-4.6	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3236		1.00	0.0100	-7.6	50.0
Cyclohexane	Ave	0.5833	0.5129		1.00	0.0100	-12.1	50.0
1,1-Dichloropropene	Ave	0.3641	0.3409		1.00	0.0100	-6.4	50.0
Carbon tetrachloride	Ave	0.3098	0.2891		1.00	0.0100	-6.7	50.0
Benzene	Ave	1.187	1.082		1.00	0.0100	-8.9	50.0
1,2-Dichloroethane	Ave	0.3411	0.3326		1.00	0.0100	-2.5	50.0
Trichloroethene	Ave	0.3009	0.2853		1.00	0.0100	-5.2	50.0
Methylcyclohexane	Ave	0.5046	0.4514		1.00	0.0100	-10.6	50.0
1,2-Dichloropropane	Ave	0.2812	0.2522		1.00	0.0100	-10.3	20.0
1,4-Dioxane	Ave	0.0028	0.0022		50.0	0.500	-20.8	50.0
Dibromomethane	Ave	0.1440	0.1384		1.00	0.0100	-4.0	50.0
Bromodichloromethane	Ave	0.3100	0.2803		1.00	0.0100	-9.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: CCVIS 240-98372/2 Calibration Date: 08/21/2013 12:34

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7126.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1461	0.1386		10.0	0.0200	-5.2	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3333		1.00	0.0100	-12.7	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2142		10.0	0.0200	-11.5	50.0
Toluene	Ave	1.519	1.453		1.00	0.0100	-4.3	20.0
trans-1,3-Dichloropropene	Ave	0.3963	0.3432		1.00	0.0100	-13.4	50.0
Ethyl methacrylate	Ave	0.4073	0.3527		1.00	0.0100	-13.4	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2750		1.00	0.0100	-5.3	50.0
Tetrachloroethene	Ave	0.3161	0.3152		1.00	0.0100	-0.3	50.0
1,3-Dichloropropane	Ave	0.5076	0.4841		1.00	0.0100	-4.6	50.0
2-Hexanone	Ave	0.2001	0.1751		10.0	0.0200	-12.5	50.0
Dibromochloromethane	Ave	0.2687	0.2429		1.00	0.0100	-9.6	50.0
1,2-Dibromoethane	Ave	0.2878	0.2700		1.00	0.0100	-6.2	50.0
Chlorobenzene	Ave	1.011	0.9521	0.3000	1.00	0.0100	-5.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.2969		1.00	0.0100	-6.5	50.0
Ethylbenzene	Ave	0.5334	0.5083		1.00	0.0100	-4.7	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6507		2.00	0.0200	-1.6	50.0
o-Xylene	Ave	0.6180	0.6098		1.00	0.0100	-1.3	50.0
Styrene	Ave	0.999	0.998		1.00	0.0100	-0.0	50.0
Bromoform	Ave	0.1619	0.1361	0.1000	1.00	0.0100	-15.9	50.0
Isopropylbenzene	Ave	1.572	1.486		1.00	0.0100	-5.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.5582	0.3000	1.00	0.0100	-11.9	50.0
Bromobenzene	Ave	0.7771	0.7266		1.00	0.0100	-6.5	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.1900		1.00	0.0100	-9.5	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.1007		1.00	0.0100	-20.9	50.0
n-Propylbenzene	Ave	0.8054	0.7631		1.00	0.0100	-5.3	50.0
2-Chlorotoluene	Ave	0.6938	0.6508		1.00	0.0100	-6.2	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.174		1.00	0.0100	-5.9	50.0
4-Chlorotoluene	Ave	0.7442	0.6987		1.00	0.0100	-6.1	50.0
tert-Butylbenzene	Ave	2.137	1.954		1.00	0.0100	-8.6	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.219		1.00	0.0100	-5.0	50.0
sec-Butylbenzene	Ave	2.858	2.605		1.00	0.0100	-8.8	50.0
1,3-Dichlorobenzene	Ave	1.449	1.335		1.00	0.0100	-7.9	50.0
p-Isopropyltoluene	Ave	2.470	2.302		1.00	0.0100	-6.8	50.0
1,4-Dichlorobenzene	Ave	1.492	1.400		1.00	0.0100	-6.2	50.0
n-Butylbenzene	Ave	2.012	1.740		1.00	0.0100	-13.5	50.0
1,2-Dichlorobenzene	Ave	1.360	1.263		1.00	0.0100	-7.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0654		2.00	0.0100	-32.3	50.0
1,3,5-Trichlorobenzene	Ave	1.048	0.8782		1.00	0.0100	-16.2	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.6521		1.00	0.0100	-28.6	50.0
Hexachlorobutadiene	Qua		0.3135		1.00	0.0100	-25.8	50.0
Naphthalene	Ave	1.729	1.024		1.00	0.0100	-40.8	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: CCVIS 240-98372/2 Calibration Date: 08/21/2013 12:34

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7126.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua		0.5061		1.00	0.0100	-39.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2102		0.00810	0.00891	-9.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2384		0.00761	0.00891	-14.5	50.0
Toluene-d8 (Surr)	Ave	1.297	1.164		0.00800	0.00891	-10.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4296		0.00804	0.00891	-9.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab Sample ID: CCV 240-98372/3 Calibration Date: 08/21/2013 12:57

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7127.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3269	0.2903		2.00	0.0100	-11.2	50.0
Ethyl ether	Ave	0.2516	0.2530		2.00	0.0100	0.6	50.0
3-Chloro-1-propene	Ave	0.1282	0.1236		2.00	0.0100	-3.6	50.0
Diisopropyl ether	Ave	0.2503	0.2521		10.0	0.0500	0.7	50.0
2-Chloro-1,3-butadiene	Ave	0.4389	0.4441		2.00	0.0100	1.2	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8346	0.7430		5.00	0.0100	-11.0	50.0
Ethyl acetate	Ave	0.2395	0.2319		4.00	0.0200	-3.2	50.0
Propionitrile	Ave	0.0400	0.0384		4.00	0.0200	-4.2	50.0
Methacrylonitrile	Ave	0.1598	0.1520		2.00	0.0100	-4.9	50.0
Isobutyl alcohol	Ave	0.0099	~~0.0093~~		50.0	0.200	-6.4	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6741	0.5882		5.00	0.0100	-12.7	50.0
n-Heptane	Ave	0.0746	0.0810		1.00	0.0100	8.5	50.0
~~n-Butanol~~	Ave	0.0094	~~0.0072~~		50.0	0.200	~~-23.9~~	50.0
Methyl methacrylate	Ave	0.2093	0.1946		2.00	0.0100	-7.0	50.0
~~2-Nitropropane~~	Ave	0.0449	~~0.0339~~		2.00	0.0200	~~-24.5~~	50.0
Cyclohexanone	Ave	0.1078	0.1081		20.0	0.100	0.3	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.347		0.0104	0.0100	4.5	50.0
~~2-Methylnaphthalene~~	Ave	0.9621	0.1681		5.00	~~0.0200~~	~~-82.5*~~	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab File ID: UXR7075.D Lab Sample ID: MB 240-98201/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/20/2013 15:10

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98201/4	UXR7073.D	08/20/2013 14:25
DR-DPT-33-25	240-27964-3	UXR7082.D	08/20/2013 17:59
DR-DPT-33-30	240-27964-4	UXR7083.D	08/20/2013 18:21
DR-DPT-34-35	240-27964-5	UXR7084.D	08/20/2013 18:43
DR-DPT-33-40	240-27964-6	UXR7085.D	08/20/2013 19:05
DR-DPT-34-40	240-27964-7	UXR7086.D	08/20/2013 19:27
DR-DPT-33-45	240-27964-8	UXR7087.D	08/20/2013 19:49
DR-DPT-34-45	240-27964-9	UXR7088.D	08/20/2013 20:11
	240-28014-B-3 MS	UXR7097.D	08/20/2013 23:29
	240-28014-B-3 MSD	UXR7098.D	08/20/2013 23:51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98201/6

Matrix: Water Lab File ID: UXR7075.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98201/6

Matrix: Water Lab File ID: UXR7075.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98201/6

Matrix: Water Lab File ID: UXR7075.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98201/6

Matrix: Water Lab File ID: UXR7075.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7073.D

Lab ID: LCS 240-98201/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.70	97	72-116	
1,1,1-Trichloroethane	10.0	9.74	97	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.21	92	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.6	116	74-151	
1,1-Dichloroethane	10.0	9.88	99	82-115	
1,1-Dichloroethene	10.0	10.2	102	78-131	
1,1-Dichloropropene	10.0	9.41	94	83-114	
1,2,3-Trichlorobenzene	10.0	6.54	65	54-126	
1,2,3-Trichloropropane	10.0	9.72	97	73-129	
1,2,3-Trimethylbenzene	10.0	10.5	105	70-130	
1,2,4-Trichlorobenzene	10.0	7.95	80	48-135	
1,2,4-Trimethylbenzene	10.0	9.84	98	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.66	77	42-136	
1,2-Dichlorobenzene	10.0	9.61	96	81-110	
1,2-Dichloroethane	10.0	10.1	101	71-127	
1,2-Dichloropropane	10.0	10.1	101	81-115	
1,3-Dichlorobenzene	10.0	9.81	98	80-110	
1,3-Dichloropropane	10.0	10.2	102	79-116	
1,4-Dichlorobenzene	10.0	9.62	96	82-110	
2,2-Dichloropropane	10.0	8.74	87	50-129	
2-Chloroethyl vinyl ether	10.0	9.23 J	92	52-131	
2-Chlorotoluene	10.0	9.67	97	76-116	
2-Hexanone	20.0	18.2	91	55-133	
Bromobenzene	10.0	9.73	97	76-115	
Bromochloromethane	10.0	10.3	103	77-120	
4-Chlorotoluene	10.0	9.76	98	77-115	
p-Isopropyltoluene	10.0	10.1	101	74-120	
Acetone	20.0	17.1	86	43-136	
Benzene	10.0	10.0	100	83-112	
Bromoform	10.0	9.35	93	40-131	
Bromomethane	10.0	8.82	88	11-185	
Carbon disulfide	10.0	10.1	101	62-142	
Carbon tetrachloride	10.0	10.1	101	66-128	
Chlorobenzene	10.0	10.0	100	85-110	
Chloroethane	10.0	8.75	87	25-153	
Chloroform	10.0	10.0	100	79-117	
Chloromethane	10.0	9.25	92	44-126	
cis-1,2-Dichloroethene	10.0	10.3	103	80-113	
cis-1,3-Dichloropropene	10.0	9.39	94	61-115	
Hexachlorobutadiene	10.0	7.72	77	36-134	
Dibromomethane	10.0	10.3	103	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7073.D

Lab ID: LCS 240-98201/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.47	95	72-121	
Dichlorodifluoromethane	10.0	9.50	95	19-129	
Ethylbenzene	10.0	10.2	102	83-112	
1,2-Dibromoethane	10.0	9.93	99	79-113	
Diisopropyl ether	10.0	10.1	101	77-118	
Naphthalene	10.0	6.76	68	32-141	
m-Xylene & p-Xylene	20.0	20.8	104	83-113	
n-Butylbenzene	10.0	9.44	94	66-125	
Isopropylbenzene	10.0	10.1	101	75-114	
n-Propylbenzene	10.0	10.2	102	74-121	
2-Butanone	20.0	17.7	88	60-126	
4-Methyl-2-pentanone	20.0	18.2	91	63-128	
sec-Butylbenzene	10.0	9.39	94	70-117	
Methyl tert-butyl ether	10.0	9.36	94	52-144	
Methylene Chloride	10.0	12.0	120	66-131	
o-Xylene	10.0	10.3	103	83-113	
Styrene	10.0	10.5	105	79-114	
tert-Butylbenzene	10.0	9.58	96	71-115	
Tetrachloroethene	10.0	10.2	102	79-114	
Toluene	10.0	10.1	101	84-111	
trans-1,2-Dichloroethene	10.0	10.1	101	83-117	
trans-1,3-Dichloropropene	10.0	9.09	91	58-117	
Trichloroethene	10.0	10.1	101	76-117	
Trichlorofluoromethane	10.0	9.87	99	49-157	
Vinyl acetate	10.0	9.85	98	46-161	
Vinyl chloride	10.0	9.22	92	53-127	
tert-Butyl alcohol	200	169	85	70-130	
Xylenes, Total	30.0	31.1	104	83-112	
Dibromochloromethane	10.0	9.40	94	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Lab File ID: UXR7130.D Lab Sample ID: MB 240-98372/6

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/21/2013 14:04

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98372/4	UXR7128.D	08/21/2013 13:19
DR-DPT-34-15	240-27964-1	UXR7131.D	08/21/2013 15:01
DR-DPT-33-15	240-27964-2	UXR7132.D	08/21/2013 15:23
	240-28014-B-4 MS	UXR7151.D	08/21/2013 22:21
	240-28014-B-4 MSD	UXR7152.D	08/21/2013 22:43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98372/6

Matrix: Water | Lab File ID: UXR7130.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 14:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	0.130	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98372/6

Matrix: Water Lab File ID: UXR7130.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 14:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.53		1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98372/6

Matrix: Water Lab File ID: UXR7130.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 14:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98372/6

Matrix: Water Lab File ID: UXR7130.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 14:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7128.D

Lab ID: LCS 240-98372/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.83	98	72-116	
1,1,1-Trichloroethane	10.0	9.76	98	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.04	90	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	12.0	120	74-151	
1,1-Dichloroethane	10.0	9.96	100	82-115	
1,1-Dichloroethene	10.0	10.1	101	78-131	
1,1-Dichloropropene	10.0	9.24	92	83-114	
1,2,3-Trichlorobenzene	10.0	6.58	66	54-126	
1,2,3-Trichloropropane	10.0	9.76	98	73-129	
1,2,3-Trimethylbenzene	10.0	10.7	107	70-130	
1,2,4-Trichlorobenzene	10.0	7.64	76	48-135	
1,2,4-Trimethylbenzene	10.0	9.86	99	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.41	74	42-136	
1,2-Dichlorobenzene	10.0	9.77	98	81-110	
1,2-Dichloroethane	10.0	10.2	102	71-127	
1,2-Dichloropropane	10.0	9.99	100	81-115	
1,3-Dichlorobenzene	10.0	9.73	97	80-110	
1,3-Dichloropropane	10.0	10.0	100	79-116	
1,4-Dichlorobenzene	10.0	9.70	97	82-110	
2,2-Dichloropropane	10.0	8.66	87	50-129	
2-Chloroethyl vinyl ether	10.0	8.43 J	84	52-131	
2-Chlorotoluene	10.0	9.97	100	76-116	
2-Hexanone	20.0	17.7	88	55-133	
Bromobenzene	10.0	9.84	98	76-115	
Bromochloromethane	10.0	10.4	104	77-120	
4-Chlorotoluene	10.0	9.69	97	77-115	
p-Isopropyltoluene	10.0	10.2	102	74-120	
Acetone	20.0	17.7	88	43-136	
Benzene	10.0	9.89	99	83-112	
Bromoform	10.0	9.01	90	40-131	
Bromomethane	10.0	8.86	89	11-185	
Carbon disulfide	10.0	9.80	98	62-142	
Carbon tetrachloride	10.0	10.3	103	66-128	
Chlorobenzene	10.0	9.90	99	85-110	
Chloroethane	10.0	8.47	85	25-153	
Chloroform	10.0	10.0	100	79-117	
Chloromethane	10.0	8.90	89	44-126	
cis-1,2-Dichloroethene	10.0	10.1	101	80-113	
cis-1,3-Dichloropropene	10.0	8.95	89	61-115	
Hexachlorobutadiene	10.0	7.89	79	36-134	
Dibromomethane	10.0	10.2	102	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7128.D

Lab ID: LCS 240-98372/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.67	97	72-121	
Dichlorodifluoromethane	10.0	8.97	90	19-129	
Ethylbenzene	10.0	10.2	102	83-112	
1,2-Dibromoethane	10.0	9.80	98	79-113	
Diisopropyl ether	10.0	10.1	101	77-118	
Naphthalene	10.0	6.49	65	32-141	
m-Xylene & p-Xylene	20.0	20.6	103	83-113	
n-Butylbenzene	10.0	9.34	93	66-125	
Isopropylbenzene	10.0	10.0	100	75-114	
n-Propylbenzene	10.0	10.2	102	74-121	
2-Butanone	20.0	17.7	89	60-126	
4-Methyl-2-pentanone	20.0	18.2	91	63-128	
sec-Butylbenzene	10.0	9.44	94	70-117	
Methyl tert-butyl ether	10.0	9.03	90	52-144	
Methylene Chloride	10.0	11.7	117	66-131	
o-Xylene	10.0	10.3	103	83-113	
Styrene	10.0	10.7	107	79-114	
tert-Butylbenzene	10.0	9.56	96	71-115	
Tetrachloroethene	10.0	10.2	102	79-114	
Toluene	10.0	9.65	96	84-111	
trans-1,2-Dichloroethene	10.0	10.1	101	83-117	
trans-1,3-Dichloropropene	10.0	8.95	90	58-117	
Trichloroethene	10.0	10.1	101	76-117	
Trichlorofluoromethane	10.0	9.85	98	49-157	
Vinyl acetate	10.0	9.14	91	46-161	
Vinyl chloride	10.0	8.91	89	53-127	
tert-Butyl alcohol	200	161	80	70-130	
Xylenes, Total	30.0	30.9	103	83-112	
Dibromochloromethane	10.0	9.49	95	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7097.D

Lab ID: 240-28014-B-3 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5000	500 U	2010	40	64-118	F
1,1,1-Trichloroethane	5000	500 U	2040	41	68-121	F
1,1,2,2-Tetrachloroethane	5000	500 U	1910	38	63-122	F
1,1,2-Trichloro-1,2,2-trichfluoroethane	5000	500 U	2590	52	70-152	F
1,1-Dichloroethane	5000	500 U	2140	43	79-116	F
1,1-Dichloroethene	5000	500 U	2320	46	74-135	F
1,1-Dichloropropene	5000	500 U	1980	40	80-114	F
1,2,3-Trichlorobenzene	5000	500 U	1170	23	45-129	F
1,2,3-Trichloropropane	5000	500 U	2060	41	67-132	F
1,2,3-Trimethylbenzene	5000	2500 U	2110 J	42	70-130	F
1,2,4-Trichlorobenzene	5000	500 U	1470	29	38-138	F
1,2,4-Trimethylbenzene	5000	500 U	1940	39	67-124	F
1,2-Dibromo-3-Chloropropane	5000	1000 U	1390	28	32-139	F
1,2-Dichlorobenzene	5000	500 U	2040	41	75-111	F
1,2-Dichloroethane	5000	500 U	2300	46	68-129	F
1,2-Dichloropropane	5000	500 U	2090	42	78-115	F
1,3-Dichlorobenzene	5000	500 U	2120	42	73-110	F
1,3-Dichloropropane	5000	500 U	2100	42	74-118	F
1,4-Dichlorobenzene	5000	500 U	2160	43	75-110	F
2,2-Dichloropropane	5000	500 U	1780	36	38-127	F
2-Chloroethyl vinyl ether	5000	5000 U	1350 J	27	10-150	
2-Chlorotoluene	5000	500 U	2030	41	69-117	F
2-Hexanone	10000	5000 U	3350 J	33	47-139	F
Bromobenzene	5000	500 U	2040	41	71-116	F
Bromochloromethane	5000	500 U	2180	44	73-121	F
4-Chlorotoluene	5000	500 U	2060	41	71-116	F
p-Isopropyltoluene	5000	500 U	1990	40	64-122	F
Acetone	10000	5000 U	3510 J	35	33-145	
Benzene	5000	86 J	2220	43	72-121	F
Bromoform	5000	500 U	1660	33	32-128	
Bromomethane	5000	500 U	2280	46	10-186	
Carbon disulfide	5000	500 U	2190	44	57-147	F
Carbon tetrachloride	5000	500 U	2050	41	59-129	F
Chlorobenzene	5000	500 U	2210	44	80-110	F
Chloroethane	5000	500 U	2590	52	21-165	
Chloroform	5000	500 U	2160	43	76-118	F
Chloromethane	5000	500 U	2170	43	33-132	
cis-1,2-Dichloroethene	5000	500 U	2180	44	70-120	F
cis-1,3-Dichloropropene	5000	500 U	1690	34	51-110	F
Hexachlorobutadiene	5000	500 U	1420	28	27-132	
Dibromomethane	5000	500 U	2160	43	77-121	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7097.D

Lab ID: 240-28014-B-3 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	5000	500 U	1980	40	67-120	F
Dichlorodifluoromethane	5000	500 U	2100	42	17-128	
Ethylbenzene	5000	500 U	2060	41	75-116	F
1,2-Dibromoethane	5000	500 U	2030	41	74-113	F
Diisopropyl ether	5000	5000 U	1970 J	39	73-118	F
Naphthalene	5000	500 U	1070	21	15-158	
m-Xylene & p-Xylene	10000	1000 U	4300	43	75-117	F
n-Butylbenzene	5000	500 U	1800	36	56-127	F
Isopropylbenzene	5000	500 U	1990	40	68-116	F
n-Propylbenzene	5000	500 U	2060	41	64-124	F
2-Butanone	10000	5000 U	3720 J	37	54-129	F
4-Methyl-2-pentanone	10000	5000 U	3330 J	33	56-131	F
sec-Butylbenzene	5000	500 U	1900	38	60-119	F
Methyl tert-butyl ether	5000	500 U	1820	36	46-144	F
Methylene Chloride	5000	500 U	2050	41	63-128	F
o-Xylene	5000	500 U	2100	42	76-116	F
Styrene	5000	500 U	2130	43	71-117	F
tert-Butylbenzene	5000	500 U	1870	37	61-119	F
Tetrachloroethene	5000	500 U	2210	44	70-117	F
Toluene	5000	500 U	2160	43	78-114	F
trans-1,2-Dichloroethene	5000	500 U	2240	45	80-119	F
trans-1,3-Dichloropropene	5000	500 U	1600	32	46-116	F
Trichloroethene	5000	500 U	2170	43	66-120	F
Trichlorofluoromethane	5000	500 U	2280	46	46-157	
Vinyl acetate	5000	1000 U	1840	37	43-157	F
Vinyl chloride	5000	5800	9200	68	49-130	
tert-Butyl alcohol	100000	25000 U	31000	31	70-130	F
Xylenes, Total	15000	1000 U	6400	43	76-116	F
Dibromochloromethane	5000	500 U	1800	36	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7098.D

Lab ID: 240-28014-B-3 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5000	1440	29	33	30	64-118	F
1,1,1-Trichloroethane	5000	1530	31	29	30	68-121	F
1,1,2,2-Tetrachloroethane	5000	1430	29	28	30	63-122	F
1,1,2-Trichloro-1,2,2-trichfluoroethane	5000	1950	39	28	30	70-152	F
1,1-Dichloroethane	5000	1650	33	26	30	79-116	F
1,1-Dichloroethene	5000	1690	34	32	30	74-135	F
1,1-Dichloropropene	5000	1440	29	32	30	80-114	F
1,2,3-Trichlorobenzene	5000	1160	23	1	30	45-129	F
1,2,3-Trichloropropane	5000	1440	29	35	30	67-132	F
1,2,3-Trimethylbenzene	5000	1580 J	32	29	30	70-130	F
1,2,4-Trichlorobenzene	5000	1230	25	18	30	38-138	F
1,2,4-Trimethylbenzene	5000	1430	29	31	30	67-124	F
1,2-Dibromo-3-Chloropropane	5000	1070	21	27	30	32-139	F
1,2-Dichlorobenzene	5000	1620	32	23	30	75-111	F
1,2-Dichloroethane	5000	1690	34	30	30	68-129	F
1,2-Dichloropropane	5000	1540	31	30	30	78-115	F
1,3-Dichlorobenzene	5000	1570	31	30	30	73-110	F
1,3-Dichloropropane	5000	1590	32	28	30	74-118	F
1,4-Dichlorobenzene	5000	1700	34	24	30	75-110	F
2,2-Dichloropropane	5000	1340	27	28	30	38-127	F
2-Chloroethyl vinyl ether	5000	949 J	19	35	30	10-150	F
2-Chlorotoluene	5000	1560	31	26	30	69-117	F
2-Hexanone	10000	2390 J	24	33	30	47-139	F
Bromobenzene	5000	1610	32	24	30	71-116	F
Bromochloromethane	5000	1700	34	25	30	73-121	F
4-Chlorotoluene	5000	1510	30	31	30	71-116	F
p-Isopropyltoluene	5000	1440	29	32	30	64-122	F
Acetone	10000	2680 J	27	27	30	33-145	F
Benzene	5000	1680	32	28	30	72-121	F
Bromoform	5000	1190	24	34	30	32-128	F
Bromomethane	5000	1760	35	26	30	10-186	
Carbon disulfide	5000	1660	33	27	30	57-147	F
Carbon tetrachloride	5000	1540	31	29	30	59-129	F
Chlorobenzene	5000	1650	33	29	30	80-110	F
Chloroethane	5000	2110	42	20	30	21-165	
Chloroform	5000	1620	32	29	30	76-118	F
Chloromethane	5000	1620	32	29	30	33-132	F
cis-1,2-Dichloroethene	5000	1660	33	27	30	70-120	F
cis-1,3-Dichloropropene	5000	1260	25	29	30	51-110	F
Hexachlorobutadiene	5000	1140	23	22	30	27-132	F
Dibromomethane	5000	1670	33	26	30	77-121	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7098.D

Lab ID: 240-28014-B-3 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	5000	1450	29	31	30	67-120	F
Dichlorodifluoromethane	5000	1560	31	29	30	17-128	
Ethylbenzene	5000	1480	30	33	30	75-116	F
1,2-Dibromoethane	5000	1520	30	29	30	74-113	F
Diisopropyl ether	5000	1480 J	30	29	30	73-118	F
Naphthalene	5000	981	20	9	30	15-158	
m-Xylene & p-Xylene	10000	3060	31	33	30	75-117	F
n-Butylbenzene	5000	1340	27	29	30	56-127	F
Isopropylbenzene	5000	1410	28	34	30	68-116	F
n-Propylbenzene	5000	1490	30	32	30	64-124	F
2-Butanone	10000	2930 J	29	24	30	54-129	F
4-Methyl-2-pentanone	10000	2400 J	24	33	30	56-131	F
sec-Butylbenzene	5000	1380	28	31	30	60-119	F
Methyl tert-butyl ether	5000	1340	27	30	30	46-144	F
Methylene Chloride	5000	1530	31	29	30	63-128	F
o-Xylene	5000	1510	30	33	30	76-116	F
Styrene	5000	1520	30	34	30	71-117	F
tert-Butylbenzene	5000	1370	27	31	30	61-119	F
Tetrachloroethene	5000	1630	33	30	30	70-117	F
Toluene	5000	1570	31	31	30	78-114	F
trans-1,2-Dichloroethene	5000	1670	33	29	30	80-119	F
trans-1,3-Dichloropropene	5000	1220	24	27	30	46-116	F
Trichloroethene	5000	1640	33	28	30	66-120	F
Trichlorofluoromethane	5000	1740	35	27	30	46-157	F
Vinyl acetate	5000	1350	27	31	30	43-157	F
Vinyl chloride	5000	7910	42	15	30	49-130	F
tert-Butyl alcohol	100000	22900 J	23	30	30	70-130	F
Xylenes, Total	15000	4570	30	33	30	76-116	F
Dibromochloromethane	5000	1330	27	30	30	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7151.D

Lab ID: 240-28014-B-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	7140	710 U	6770	95	64-118	
1,1,1-Trichloroethane	7140	710 U	6800	95	68-121	
1,1,2,2-Tetrachloroethane	7140	710 U	6080	85	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	7140	710 U	7960	111	70-152	
1,1-Dichloroethane	7140	710 U	6710	94	79-116	
1,1-Dichloroethene	7140	160 J	7080	97	74-135	
1,1-Dichloropropene	7140	710 U	6150	86	80-114	
1,2,3-Trichlorobenzene	7140	710 U	3900	55	45-129	
1,2,3-Trichloropropane	7140	710 U	6330	89	67-132	
1,2,3-Trimethylbenzene	7140	3600 U	6970	98	70-130	
1,2,4-Trichlorobenzene	7140	710 U	4740	66	38-138	
1,2,4-Trimethylbenzene	7140	710 U	6480	91	67-124	
1,2-Dibromo-3-Chloropropane	7140	1400 U	4420	62	32-139	
1,2-Dichlorobenzene	7140	710 U	6460	90	75-111	
1,2-Dichloroethane	7140	710 U	7430	104	68-129	
1,2-Dichloropropane	7140	710 U	6910	97	78-115	
1,3-Dichlorobenzene	7140	710 U	6480	91	73-110	
1,3-Dichloropropane	7140	710 U	6990	98	74-118	
1,4-Dichlorobenzene	7140	710 U	6500	91	75-110	
2,2-Dichloropropane	7140	710 U	5880	82	38-127	
2-Chloroethyl vinyl ether	7140	7100 U	4920 J	69	10-150	
2-Chlorotoluene	7140	710 U	6450	90	69-117	
2-Hexanone	14300	7100 U	11300	79	47-139	
Bromobenzene	7140	710 U	6520	91	71-116	
Bromochloromethane	7140	710 U	7070	99	73-121	
4-Chlorotoluene	7140	710 U	6350	89	71-116	
p-Isopropyltoluene	7140	710 U	6500	91	64-122	
Acetone	14300	1800 J	13700	83	33-145	
Benzene	7140	94 J	6920	96	72-121	
Bromoform	7140	710 U	6160	86	32-128	
Bromomethane	7140	710 U	6970	98	10-186	
Carbon disulfide	7140	710 U	6990	98	57-147	
Carbon tetrachloride	7140	710 U	7020	98	59-129	
Chlorobenzene	7140	710 U	6920	97	80-110	
Chloroethane	7140	710 U	8970	126	21-165	
Chloroform	7140	710 U	7060	99	76-118	
Chloromethane	7140	710 U	6120	86	33-132	
cis-1,2-Dichloroethene	7140	24000	30600	97	70-120	E
cis-1,3-Dichloropropene	7140	710 U	5800	81	51-110	
Hexachlorobutadiene	7140	710 U	4840	68	27-132	
Dibromomethane	7140	710 U	7130	100	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7151.D

Lab ID: 240-28014-B-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	7140	710 U	6670	93	67-120	
Dichlorodifluoromethane	7140	710 U	5830	82	17-128	
Ethylbenzene	7140	710 U	6930	97	75-116	
1,2-Dibromoethane	7140	710 U	6660	93	74-113	
Diisopropyl ether	7140	7100 U	6620 J	93	73-118	
Naphthalene	7140	710 U	3680	52	15-158	
m-Xylene & p-Xylene	14300	1400 U	14300	100	75-117	
n-Butylbenzene	7140	710 U	5810	81	56-127	
Isopropylbenzene	7140	710 U	6670	93	68-116	
n-Propylbenzene	7140	710 U	6600	92	64-124	
2-Butanone	14300	7100 U	12200	86	54-129	
4-Methyl-2-pentanone	14300	7100 U	11600	81	56-131	
sec-Butylbenzene	7140	710 U	6010	84	60-119	
Methyl tert-butyl ether	7140	710 U	6020	84	46-144	
Methylene Chloride	7140	1400	9120	108	63-128	
o-Xylene	7140	710 U	7080	99	76-116	
Styrene	7140	710 U	7340	103	71-117	
tert-Butylbenzene	7140	710 U	6030	84	61-119	
Tetrachloroethene	7140	710 U	7020	98	70-117	
Toluene	7140	120 J	6890	95	78-114	
trans-1,2-Dichloroethene	7140	710 U	6960	97	80-119	
trans-1,3-Dichloropropene	7140	710 U	5590	78	46-116	
Trichloroethene	7140	850	7830	98	66-120	
Trichlorofluoromethane	7140	710 U	7160	100	46-157	
Vinyl acetate	7140	1400 U	5970	84	43-157	
Vinyl chloride	7140	7600	13300	80	49-130	
tert-Butyl alcohol	143000	36000 U	98200	69	70-130	F
Xylenes, Total	21400	1400 U	21400	100	76-116	
Dibromochloromethane	7140	710 U	6340	89	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7152.D

Lab ID: 240-28014-B-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	7140	6720	94	1	30	64-118	
1,1,1-Trichloroethane	7140	6770	95	1	30	68-121	
1,1,2,2-Tetrachloroethane	7140	6400	90	5	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	7140	7720	108	3	30	70-152	
1,1-Dichloroethane	7140	6970	98	4	30	79-116	
1,1-Dichloroethene	7140	7130	98	1	30	74-135	
1,1-Dichloropropene	7140	5980	84	3	30	80-114	
1,2,3-Trichlorobenzene	7140	4930	69	23	30	45-129	
1,2,3-Trichloropropane	7140	6730	94	6	30	67-132	
1,2,3-Trimethylbenzene	7140	7020	98	1	30	70-130	
1,2,4-Trichlorobenzene	7140	5240	73	10	30	38-138	
1,2,4-Trimethylbenzene	7140	6530	91	1	30	67-124	
1,2-Dibromo-3-Chloropropane	7140	4950	69	11	30	32-139	
1,2-Dichlorobenzene	7140	6660	93	3	30	75-111	
1,2-Dichloroethane	7140	7540	106	1	30	68-129	
1,2-Dichloropropane	7140	7130	100	3	30	78-115	
1,3-Dichlorobenzene	7140	6430	90	1	30	73-110	
1,3-Dichloropropane	7140	7060	99	1	30	74-118	
1,4-Dichlorobenzene	7140	6480	91	0	30	75-110	
2,2-Dichloropropane	7140	6100	85	4	30	38-127	
2-Chloroethyl vinyl ether	7140	5020 J	70	2	30	10-150	
2-Chlorotoluene	7140	6380	89	1	30	69-117	
2-Hexanone	14300	11800	83	4	30	47-139	
Bromobenzene	7140	6470	91	1	30	71-116	
Bromochloromethane	7140	7270	102	3	30	73-121	
4-Chlorotoluene	7140	6480	91	2	30	71-116	
p-Isopropyltoluene	7140	6550	92	1	30	64-122	
Acetone	14300	14100	86	3	30	33-145	
Benzene	7140	6900	95	0	30	72-121	
Bromoform	7140	5940	83	4	30	32-128	
Bromomethane	7140	7200	101	3	30	10-186	
Carbon disulfide	7140	6900	97	1	30	57-147	
Carbon tetrachloride	7140	6890	97	2	30	59-129	
Chlorobenzene	7140	6770	95	2	30	80-110	
Chloroethane	7140	9000	126	0	30	21-165	
Chloroform	7140	7210	101	2	30	76-118	
Chloromethane	7140	6330	89	3	30	33-132	
cis-1,2-Dichloroethene	7140	30500	95	0	30	70-120	E
cis-1,3-Dichloropropene	7140	5890	82	2	30	51-110	
Hexachlorobutadiene	7140	5460	76	12	30	27-132	
Dibromomethane	7140	7300	102	2	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7152.D

Lab ID: 240-28014-B-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	7140	6790	95	2	30	67-120	
Dichlorodifluoromethane	7140	6020	84	3	30	17-128	
Ethylbenzene	7140	6590	92	5	30	75-116	
1,2-Dibromoethane	7140	6800	95	2	30	74-113	
Diisopropyl ether	7140	6870 J	96	4	30	73-118	
Naphthalene	7140	4670	65	24	30	15-158	
m-Xylene & p-Xylene	14300	13700	96	4	30	75-117	
n-Butylbenzene	7140	5930	83	2	30	56-127	
Isopropylbenzene	7140	6410	90	4	30	68-116	
n-Propylbenzene	7140	6630	93	0	30	64-124	
2-Butanone	14300	12300	86	1	30	54-129	
4-Methyl-2-pentanone	14300	11900	83	2	30	56-131	
sec-Butylbenzene	7140	5970	84	1	30	60-119	
Methyl tert-butyl ether	7140	6180	87	3	30	46-144	
Methylene Chloride	7140	9060	107	1	30	63-128	
o-Xylene	7140	6920	97	2	30	76-116	
Styrene	7140	7050	99	4	30	71-117	
tert-Butylbenzene	7140	6100	85	1	30	61-119	
Tetrachloroethene	7140	6710	94	4	30	70-117	
Toluene	7140	6800	94	1	30	78-114	
trans-1,2-Dichloroethene	7140	7160	100	3	30	80-119	
trans-1,3-Dichloropropene	7140	5830	82	4	30	46-116	
Trichloroethene	7140	7530	94	4	30	66-120	
Trichlorofluoromethane	7140	7150	100	0	30	46-157	
Vinyl acetate	7140	6510	91	9	30	43-157	
Vinyl chloride	7140	13700	85	3	30	49-130	
tert-Butyl alcohol	143000	106000	74	8	30	70-130	
Xylenes, Total	21400	20600	96	4	30	76-116	
Dibromochloromethane	7140	6540	92	3	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-34-15	240-27964-1	90	88	81	80
DR-DPT-33-15	240-27964-2	96	95	86	85
DR-DPT-33-25	240-27964-3	90	88	84	85
DR-DPT-33-30	240-27964-4	88	86	85	84
DR-DPT-34-35	240-27964-5	89	87	86	86
DR-DPT-33-40	240-27964-6	86	86	85	84
DR-DPT-34-40	240-27964-7	99	94	91	89
DR-DPT-33-45	240-27964-8	92	88	88	86
DR-DPT-34-45	240-27964-9	92	88	87	85
	MB 240-98201/6	91	90	86	84
	MB 240-98372/6	91	91	86	81
	LCS 240-98201/4	97	91	94	98
	LCS 240-98372/4	98	90	92	101
	240-28014-B-3 MS	94	90	90	95
	240-28014-B-4 MS	97	94	94	101
	240-28014-B-3 MSD	87	86	87	90
	240-28014-B-4 MSD	96	91	91	98

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Sample No.: STD8260 240-97903/4 Date Analyzed: 08/17/2013 16:41

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7006.D Heated Purge: (Y/N) N

Calibration ID: 16931

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1705267	5.76	1392950	8.48	758712	10.72
UPPER LIMIT		3410534	6.26	2785900	8.98	1517424	11.22
LOWER LIMIT		852634	5.26	696475	7.98	379356	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-98201/2		1736283	5.76	1392825	8.48	803037	10.72
CCVIS 240-98372/2		1633820	5.76	1328013	8.48	760176	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Sample No.: CCVIS 240-98201/2 Date Analyzed: 08/20/2013 13:40

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7071.D Heated Purge: (Y/N) N

Calibration ID: 16934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1736283	5.76	1392825	8.48	803037	10.72
UPPER LIMIT		3472566	6.26	2785650	8.98	1606074	11.22
LOWER LIMIT		868142	5.26	696413	7.98	401519	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-98201/3		1765049	5.76	1387370	8.48	735631	10.72
LCS 240-98201/4		1656834	5.76	1352788	8.48	789241	10.72
MB 240-98201/6		1638421	5.76	1341152	8.48	693040	10.72
240-27964-3	DR-DPT-33-25	1850440	5.76	1524121	8.48	816257	10.72
240-27964-4	DR-DPT-33-30	1850796	5.76	1499323	8.48	798763	10.72
240-27964-5	DR-DPT-34-35	1821530	5.76	1479477	8.48	789409	10.72
240-27964-6	DR-DPT-33-40	1831815	5.76	1460063	8.48	784851	10.72
240-27964-7	DR-DPT-34-40	1751470	5.76	1426025	8.48	752380	10.72
240-27964-8	DR-DPT-33-45	1760375	5.76	1411851	8.48	752703	10.72
240-27964-9	DR-DPT-34-45	1766235	5.76	1407844	8.48	738891	10.72
240-28014-B-3 MS		1672516	5.76	1354097	8.48	788977	10.72
240-28014-B-3 MSD		1715479	5.76	1380433	8.48	790846	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-27964-1

SDG No.:

Sample No.: CCVIS 240-98372/2 Date Analyzed: 08/21/2013 12:34

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7126.D Heated Purge: (Y/N) N

Calibration ID: 16934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1633820	5.76	1328013	8.48	760176	10.72
UPPER LIMIT		3267640	6.26	2656026	8.98	1520352	11.22
LOWER LIMIT		816910	5.26	664007	7.98	380088	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-98372/3		1646178	5.76	1274178	8.48	676377	10.72
LCS 240-98372/4		1566284	5.76	1281444	8.48	742193	10.72
MB 240-98372/6		1532829	5.76	1234002	8.48	642966	10.72
240-27964-1	DR-DPT-34-15	1566875	5.76	1293084	8.48	669209	10.72
240-27964-2	DR-DPT-33-15	1488626	5.76	1237688	8.48	635138	10.72
240-28014-B-4 MS		1436841	5.76	1166621	8.48	719460	10.72
240-28014-B-4 MSD		1448139	5.76	1186709	8.48	701879	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

VOC CALCULATION	SAMPLE		
	DR-DPT-34-15		
TARGET ANALYTE	**cis-1,2-dichloroethene**		
ANALYTE RESPONSE	1438709		
INTERNAL STANDARD	fluorobenzene		
I.S. RESPONSE	1566875		
I.S. CONCENTRATION	10	µg/l	
ANALYTE CAL. RF	0.3079		
DILUTION FACTOR (DF)	2500		
INITIAL SAMPLE VOLUME - V1	5	ml	
FINAL SAMPLE VOLUME - V2	5		
(ANALYTE RESPONSE) x (I.S. CONCENTRATION) X DF x V2 / (I.S. RESPONSE) x (CAL. R.F.) x V1	=	74553.65	µg/l

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-27964-1

SDG No.:

Client Sample ID: DR-DPT-34-15 | Lab Sample ID: 240-27964-1

Matrix: Water | Lab File ID: UXR7131.D

Analysis Method: 8260B | Date Collected: 08/14/2013 11:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 15:01

Soil Aliquot Vol: | Dilution Factor: 2500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	2500	U	2500	400
74-87-3	Chloromethane	2500	U	2500	750
156-59-2	cis-1,2-Dichloroethene	75000		2500	430
10061-01-5	cis-1,3-Dichloropropene	2500	U	2500	350
87-68-3	Hexachlorobutadiene	2500	U	2500	750
74-95-3	Dibromomethane	2500	U	2500	700
75-27-4	Bromodichloromethane	2500	U	2500	380
75-71-8	Dichlorodifluoromethane	2500	U	2500	780
100-41-4	Ethylbenzene	2500	U	2500	430
106-93-4	1,2-Dibromoethane	2500	U	2500	600
108-20-3	Diisopropyl ether	25000	U	25000	3800
91-20-3	Naphthalene	2500	U	2500	600
179601-23-1	m-Xylene & p-Xylene	670	J	5000	600
104-51-8	n-Butylbenzene	2500	U	2500	300
98-82-8	Isopropylbenzene	2500	U	2500	330
103-65-1	n-Propylbenzene	2500	U	2500	350
78-93-3	2-Butanone	25000	U	25000	1400
108-10-1	4-Methyl-2-pentanone	25000	U	25000	800
135-98-8	sec-Butylbenzene	2500	U	2500	330
1634-04-4	Methyl tert-butyl ether	2500	U	2500	430
994-05-8	Tert-amyl-methyl ether (TAME)	13000	U	13000	170
75-09-2	Methylene Chloride	4800	B	2500	830
95-47-6	o-Xylene	2500	U	2500	350
100-42-5	Styrene	2500	U	2500	280
637-92-3	Ethyl-t-butyl ether (ETBE)	13000	U	13000	280
98-06-6	tert-Butylbenzene	2500	U	2500	330
127-18-4	Tetrachloroethene	2500	U	2500	730
108-88-3	Toluene	37000		2500	330
156-60-5	trans-1,2-Dichloroethene	2500	U	2500	480
10061-02-6	trans-1,3-Dichloropropene	2500	U	2500	480
79-01-6	Trichloroethene	2500	U	2500	430
75-69-4	Trichlorofluoromethane	2500	U	2500	530
108-05-4	Vinyl acetate	5000	U	5000	480
75-01-4	Vinyl chloride	87000		2500	550
75-65-0	tert-Butyl alcohol	130000	U	130000	9800
1330-20-7	Xylenes, Total	670	J	5000	350

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCCHROM\ChromData\A3UX17\20130821-22710.b\UXR7131.D
Lims ID: 240-27964-C-1 Client ID: DR-DPT-34-15
Inject. Date: 21-Aug-2013 15:01:30 Dil. Factor: 2500.0000
Sample Type: Client
Sample ID: 240-0022710-007
Misc. Info.:
Operator: 1644 Instrument ID: A3UX17
Purge Vol: 5.000 mL ALS Bottle#: 6
Lims Batch ID: 98372 Lims Sample ID: 7
Detector: MS SCAN

Method: \\NCCHROM\ChromData\A3UX17\20130821-22710.b\8260_17.m
Last Update: 22-Aug-2013 14:34:50 Calib Date: 17-Aug-2013 20:01:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCCHROM\ChromData\A3UX17\20130817-22594.b\UXR7015.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: RT Order ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK032

First Level Reviewer: williamsla Date: 22-Aug-2013 14:33:58

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.763	5.763	0.0	99	1566875	10.0	
* 2 Chlorobenzene-d5	117	8.479	8.479	0.0	84	1293084	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.0	93	669209	10.0	
$ 6 Dibromofluoromethane (Surr)	113	5.182	5.182	0.0	59	292047	8.06	
$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.479	5.479	0.0	0	344464	7.88	
$ 8 Toluene-d8 (Surr)	98	7.151	7.139	0.012	92	1217033	7.26	
$ 9 4-Bromofluorobenzene (Surr)	95	9.582	9.582	0.0	95	439068	7.14	
14 Dichlorodifluoromethane	85		1.648					
15 Chloromethane	50		1.826					
17 Vinyl chloride	62	1.957	1.957	0.0	83	1815663	34.7	
18 Bromomethane	94		2.312					
19 Chloroethane	64		2.419					
21 Trichlorofluoromethane	101		2.668					
25 1,1-Dichloroethene	96		3.178					9
26 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.190					
27 Acetone	43	3.237	3.237	0.0	93	52214	2.79	
29 Carbon disulfide	76		3.392					
33 Methylene Chloride	84	3.641	3.641	0.0	92	145536	1.92	
34 2-Methyl-2-propanol	59		3.735					
35 Methyl tert-butyl ether	73		3.878					
37 trans-1,2-Dichloroethene	96		3.890					9
39 1,1-Dichloroethane	63		4.269					
41 Isopropyl ether	87		4.305					
40 Vinyl acetate	86		4.305					
43 Tert-butyl ethyl ether	59		4.625					
45 cis-1,2-Dichloroethene	96	4.779	4.779	0.0	67	1438709	29.8	
44 2,2-Dichloropropane	77		4.779					9
46 2-Butanone (MEK)	43		4.791					9
50 Chlorobromomethane	128		4.992					9
52 Chloroform	83		5.052					9

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-27964-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0240 0.0204	0.0208	0.0212	0.0221	0.0216	Ave		0.0217				5.9		15.0			
Acrylonitrile	0.1371 0.1043	0.1034	0.1113	0.1144	0.1096	Ave		0.1133				11.0		15.0			
Methyl tert-butyl ether	0.7668 0.7487	0.7032	0.7304	0.7764	0.7508	Ave		0.7461				3.5		15.0			
trans-1,2-Dichloroethene	0.3148 0.2849	0.2867	0.2853	0.2966	0.2863	Ave		0.2924				4.0		15.0			
Hexane	0.0992 0.0780	0.0708	0.0695	0.0827	0.0800	Ave		0.0800				13.0		15.0			
1,1-Dichloroethane	0.5339 0.4884	0.4788	0.4796	0.5057	0.4874	Ave		0.4956			0.1000	4.3		15.0			
Vinyl acetate	0.0353 0.0410	0.0341	0.0395	0.0436	0.0431	Ave		0.0394				10.0		15.0			
2,2-Dichloropropane	0.2891 0.2547	0.2421	0.2517	0.2761	0.2630	Ave		0.2628				6.6		15.0			
cis-1,2-Dichloroethene	0.3348 0.2979	0.2915	0.3010	0.3187	0.3034	Ave		0.3079				5.2		15.0			
2-Butanone	0.1550 0.1121	0.1165	0.1152	0.1221	0.1194	Ave		0.1234				13.0		15.0			
Bromochloromethane	0.1627 0.1407	0.1371	0.1393	0.1472	0.1412	Ave		0.1447				6.5		15.0			
Tetrahydrofuran	0.1433 0.0739	0.0937	0.0801	0.0838	0.0777	Lin1	0.0363	0.0747							0.9990		0.9900
Chloroform	0.4968 0.4344	0.4333	0.4317	0.4548	0.4433	Ave		0.4491				5.6		15.0			
1,1,1-Trichloroethane	0.3491 0.3450	0.3369	0.3423	0.3732	0.3542	Ave		0.3501				3.6		15.0			
Cyclohexane	0.6528 0.5796	0.5383	0.5348	0.6061	0.5879	Ave		0.5833				7.6		15.0			
1,1-Dichloropropene	0.3835 0.3611	0.3385	0.3509	0.3855	0.3654	Ave		0.3641				5.0		15.0			
Carbon tetrachloride	0.3117 0.3191	0.2879	0.2913	0.3292	0.3199	Ave		0.3098				5.4		15.0			
Benzene	1.4198 1.1202	1.1585	1.1063	1.1850	1.1333	Ave		1.1872				9.9		15.0			
1,2-Dichloroethane	0.3511 0.3344	0.3323	0.3346	0.3528	0.3411	Ave		0.3411				2.6		15.0			
Trichloroethene	0.3448 0.2857	0.2917	0.2853	0.3070	0.2909	Ave		0.3009				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**November 6, 2013**
FROM:	**MEGAN CARSON**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION-VOC**
LOCKHEED-MARTIN STATE AIRPORT (MSA)
DUMP ROAD SOURCE AREAS
SDG 240-28014-1

SAMPLES: 13/Aqueous/

DR-DPT-26-20	DR-DPT-26-25
DR-DPT-26-30	DR-DPT-26-35
DR-DPT-26-40	DR-DPT-26-45
DR-DPT-30-20	DR-DPT-30-30
DR-DPT-30-35	DR-DPT-30-40
DR-DPT-DUP01	DR-DPT-DUP02
TB-081513-240-28014-1	

Overview

The sample set for Lockheed MSA, SDG 240-28014-1, consists of twelve (12) aqueous environmental samples and one trip blank. This SDG contained two field duplicate pairs: DR-DPT-DUP01/DR-DPT-26-25 and DR-DPT-DUP02/DR-DPT-30-40.

All samples were analyzed for volatile organic compounds (VOCs). The samples were collected by Tetra Tech August 15th, 2013 and analyzed by TestAmerica. VOC analyses were conducted using method 8260B.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, GC/MS tuning, initial and continuing calibration verification results, laboratory method / preparation blank results, internal standard recoveries, surrogate standard recoveries, laboratory control sample recoveries, matrix spike recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems-

- The initial calibration analyzed on 8/17/13 on instrument A3UX17 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. All samples were affected. Non-detected results were qualified as rejected (UR).

- The continuing calibration analyzed on 8/20/13 at 13:40 on instrument A3UX17 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. Samples DR-DPT-26-20 and DR-DPT-DUP02 were affected. Non-detected results were qualified as rejected (UR).

- The continuing calibration analyzed on 8/21/13 at 12:34 on instrument A3UX17 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. Samples DR-DPT-26-25,

DR-DPT-26-30, DR-DPT-26-35, DR-DPT-26-40, DR-DPT-26-45, DR-DPT-30-20, DR-DPT-30-35, and TB-081513-240-28014-1 were affected. Non-detected results were qualified as rejected (UR).

- The continuing calibration analyzed on 8/22/13 at 14:38 on instrument A3UX17 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. Samples DR-DPT-30-30, DR-DPT-30-40, and DR-DPT-DUP01 were affected. Non-detected results were qualified as rejected (UR).

Minor Problems-

- The following contaminants were detected in method and calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Benzene [1]	0.13 ug/L	0.65 ug/L
Methylene Chloride [1]	1.53 ug/L	15.3 ug/L
Methylene chloride [2]	2.27 ug/L	22.7 ug/L

[1] Maximum concentration found in a preparation blank affecting samples in 240-98372.
[2] Maximum concentration found in a preparation blank affecting samples in 240-98511.

An action level of 5X and 10X (methylene chloride only) the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the blank action level were qualified (B) for blank contamination.

- The continuing calibration standard analyzed on 8/21/13 at 12:34 on instrument A3UX17 had a percent difference > 20% but less than 50% for bromomethane, chloroethane, tert butyl-alcohol, 1,2-dibromo-3-chloropropane,1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene. Samples DR-DPT-26-25, DR-DPT-26-30, DR-DPT-26-35, DR-DPT-26-40, DR-DPT-26-45, DR-DPT-30-20, DR-DPT-30-35, and TB-081513-240-28014-1 were affected. The detected 1,2,4-trichlorobenzene for sample DR-DPT-26-35 was qualified as estimated (J). Non-detected results were not qualified as %D< 50%.

- The matrix spike and matrix spike duplicate for preparation batch 240-98511 sample DR-DPT-30-30 had 0% percent recoveries for 2-chloroethyl vinyl ether.. Non-detect 2-chloroethyl vinyl ether results were rejected (UR) for sample DR-DPT-30-30.

Notes

The continuing calibration standard analyzed on 8/20/13 at 13:40 on instrument A3UX17 had a percent difference > 20% but less than 50% for tert butyl-alcohol, vinyl acetate, 1,2-dibromo-3-chloropropane,1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene. Samples DR-DPT-26-20 and DR-DPT-DUP02 were affected. Non-detected results were not qualified as %D< 50%.

The continuing calibration standard analyzed on 8/22/13 at 14:38 on instrument A3UX17 had a percent difference > 20% but less than 50% for bromomethane, chloroethane, methylene chloride, tert butyl-alcohol, 1,2-dibromo-3-chloropropane,1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and

1,2,3-trichlorobenzene. Samples DR-DPT-30-30, DR-DPT-30-40, and DR-DPT-DUP01 were affected. Non-detected results were not qualified as %D< 50%.

The matrix spike and matrix spike duplicate for preparation batch 240-98372 (DR-DPT-26-25) had a percent recovery less than the lower QC limit for tert-butyl alcohol. No validation action was warranted as the sample result was previously rejected for calibration non-compliances.
Non-detected results were reported at the MDL.

Tentatively Identified Compounds (TICs) were also analyzed for VOC analyses.

Compound chlorodibromomethane was listed in the lab data as dibromochloromethane.

Samples DR-DPT-26-40 and DR-DPT-26-35 were not listed on the COC but were included in the coolers. The collection date and times were taken from the containers.

The matrix spike and matrix spike duplicate for preparation batch 98201(sample DR-DPT-26-20) had percent recoveries less than the lower quality control limit for a majority of the compound in the VOC list. No validation action was taken as the sample and subsequent MS/MSD were analyzed at a 500X dilution. The spike solution was added to the MS/MSD prior to dilution.

The following samples were analyzed at the following dilutions for all VOCs:

Sample ID	Dilution Factor
DR-DPT-26-20	500X
DR-DPT-26-25	714.28X
DR-DPT-26-30	714.28X
DR-DPT-26-35	50X
DR-DPT-26-40	16.67X
DR-DPT-26-45	4X
DR-DPT-30-20	2.86X
DR-DPT-30-30	40X
DR-DPT-30-35	28.57X
DR-DPT-30-40	7.69X
DR-DPT-DUP01	833.33X
DR-DPT-DUP02	6.67X

Executive Summary

Laboratory Performance: Preparation blank contamination for benzene and methylene chloride resulted in the qualification of sample results. Initial and continuing calibration RRF non-compliances resulted in the rejection of tert-butyl alcohol and vinyl acetate results. Continuing calibration %D non-compliances for 1,2,4-trichlorobenzene for sample DR-DPT-26-35 resulted in the qualification of sample results.

Other Factors Affecting Data Quality: MS/MSD non-compliances for 2-chloroethyl vinyl ether resulted in the rejection of results for sample DR-DPT-30-30.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	DR-DPT-26-20			DR-DPT-26-25			DR-DPT-26-30			DR-DPT-26-35		
SDG: 240-28014-1	LAB_ID	240-28014-3			240-28014-4			240-28014-5			240-28014-13		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		120	U		160	U		160	U		12	U	
1,1,1-TRICHLOROETHANE		110	U		160	U		160	U		11	U	
1,1,2,2-TETRACHLOROETHANE		90	U		130	U		130	U		9	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		140	U		200	U		200	U		14	U	
1,1-DICHLOROETHANE		75	U		110	U		110	U		7.5	U	
1,1-DICHLOROETHENE		95	U		160	J	P	140	U		9.5	U	
1,1-DICHLOROPROPENE		65	U		93	U		93	U		6.5	U	
1,2,3-TRICHLOROBENZENE		85	U		120	U		120	U		8.5	U	
1,2,3-TRICHLOROPROPANE		220	U		310	U		310	U		22	U	
1,2,3-TRIMETHYLBENZENE		3	U		4.2	U		4.2	U		0.3	U	
1,2,4-TRICHLOROBENZENE		75	U		110	U		110	U		13	J	CP
1,2,4-TRIMETHYLBENZENE		60	U		86	U		86	U		6	U	
1,2-DIBROMO-3-CHLOROPROPANE		340	U		480	U		480	U		34	U	
1,2-DIBROMOETHANE		120	U		170	U		170	U		12	U	
1,2-DICHLOROBENZENE		65	U		93	U		93	U		6.5	U	
1,2-DICHLOROETHANE		110	U		160	U		180	J	P	15	J	P
1,2-DICHLOROPROPANE		90	U		130	U		130	U		9	U	
1,3-DICHLOROBENZENE		70	U		100	U		100	U		7	U	
1,3-DICHLOROPROPANE		80	U		110	U		110	U		8	U	
1,4-DICHLOROBENZENE		65	U		93	U		93	U		6.5	U	
2,2-DICHLOROPROPANE		65	U		93	U		93	U		6.5	U	
2-BUTANONE		290	U		410	U		410	U		29	U	
2-CHLOROETHYL VINYL ETHER		500	U		710	U		710	U		50	U	
2-CHLOROTOLUENE		55	U		79	U		79	U		5.5	U	
2-HEXANONE		210	U		290	U		290	U		21	U	
4-CHLOROTOLUENE		90	U		130	U		130	U		9	U	
4-ISOPROPYLTOLUENE		60	U		86	U		86	U		6	U	
4-METHYL-2-PENTANONE		160	U		230	U		230	U		16	U	
ACETONE		550	U		1800	J	P	2000	J	P	160	J	P
BENZENE		86	J	P	94	B	A	150	B	A	8.6	B	A
BROMOBENZENE		65	U		93	U		93	U		6.5	U	
BROMOCHLOROMETHANE		150	U		210	U		210	U		15	U	
BROMODICHLOROMETHANE		75	U		110	U		110	U		7.5	U	
BROMOFORM		320	U		460	U		460	U		32	U	
BROMOMETHANE		210	U		290	U		290	U		21	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-26-40			DR-DPT-26-45			DR-DPT-30-20			DR-DPT-30-30		
SDG: 240-28014-1	LAB_ID	240-28014-12			240-28014-10			240-28014-6			240-28014-7		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		3.8	U		0.92	U		0.66	U		9.2	U	
1,1,1-TRICHLOROETHANE		3.7	U		0.88	U		0.63	U		8.8	U	
1,1,2,2-TETRACHLOROETHANE		3	U		0.72	U		0.51	U		7.2	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		4.7	U		1.1	U		0.8	U		11	U	
1,1-DICHLOROETHANE		2.5	U		0.6	U		0.43	U		6	U	
1,1-DICHLOROETHENE		3.2	J	P	0.76	U		0.54	U		7.6	U	
1,1-DICHLOROPROPENE		2.2	U		0.52	U		0.37	U		5.2	U	
1,2,3-TRICHLOROBENZENE		2.8	U		0.68	U		0.49	U		6.8	U	
1,2,3-TRICHLOROPROPANE		7.2	U		1.7	U		1.2	U		17	U	
1,2,3-TRIMETHYLBENZENE		0.098	U		0.024	U		0.017	U		0.24	U	
1,2,4-TRICHLOROBENZENE		2.5	U		0.6	U		0.43	U		6	U	
1,2,4-TRIMETHYLBENZENE		2	U		0.48	U		0.34	U		4.8	U	
1,2-DIBROMO-3-CHLOROPROPANE		11	U		2.7	U		1.9	U		27	U	
1,2-DIBROMOETHANE		4	U		0.96	U		0.69	U		9.6	U	
1,2-DICHLOROBENZENE		2.2	U		0.52	U		0.37	U		5.2	U	
1,2-DICHLOROETHANE		7.8	J	P	2.1	J	P	0.63	U		8.8	U	
1,2-DICHLOROPROPANE		3	U		0.72	U		0.51	U		7.2	U	
1,3-DICHLOROBENZENE		2.3	U		0.56	U		0.4	U		5.6	U	
1,3-DICHLOROPROPANE		2.7	U		0.64	U		0.46	U		6.4	U	
1,4-DICHLOROBENZENE		2.2	U		0.52	U		0.37	U		5.2	U	
2,2-DICHLOROPROPANE		2.2	U		0.52	U		0.37	U		5.2	U	
2-BUTANONE		9.5	U		2.3	U		1.6	U		23	U	
2-CHLOROETHYL VINYL ETHER		17	U		4	U		2.8	U		40	UR	D
2-CHLOROTOLUENE		1.8	U		0.44	U		0.31	U		4.4	U	
2-HEXANONE		6.8	U		1.6	U		1.2	U		16	U	
4-CHLOROTOLUENE		3	U		0.72	U		0.51	U		7.2	U	
4-ISOPROPYLTOLUENE		2	U		0.48	U		0.34	U		4.8	U	
4-METHYL-2-PENTANONE		5.3	U		1.3	U		0.92	U		13	U	
ACETONE		55	J	P	13	J	P	41			53	J	P
BENZENE		4.1	B	A	1.3	B	A	3.4			14	J	P
BROMOBENZENE		2.2	U		0.52	U		0.37	U		5.2	U	
BROMOCHLOROMETHANE		4.8	U		1.2	U		0.83	U		12	U	
BROMODICHLOROMETHANE		2.5	U		0.6	U		0.43	U		6	U	
BROMOFORM		11	U		2.6	U		1.8	U		26	U	
BROMOMETHANE		6.8	U		1.6	U		1.2	U		16	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-30-35			DR-DPT-30-40			DR-DPT-DUP01			DR-DPT-DUP02		
SDG: 240-28014-1	LAB_ID	240-28014-8			240-28014-9			240-28014-1			240-28014-2		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		6.6	U		1.8	U		190	U		1.5	U	
1,1,1-TRICHLOROETHANE		6.3	U		1.7	U		180	U		1.5	U	
1,1,2,2-TETRACHLOROETHANE		5.1	U		1.4	U		150	U		1.2	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		8	U		2.2	U		230	U		1.9	U	
1,1-DICHLOROETHANE		4.3	U		1.2	U		120	U		1	U	
1,1-DICHLOROETHENE		5.4	U		1.5	U		190	J	P	1.3	U	
1,1-DICHLOROPROPENE		3.7	U		1	U		110	U		0.87	U	
1,2,3-TRICHLOROBENZENE		4.9	U		1.3	U		140	U		1.1	U	
1,2,3-TRICHLOROPROPANE		12	U		3.3	U		360	U		2.9	U	
1,2,3-TRIMETHYLBENZENE		0.17	U		0.045	U		4.9	U		0.039	U	
1,2,4-TRICHLOROBENZENE		4.3	U		1.2	U		120	U		1	U	
1,2,4-TRIMETHYLBENZENE		3.4	U		0.92	U		100	U		0.8	U	
1,2-DIBROMO-3-CHLOROPROPANE		19	U		5.2	U		560	U		4.5	U	
1,2-DIBROMOETHANE		6.9	U		1.8	U		200	U		1.6	U	
1,2-DICHLOROBENZENE		3.7	U		1	U		110	U		0.87	U	
1,2-DICHLOROETHANE		6.3	U		1.7	U		180	U		1.5	U	
1,2-DICHLOROPROPANE		5.1	U		1.4	U		150	U		1.2	U	
1,3-DICHLOROBENZENE		4	U		1.1	U		120	U		0.93	U	
1,3-DICHLOROPROPANE		4.6	U		1.2	U		130	U		1.1	U	
1,4-DICHLOROBENZENE		3.7	U		1	U		110	U		0.87	U	
2,2-DICHLOROPROPANE		3.7	U		1	U		110	U		0.87	U	
2-BUTANONE		16	U		4.4	U		470	U		3.8	U	
2-CHLOROETHYL VINYL ETHER		28	U		7.6	U		820	U		6.6	U	
2-CHLOROTOLUENE		3.1	U		0.85	U		92	U		0.73	U	
2-HEXANONE		12	U		3.2	U		340	U		2.7	U	
4-CHLOROTOLUENE		5.1	U		1.4	U		150	U		1.2	U	
4-ISOPROPYLTOLUENE		3.4	U		0.92	U		100	U		0.8	U	
4-METHYL-2-PENTANONE		9.1	U		2.5	U		270	U		2.1	U	
ACETONE		89	J	P	11	J	P	920	U		8.5	J	P
BENZENE		15	B	A	7.4	J	P	110	U		5.7	J	P
BROMOBENZENE		3.7	U		1	U		110	U		0.87	U	
BROMOCHLOROMETHANE		8.3	U		2.2	U		240	U		1.9	U	
BROMODICHLOROMETHANE		4.3	U		1.2	U		120	U		1	U	
BROMOFORM		18	U		4.9	U		530	U		4.3	U	
BROMOMETHANE		12	U		3.2	U		340	U		2.7	U	

PROJ_NO: 04882	NSAMPLE	TB-081513-240-28014-1
SDG: 240-28014-1	LAB_ID	240-28014-11
FRACTION: OV	SAMP_DATE	8/15/2013
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U	
1,1-DICHLOROETHANE	0.15	U	
1,1-DICHLOROETHENE	0.19	U	
1,1-DICHLOROPROPENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U	
1,2-DIBROMOETHANE	0.24	U	
1,2-DICHLOROBENZENE	0.13	U	
1,2-DICHLOROETHANE	0.22	U	
1,2-DICHLOROPROPANE	0.18	U	
1,3-DICHLOROBENZENE	0.14	U	
1,3-DICHLOROPROPANE	0.16	U	
1,4-DICHLOROBENZENE	0.13	U	
2,2-DICHLOROPROPANE	0.13	U	
2-BUTANONE	0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U	
2-CHLOROTOLUENE	0.11	U	
2-HEXANONE	0.41	U	
4-CHLOROTOLUENE	0.18	U	
4-ISOPROPYLTOLUENE	0.12	U	
4-METHYL-2-PENTANONE	0.32	U	
ACETONE	1.1	U	
BENZENE	0.13	U	
BROMOBENZENE	0.13	U	
BROMOCHLOROMETHANE	0.29	U	
BROMODICHLOROMETHANE	0.15	U	
BROMOFORM	0.64	U	
BROMOMETHANE	0.41	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-26-20			DR-DPT-26-25			DR-DPT-26-30			DR-DPT-26-35		
SDG: 240-28014-1	LAB_ID	240-28014-3			240-28014-4			240-28014-5			240-28014-13		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		65	U		93	U		93	U		6.5	U	
CARBON TETRACHLORIDE		65	U		93	U		93	U		6.5	U	
CHLOROBENZENE		75	U		110	U		110	U		7.5	U	
CHLORODIBROMOMETHANE		90	U		130	U		130	U		9	U	
CHLOROETHANE		150	U		210	U		210	U		15	U	
CHLOROFORM		80	U		110	U		110	U		8	U	
CHLOROMETHANE		150	U		210	U		210	U		15	U	
CIS-1,2-DICHLOROETHENE		85	U		24000			4500			500		
CIS-1,3-DICHLOROPROPENE		70	U		100	U		100	U		7	U	
DIBROMOMETHANE		140	U		200	U		200	U		14	U	
DICHLORODIFLUOROMETHANE		160	U		220	U		220	U		16	U	
DIISOPROPYL ETHER		750	U		1100	U		1100	U		75	U	
ETHYL TERT-BUTYL ETHER		55	U		79	U		79	U		5.5	U	
ETHYLBENZENE		85	U		120	U		120	U		8.5	U	
HEXACHLOROBUTADIENE		150	U		210	U		210	U		15	U	
ISOPROPYLBENZENE		65	U		93	U		93	U		6.5	U	
M+P-XYLENES		120	U		170	U		170	U		12	U	
METHYL TERT-BUTYL ETHER		85	U		120	U		120	U		8.5	U	
METHYLENE CHLORIDE		170	U		1400	B	A	1400	B	A	160	B	A
NAPHTHALENE		120	U		170	U		170	U		12	U	
N-BUTYLBENZENE		60	U		86	U		86	U		6	U	
N-PROPYLBENZENE		70	U		100	U		100	U		7	U	
O-XYLENE		70	U		100	U		100	U		7	U	
SEC-BUTYLBENZENE		65	U		93	U		93	U		6.5	U	
STYRENE		55	U		79	U		79	U		5.5	U	
TERT-AMYL METHYL ETHER		34	U		48	U		48	U		3.4	U	
TERT-BUTYLBENZENE		65	U		93	U		93	U		6.5	U	
TERTIARY-BUTYL ALCOHOL		2000	UR	C	2800	UR	C	2800	UR	C	200	UR	C
TETRACHLOROETHENE		150	U		210	U		210	U		15	U	
TOLUENE		65	U		120	J	P	93	U		6.5	U	
TOTAL XYLENES		70	U		100	U		100	U		7	U	
TRANS-1,2-DICHLOROETHENE		95	U		140	U		140	U		9.5	U	
TRANS-1,3-DICHLOROPROPENE		95	U		140	U		140	U		9.5	U	
TRICHLOROETHENE		85	U		850			26000			1600		
TRICHLOROFLUOROMETHANE		110	U		150	U		150	U		11	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-26-40			DR-DPT-26-45			DR-DPT-30-20			DR-DPT-30-30		
SDG: 240-28014-1	LAB_ID	240-28014-12			240-28014-10			240-28014-6			240-28014-7		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		2.2	U		0.67	J	P	0.44	J	P	5.2	U	
CARBON TETRACHLORIDE		2.2	U		0.52	U		0.37	U		5.2	U	
CHLOROBENZENE		2.5	U		0.6	U		0.43	U		6	U	
CHLORODIBROMOMETHANE		3	U		0.72	U		0.51	U		7.2	U	
CHLOROETHANE		4.8	U		1.2	U		0.83	U		12	U	
CHLOROFORM		2.7	U		0.69	J	P	0.46	U		6.4	U	
CHLOROMETHANE		5	U		1.2	U		0.86	U		12	U	
CIS-1,2-DICHLOROETHENE		410			110			100			920		
CIS-1,3-DICHLOROPROPENE		2.3	U		0.56	U		0.4	U		5.6	U	
DIBROMOMETHANE		4.7	U		1.1	U		0.8	U		11	U	
DICHLORODIFLUOROMETHANE		5.2	U		1.2	U		0.89	U		12	U	
DIISOPROPYL ETHER		25	U		6	U		4.3	U		60	U	
ETHYL TERT-BUTYL ETHER		1.8	U		0.44	U		0.31	U		4.4	U	
ETHYLBENZENE		2.8	U		0.68	U		0.49	U		6.8	U	
HEXACHLOROBUTADIENE		5	U		1.2	U		0.86	U		12	U	
ISOPROPYLBENZENE		2.2	U		0.52	U		0.37	U		5.2	U	
M+P-XYLENES		4	U		0.96	U		0.69	U		9.6	U	
METHYL TERT-BUTYL ETHER		2.8	U		0.68	U		0.49	U		6.8	U	
METHYLENE CHLORIDE		55	B	A	5.8	B	A	2.5	B	A	13	U	
NAPHTHALENE		4	U		0.96	U		0.69	U		9.6	U	
N-BUTYLBENZENE		2	U		0.48	U		0.34	U		4.8	U	
N-PROPYLBENZENE		2.3	U		0.56	U		0.4	U		5.6	U	
O-XYLENE		2.3	U		0.56	U		0.4	U		5.6	U	
SEC-BUTYLBENZENE		2.2	U		0.52	U		0.37	U		5.2	U	
STYRENE		1.8	U		0.44	U		0.31	U		4.4	U	
TERT-AMYL METHYL ETHER		1.1	U		0.27	U		0.19	U		2.7	U	
TERT-BUTYLBENZENE		2.2	U		0.52	U		0.37	U		5.2	U	
TERTIARY-BUTYL ALCOHOL		65	UR	C	16	UR	C	11	UR	C	160	UR	C
TETRACHLOROETHENE		4.8	U		1.2	U		0.83	U		12	U	
TOLUENE		2.2	U		0.52	U		0.37	U		6.9	J	P
TOTAL XYLENES		2.3	U		0.56	U		0.4	U		5.6	U	
TRANS-1,2-DICHLOROETHENE		3.2	U		1.4	J	P	1.2	J	P	9.2	J	P
TRANS-1,3-DICHLOROPROPENE		3.2	U		0.76	U		0.54	U		7.6	U	
TRICHLOROETHENE		540			130			20			270		
TRICHLOROFLUOROMETHANE		3.5	U		0.84	U		0.6	U		8.4	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-30-35			DR-DPT-30-40			DR-DPT-DUP01			DR-DPT-DUP02		
SDG: 240-28014-1	LAB_ID	240-28014-8			240-28014-9			240-28014-1			240-28014-2		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		3.7	U		1	U		110	U		0.87	U	
CARBON TETRACHLORIDE		3.7	U		1	U		110	U		0.87	U	
CHLOROBENZENE		4.3	U		1.2	U		120	U		1	U	
CHLORODIBROMOMETHANE		5.1	U		1.4	U		150	U		1.2	U	
CHLOROETHANE		8.3	U		2.2	U		240	U		1.9	U	
CHLOROFORM		4.6	U		1.2	U		130	U		1.1	U	
CHLOROMETHANE		8.6	U		2.3	U		250	U		2	U	
CIS-1,2-DICHLOROETHENE		530			130			24000			100		
CIS-1,3-DICHLOROPROPENE		4	U		1.1	U		120	U		0.93	U	
DIBROMOMETHANE		8	U		2.2	U		230	U		1.9	U	
DICHLORODIFLUOROMETHANE		8.9	U		2.4	U		260	U		2.1	U	
DIISOPROPYL ETHER		43	U		12	U		1200	U		10	U	
ETHYL TERT-BUTYL ETHER		3.1	U		0.85	U		92	U		0.73	U	
ETHYLBENZENE		4.9	U		1.3	U		140	U		1.1	U	
HEXACHLOROBUTADIENE		8.6	U		2.3	U		250	U		2	U	
ISOPROPYLBENZENE		3.7	U		1	U		110	U		0.87	U	
M+P-XYLENES		6.9	U		1.8	U		200	U		1.6	U	
METHYL TERT-BUTYL ETHER		4.9	U		1.3	U		140	U		1.1	U	
METHYLENE CHLORIDE		54	B	A	2.5	U		270	U		2.2	U	
NAPHTHALENE		6.9	U		1.8	U		200	U		1.6	U	
N-BUTYLBENZENE		3.4	U		0.92	U		100	U		0.8	U	
N-PROPYLBENZENE		4	U		1.1	U		120	U		0.93	U	
O-XYLENE		4	U		1.8	J	P	120	U		1	J	P
SEC-BUTYLBENZENE		3.7	U		1	U		110	U		0.87	U	
STYRENE		3.1	U		0.85	U		92	U		0.73	U	
TERT-AMYL METHYL ETHER		1.9	U		0.52	U		56	U		0.45	U	
TERT-BUTYLBENZENE		3.7	U		1	U		110	U		0.87	U	
TERTIARY-BUTYL ALCOHOL		110	UR	C	30	UR	C	3200	UR	C	26	UR	C
TETRACHLOROETHENE		8.3	U		2.2	U		240	U		1.9	U	
TOLUENE		3.7	U		1.9	J	P	230	J	P	0.87	U	
TOTAL XYLENES		4	U		1.8	J	P	120	U		1	J	P
TRANS-1,2-DICHLOROETHENE		6	J	P	1.8	J	P	160	U		1.3	U	
TRANS-1,3-DICHLOROPROPENE		5.4	U		1.5	U		160	U		1.3	U	
TRICHLOROETHENE		1000			230			790	J	P	160		
TRICHLOROFLUOROMETHANE		6	U		1.6	U		170	U		1.4	U	

PROJ_NO: 04882	NSAMPLE	TB-081513-240-28014-1
SDG: 240-28014-1	LAB_ID	240-28014-11
FRACTION: OV	SAMP_DATE	8/15/2013
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
CARBON DISULFIDE	0.13	U	
CARBON TETRACHLORIDE	0.13	U	
CHLOROBENZENE	0.15	U	
CHLORODIBROMOMETHANE	0.18	U	
CHLOROETHANE	0.29	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U	
DIBROMOMETHANE	0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U	
DIISOPROPYL ETHER	1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U	
ETHYLBENZENE	0.17	U	
HEXACHLOROBUTADIENE	0.3	U	
ISOPROPYLBENZENE	0.13	U	
M+P-XYLENES	0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U	
METHYLENE CHLORIDE	0.33	U	
NAPHTHALENE	0.24	U	
N-BUTYLBENZENE	0.12	U	
N-PROPYLBENZENE	0.14	U	
O-XYLENE	0.14	U	
SEC-BUTYLBENZENE	0.13	U	
STYRENE	0.11	U	
TERT-AMYL METHYL ETHER	0.067	U	
TERT-BUTYLBENZENE	0.13	U	
TERTIARY-BUTYL ALCOHOL	3.9	UR	C
TETRACHLOROETHENE	0.29	U	
TOLUENE	0.13	U	
TOTAL XYLENES	0.14	U	
TRANS-1,2-DICHLOROETHENE	0.19	U	
TRANS-1,3-DICHLOROPROPENE	0.19	U	
TRICHLOROETHENE	0.17	U	
TRICHLOROFLUOROMETHANE	0.21	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-26-20			DR-DPT-26-25			DR-DPT-26-30			DR-DPT-26-35		
SDG: 240-28014-1	LAB_ID	240-28014-3			240-28014-4			240-28014-5			240-28014-13		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		95	UR	C	140	UR	C	140	UR	C	9.5	UR	C
VINYL CHLORIDE		5800			7600			550	J	P	94		

PROJ_NO: 04882	NSAMPLE	DR-DPT-26-40			DR-DPT-26-45			DR-DPT-30-20			DR-DPT-30-30		
SDG: 240-28014-1	LAB_ID	240-28014-12			240-28014-10			240-28014-6			240-28014-7		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		3.2	UR	C	0.76	UR	C	0.54	UR	C	7.6	UR	C
VINYL CHLORIDE		59			29			2.6	J	P	51		

PROJ_NO: 04882	NSAMPLE	DR-DPT-30-35			DR-DPT-30-40			DR-DPT-DUP01			DR-DPT-DUP02		
SDG: 240-28014-1	LAB_ID	240-28014-8			240-28014-9			240-28014-1			240-28014-2		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		5.4	UR	C	1.5	UR	C	160	UR	C	1.3	UR	C
VINYL CHLORIDE		42			11			7800			7.2		

PROJ_NO: 04882	NSAMPLE	TB-081513-240-28014-1		
SDG: 240-28014-1	LAB_ID	240-28014-11		
FRACTION: OV	SAMP_DATE	8/15/2013		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C
VINYL CHLORIDE		0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-30-20			DR-DPT-30-35			DR-DPT-30-40		
SDG: 240-28014-1	LAB_ID	240-28014-6			240-28014-8			240-28014-9		
FRACTION: TICOV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013		
MEDIA: TIC	QC_TYPE	TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CYCLOHEXANE					3.4	J	P	1.8	J	P
TETRAHYDROFURAN		1.2	J	P						

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-20 | Lab Sample ID: 240-28014-3

Matrix: Water | Lab File ID: UXR7096.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 23:07

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	500	U	500	120
71-55-6	1,1,1-Trichloroethane	500	U	500	110
79-34-5	1,1,2,2-Tetrachloroethane	500	U	500	90
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	500	U	500	140
75-34-3	1,1-Dichloroethane	500	U	500	75
75-35-4	1,1-Dichloroethene	500	U	500	95
563-58-6	1,1-Dichloropropene	500	U	500	65
87-61-6	1,2,3-Trichlorobenzene	500	U	500	85
96-18-4	1,2,3-Trichloropropane	500	U	500	220
526-73-8	1,2,3-Trimethylbenzene	2500	U	2500	3.0
120-82-1	1,2,4-Trichlorobenzene	500	U	500	75
95-63-6	1,2,4-Trimethylbenzene	500	U	500	60
96-12-8	1,2-Dibromo-3-Chloropropane	1000	U	1000	340
95-50-1	1,2-Dichlorobenzene	500	U	500	65
107-06-2	1,2-Dichloroethane	500	U	500	110
78-87-5	1,2-Dichloropropane	500	U	500	90
541-73-1	1,3-Dichlorobenzene	500	U	500	70
142-28-9	1,3-Dichloropropane	500	U	500	80
106-46-7	1,4-Dichlorobenzene	500	U	500	65
594-20-7	2,2-Dichloropropane	500	U	500	65
110-75-8	2-Chloroethyl vinyl ether	5000	U	5000	500
95-49-8	2-Chlorotoluene	500	U	500	55
591-78-6	2-Hexanone	5000	U	5000	210
108-86-1	Bromobenzene	500	U	500	65
74-97-5	Bromochloromethane	500	U	500	150
106-43-4	4-Chlorotoluene	500	U	500	90
99-87-6	p-Isopropyltoluene	500	U	500	60
67-64-1	Acetone	5000	U	5000	550
71-43-2	Benzene	86	J	500	65
75-25-2	Bromoform	500	U	500	320
74-83-9	Bromomethane	500	U	500	210
75-15-0	Carbon disulfide	500	U	500	65
56-23-5	Carbon tetrachloride	500	U	500	65
108-90-7	Chlorobenzene	500	U	500	75
75-00-3	Chloroethane	500	U	500	150

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-20 | Lab Sample ID: 240-28014-3

Matrix: Water | Lab File ID: UXR7096.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 23:07

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	500	U	500	80
74-87-3	Chloromethane	500	U	500	150
156-59-2	cis-1,2-Dichloroethene	500	U	500	85
10061-01-5	cis-1,3-Dichloropropene	500	U	500	70
87-68-3	Hexachlorobutadiene	500	U	500	150
74-95-3	Dibromomethane	500	U	500	140
75-27-4	Bromodichloromethane	500	U	500	75
75-71-8	Dichlorodifluoromethane	500	U	500	160
100-41-4	Ethylbenzene	500	U	500	85
106-93-4	1,2-Dibromoethane	500	U	500	120
108-20-3	Diisopropyl ether	5000	U	5000	750
91-20-3	Naphthalene	500	U	500	120
179601-23-1	m-Xylene & p-Xylene	1000	U	1000	120
104-51-8	n-Butylbenzene	500	U	500	60
98-82-8	Isopropylbenzene	500	U	500	65
103-65-1	n-Propylbenzene	500	U	500	70
78-93-3	2-Butanone	5000	U	5000	290
108-10-1	4-Methyl-2-pentanone	5000	U	5000	160
135-98-8	sec-Butylbenzene	500	U	500	65
1634-04-4	Methyl tert-butyl ether	500	U	500	85
994-05-8	Tert-amyl-methyl ether (TAME)	2500	U	2500	34
75-09-2	Methylene Chloride	500	U	500	170
95-47-6	o-Xylene	500	U	500	70
100-42-5	Styrene	500	U	500	55
637-92-3	Ethyl-t-butyl ether (ETBE)	2500	U	2500	55
98-06-6	tert-Butylbenzene	500	U	500	65
127-18-4	Tetrachloroethene	500	U	500	150
108-88-3	Toluene	500	U	500	65
156-60-5	trans-1,2-Dichloroethene	500	U	500	95
10061-02-6	trans-1,3-Dichloropropene	500	U	500	95
79-01-6	Trichloroethene	500	U	500	85
75-69-4	Trichlorofluoromethane	500	U	500	110
108-05-4	Vinyl acetate	1000	U	1000	95
75-01-4	Vinyl chloride	5800		500	110
75-65-0	tert-Butyl alcohol	25000	U	25000	2000
1330-20-7	Xylenes, Total	1000	U	1000	70

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-20 Lab Sample ID: 240-28014-3

Matrix: Water Lab File ID: UXR7096.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 23:07

Soil Aliquot Vol: Dilution Factor: 500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	500	U	500	90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-20 | Lab Sample ID: 240-28014-3

Matrix: Water | Lab File ID: UXR7096.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 23:07

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-25 | Lab Sample ID: 240-28014-4

Matrix: Water | Lab File ID: UXR7133.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 15:46

Soil Aliquot Vol: | Dilution Factor: 714.28

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	710	U	710	160
71-55-6	1,1,1-Trichloroethane	710	U	710	160
79-34-5	1,1,2,2-Tetrachloroethane	710	U	710	130
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	710	U	710	200
75-34-3	1,1-Dichloroethane	710	U	710	110
75-35-4	1,1-Dichloroethene	160	J	710	140
563-58-6	1,1-Dichloropropene	710	U	710	93
87-61-6	1,2,3-Trichlorobenzene	710	U	710	120
96-18-4	1,2,3-Trichloropropane	710	U	710	310
526-73-8	1,2,3-Trimethylbenzene	3600	U	3600	4.2
120-82-1	1,2,4-Trichlorobenzene	710	U	710	110
95-63-6	1,2,4-Trimethylbenzene	710	U	710	86
96-12-8	1,2-Dibromo-3-Chloropropane	1400	U	1400	480
95-50-1	1,2-Dichlorobenzene	710	U	710	93
107-06-2	1,2-Dichloroethane	710	U	710	160
78-87-5	1,2-Dichloropropane	710	U	710	130
541-73-1	1,3-Dichlorobenzene	710	U	710	100
142-28-9	1,3-Dichloropropane	710	U	710	110
106-46-7	1,4-Dichlorobenzene	710	U	710	93
594-20-7	2,2-Dichloropropane	710	U	710	93
110-75-8	2-Chloroethyl vinyl ether	7100	U	7100	710
95-49-8	2-Chlorotoluene	710	U	710	79
591-78-6	2-Hexanone	7100	U	7100	290
108-86-1	Bromobenzene	710	U	710	93
74-97-5	Bromochloromethane	710	U	710	210
106-43-4	4-Chlorotoluene	710	U	710	130
99-87-6	p-Isopropyltoluene	710	U	710	86
67-64-1	Acetone	1800	J	7100	790
71-43-2	Benzene	94	J B	710	93
75-25-2	Bromoform	710	U	710	460
74-83-9	Bromomethane	710	U	710	290
75-15-0	Carbon disulfide	710	U	710	93
56-23-5	Carbon tetrachloride	710	U	710	93
108-90-7	Chlorobenzene	710	U	710	110
75-00-3	Chloroethane	710	U	710	210

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-25 | Lab Sample ID: 240-28014-4

Matrix: Water | Lab File ID: UXR7133.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 15:46

Soil Aliquot Vol: | Dilution Factor: 714.28

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	710	U	710	110
74-87-3	Chloromethane	710	U	710	210
156-59-2	cis-1,2-Dichloroethene	24000		710	120
10061-01-5	cis-1,3-Dichloropropene	710	U	710	100
87-68-3	Hexachlorobutadiene	710	U	710	210
74-95-3	Dibromomethane	710	U	710	200
75-27-4	Bromodichloromethane	710	U	710	110
75-71-8	Dichlorodifluoromethane	710	U	710	220
100-41-4	Ethylbenzene	710	U	710	120
106-93-4	1,2-Dibromoethane	710	U	710	170
108-20-3	Diisopropyl ether	7100	U	7100	1100
91-20-3	Naphthalene	710	U	710	170
179601-23-1	m-Xylene & p-Xylene	1400	U	1400	170
104-51-8	n-Butylbenzene	710	U	710	86
98-82-8	Isopropylbenzene	710	U	710	93
103-65-1	n-Propylbenzene	710	U	710	100
78-93-3	2-Butanone	7100	U	7100	410
108-10-1	4-Methyl-2-pentanone	7100	U	7100	230
135-98-8	sec-Butylbenzene	710	U	710	93
1634-04-4	Methyl tert-butyl ether	710	U	710	120
994-05-8	Tert-amyl-methyl ether (TAME)	3600	U	3600	48
75-09-2	Methylene Chloride	1400	B	710	240
95-47-6	o-Xylene	710	U	710	100
100-42-5	Styrene	710	U	710	79
637-92-3	Ethyl-t-butyl ether (ETBE)	3600	U	3600	79
98-06-6	tert-Butylbenzene	710	U	710	93
127-18-4	Tetrachloroethene	710	U	710	210
108-88-3	Toluene	120	J	710	93
156-60-5	trans-1,2-Dichloroethene	710	U	710	140
10061-02-6	trans-1,3-Dichloropropene	710	U	710	140
79-01-6	Trichloroethene	850		710	120
75-69-4	Trichlorofluoromethane	710	U	710	150
108-05-4	Vinyl acetate	1400	U	1400	140
75-01-4	Vinyl chloride	7600		710	160
75-65-0	tert-Butyl alcohol	36000	U	36000	2800
1330-20-7	Xylenes, Total	1400	U	1400	100

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-25 Lab Sample ID: 240-28014-4

Matrix: Water Lab File ID: UXR7133.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:50

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 15:46

Soil Aliquot Vol: Dilution Factor: 714.28

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	710	U	710	130

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	96		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-25 | Lab Sample ID: 240-28014-4

Matrix: Water | Lab File ID: UXR7133.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 15:46

Soil Aliquot Vol: | Dilution Factor: 714.28

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-30 Lab Sample ID: 240-28014-5

Matrix: Water Lab File ID: UXR7134.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:35

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 16:08

Soil Aliquot Vol: Dilution Factor: 714.28

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	710	U	710	160
71-55-6	1,1,1-Trichloroethane	710	U	710	160
79-34-5	1,1,2,2-Tetrachloroethane	710	U	710	130
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	710	U	710	200
75-34-3	1,1-Dichloroethane	710	U	710	110
75-35-4	1,1-Dichloroethene	710	U	710	140
563-58-6	1,1-Dichloropropene	710	U	710	93
87-61-6	1,2,3-Trichlorobenzene	710	U	710	120
96-18-4	1,2,3-Trichloropropane	710	U	710	310
526-73-8	1,2,3-Trimethylbenzene	3600	U	3600	4.2
120-82-1	1,2,4-Trichlorobenzene	710	U	710	110
95-63-6	1,2,4-Trimethylbenzene	710	U	710	86
96-12-8	1,2-Dibromo-3-Chloropropane	1400	U	1400	480
95-50-1	1,2-Dichlorobenzene	710	U	710	93
107-06-2	1,2-Dichloroethane	180	J	710	160
78-87-5	1,2-Dichloropropane	710	U	710	130
541-73-1	1,3-Dichlorobenzene	710	U	710	100
142-28-9	1,3-Dichloropropane	710	U	710	110
106-46-7	1,4-Dichlorobenzene	710	U	710	93
594-20-7	2,2-Dichloropropane	710	U	710	93
110-75-8	2-Chloroethyl vinyl ether	7100	U	7100	710
95-49-8	2-Chlorotoluene	710	U	710	79
591-78-6	2-Hexanone	7100	U	7100	290
108-86-1	Bromobenzene	710	U	710	93
74-97-5	Bromochloromethane	710	U	710	210
106-43-4	4-Chlorotoluene	710	U	710	130
99-87-6	p-Isopropyltoluene	710	U	710	86
67-64-1	Acetone	2000	J	7100	790
71-43-2	Benzene	150	J B	710	93
75-25-2	Bromoform	710	U	710	460
74-83-9	Bromomethane	710	U	710	290
75-15-0	Carbon disulfide	710	U	710	93
56-23-5	Carbon tetrachloride	710	U	710	93
108-90-7	Chlorobenzene	710	U	710	110
75-00-3	Chloroethane	710	U	710	210

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-30 | Lab Sample ID: 240-28014-5

Matrix: Water | Lab File ID: UXR7134.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 16:08

Soil Aliquot Vol: | Dilution Factor: 714.28

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	710	U	710	110
74-87-3	Chloromethane	710	U	710	210
156-59-2	cis-1,2-Dichloroethene	4500		710	120
10061-01-5	cis-1,3-Dichloropropene	710	U	710	100
87-68-3	Hexachlorobutadiene	710	U	710	210
74-95-3	Dibromomethane	710	U	710	200
75-27-4	Bromodichloromethane	710	U	710	110
75-71-8	Dichlorodifluoromethane	710	U	710	220
100-41-4	Ethylbenzene	710	U	710	120
106-93-4	1,2-Dibromoethane	710	U	710	170
108-20-3	Diisopropyl ether	7100	U	7100	1100
91-20-3	Naphthalene	710	U	710	170
179601-23-1	m-Xylene & p-Xylene	1400	U	1400	170
104-51-8	n-Butylbenzene	710	U	710	86
98-82-8	Isopropylbenzene	710	U	710	93
103-65-1	n-Propylbenzene	710	U	710	100
78-93-3	2-Butanone	7100	U	7100	410
108-10-1	4-Methyl-2-pentanone	7100	U	7100	230
135-98-8	sec-Butylbenzene	710	U	710	93
1634-04-4	Methyl tert-butyl ether	710	U	710	120
994-05-8	Tert-amyl-methyl ether (TAME)	3600	U	3600	48
75-09-2	Methylene Chloride	1400	B	710	240
95-47-6	o-Xylene	710	U	710	100
100-42-5	Styrene	710	U	710	79
637-92-3	Ethyl-t-butyl ether (ETBE)	3600	U	3600	79
98-06-6	tert-Butylbenzene	710	U	710	93
127-18-4	Tetrachloroethene	710	U	710	210
108-88-3	Toluene	710	U	710	93
156-60-5	trans-1,2-Dichloroethene	710	U	710	140
10061-02-6	trans-1,3-Dichloropropene	710	U	710	140
79-01-6	Trichloroethene	26000		710	120
75-69-4	Trichlorofluoromethane	710	U	710	150
108-05-4	Vinyl acetate	1400	U	1400	140
75-01-4	Vinyl chloride	550	J	710	160
75-65-0	tert-Butyl alcohol	36000	U	36000	2800
1330-20-7	Xylenes, Total	1400	U	1400	100

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-30 | Lab Sample ID: 240-28014-5

Matrix: Water | Lab File ID: UXR7134.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 16:08

Soil Aliquot Vol: | Dilution Factor: 714.28

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	710	U	710	130

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-30 | Lab Sample ID: 240-28014-5

Matrix: Water | Lab File ID: UXR7134.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 16:08

Soil Aliquot Vol: | Dilution Factor: 714.28

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-35 Lab Sample ID: 240-28014-13

Matrix: Water Lab File ID: UXR7142.D

Analysis Method: 8260B Date Collected: 08/15/2013 14:50

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 19:04

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	50	U	50	12
71-55-6	1,1,1-Trichloroethane	50	U	50	11
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	9.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	50	U	50	14
75-34-3	1,1-Dichloroethane	50	U	50	7.5
75-35-4	1,1-Dichloroethene	50	U	50	9.5
563-58-6	1,1-Dichloropropene	50	U	50	6.5
87-61-6	1,2,3-Trichlorobenzene	50	U	50	8.5
96-18-4	1,2,3-Trichloropropane	50	U	50	22
526-73-8	1,2,3-Trimethylbenzene	250	U	250	0.30
120-82-1	1,2,4-Trichlorobenzene	13	J	50	7.5
95-63-6	1,2,4-Trimethylbenzene	50	U	50	6.0
96-12-8	1,2-Dibromo-3-Chloropropane	100	U	100	34
95-50-1	1,2-Dichlorobenzene	50	U	50	6.5
107-06-2	1,2-Dichloroethane	15	J	50	11
78-87-5	1,2-Dichloropropane	50	U	50	9.0
541-73-1	1,3-Dichlorobenzene	50	U	50	7.0
142-28-9	1,3-Dichloropropane	50	U	50	8.0
106-46-7	1,4-Dichlorobenzene	50	U	50	6.5
594-20-7	2,2-Dichloropropane	50	U	50	6.5
110-75-8	2-Chloroethyl vinyl ether	500	U	500	50
95-49-8	2-Chlorotoluene	50	U	50	5.5
591-78-6	2-Hexanone	500	U	500	21
108-86-1	Bromobenzene	50	U	50	6.5
74-97-5	Bromochloromethane	50	U	50	15
106-43-4	4-Chlorotoluene	50	U	50	9.0
99-87-6	p-Isopropyltoluene	50	U	50	6.0
67-64-1	Acetone	160	J	500	55
71-43-2	Benzene	8.6	J B	50	6.5
75-25-2	Bromoform	50	U	50	32
74-83-9	Bromomethane	50	U	50	21
75-15-0	Carbon disulfide	50	U	50	6.5
56-23-5	Carbon tetrachloride	50	U	50	6.5
108-90-7	Chlorobenzene	50	U	50	7.5
75-00-3	Chloroethane	50	U	50	15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-35 | Lab Sample ID: 240-28014-13

Matrix: Water | Lab File ID: UXR7142.D

Analysis Method: 8260B | Date Collected: 08/15/2013 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 19:04

Soil Aliquot Vol: | Dilution Factor: 50

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	50	U	50	8.0
74-87-3	Chloromethane	50	U	50	15
156-59-2	cis-1,2-Dichloroethene	500		50	8.5
10061-01-5	cis-1,3-Dichloropropene	50	U	50	7.0
87-68-3	Hexachlorobutadiene	50	U	50	15
74-95-3	Dibromomethane	50	U	50	14
75-27-4	Bromodichloromethane	50	U	50	7.5
75-71-8	Dichlorodifluoromethane	50	U	50	16
100-41-4	Ethylbenzene	50	U	50	8.5
106-93-4	1,2-Dibromoethane	50	U	50	12
108-20-3	Diisopropyl ether	500	U	500	75
91-20-3	Naphthalene	50	U	50	12
179601-23-1	m-Xylene & p-Xylene	100	U	100	12
104-51-8	n-Butylbenzene	50	U	50	6.0
98-82-8	Isopropylbenzene	50	U	50	6.5
103-65-1	n-Propylbenzene	50	U	50	7.0
78-93-3	2-Butanone	500	U	500	29
108-10-1	4-Methyl-2-pentanone	500	U	500	16
135-98-8	sec-Butylbenzene	50	U	50	6.5
1634-04-4	Methyl tert-butyl ether	50	U	50	8.5
994-05-8	Tert-amyl-methyl ether (TAME)	250	U	250	3.4
75-09-2	Methylene Chloride	160	B	50	17
95-47-6	o-Xylene	50	U	50	7.0
100-42-5	Styrene	50	U	50	5.5
637-92-3	Ethyl-t-butyl ether (ETBE)	250	U	250	5.5
98-06-6	tert-Butylbenzene	50	U	50	6.5
127-18-4	Tetrachloroethene	50	U	50	15
108-88-3	Toluene	50	U	50	6.5
156-60-5	trans-1,2-Dichloroethene	50	U	50	9.5
10061-02-6	trans-1,3-Dichloropropene	50	U	50	9.5
79-01-6	Trichloroethene	1600		50	8.5
75-69-4	Trichlorofluoromethane	50	U	50	11
108-05-4	Vinyl acetate	100	U	100	9.5
75-01-4	Vinyl chloride	94		50	11
75-65-0	tert-Butyl alcohol	2500	U	2500	200
1330-20-7	Xylenes, Total	100	U	100	7.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-35 | Lab Sample ID: 240-28014-13

Matrix: Water | Lab File ID: UXR7142.D

Analysis Method: 8260B | Date Collected: 08/15/2013 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 19:04

Soil Aliquot Vol: | Dilution Factor: 50

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	50	U	50	9.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-35 | Lab Sample ID: 240-28014-13

Matrix: Water | Lab File ID: UXR7142.D

Analysis Method: 8260B | Date Collected: 08/15/2013 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 19:04

Soil Aliquot Vol: | Dilution Factor: 50

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-40 | Lab Sample ID: 240-28014-12

Matrix: Water | Lab File ID: UXR7141.D

Analysis Method: 8260B | Date Collected: 08/15/2013 15:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 18:42

Soil Aliquot Vol: | Dilution Factor: 16.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	17	U	17	3.8
71-55-6	1,1,1-Trichloroethane	17	U	17	3.7
79-34-5	1,1,2,2-Tetrachloroethane	17	U	17	3.0
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	17	U	17	4.7
75-34-3	1,1-Dichloroethane	17	U	17	2.5
75-35-4	1,1-Dichloroethene	3.2	J	17	3.2
563-58-6	1,1-Dichloropropene	17	U	17	2.2
87-61-6	1,2,3-Trichlorobenzene	17	U	17	2.8
96-18-4	1,2,3-Trichloropropane	17	U	17	7.2
526-73-8	1,2,3-Trimethylbenzene	83	U	83	0.098
120-82-1	1,2,4-Trichlorobenzene	17	U	17	2.5
95-63-6	1,2,4-Trimethylbenzene	17	U	17	2.0
96-12-8	1,2-Dibromo-3-Chloropropane	33	U	33	11
95-50-1	1,2-Dichlorobenzene	17	U	17	2.2
107-06-2	1,2-Dichloroethane	7.8	J	17	3.7
78-87-5	1,2-Dichloropropane	17	U	17	3.0
541-73-1	1,3-Dichlorobenzene	17	U	17	2.3
142-28-9	1,3-Dichloropropane	17	U	17	2.7
106-46-7	1,4-Dichlorobenzene	17	U	17	2.2
594-20-7	2,2-Dichloropropane	17	U	17	2.2
110-75-8	2-Chloroethyl vinyl ether	170	U	170	17
95-49-8	2-Chlorotoluene	17	U	17	1.8
591-78-6	2-Hexanone	170	U	170	6.8
108-86-1	Bromobenzene	17	U	17	2.2
74-97-5	Bromochloromethane	17	U	17	4.8
106-43-4	4-Chlorotoluene	17	U	17	3.0
99-87-6	p-Isopropyltoluene	17	U	17	2.0
67-64-1	Acetone	55	J	170	18
71-43-2	Benzene	4.1	J B	17	2.2
75-25-2	Bromoform	17	U	17	11
74-83-9	Bromomethane	17	U	17	6.8
75-15-0	Carbon disulfide	17	U	17	2.2
56-23-5	Carbon tetrachloride	17	U	17	2.2
108-90-7	Chlorobenzene	17	U	17	2.5
75-00-3	Chloroethane	17	U	17	4.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-40 Lab Sample ID: 240-28014-12

Matrix: Water Lab File ID: UXR7141.D

Analysis Method: 8260B Date Collected: 08/15/2013 15:05

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 18:42

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	17	U	17	2.7
74-87-3	Chloromethane	17	U	17	5.0
156-59-2	cis-1,2-Dichloroethene	410		17	2.8
10061-01-5	cis-1,3-Dichloropropene	17	U	17	2.3
87-68-3	Hexachlorobutadiene	17	U	17	5.0
74-95-3	Dibromomethane	17	U	17	4.7
75-27-4	Bromodichloromethane	17	U	17	2.5
75-71-8	Dichlorodifluoromethane	17	U	17	5.2
100-41-4	Ethylbenzene	17	U	17	2.8
106-93-4	1,2-Dibromoethane	17	U	17	4.0
108-20-3	Diisopropyl ether	170	U	170	25
91-20-3	Naphthalene	17	U	17	4.0
179601-23-1	m-Xylene & p-Xylene	33	U	33	4.0
104-51-8	n-Butylbenzene	17	U	17	2.0
98-82-8	Isopropylbenzene	17	U	17	2.2
103-65-1	n-Propylbenzene	17	U	17	2.3
78-93-3	2-Butanone	170	U	170	9.5
108-10-1	4-Methyl-2-pentanone	170	U	170	5.3
135-98-8	sec-Butylbenzene	17	U	17	2.2
1634-04-4	Methyl tert-butyl ether	17	U	17	2.8
994-05-8	Tert-amyl-methyl ether (TAME)	83	U	83	1.1
75-09-2	Methylene Chloride	55	B	17	5.5
95-47-6	o-Xylene	17	U	17	2.3
100-42-5	Styrene	17	U	17	1.8
637-92-3	Ethyl-t-butyl ether (ETBE)	83	U	83	1.8
98-06-6	tert-Butylbenzene	17	U	17	2.2
127-18-4	Tetrachloroethene	17	U	17	4.8
108-88-3	Toluene	17	U	17	2.2
156-60-5	trans-1,2-Dichloroethene	17	U	17	3.2
10061-02-6	trans-1,3-Dichloropropene	17	U	17	3.2
79-01-6	Trichloroethene	540		17	2.8
75-69-4	Trichlorofluoromethane	17	U	17	3.5
108-05-4	Vinyl acetate	33	U	33	3.2
75-01-4	Vinyl chloride	59		17	3.7
75-65-0	tert-Butyl alcohol	830	U	830	65
1330-20-7	Xylenes, Total	33	U	33	2.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-40 Lab Sample ID: 240-28014-12

Matrix: Water Lab File ID: UXR7141.D

Analysis Method: 8260B Date Collected: 08/15/2013 15:05

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 18:42

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	17	U	17	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-40 Lab Sample ID: 240-28014-12

Matrix: Water Lab File ID: UXR7141.D

Analysis Method: 8260B Date Collected: 08/15/2013 15:05

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 18:42

Soil Aliquot Vol: Dilution Factor: 16.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-45 Lab Sample ID: 240-28014-10

Matrix: Water Lab File ID: UXR7139.D

Analysis Method: 8260B Date Collected: 08/15/2013 15:45

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 17:58

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.0	U	4.0	0.92
71-55-6	1,1,1-Trichloroethane	4.0	U	4.0	0.88
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.72
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.0	U	4.0	1.1
75-34-3	1,1-Dichloroethane	4.0	U	4.0	0.60
75-35-4	1,1-Dichloroethene	4.0	U	4.0	0.76
563-58-6	1,1-Dichloropropene	4.0	U	4.0	0.52
87-61-6	1,2,3-Trichlorobenzene	4.0	U	4.0	0.68
96-18-4	1,2,3-Trichloropropane	4.0	U	4.0	1.7
526-73-8	1,2,3-Trimethylbenzene	20	U	20	0.024
120-82-1	1,2,4-Trichlorobenzene	4.0	U	4.0	0.60
95-63-6	1,2,4-Trimethylbenzene	4.0	U	4.0	0.48
96-12-8	1,2-Dibromo-3-Chloropropane	8.0	U	8.0	2.7
95-50-1	1,2-Dichlorobenzene	4.0	U	4.0	0.52
107-06-2	1,2-Dichloroethane	2.1	J	4.0	0.88
78-87-5	1,2-Dichloropropane	4.0	U	4.0	0.72
541-73-1	1,3-Dichlorobenzene	4.0	U	4.0	0.56
142-28-9	1,3-Dichloropropane	4.0	U	4.0	0.64
106-46-7	1,4-Dichlorobenzene	4.0	U	4.0	0.52
594-20-7	2,2-Dichloropropane	4.0	U	4.0	0.52
110-75-8	2-Chloroethyl vinyl ether	40	U	40	4.0
95-49-8	2-Chlorotoluene	4.0	U	4.0	0.44
591-78-6	2-Hexanone	40	U	40	1.6
108-86-1	Bromobenzene	4.0	U	4.0	0.52
74-97-5	Bromochloromethane	4.0	U	4.0	1.2
106-43-4	4-Chlorotoluene	4.0	U	4.0	0.72
99-87-6	p-Isopropyltoluene	4.0	U	4.0	0.48
67-64-1	Acetone	13	J	40	4.4
71-43-2	Benzene	1.3	J B	4.0	0.52
75-25-2	Bromoform	4.0	U	4.0	2.6
74-83-9	Bromomethane	4.0	U	4.0	1.6
75-15-0	Carbon disulfide	0.67	J	4.0	0.52
56-23-5	Carbon tetrachloride	4.0	U	4.0	0.52
108-90-7	Chlorobenzene	4.0	U	4.0	0.60
75-00-3	Chloroethane	4.0	U	4.0	1.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-45 | Lab Sample ID: 240-28014-10

Matrix: Water | Lab File ID: UXR7139.D

Analysis Method: 8260B | Date Collected: 08/15/2013 15:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 17:58

Soil Aliquot Vol: | Dilution Factor: 4

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.69	J	4.0	0.64
74-87-3	Chloromethane	4.0	U	4.0	1.2
156-59-2	cis-1,2-Dichloroethene	110		4.0	0.68
10061-01-5	cis-1,3-Dichloropropene	4.0	U	4.0	0.56
87-68-3	Hexachlorobutadiene	4.0	U	4.0	1.2
74-95-3	Dibromomethane	4.0	U	4.0	1.1
75-27-4	Bromodichloromethane	4.0	U	4.0	0.60
75-71-8	Dichlorodifluoromethane	4.0	U	4.0	1.2
100-41-4	Ethylbenzene	4.0	U	4.0	0.68
106-93-4	1,2-Dibromoethane	4.0	U	4.0	0.96
108-20-3	Diisopropyl ether	40	U	40	6.0
91-20-3	Naphthalene	4.0	U	4.0	0.96
179601-23-1	m-Xylene & p-Xylene	8.0	U	8.0	0.96
104-51-8	n-Butylbenzene	4.0	U	4.0	0.48
98-82-8	Isopropylbenzene	4.0	U	4.0	0.52
103-65-1	n-Propylbenzene	4.0	U	4.0	0.56
78-93-3	2-Butanone	40	U	40	2.3
108-10-1	4-Methyl-2-pentanone	40	U	40	1.3
135-98-8	sec-Butylbenzene	4.0	U	4.0	0.52
1634-04-4	Methyl tert-butyl ether	4.0	U	4.0	0.68
994-05-8	Tert-amyl-methyl ether (TAME)	20	U	20	0.27
75-09-2	Methylene Chloride	5.8	B	4.0	1.3
95-47-6	o-Xylene	4.0	U	4.0	0.56
100-42-5	Styrene	4.0	U	4.0	0.44
637-92-3	Ethyl-t-butyl ether (ETBE)	20	U	20	0.44
98-06-6	tert-Butylbenzene	4.0	U	4.0	0.52
127-18-4	Tetrachloroethene	4.0	U	4.0	1.2
108-88-3	Toluene	4.0	U	4.0	0.52
156-60-5	trans-1,2-Dichloroethene	1.4	J	4.0	0.76
10061-02-6	trans-1,3-Dichloropropene	4.0	U	4.0	0.76
79-01-6	Trichloroethene	130		4.0	0.68
75-69-4	Trichlorofluoromethane	4.0	U	4.0	0.84
108-05-4	Vinyl acetate	8.0	U	8.0	0.76
75-01-4	Vinyl chloride	29		4.0	0.88
75-65-0	tert-Butyl alcohol	200	U	200	16
1330-20-7	Xylenes, Total	8.0	U	8.0	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-45 | Lab Sample ID: 240-28014-10

Matrix: Water | Lab File ID: UXR7139.D

Analysis Method: 8260B | Date Collected: 08/15/2013 15:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 17:58

Soil Aliquot Vol: | Dilution Factor: 4

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	4.0	U	4.0	0.72

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	97		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-26-45 | Lab Sample ID: 240-28014-10

Matrix: Water | Lab File ID: UXR7139.D

Analysis Method: 8260B | Date Collected: 08/15/2013 15:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 17:58

Soil Aliquot Vol: | Dilution Factor: 4

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-20 | Lab Sample ID: 240-28014-6

Matrix: Water | Lab File ID: UXR7135.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 16:30

Soil Aliquot Vol: | Dilution Factor: 2.86

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	2.9	U	2.9	0.66
71-55-6	1,1,1-Trichloroethane	2.9	U	2.9	0.63
79-34-5	1,1,2,2-Tetrachloroethane	2.9	U	2.9	0.51
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	2.9	U	2.9	0.80
75-34-3	1,1-Dichloroethane	2.9	U	2.9	0.43
75-35-4	1,1-Dichloroethene	2.9	U	2.9	0.54
563-58-6	1,1-Dichloropropene	2.9	U	2.9	0.37
87-61-6	1,2,3-Trichlorobenzene	2.9	U	2.9	0.49
96-18-4	1,2,3-Trichloropropane	2.9	U	2.9	1.2
526-73-8	1,2,3-Trimethylbenzene	14	U	14	0.017
120-82-1	1,2,4-Trichlorobenzene	2.9	U	2.9	0.43
95-63-6	1,2,4-Trimethylbenzene	2.9	U	2.9	0.34
96-12-8	1,2-Dibromo-3-Chloropropane	5.7	U	5.7	1.9
95-50-1	1,2-Dichlorobenzene	2.9	U	2.9	0.37
107-06-2	1,2-Dichloroethane	2.9	U	2.9	0.63
78-87-5	1,2-Dichloropropane	2.9	U	2.9	0.51
541-73-1	1,3-Dichlorobenzene	2.9	U	2.9	0.40
142-28-9	1,3-Dichloropropane	2.9	U	2.9	0.46
106-46-7	1,4-Dichlorobenzene	2.9	U	2.9	0.37
594-20-7	2,2-Dichloropropane	2.9	U	2.9	0.37
110-75-8	2-Chloroethyl vinyl ether	29	U	29	2.8
95-49-8	2-Chlorotoluene	2.9	U	2.9	0.31
591-78-6	2-Hexanone	29	U	29	1.2
108-86-1	Bromobenzene	2.9	U	2.9	0.37
74-97-5	Bromochloromethane	2.9	U	2.9	0.83
106-43-4	4-Chlorotoluene	2.9	U	2.9	0.51
99-87-6	p-Isopropyltoluene	2.9	U	2.9	0.34
67-64-1	Acetone	41		29	3.1
71-43-2	Benzene	3.4	B	2.9	0.37
75-25-2	Bromoform	2.9	U	2.9	1.8
74-83-9	Bromomethane	2.9	U	2.9	1.2
75-15-0	Carbon disulfide	0.44	J	2.9	0.37
56-23-5	Carbon tetrachloride	2.9	U	2.9	0.37
108-90-7	Chlorobenzene	2.9	U	2.9	0.43
75-00-3	Chloroethane	2.9	U	2.9	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-20 Lab Sample ID: 240-28014-6

Matrix: Water Lab File ID: UXR7135.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:50

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 16:30

Soil Aliquot Vol: Dilution Factor: 2.86

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	2.9	U	2.9	0.46
74-87-3	Chloromethane	2.9	U	2.9	0.86
156-59-2	cis-1,2-Dichloroethene	100		2.9	0.49
10061-01-5	cis-1,3-Dichloropropene	2.9	U	2.9	0.40
87-68-3	Hexachlorobutadiene	2.9	U	2.9	0.86
74-95-3	Dibromomethane	2.9	U	2.9	0.80
75-27-4	Bromodichloromethane	2.9	U	2.9	0.43
75-71-8	Dichlorodifluoromethane	2.9	U	2.9	0.89
100-41-4	Ethylbenzene	2.9	U	2.9	0.49
106-93-4	1,2-Dibromoethane	2.9	U	2.9	0.69
108-20-3	Diisopropyl ether	29	U	29	4.3
91-20-3	Naphthalene	2.9	U	2.9	0.69
179601-23-1	m-Xylene & p-Xylene	5.7	U	5.7	0.69
104-51-8	n-Butylbenzene	2.9	U	2.9	0.34
98-82-8	Isopropylbenzene	2.9	U	2.9	0.37
103-65-1	n-Propylbenzene	2.9	U	2.9	0.40
78-93-3	2-Butanone	29	U	29	1.6
108-10-1	4-Methyl-2-pentanone	29	U	29	0.92
135-98-8	sec-Butylbenzene	2.9	U	2.9	0.37
1634-04-4	Methyl tert-butyl ether	2.9	U	2.9	0.49
994-05-8	Tert-amyl-methyl ether (TAME)	14	U	14	0.19
75-09-2	Methylene Chloride	2.5	J B	2.9	0.94
95-47-6	o-Xylene	2.9	U	2.9	0.40
100-42-5	Styrene	2.9	U	2.9	0.31
637-92-3	Ethyl-t-butyl ether (ETBE)	14	U	14	0.31
98-06-6	tert-Butylbenzene	2.9	U	2.9	0.37
127-18-4	Tetrachloroethene	2.9	U	2.9	0.83
108-88-3	Toluene	2.9	U	2.9	0.37
156-60-5	trans-1,2-Dichloroethene	1.2	J	2.9	0.54
10061-02-6	trans-1,3-Dichloropropene	2.9	U	2.9	0.54
79-01-6	Trichloroethene	20		2.9	0.49
75-69-4	Trichlorofluoromethane	2.9	U	2.9	0.60
108-05-4	Vinyl acetate	5.7	U	5.7	0.54
75-01-4	Vinyl chloride	2.6	J	2.9	0.63
75-65-0	tert-Butyl alcohol	140	U	140	11
1330-20-7	Xylenes, Total	5.7	U	5.7	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-20 | Lab Sample ID: 240-28014-6

Matrix: Water | Lab File ID: UXR7135.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 16:30

Soil Aliquot Vol: | Dilution Factor: 2.86

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	2.9	U	2.9	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-20 | Lab Sample ID: 240-28014-6

Matrix: Water | Lab File ID: UXR7135.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 16:30

Soil Aliquot Vol: | Dilution Factor: 2.86

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 1.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	5.03	1.2	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-30 | Lab Sample ID: 240-28014-7

Matrix: Water | Lab File ID: UXR7190.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/22/2013 17:39

Soil Aliquot Vol: | Dilution Factor: 40

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98511 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	40	U	40	9.2
71-55-6	1,1,1-Trichloroethane	40	U	40	8.8
79-34-5	1,1,2,2-Tetrachloroethane	40	U	40	7.2
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	40	U	40	11
75-34-3	1,1-Dichloroethane	40	U	40	6.0
75-35-4	1,1-Dichloroethene	40	U	40	7.6
563-58-6	1,1-Dichloropropene	40	U	40	5.2
87-61-6	1,2,3-Trichlorobenzene	40	U	40	6.8
96-18-4	1,2,3-Trichloropropane	40	U	40	17
526-73-8	1,2,3-Trimethylbenzene	200	U	200	0.24
120-82-1	1,2,4-Trichlorobenzene	40	U	40	6.0
95-63-6	1,2,4-Trimethylbenzene	40	U	40	4.8
96-12-8	1,2-Dibromo-3-Chloropropane	80	U	80	27
95-50-1	1,2-Dichlorobenzene	40	U	40	5.2
107-06-2	1,2-Dichloroethane	40	U	40	8.8
78-87-5	1,2-Dichloropropane	40	U	40	7.2
541-73-1	1,3-Dichlorobenzene	40	U	40	5.6
142-28-9	1,3-Dichloropropane	40	U	40	6.4
106-46-7	1,4-Dichlorobenzene	40	U	40	5.2
594-20-7	2,2-Dichloropropane	40	U	40	5.2
110-75-8	2-Chloroethyl vinyl ether	400	U	400	40
95-49-8	2-Chlorotoluene	40	U	40	4.4
591-78-6	2-Hexanone	400	U	400	16
108-86-1	Bromobenzene	40	U	40	5.2
74-97-5	Bromochloromethane	40	U	40	12
106-43-4	4-Chlorotoluene	40	U	40	7.2
99-87-6	p-Isopropyltoluene	40	U	40	4.8
67-64-1	Acetone	53	J	400	44
71-43-2	Benzene	14	J	40	5.2
75-25-2	Bromoform	40	U	40	26
74-83-9	Bromomethane	40	U	40	16
75-15-0	Carbon disulfide	40	U	40	5.2
56-23-5	Carbon tetrachloride	40	U	40	5.2
108-90-7	Chlorobenzene	40	U	40	6.0
75-00-3	Chloroethane	40	U	40	12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-30 Lab Sample ID: 240-28014-7

Matrix: Water Lab File ID: UXR7190.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:25

Sample wt/vol: 5(mL) Date Analyzed: 08/22/2013 17:39

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98511 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	40	U	40	6.4
74-87-3	Chloromethane	40	U	40	12
156-59-2	cis-1,2-Dichloroethene	920		40	6.8
10061-01-5	cis-1,3-Dichloropropene	40	U	40	5.6
87-68-3	Hexachlorobutadiene	40	U	40	12
74-95-3	Dibromomethane	40	U	40	11
75-27-4	Bromodichloromethane	40	U	40	6.0
75-71-8	Dichlorodifluoromethane	40	U	40	12
100-41-4	Ethylbenzene	40	U	40	6.8
106-93-4	1,2-Dibromoethane	40	U	40	9.6
108-20-3	Diisopropyl ether	400	U	400	60
91-20-3	Naphthalene	40	U	40	9.6
179601-23-1	m-Xylene & p-Xylene	80	U	80	9.6
104-51-8	n-Butylbenzene	40	U	40	4.8
98-82-8	Isopropylbenzene	40	U	40	5.2
103-65-1	n-Propylbenzene	40	U	40	5.6
78-93-3	2-Butanone	400	U	400	23
108-10-1	4-Methyl-2-pentanone	400	U	400	13
135-98-8	sec-Butylbenzene	40	U	40	5.2
1634-04-4	Methyl tert-butyl ether	40	U	40	6.8
994-05-8	Tert-amyl-methyl ether (TAME)	200	U	200	2.7
75-09-2	Methylene Chloride	40	U	40	13
95-47-6	o-Xylene	40	U	40	5.6
100-42-5	Styrene	40	U	40	4.4
637-92-3	Ethyl-t-butyl ether (ETBE)	200	U	200	4.4
98-06-6	tert-Butylbenzene	40	U	40	5.2
127-18-4	Tetrachloroethene	40	U	40	12
108-88-3	Toluene	6.9	J	40	5.2
156-60-5	trans-1,2-Dichloroethene	9.2	J	40	7.6
10061-02-6	trans-1,3-Dichloropropene	40	U	40	7.6
79-01-6	Trichloroethene	270		40	6.8
75-69-4	Trichlorofluoromethane	40	U	40	8.4
108-05-4	Vinyl acetate	80	U	80	7.6
75-01-4	Vinyl chloride	51		40	8.8
75-65-0	tert-Butyl alcohol	2000	U	2000	160
1330-20-7	Xylenes, Total	80	U	80	5.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-30 | Lab Sample ID: 240-28014-7

Matrix: Water | Lab File ID: UXR7190.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/22/2013 17:39

Soil Aliquot Vol: | Dilution Factor: 40

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98511 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	40	U	40	7.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-30 Lab Sample ID: 240-28014-7

Matrix: Water Lab File ID: UXR7190.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:25

Sample wt/vol: 5(mL) Date Analyzed: 08/22/2013 17:39

Soil Aliquot Vol: Dilution Factor: 40

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98511 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-35 Lab Sample ID: 240-28014-8

Matrix: Water Lab File ID: UXR7137.D

Analysis Method: 8260B Date Collected: 08/15/2013 14:10

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 17:14

Soil Aliquot Vol: Dilution Factor: 28.57

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	29	U	29	6.6
71-55-6	1,1,1-Trichloroethane	29	U	29	6.3
79-34-5	1,1,2,2-Tetrachloroethane	29	U	29	5.1
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	29	U	29	8.0
75-34-3	1,1-Dichloroethane	29	U	29	4.3
75-35-4	1,1-Dichloroethene	29	U	29	5.4
563-58-6	1,1-Dichloropropene	29	U	29	3.7
87-61-6	1,2,3-Trichlorobenzene	29	U	29	4.9
96-18-4	1,2,3-Trichloropropane	29	U	29	12
526-73-8	1,2,3-Trimethylbenzene	140	U	140	0.17
120-82-1	1,2,4-Trichlorobenzene	29	U	29	4.3
95-63-6	1,2,4-Trimethylbenzene	29	U	29	3.4
96-12-8	1,2-Dibromo-3-Chloropropane	57	U	57	19
95-50-1	1,2-Dichlorobenzene	29	U	29	3.7
107-06-2	1,2-Dichloroethane	29	U	29	6.3
78-87-5	1,2-Dichloropropane	29	U	29	5.1
541-73-1	1,3-Dichlorobenzene	29	U	29	4.0
142-28-9	1,3-Dichloropropane	29	U	29	4.6
106-46-7	1,4-Dichlorobenzene	29	U	29	3.7
594-20-7	2,2-Dichloropropane	29	U	29	3.7
110-75-8	2-Chloroethyl vinyl ether	290	U	290	28
95-49-8	2-Chlorotoluene	29	U	29	3.1
591-78-6	2-Hexanone	290	U	290	12
108-86-1	Bromobenzene	29	U	29	3.7
74-97-5	Bromochloromethane	29	U	29	8.3
106-43-4	4-Chlorotoluene	29	U	29	5.1
99-87-6	p-Isopropyltoluene	29	U	29	3.4
67-64-1	Acetone	89	J	290	31
71-43-2	Benzene	15	J B	29	3.7
75-25-2	Bromoform	29	U	29	18
74-83-9	Bromomethane	29	U	29	12
75-15-0	Carbon disulfide	29	U	29	3.7
56-23-5	Carbon tetrachloride	29	U	29	3.7
108-90-7	Chlorobenzene	29	U	29	4.3
75-00-3	Chloroethane	29	U	29	8.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-35 Lab Sample ID: 240-28014-8

Matrix: Water Lab File ID: UXR7137.D

Analysis Method: 8260B Date Collected: 08/15/2013 14:10

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 17:14

Soil Aliquot Vol: Dilution Factor: 28.57

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	29	U	29	4.6
74-87-3	Chloromethane	29	U	29	8.6
156-59-2	cis-1,2-Dichloroethene	530		29	4.9
10061-01-5	cis-1,3-Dichloropropene	29	U	29	4.0
87-68-3	Hexachlorobutadiene	29	U	29	8.6
74-95-3	Dibromomethane	29	U	29	8.0
75-27-4	Bromodichloromethane	29	U	29	4.3
75-71-8	Dichlorodifluoromethane	29	U	29	8.9
100-41-4	Ethylbenzene	29	U	29	4.9
106-93-4	1,2-Dibromoethane	29	U	29	6.9
108-20-3	Diisopropyl ether	290	U	290	43
91-20-3	Naphthalene	29	U	29	6.9
179601-23-1	m-Xylene & p-Xylene	57	U	57	6.9
104-51-8	n-Butylbenzene	29	U	29	3.4
98-82-8	Isopropylbenzene	29	U	29	3.7
103-65-1	n-Propylbenzene	29	U	29	4.0
78-93-3	2-Butanone	290	U	290	16
108-10-1	4-Methyl-2-pentanone	290	U	290	9.1
135-98-8	sec-Butylbenzene	29	U	29	3.7
1634-04-4	Methyl tert-butyl ether	29	U	29	4.9
994-05-8	Tert-amyl-methyl ether (TAME)	140	U	140	1.9
75-09-2	Methylene Chloride	54	B	29	9.4
95-47-6	o-Xylene	29	U	29	4.0
100-42-5	Styrene	29	U	29	3.1
637-92-3	Ethyl-t-butyl ether (ETBE)	140	U	140	3.1
98-06-6	tert-Butylbenzene	29	U	29	3.7
127-18-4	Tetrachloroethene	29	U	29	8.3
108-88-3	Toluene	29	U	29	3.7
156-60-5	trans-1,2-Dichloroethene	6.0	J	29	5.4
10061-02-6	trans-1,3-Dichloropropene	29	U	29	5.4
79-01-6	Trichloroethene	1000		29	4.9
75-69-4	Trichlorofluoromethane	29	U	29	6.0
108-05-4	Vinyl acetate	57	U	57	5.4
75-01-4	Vinyl chloride	42		29	6.3
75-65-0	tert-Butyl alcohol	1400	U	1400	110
1330-20-7	Xylenes, Total	57	U	57	4.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-35 Lab Sample ID: 240-28014-8

Matrix: Water Lab File ID: UXR7137.D

Analysis Method: 8260B Date Collected: 08/15/2013 14:10

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 17:14

Soil Aliquot Vol: Dilution Factor: 28.57

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	29	U	29	5.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-35 Lab Sample ID: 240-28014-8

Matrix: Water Lab File ID: UXR7137.D

Analysis Method: 8260B Date Collected: 08/15/2013 14:10

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 17:14

Soil Aliquot Vol: Dilution Factor: 28.57

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

Number TICs Found: 1 TIC Result Total: 3.4

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
110-82-7	Cyclohexane	5.25	3.4	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-40 | Lab Sample ID: 240-28014-9

Matrix: Water | Lab File ID: UXR7191.D

Analysis Method: 8260B | Date Collected: 08/15/2013 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/22/2013 18:00

Soil Aliquot Vol: | Dilution Factor: 7.69

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98511 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	7.7	U	7.7	1.8
71-55-6	1,1,1-Trichloroethane	7.7	U	7.7	1.7
79-34-5	1,1,2,2-Tetrachloroethane	7.7	U	7.7	1.4
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	7.7	U	7.7	2.2
75-34-3	1,1-Dichloroethane	7.7	U	7.7	1.2
75-35-4	1,1-Dichloroethene	7.7	U	7.7	1.5
563-58-6	1,1-Dichloropropene	7.7	U	7.7	1.0
87-61-6	1,2,3-Trichlorobenzene	7.7	U	7.7	1.3
96-18-4	1,2,3-Trichloropropane	7.7	U	7.7	3.3
526-73-8	1,2,3-Trimethylbenzene	38	U	38	0.045
120-82-1	1,2,4-Trichlorobenzene	7.7	U	7.7	1.2
95-63-6	1,2,4-Trimethylbenzene	7.7	U	7.7	0.92
96-12-8	1,2-Dibromo-3-Chloropropane	15	U	15	5.2
95-50-1	1,2-Dichlorobenzene	7.7	U	7.7	1.0
107-06-2	1,2-Dichloroethane	7.7	U	7.7	1.7
78-87-5	1,2-Dichloropropane	7.7	U	7.7	1.4
541-73-1	1,3-Dichlorobenzene	7.7	U	7.7	1.1
142-28-9	1,3-Dichloropropane	7.7	U	7.7	1.2
106-46-7	1,4-Dichlorobenzene	7.7	U	7.7	1.0
594-20-7	2,2-Dichloropropane	7.7	U	7.7	1.0
110-75-8	2-Chloroethyl vinyl ether	77	U	77	7.6
95-49-8	2-Chlorotoluene	7.7	U	7.7	0.85
591-78-6	2-Hexanone	77	U	77	3.2
108-86-1	Bromobenzene	7.7	U	7.7	1.0
74-97-5	Bromochloromethane	7.7	U	7.7	2.2
106-43-4	4-Chlorotoluene	7.7	U	7.7	1.4
99-87-6	p-Isopropyltoluene	7.7	U	7.7	0.92
67-64-1	Acetone	11	J	77	8.5
71-43-2	Benzene	7.4	J	7.7	1.0
75-25-2	Bromoform	7.7	U	7.7	4.9
74-83-9	Bromomethane	7.7	U	7.7	3.2
75-15-0	Carbon disulfide	7.7	U	7.7	1.0
56-23-5	Carbon tetrachloride	7.7	U	7.7	1.0
108-90-7	Chlorobenzene	7.7	U	7.7	1.2
75-00-3	Chloroethane	7.7	U	7.7	2.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-40 | Lab Sample ID: 240-28014-9

Matrix: Water | Lab File ID: UXR7191.D

Analysis Method: 8260B | Date Collected: 08/15/2013 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/22/2013 18:00

Soil Aliquot Vol: | Dilution Factor: 7.69

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98511 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	7.7	U	7.7	1.2
74-87-3	Chloromethane	7.7	U	7.7	2.3
156-59-2	cis-1,2-Dichloroethene	130		7.7	1.3
10061-01-5	cis-1,3-Dichloropropene	7.7	U	7.7	1.1
87-68-3	Hexachlorobutadiene	7.7	U	7.7	2.3
74-95-3	Dibromomethane	7.7	U	7.7	2.2
75-27-4	Bromodichloromethane	7.7	U	7.7	1.2
75-71-8	Dichlorodifluoromethane	7.7	U	7.7	2.4
100-41-4	Ethylbenzene	7.7	U	7.7	1.3
106-93-4	1,2-Dibromoethane	7.7	U	7.7	1.8
108-20-3	Diisopropyl ether	77	U	77	12
91-20-3	Naphthalene	7.7	U	7.7	1.8
179601-23-1	m-Xylene & p-Xylene	15	U	15	1.8
104-51-8	n-Butylbenzene	7.7	U	7.7	0.92
98-82-8	Isopropylbenzene	7.7	U	7.7	1.0
103-65-1	n-Propylbenzene	7.7	U	7.7	1.1
78-93-3	2-Butanone	77	U	77	4.4
108-10-1	4-Methyl-2-pentanone	77	U	77	2.5
135-98-8	sec-Butylbenzene	7.7	U	7.7	1.0
1634-04-4	Methyl tert-butyl ether	7.7	U	7.7	1.3
994-05-8	Tert-amyl-methyl ether (TAME)	38	U	38	0.52
75-09-2	Methylene Chloride	7.7	U	7.7	2.5
95-47-6	o-Xylene	1.8	J	7.7	1.1
100-42-5	Styrene	7.7	U	7.7	0.85
637-92-3	Ethyl-t-butyl ether (ETBE)	38	U	38	0.85
98-06-6	tert-Butylbenzene	7.7	U	7.7	1.0
127-18-4	Tetrachloroethene	7.7	U	7.7	2.2
108-88-3	Toluene	1.9	J	7.7	1.0
156-60-5	trans-1,2-Dichloroethene	1.8	J	7.7	1.5
10061-02-6	trans-1,3-Dichloropropene	7.7	U	7.7	1.5
79-01-6	Trichloroethene	230		7.7	1.3
75-69-4	Trichlorofluoromethane	7.7	U	7.7	1.6
108-05-4	Vinyl acetate	15	U	15	1.5
75-01-4	Vinyl chloride	11		7.7	1.7
75-65-0	tert-Butyl alcohol	380	U	380	30
1330-20-7	Xylenes, Total	1.8	J	15	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-40 Lab Sample ID: 240-28014-9

Matrix: Water Lab File ID: UXR7191.D

Analysis Method: 8260B Date Collected: 08/15/2013 14:30

Sample wt/vol: 5(mL) Date Analyzed: 08/22/2013 18:00

Soil Aliquot Vol: Dilution Factor: 7.69

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98511 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	7.7	U	7.7	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-30-40 | Lab Sample ID: 240-28014-9

Matrix: Water | Lab File ID: UXR7191.D

Analysis Method: 8260B | Date Collected: 08/15/2013 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/22/2013 18:00

Soil Aliquot Vol: | Dilution Factor: 7.69

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98511 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 1.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
110-82-7	Cyclohexane	5.25	1.8	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-DUP01 | Lab Sample ID: 240-28014-1

Matrix: Water | Lab File ID: UXR7189.D

Analysis Method: 8260B | Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/22/2013 17:17

Soil Aliquot Vol: | Dilution Factor: 833.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98511 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	830	U	830	190
71-55-6	1,1,1-Trichloroethane	830	U	830	180
79-34-5	1,1,2,2-Tetrachloroethane	830	U	830	150
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	830	U	830	230
75-34-3	1,1-Dichloroethane	830	U	830	120
75-35-4	1,1-Dichloroethene	190	J	830	160
563-58-6	1,1-Dichloropropene	830	U	830	110
87-61-6	1,2,3-Trichlorobenzene	830	U	830	140
96-18-4	1,2,3-Trichloropropane	830	U	830	360
526-73-8	1,2,3-Trimethylbenzene	4200	U	4200	4.9
120-82-1	1,2,4-Trichlorobenzene	830	U	830	120
95-63-6	1,2,4-Trimethylbenzene	830	U	830	100
96-12-8	1,2-Dibromo-3-Chloropropane	1700	U	1700	560
95-50-1	1,2-Dichlorobenzene	830	U	830	110
107-06-2	1,2-Dichloroethane	830	U	830	180
78-87-5	1,2-Dichloropropane	830	U	830	150
541-73-1	1,3-Dichlorobenzene	830	U	830	120
142-28-9	1,3-Dichloropropane	830	U	830	130
106-46-7	1,4-Dichlorobenzene	830	U	830	110
594-20-7	2,2-Dichloropropane	830	U	830	110
110-75-8	2-Chloroethyl vinyl ether	8300	U	8300	820
95-49-8	2-Chlorotoluene	830	U	830	92
591-78-6	2-Hexanone	8300	U	8300	340
108-86-1	Bromobenzene	830	U	830	110
74-97-5	Bromochloromethane	830	U	830	240
106-43-4	4-Chlorotoluene	830	U	830	150
99-87-6	p-Isopropyltoluene	830	U	830	100
67-64-1	Acetone	8300	U	8300	920
71-43-2	Benzene	830	U	830	110
75-25-2	Bromoform	830	U	830	530
74-83-9	Bromomethane	830	U	830	340
75-15-0	Carbon disulfide	830	U	830	110
56-23-5	Carbon tetrachloride	830	U	830	110
108-90-7	Chlorobenzene	830	U	830	120
75-00-3	Chloroethane	830	U	830	240

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-DUP01 | Lab Sample ID: 240-28014-1

Matrix: Water | Lab File ID: UXR7189.D

Analysis Method: 8260B | Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/22/2013 17:17

Soil Aliquot Vol: | Dilution Factor: 833.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98511 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	830	U	830	130
74-87-3	Chloromethane	830	U	830	250
156-59-2	cis-1,2-Dichloroethene	24000		830	140
10061-01-5	cis-1,3-Dichloropropene	830	U	830	120
87-68-3	Hexachlorobutadiene	830	U	830	250
74-95-3	Dibromomethane	830	U	830	230
75-27-4	Bromodichloromethane	830	U	830	120
75-71-8	Dichlorodifluoromethane	830	U	830	260
100-41-4	Ethylbenzene	830	U	830	140
106-93-4	1,2-Dibromoethane	830	U	830	200
108-20-3	Diisopropyl ether	8300	U	8300	1200
91-20-3	Naphthalene	830	U	830	200
179601-23-1	m-Xylene & p-Xylene	1700	U	1700	200
104-51-8	n-Butylbenzene	830	U	830	100
98-82-8	Isopropylbenzene	830	U	830	110
103-65-1	n-Propylbenzene	830	U	830	120
78-93-3	2-Butanone	8300	U	8300	470
108-10-1	4-Methyl-2-pentanone	8300	U	8300	270
135-98-8	sec-Butylbenzene	830	U	830	110
1634-04-4	Methyl tert-butyl ether	830	U	830	140
994-05-8	Tert-amyl-methyl ether (TAME)	4200	U	4200	56
75-09-2	Methylene Chloride	830	U	830	270
95-47-6	o-Xylene	830	U	830	120
100-42-5	Styrene	830	U	830	92
637-92-3	Ethyl-t-butyl ether (ETBE)	4200	U	4200	92
98-06-6	tert-Butylbenzene	830	U	830	110
127-18-4	Tetrachloroethene	830	U	830	240
108-88-3	Toluene	230	J	830	110
156-60-5	trans-1,2-Dichloroethene	830	U	830	160
10061-02-6	trans-1,3-Dichloropropene	830	U	830	160
79-01-6	Trichloroethene	790	J	830	140
75-69-4	Trichlorofluoromethane	830	U	830	170
108-05-4	Vinyl acetate	1700	U	1700	160
75-01-4	Vinyl chloride	7800		830	180
75-65-0	tert-Butyl alcohol	42000	U	42000	3200
1330-20-7	Xylenes, Total	1700	U	1700	120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-DUP01 Lab Sample ID: 240-28014-1

Matrix: Water Lab File ID: UXR7189.D

Analysis Method: 8260B Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/22/2013 17:17

Soil Aliquot Vol: Dilution Factor: 833.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98511 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	830	U	830	150

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	82		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-DUP01 Lab Sample ID: 240-28014-1

Matrix: Water Lab File ID: UXR7189.D

Analysis Method: 8260B Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/22/2013 17:17

Soil Aliquot Vol: Dilution Factor: 833.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98511 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-DUP02 | Lab Sample ID: 240-28014-2

Matrix: Water | Lab File ID: UXR7095.D

Analysis Method: 8260B | Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 22:45

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	6.7	U	6.7	1.5
71-55-6	1,1,1-Trichloroethane	6.7	U	6.7	1.5
79-34-5	1,1,2,2-Tetrachloroethane	6.7	U	6.7	1.2
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	6.7	U	6.7	1.9
75-34-3	1,1-Dichloroethane	6.7	U	6.7	1.0
75-35-4	1,1-Dichloroethene	6.7	U	6.7	1.3
563-58-6	1,1-Dichloropropene	6.7	U	6.7	0.87
87-61-6	1,2,3-Trichlorobenzene	6.7	U	6.7	1.1
96-18-4	1,2,3-Trichloropropane	6.7	U	6.7	2.9
526-73-8	1,2,3-Trimethylbenzene	33	U	33	0.039
120-82-1	1,2,4-Trichlorobenzene	6.7	U	6.7	1.0
95-63-6	1,2,4-Trimethylbenzene	6.7	U	6.7	0.80
96-12-8	1,2-Dibromo-3-Chloropropane	13	U	13	4.5
95-50-1	1,2-Dichlorobenzene	6.7	U	6.7	0.87
107-06-2	1,2-Dichloroethane	6.7	U	6.7	1.5
78-87-5	1,2-Dichloropropane	6.7	U	6.7	1.2
541-73-1	1,3-Dichlorobenzene	6.7	U	6.7	0.93
142-28-9	1,3-Dichloropropane	6.7	U	6.7	1.1
106-46-7	1,4-Dichlorobenzene	6.7	U	6.7	0.87
594-20-7	2,2-Dichloropropane	6.7	U	6.7	0.87
110-75-8	2-Chloroethyl vinyl ether	67	U	67	6.6
95-49-8	2-Chlorotoluene	6.7	U	6.7	0.73
591-78-6	2-Hexanone	67	U	67	2.7
108-86-1	Bromobenzene	6.7	U	6.7	0.87
74-97-5	Bromochloromethane	6.7	U	6.7	1.9
106-43-4	4-Chlorotoluene	6.7	U	6.7	1.2
99-87-6	p-Isopropyltoluene	6.7	U	6.7	0.80
67-64-1	Acetone	8.5	J	67	7.3
71-43-2	Benzene	5.7	J	6.7	0.87
75-25-2	Bromoform	6.7	U	6.7	4.3
74-83-9	Bromomethane	6.7	U	6.7	2.7
75-15-0	Carbon disulfide	6.7	U	6.7	0.87
56-23-5	Carbon tetrachloride	6.7	U	6.7	0.87
108-90-7	Chlorobenzene	6.7	U	6.7	1.0
75-00-3	Chloroethane	6.7	U	6.7	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-DUP02 | Lab Sample ID: 240-28014-2

Matrix: Water | Lab File ID: UXR7095.D

Analysis Method: 8260B | Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 22:45

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	6.7	U	6.7	1.1
74-87-3	Chloromethane	6.7	U	6.7	2.0
156-59-2	cis-1,2-Dichloroethene	100		6.7	1.1
10061-01-5	cis-1,3-Dichloropropene	6.7	U	6.7	0.93
87-68-3	Hexachlorobutadiene	6.7	U	6.7	2.0
74-95-3	Dibromomethane	6.7	U	6.7	1.9
75-27-4	Bromodichloromethane	6.7	U	6.7	1.0
75-71-8	Dichlorodifluoromethane	6.7	U	6.7	2.1
100-41-4	Ethylbenzene	6.7	U	6.7	1.1
106-93-4	1,2-Dibromoethane	6.7	U	6.7	1.6
108-20-3	Diisopropyl ether	67	U	67	10
91-20-3	Naphthalene	6.7	U	6.7	1.6
179601-23-1	m-Xylene & p-Xylene	13	U	13	1.6
104-51-8	n-Butylbenzene	6.7	U	6.7	0.80
98-82-8	Isopropylbenzene	6.7	U	6.7	0.87
103-65-1	n-Propylbenzene	6.7	U	6.7	0.93
78-93-3	2-Butanone	67	U	67	3.8
108-10-1	4-Methyl-2-pentanone	67	U	67	2.1
135-98-8	sec-Butylbenzene	6.7	U	6.7	0.87
1634-04-4	Methyl tert-butyl ether	6.7	U	6.7	1.1
994-05-8	Tert-amyl-methyl ether (TAME)	33	U	33	0.45
75-09-2	Methylene Chloride	6.7	U	6.7	2.2
95-47-6	o-Xylene	1.0	J	6.7	0.93
100-42-5	Styrene	6.7	U	6.7	0.73
637-92-3	Ethyl-t-butyl ether (ETBE)	33	U	33	0.73
98-06-6	tert-Butylbenzene	6.7	U	6.7	0.87
127-18-4	Tetrachloroethene	6.7	U	6.7	1.9
108-88-3	Toluene	6.7	U	6.7	0.87
156-60-5	trans-1,2-Dichloroethene	6.7	U	6.7	1.3
10061-02-6	trans-1,3-Dichloropropene	6.7	U	6.7	1.3
79-01-6	Trichloroethene	160		6.7	1.1
75-69-4	Trichlorofluoromethane	6.7	U	6.7	1.4
108-05-4	Vinyl acetate	13	U	13	1.3
75-01-4	Vinyl chloride	7.2		6.7	1.5
75-65-0	tert-Butyl alcohol	330	U	330	26
1330-20-7	Xylenes, Total	1.0	J	13	0.93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-DUP02 | Lab Sample ID: 240-28014-2

Matrix: Water | Lab File ID: UXR7095.D

Analysis Method: 8260B | Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 22:45

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	6.7	U	6.7	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
460-00-4	4-Bromofluorobenzene (Surr)	87		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: DR-DPT-DUP02 | Lab Sample ID: 240-28014-2

Matrix: Water | Lab File ID: UXR7095.D

Analysis Method: 8260B | Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 22:45

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: TB-081513 | Lab Sample ID: 240-28014-11

Matrix: Water | Lab File ID: UXR7140.D

Analysis Method: 8260B | Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 18:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: TB-081513 Lab Sample ID: 240-28014-11

Matrix: Water Lab File ID: UXR7140.D

Analysis Method: 8260B Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 18:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: TB-081513 Lab Sample ID: 240-28014-11

Matrix: Water Lab File ID: UXR7140.D

Analysis Method: 8260B Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 18:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: TB-081513 Lab Sample ID: 240-28014-11

Matrix: Water Lab File ID: UXR7140.D

Analysis Method: 8260B Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 18:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

APPENDIX C

SUPPORT DOCUMENTATION

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

4.2

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) ____			112IC04882
(301) 528-3021 Phone	TAT if different from Below: ~~Standard~~			SDG No.
(301) 528-3000 FAX	☐ 2 weeks 5day TAT			
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			Sampler: S. Cameron
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT- DUP01	8/15/2013	0000	GW	Water	3		x	
DR-DPT- DUP02	8/15/2013	0000	GW	Water	3		x	
DR-DPT- 26-20	8/15/2013	1010	GW	Water	3		x	
DR-DPT- 26-25	8/15/2013	1050	GW	Water	3		x	
DR-DPT- 26-30	8/15/2013	1135	GW	Water	3		x	
DR-DPT- 30-20	8/15/2013	0950	GW	Water	3		x	
DR-DPT- 30-30	8/15/2013	1125	GW	Water	3		x	
DR-DPT- 30-35	8/15/2013	1410	GW	Water	3		x	
DR-DPT- 30-40	8/15/2013	1430	GW	Water	3		x	
DR-DPT- 26-45	8/15/2013	1545	GW	Water	3		x	
~~DR-DPT-~~	~~8/15/2013~~		GW	Water	3		x	
TB-081513	8/15/2013	—	GW	Water	2		x	



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* ____ *Months*

Special Instructions/QC Requirements & Comments: 5 day TAT

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8-15-13 1600		TestAmerica	8/15/13 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	8/15/13 1630		TA	8/16/13 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

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CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-28014-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/16/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.2 C.

The laboratory received the following samples that are not listed on the chain of custody: DR-DPT-26-40 collected on 8/15/13 at time 1505 and DR-DPT-26-35 collected on 8/15/13 at time 1450. The laboratory will log the samples for VOCs.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-DUP01 (240-28014-1), DR-DPT-DUP02 (240-28014-2), DR-DPT-26-20 (240-28014-3), DR-DPT-26-25 (240-28014-4), DR-DPT-26-30 (240-28014-5), DR-DPT-30-20 (240-28014-6), DR-DPT-30-30 (240-28014-7), DR-DPT-30-35 (240-28014-8), DR-DPT-30-40 (240-28014-9), DR-DPT-26-45 (240-28014-10), TB-081513 (240-28014-11), DR-DPT-26-40 (240-28014-12) and DR-DPT-26-35 (240-28014-13) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/20/2013, 08/21/2013 and 08/22/2013.

Methylene Chloride was detected in method blank MB 240-98372/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Benzene was detected in method blank MB 240-98372/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Methylene Chloride was detected in method blank MB 240-98511/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-DUP01 (240-28014-1)[833.33X], DR-DPT-DUP02 (240-28014-2)[6.67X], DR-DPT-26-20 (240-28014-3)[500X], DR-DPT-26-25 (240-28014-4)[714.28X], DR-DPT-26-30 (240-28014-5)[714.28X], DR-DPT-30-20 (240-28014-6)[2.86X], DR-DPT-30-30 (240-28014-7)[40X], DR-DPT-30-35 (240-28014-8)[28.57X], DR-DPT-30-40 (240-28014-9)[7.69X], DR-DPT-26-45 (240-28014-10)[4X], DR-DPT-26-40 (240-28014-12)[16.67X] and DR-DPT-26-35 (240-28014-13)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

			Field Duplicate						
	DR-DPT-26-25		DR-DPT-DUP01		units	RPD	%D	CRDL	MDL
1,1-DICHLOROETHENE	160	J	190	J	UG/L	-17.14	-30	710	140
ACETONE	1800	J	920	U	UG/L	64.71	880	7100	790
BENZENE	94	B	110	U	UG/L	-15.69	-16	710	93
CIS-1,2-DICHLOROETHENE	24000		24000		UG/L	0.00	0	710	120
METHYLENE CHLORIDE	1400	B	270	U	UG/L	135.33	1130	710	240
TERTIARY-BUTYL ALCOHOL	2800	UR	3200	UR	UG/L	-13.33	-400	36000	2800
TOLUENE	120	J	230	J	UG/L	-62.86	-110	710	93
TRICHLOROETHENE	850		790	J	UG/L	7.32	60	710	120
VINYL CHLORIDE	7600		7800		UG/L	-2.60	-200	710	160
	DR-DPT-30-40		DR-DPT-DUP02						
ACETONE	11	J	8.5	J	UG/L	25.64	2.5	77	8.5
BENZENE	7.4	J	5.7	J	UG/L	25.95	1.7	7.7	1
CIS-1,2-DICHLOROETHENE	130		100		UG/L	26.09	30	7.7	1.3
O-XYLENE	1.8	J	1	J	UG/L	57.14	0.8	7.7	1.1
TOLUENE	1.9	J	0.87	U	UG/L	74.37	1.03	7.7	1
TOTAL XYLENES	1.8	J	1	J	UG/L	57.14	0.8	15	1.1
TRANS-1,2-DICHLOROETHENE	1.8	J	1.3	U	UG/L	32.26	0.5	7.7	1.5
TRICHLOROETHENE	230		160		UG/L	35.90	70	7.7	1.3
VINYL CHLORIDE	11		7.2		UG/L	41.76	3.8	7.7	1.7

TestAmerica Canton Sample Receipt Form/Narrative Login # :_____
Canton Facility

Client Tetra Tech Site Name_____ Cooler unpacked by:

Cooler Received on 8-16-13 Opened on 8-16-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other_____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A (CF –1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

IR GUN# 4 (CF 0 °C) Observed Cooler Temp. 4 °C Corrected Cooler Temp._____°C ☐ See Multiple Cooler Form

IR GUN# 5 (CF +1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

~~IR GUN# 8 (CF -0 °C) Observed Cooler Temp. 4.0 °C Corrected Cooler Temp. 4.0 °C~~

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No

-Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were custody seals on the bottle(s)? Yes No

3. Shippers' packing slip attached to the cooler(s)? Yes No

4. Did custody papers accompany the sample(s)? Yes No

5. Were the custody papers relinquished & signed in the appropriate place? Yes No

6. Did all bottles arrive in good condition (Unbroken)? Yes No

7. ~~Could all bottle labels be reconciled with the COC?~~ Yes No

8. Were correct bottle(s) used for the test(s) indicated? Yes No

9. Sufficient quantity received to perform indicated analyses? Yes No

10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062

11. Were VOAs on the COC? Yes No

12. Were air bubbles >6 mm in any VOA vials? Yes No NA

13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

Received 3x40ml vials taken 8-15-13 at 1505, EDD DR-DPT-26-40, not on COC, will log.

Received 3x40ml vials taken 8-15-13 at 1450, EDD DR-DPT-26-35, not on COC, will log.

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s):_____.

HOLDTIME

SDG 240-28014-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-081513	240-28014-11	NM	08/15/2013	08/21/2013	08/21/2013	6	0	6
OV	UG/L	DR-DPT-DUP02	240-28014-2	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	DR-DPT-DUP01	240-28014-1	NM	08/15/2013	08/22/2013	08/22/2013	7	0	7
OV	UG/L	DR-DPT-30-40	240-28014-9	NM	08/15/2013	08/22/2013	08/22/2013	7	0	7
OV	UG/L	DR-DPT-30-35	240-28014-8	NM	08/15/2013	08/21/2013	08/21/2013	6	0	6
OV	UG/L	DR-DPT-30-30	240-28014-7	NM	08/15/2013	08/22/2013	08/22/2013	7	0	7
OV	UG/L	DR-DPT-30-20	240-28014-6	NM	08/15/2013	08/21/2013	08/21/2013	6	0	6
OV	UG/L	DR-DPT-26-45	240-28014-10	NM	08/15/2013	08/21/2013	08/21/2013	6	0	6
OV	UG/L	DR-DPT-26-40	240-28014-12	NM	08/15/2013	08/21/2013	08/21/2013	6	0	6
OV	UG/L	DR-DPT-26-35	240-28014-13	NM	08/15/2013	08/21/2013	08/21/2013	6	0	6
OV	UG/L	DR-DPT-26-30	240-28014-5	NM	08/15/2013	08/21/2013	08/21/2013	6	0	6
OV	UG/L	DR-DPT-26-25	240-28014-4	NM	08/15/2013	08/21/2013	08/21/2013	6	0	6
OV	UG/L	DR-DPT-26-20	240-28014-3	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab File ID: UXR7075.D Lab Sample ID: MB 240-98201/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/20/2013 15:10

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98201/4	UXR7073.D	08/20/2013 14:25
DR-DPT-DUP02	240-28014-2	UXR7095.D	08/20/2013 22:45
DR-DPT-26-20	240-28014-3	UXR7096.D	08/20/2013 23:07
DR-DPT-26-20 MS	240-28014-3 MS	UXR7097.D	08/20/2013 23:29
DR-DPT-26-20 MSD	240-28014-3 MSD	UXR7098.D	08/20/2013 23:51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98201/6

Matrix: Water | Lab File ID: UXR7075.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98201 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98201/6

Matrix: Water Lab File ID: UXR7075.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98201/6

Matrix: Water Lab File ID: UXR7075.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98201/6

Matrix: Water Lab File ID: UXR7075.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7073.D

Lab ID: LCS 240-98201/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.70	97	72-116	
1,1,1-Trichloroethane	10.0	9.74	97	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.21	92	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.6	116	74-151	
1,1-Dichloroethane	10.0	9.88	99	82-115	
1,1-Dichloroethene	10.0	10.2	102	78-131	
1,1-Dichloropropene	10.0	9.41	94	83-114	
1,2,3-Trichlorobenzene	10.0	6.54	65	54-126	
1,2,3-Trichloropropane	10.0	9.72	97	73-129	
1,2,3-Trimethylbenzene	10.0	10.5	105	70-130	
1,2,4-Trichlorobenzene	10.0	7.95	80	48-135	
1,2,4-Trimethylbenzene	10.0	9.84	98	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.66	77	42-136	
1,2-Dichlorobenzene	10.0	9.61	96	81-110	
1,2-Dichloroethane	10.0	10.1	101	71-127	
1,2-Dichloropropane	10.0	10.1	101	81-115	
1,3-Dichlorobenzene	10.0	9.81	98	80-110	
1,3-Dichloropropane	10.0	10.2	102	79-116	
1,4-Dichlorobenzene	10.0	9.62	96	82-110	
2,2-Dichloropropane	10.0	8.74	87	50-129	
2-Chloroethyl vinyl ether	10.0	9.23 J	92	52-131	
2-Chlorotoluene	10.0	9.67	97	76-116	
2-Hexanone	20.0	18.2	91	55-133	
Bromobenzene	10.0	9.73	97	76-115	
Bromochloromethane	10.0	10.3	103	77-120	
4-Chlorotoluene	10.0	9.76	98	77-115	
p-Isopropyltoluene	10.0	10.1	101	74-120	
Acetone	20.0	17.1	86	43-136	
Benzene	10.0	10.0	100	83-112	
Bromoform	10.0	9.35	93	40-131	
Bromomethane	10.0	8.82	88	11-185	
Carbon disulfide	10.0	10.1	101	62-142	
Carbon tetrachloride	10.0	10.1	101	66-128	
Chlorobenzene	10.0	10.0	100	85-110	
Chloroethane	10.0	8.75	87	25-153	
Chloroform	10.0	10.0	100	79-117	
Chloromethane	10.0	9.25	92	44-126	
cis-1,2-Dichloroethene	10.0	10.3	103	80-113	
cis-1,3-Dichloropropene	10.0	9.39	94	61-115	
Hexachlorobutadiene	10.0	7.72	77	36-134	
Dibromomethane	10.0	10.3	103	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7073.D

Lab ID: LCS 240-98201/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.47	95	72-121	
Dichlorodifluoromethane	10.0	9.50	95	19-129	
Ethylbenzene	10.0	10.2	102	83-112	
1,2-Dibromoethane	10.0	9.93	99	79-113	
Diisopropyl ether	10.0	10.1	101	77-118	
Naphthalene	10.0	6.76	68	32-141	
m-Xylene & p-Xylene	20.0	20.8	104	83-113	
n-Butylbenzene	10.0	9.44	94	66-125	
Isopropylbenzene	10.0	10.1	101	75-114	
n-Propylbenzene	10.0	10.2	102	74-121	
2-Butanone	20.0	17.7	88	60-126	
4-Methyl-2-pentanone	20.0	18.2	91	63-128	
sec-Butylbenzene	10.0	9.39	94	70-117	
Methyl tert-butyl ether	10.0	9.36	94	52-144	
Methylene Chloride	10.0	12.0	120	66-131	
o-Xylene	10.0	10.3	103	83-113	
Styrene	10.0	10.5	105	79-114	
tert-Butylbenzene	10.0	9.58	96	71-115	
Tetrachloroethene	10.0	10.2	102	79-114	
Toluene	10.0	10.1	101	84-111	
trans-1,2-Dichloroethene	10.0	10.1	101	83-117	
trans-1,3-Dichloropropene	10.0	9.09	91	58-117	
Trichloroethene	10.0	10.1	101	76-117	
Trichlorofluoromethane	10.0	9.87	99	49-157	
Vinyl acetate	10.0	9.85	98	46-161	
Vinyl chloride	10.0	9.22	92	53-127	
tert-Butyl alcohol	200	169	85	70-130	
Xylenes, Total	30.0	31.1	104	83-112	
Dibromochloromethane	10.0	9.40	94	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III

GC/MS VOA MATRIX SPIKE RECOVERY

Not used to qualify 500x DF

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7097.D

Lab ID: 240-28014-3 MS Client ID: DR-DPT-26-20 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5000	500 U	2010	40	64-118	F
1,1,1-Trichloroethane	5000	500 U	2040	41	68-121	F
1,1,2,2-Tetrachloroethane	5000	500 U	1910	38	63-122	F
1,1,2-Trichloro-1,2,2-trichfluoroethane	5000	500 U	2590	52	70-152	F
1,1-Dichloroethane	5000	500 U	2140	43	79-116	F
1,1-Dichloroethene	5000	500 U	2320	46	74-135	F
1,1-Dichloropropene	5000	500 U	1980	40	80-114	F
1,2,3-Trichlorobenzene	5000	500 U	1170	23	45-129	F
1,2,3-Trichloropropane	5000	500 U	2060	41	67-132	F
1,2,3-Trimethylbenzene	5000	2500 U	2110 J	42	70-130	F
1,2,4-Trichlorobenzene	5000	500 U	1470	29	38-138	F
1,2,4-Trimethylbenzene	5000	500 U	1940	39	67-124	F
1,2-Dibromo-3-Chloropropane	5000	1000 U	1390	28	32-139	F
1,2-Dichlorobenzene	5000	500 U	2040	41	75-111	F
1,2-Dichloroethane	5000	500 U	2300	46	68-129	F
1,2-Dichloropropane	5000	500 U	2090	42	78-115	F
1,3-Dichlorobenzene	5000	500 U	2120	42	73-110	F
1,3-Dichloropropane	5000	500 U	2100	42	74-118	F
1,4-Dichlorobenzene	5000	500 U	2160	43	75-110	F
2,2-Dichloropropane	5000	500 U	1780	36	38-127	F
2-Chloroethyl vinyl ether	5000	5000 U	1350 J	27	10-150	
2-Chlorotoluene	5000	500 U	2030	41	69-117	F
2-Hexanone	10000	5000 U	3350 J	33	47-139	F
Bromobenzene	5000	500 U	2040	41	71-116	F
Bromochloromethane	5000	500 U	2180	44	73-121	F
4-Chlorotoluene	5000	500 U	2060	41	71-116	F
p-Isopropyltoluene	5000	500 U	1990	40	64-122	F
Acetone	10000	5000 U	3510 J	35	33-145	
Benzene	5000	86 J	2220	43	72-121	F
Bromoform	5000	500 U	1660	33	32-128	
Bromomethane	5000	500 U	2280	46	10-186	
Carbon disulfide	5000	500 U	2190	44	57-147	F
Carbon tetrachloride	5000	500 U	2050	41	59-129	F
Chlorobenzene	5000	500 U	2210	44	80-110	F
Chloroethane	5000	500 U	2590	52	21-165	
Chloroform	5000	500 U	2160	43	76-118	F
Chloromethane	5000	500 U	2170	43	33-132	
cis-1,2-Dichloroethene	5000	500 U	2180	44	70-120	F
cis-1,3-Dichloropropene	5000	500 U	1690	34	51-110	F
Hexachlorobutadiene	5000	500 U	1420	28	27-132	
Dibromomethane	5000	500 U	2160	43	77-121	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7097.D

Lab ID: 240-28014-3 MS Client ID: DR-DPT-26-20 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	5000	500 U	1980	40	67-120	F
Dichlorodifluoromethane	5000	500 U	2100	42	17-128	
Ethylbenzene	5000	500 U	2060	41	75-116	F
1,2-Dibromoethane	5000	500 U	2030	41	74-113	F
Diisopropyl ether	5000	5000 U	1970 J	39	73-118	F
Naphthalene	5000	500 U	1070	21	15-158	
m-Xylene & p-Xylene	10000	1000 U	4300	43	75-117	F
n-Butylbenzene	5000	500 U	1800	36	56-127	F
Isopropylbenzene	5000	500 U	1990	40	68-116	F
n-Propylbenzene	5000	500 U	2060	41	64-124	F
2-Butanone	10000	5000 U	3720 J	37	54-129	F
4-Methyl-2-pentanone	10000	5000 U	3330 J	33	56-131	F
sec-Butylbenzene	5000	500 U	1900	38	60-119	F
Methyl tert-butyl ether	5000	500 U	1820	36	46-144	F
Methylene Chloride	5000	500 U	2050	41	63-128	F
o-Xylene	5000	500 U	2100	42	76-116	F
Styrene	5000	500 U	2130	43	71-117	F
tert-Butylbenzene	5000	500 U	1870	37	61-119	F
Tetrachloroethene	5000	500 U	2210	44	70-117	F
Toluene	5000	500 U	2160	43	78-114	F
trans-1,2-Dichloroethene	5000	500 U	2240	45	80-119	F
trans-1,3-Dichloropropene	5000	500 U	1600	32	46-116	F
Trichloroethene	5000	500 U	2170	43	66-120	F
Trichlorofluoromethane	5000	500 U	2280	46	46-157	
Vinyl acetate	5000	1000 U	1840	37	43-157	F
Vinyl chloride	5000	5800	9200	68	49-130	
tert-Butyl alcohol	100000	25000 U	31000	31	70-130	F
Xylenes, Total	15000	1000 U	6400	43	76-116	F
Dibromochloromethane	5000	500 U	1800	36	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7098.D

Lab ID: 240-28014-3 MSD Client ID: DR-DPT-26-20 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5000	1440	29	33	30	64-118	F
1,1,1-Trichloroethane	5000	1530	31	29	30	68-121	F
1,1,2,2-Tetrachloroethane	5000	1430	29	28	30	63-122	F
1,1,2-Trichloro-1,2,2-trichfluoroethane	5000	1950	39	28	30	70-152	F
1,1-Dichloroethane	5000	1650	33	26	30	79-116	F
1,1-Dichloroethene	5000	1690	34	32	30	74-135	F
1,1-Dichloropropene	5000	1440	29	32	30	80-114	F
1,2,3-Trichlorobenzene	5000	1160	23	1	30	45-129	F
1,2,3-Trichloropropane	5000	1440	29	35	30	67-132	F
1,2,3-Trimethylbenzene	5000	1580 J	32	29	30	70-130	F
1,2,4-Trichlorobenzene	5000	1230	25	18	30	38-138	F
1,2,4-Trimethylbenzene	5000	1430	29	31	30	67-124	F
1,2-Dibromo-3-Chloropropane	5000	1070	21	27	30	32-139	F
1,2-Dichlorobenzene	5000	1620	32	23	30	75-111	F
1,2-Dichloroethane	5000	1690	34	30	30	68-129	F
1,2-Dichloropropane	5000	1540	31	30	30	78-115	F
1,3-Dichlorobenzene	5000	1570	31	30	30	73-110	F
1,3-Dichloropropane	5000	1590	32	28	30	74-118	F
1,4-Dichlorobenzene	5000	1700	34	24	30	75-110	F
2,2-Dichloropropane	5000	1340	27	28	30	38-127	F
2-Chloroethyl vinyl ether	5000	949 J	19	35	30	10-150	F
2-Chlorotoluene	5000	1560	31	26	30	69-117	F
2-Hexanone	10000	2390 J	24	33	30	47-139	F
Bromobenzene	5000	1610	32	24	30	71-116	F
Bromochloromethane	5000	1700	34	25	30	73-121	F
4-Chlorotoluene	5000	1510	30	31	30	71-116	F
p-Isopropyltoluene	5000	1440	29	32	30	64-122	F
Acetone	10000	2680 J	27	27	30	33-145	F
Benzene	5000	1680	32	28	30	72-121	F
Bromoform	5000	1190	24	34	30	32-128	F
Bromomethane	5000	1760	35	26	30	10-186	
Carbon disulfide	5000	1660	33	27	30	57-147	F
Carbon tetrachloride	5000	1540	31	29	30	59-129	F
Chlorobenzene	5000	1650	33	29	30	80-110	F
Chloroethane	5000	2110	42	20	30	21-165	
Chloroform	5000	1620	32	29	30	76-118	F
Chloromethane	5000	1620	32	29	30	33-132	F
cis-1,2-Dichloroethene	5000	1660	33	27	30	70-120	F
cis-1,3-Dichloropropene	5000	1260	25	29	30	51-110	F
Hexachlorobutadiene	5000	1140	23	22	30	27-132	F
Dibromomethane	5000	1670	33	26	30	77-121	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7098.D

Lab ID: 240-28014-3 MSD Client ID: DR-DPT-26-20 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	5000	1450	29	31	30	67-120	F
Dichlorodifluoromethane	5000	1560	31	29	30	17-128	
Ethylbenzene	5000	1480	30	33	30	75-116	F
1,2-Dibromoethane	5000	1520	30	29	30	74-113	F
Diisopropyl ether	5000	1480 J	30	29	30	73-118	F
Naphthalene	5000	981	20	9	30	15-158	
m-Xylene & p-Xylene	10000	3060	31	33	30	75-117	F
n-Butylbenzene	5000	1340	27	29	30	56-127	F
Isopropylbenzene	5000	1410	28	34	30	68-116	F
n-Propylbenzene	5000	1490	30	32	30	64-124	F
2-Butanone	10000	2930 J	29	24	30	54-129	F
4-Methyl-2-pentanone	10000	2400 J	24	33	30	56-131	F
sec-Butylbenzene	5000	1380	28	31	30	60-119	F
Methyl tert-butyl ether	5000	1340	27	30	30	46-144	F
Methylene Chloride	5000	1530	31	29	30	63-128	F
o-Xylene	5000	1510	30	33	30	76-116	F
Styrene	5000	1520	30	34	30	71-117	F
tert-Butylbenzene	5000	1370	27	31	30	61-119	F
Tetrachloroethene	5000	1630	33	30	30	70-117	F
Toluene	5000	1570	31	31	30	78-114	F
trans-1,2-Dichloroethene	5000	1670	33	29	30	80-119	F
trans-1,3-Dichloropropene	5000	1220	24	27	30	46-116	F
Trichloroethene	5000	1640	33	28	30	66-120	F
Trichlorofluoromethane	5000	1740	35	27	30	46-157	F
Vinyl acetate	5000	1350	27	31	30	43-157	F
Vinyl chloride	5000	7910	42	15	30	49-130	F
tert-Butyl alcohol	100000	22900 J	23	30	30	70-130	F
Xylenes, Total	15000	4570	30	33	30	76-116	F
Dibromochloromethane	5000	1330	27	30	30	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab File ID: UXR7130.D Lab Sample ID: MB 240-98372/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/21/2013 14:04

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98372/4	UXR7128.D	08/21/2013 13:19
DR-DPT-26-25	240-28014-4	UXR7133.D	08/21/2013 15:46
DR-DPT-26-30	240-28014-5	UXR7134.D	08/21/2013 16:08
DR-DPT-30-20	240-28014-6	UXR7135.D	08/21/2013 16:30
DR-DPT-30-35	240-28014-8	UXR7137.D	08/21/2013 17:14
DR-DPT-26-45	240-28014-10	UXR7139.D	08/21/2013 17:58
TB-081513	240-28014-11	UXR7140.D	08/21/2013 18:20
DR-DPT-26-40	240-28014-12	UXR7141.D	08/21/2013 18:42
DR-DPT-26-35	240-28014-13	UXR7142.D	08/21/2013 19:04
DR-DPT-26-25 MS	240-28014-4 MS	UXR7151.D	08/21/2013 22:21
DR-DPT-26-25 MSD	240-28014-4 MSD	UXR7152.D	08/21/2013 22:43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98372/6

Matrix: Water | Lab File ID: UXR7130.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/21/2013 14:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	0.130	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98372/6

Matrix: Water Lab File ID: UXR7130.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 14:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.53		1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98372/6

Matrix: Water Lab File ID: UXR7130.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 14:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98372/6

Matrix: Water Lab File ID: UXR7130.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/21/2013 14:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98372 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7128.D

Lab ID: LCS 240-98372/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.83	98	72-116	
1,1,1-Trichloroethane	10.0	9.76	98	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.04	90	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	12.0	120	74-151	
1,1-Dichloroethane	10.0	9.96	100	82-115	
1,1-Dichloroethene	10.0	10.1	101	78-131	
1,1-Dichloropropene	10.0	9.24	92	83-114	
1,2,3-Trichlorobenzene	10.0	6.58	66	54-126	
1,2,3-Trichloropropane	10.0	9.76	98	73-129	
1,2,3-Trimethylbenzene	10.0	10.7	107	70-130	
1,2,4-Trichlorobenzene	10.0	7.64	76	48-135	
1,2,4-Trimethylbenzene	10.0	9.86	99	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.41	74	42-136	
1,2-Dichlorobenzene	10.0	9.77	98	81-110	
1,2-Dichloroethane	10.0	10.2	102	71-127	
1,2-Dichloropropane	10.0	9.99	100	81-115	
1,3-Dichlorobenzene	10.0	9.73	97	80-110	
1,3-Dichloropropane	10.0	10.0	100	79-116	
1,4-Dichlorobenzene	10.0	9.70	97	82-110	
2,2-Dichloropropane	10.0	8.66	87	50-129	
2-Chloroethyl vinyl ether	10.0	8.43 J	84	52-131	
2-Chlorotoluene	10.0	9.97	100	76-116	
2-Hexanone	20.0	17.7	88	55-133	
Bromobenzene	10.0	9.84	98	76-115	
Bromochloromethane	10.0	10.4	104	77-120	
4-Chlorotoluene	10.0	9.69	97	77-115	
p-Isopropyltoluene	10.0	10.2	102	74-120	
Acetone	20.0	17.7	88	43-136	
Benzene	10.0	9.89	99	83-112	
Bromoform	10.0	9.01	90	40-131	
Bromomethane	10.0	8.86	89	11-185	
Carbon disulfide	10.0	9.80	98	62-142	
Carbon tetrachloride	10.0	10.3	103	66-128	
Chlorobenzene	10.0	9.90	99	85-110	
Chloroethane	10.0	8.47	85	25-153	
Chloroform	10.0	10.0	100	79-117	
Chloromethane	10.0	8.90	89	44-126	
cis-1,2-Dichloroethene	10.0	10.1	101	80-113	
cis-1,3-Dichloropropene	10.0	8.95	89	61-115	
Hexachlorobutadiene	10.0	7.89	79	36-134	
Dibromomethane	10.0	10.2	102	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7128.D

Lab ID: LCS 240-98372/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.67	97	72-121	
Dichlorodifluoromethane	10.0	8.97	90	19-129	
Ethylbenzene	10.0	10.2	102	83-112	
1,2-Dibromoethane	10.0	9.80	98	79-113	
Diisopropyl ether	10.0	10.1	101	77-118	
Naphthalene	10.0	6.49	65	32-141	
m-Xylene & p-Xylene	20.0	20.6	103	83-113	
n-Butylbenzene	10.0	9.34	93	66-125	
Isopropylbenzene	10.0	10.0	100	75-114	
n-Propylbenzene	10.0	10.2	102	74-121	
2-Butanone	20.0	17.7	89	60-126	
4-Methyl-2-pentanone	20.0	18.2	91	63-128	
sec-Butylbenzene	10.0	9.44	94	70-117	
Methyl tert-butyl ether	10.0	9.03	90	52-144	
Methylene Chloride	10.0	11.7	117	66-131	
o-Xylene	10.0	10.3	103	83-113	
Styrene	10.0	10.7	107	79-114	
tert-Butylbenzene	10.0	9.56	96	71-115	
Tetrachloroethene	10.0	10.2	102	79-114	
Toluene	10.0	9.65	96	84-111	
trans-1,2-Dichloroethene	10.0	10.1	101	83-117	
trans-1,3-Dichloropropene	10.0	8.95	90	58-117	
Trichloroethene	10.0	10.1	101	76-117	
Trichlorofluoromethane	10.0	9.85	98	49-157	
Vinyl acetate	10.0	9.14	91	46-161	
Vinyl chloride	10.0	8.91	89	53-127	
tert-Butyl alcohol	200	161	80	70-130	
Xylenes, Total	30.0	30.9	103	83-112	
Dibromochloromethane	10.0	9.49	95	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7151.D

Lab ID: 240-28014-4 MS Client ID: DR-DPT-26-25 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	7140	710 U	6770	95	64-118	
1,1,1-Trichloroethane	7140	710 U	6800	95	68-121	
1,1,2,2-Tetrachloroethane	7140	710 U	6080	85	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	7140	710 U	7960	111	70-152	
1,1-Dichloroethane	7140	710 U	6710	94	79-116	
1,1-Dichloroethene	7140	160 J	7080	97	74-135	
1,1-Dichloropropene	7140	710 U	6150	86	80-114	
1,2,3-Trichlorobenzene	7140	710 U	3900	55	45-129	
1,2,3-Trichloropropane	7140	710 U	6330	89	67-132	
1,2,3-Trimethylbenzene	7140	3600 U	6970	98	70-130	
1,2,4-Trichlorobenzene	7140	710 U	4740	66	38-138	
1,2,4-Trimethylbenzene	7140	710 U	6480	91	67-124	
1,2-Dibromo-3-Chloropropane	7140	1400 U	4420	62	32-139	
1,2-Dichlorobenzene	7140	710 U	6460	90	75-111	
1,2-Dichloroethane	7140	710 U	7430	104	68-129	
1,2-Dichloropropane	7140	710 U	6910	97	78-115	
1,3-Dichlorobenzene	7140	710 U	6480	91	73-110	
1,3-Dichloropropane	7140	710 U	6990	98	74-118	
1,4-Dichlorobenzene	7140	710 U	6500	91	75-110	
2,2-Dichloropropane	7140	710 U	5880	82	38-127	
2-Chloroethyl vinyl ether	7140	7100 U	4920 J	69	10-150	
2-Chlorotoluene	7140	710 U	6450	90	69-117	
2-Hexanone	14300	7100 U	11300	79	47-139	
Bromobenzene	7140	710 U	6520	91	71-116	
Bromochloromethane	7140	710 U	7070	99	73-121	
4-Chlorotoluene	7140	710 U	6350	89	71-116	
p-Isopropyltoluene	7140	710 U	6500	91	64-122	
Acetone	14300	1800 J	13700	83	33-145	
Benzene	7140	94 J	6920	96	72-121	
Bromoform	7140	710 U	6160	86	32-128	
Bromomethane	7140	710 U	6970	98	10-186	
Carbon disulfide	7140	710 U	6990	98	57-147	
Carbon tetrachloride	7140	710 U	7020	98	59-129	
Chlorobenzene	7140	710 U	6920	97	80-110	
Chloroethane	7140	710 U	8970	126	21-165	
Chloroform	7140	710 U	7060	99	76-118	
Chloromethane	7140	710 U	6120	86	33-132	
cis-1,2-Dichloroethene	7140	24000	30600	97	70-120	E
cis-1,3-Dichloropropene	7140	710 U	5800	81	51-110	
Hexachlorobutadiene	7140	710 U	4840	68	27-132	
Dibromomethane	7140	710 U	7130	100	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7151.D

Lab ID: 240-28014-4 MS Client ID: DR-DPT-26-25 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	7140	710 U	6670	93	67-120	
Dichlorodifluoromethane	7140	710 U	5830	82	17-128	
Ethylbenzene	7140	710 U	6930	97	75-116	
1,2-Dibromoethane	7140	710 U	6660	93	74-113	
Diisopropyl ether	7140	7100 U	6620 J	93	73-118	
Naphthalene	7140	710 U	3680	52	15-158	
m-Xylene & p-Xylene	14300	1400 U	14300	100	75-117	
n-Butylbenzene	7140	710 U	5810	81	56-127	
Isopropylbenzene	7140	710 U	6670	93	68-116	
n-Propylbenzene	7140	710 U	6600	92	64-124	
2-Butanone	14300	7100 U	12200	86	54-129	
4-Methyl-2-pentanone	14300	7100 U	11600	81	56-131	
sec-Butylbenzene	7140	710 U	6010	84	60-119	
Methyl tert-butyl ether	7140	710 U	6020	84	46-144	
Methylene Chloride	7140	1400	9120	108	63-128	
o-Xylene	7140	710 U	7080	99	76-116	
Styrene	7140	710 U	7340	103	71-117	
tert-Butylbenzene	7140	710 U	6030	84	61-119	
Tetrachloroethene	7140	710 U	7020	98	70-117	
Toluene	7140	120 J	6890	95	78-114	
trans-1,2-Dichloroethene	7140	710 U	6960	97	80-119	
trans-1,3-Dichloropropene	7140	710 U	5590	78	46-116	
Trichloroethene	7140	850	7830	98	66-120	
Trichlorofluoromethane	7140	710 U	7160	100	46-157	
Vinyl acetate	7140	1400 U	5970	84	43-157	
Vinyl chloride	7140	7600	13300	80	49-130	
tert-Butyl alcohol	143000	36000 U	98200	69	70-130	F
Xylenes, Total	21400	1400 U	21400	100	76-116	
Dibromochloromethane	7140	710 U	6340	89	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7152.D

Lab ID: 240-28014-4 MSD Client ID: DR-DPT-26-25 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	7140	6720	94	1	30	64-118	
1,1,1-Trichloroethane	7140	6770	95	1	30	68-121	
1,1,2,2-Tetrachloroethane	7140	6400	90	5	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	7140	7720	108	3	30	70-152	
1,1-Dichloroethane	7140	6970	98	4	30	79-116	
1,1-Dichloroethene	7140	7130	98	1	30	74-135	
1,1-Dichloropropene	7140	5980	84	3	30	80-114	
1,2,3-Trichlorobenzene	7140	4930	69	23	30	45-129	
1,2,3-Trichloropropane	7140	6730	94	6	30	67-132	
1,2,3-Trimethylbenzene	7140	7020	98	1	30	70-130	
1,2,4-Trichlorobenzene	7140	5240	73	10	30	38-138	
1,2,4-Trimethylbenzene	7140	6530	91	1	30	67-124	
1,2-Dibromo-3-Chloropropane	7140	4950	69	11	30	32-139	
1,2-Dichlorobenzene	7140	6660	93	3	30	75-111	
1,2-Dichloroethane	7140	7540	106	1	30	68-129	
1,2-Dichloropropane	7140	7130	100	3	30	78-115	
1,3-Dichlorobenzene	7140	6430	90	1	30	73-110	
1,3-Dichloropropane	7140	7060	99	1	30	74-118	
1,4-Dichlorobenzene	7140	6480	91	0	30	75-110	
2,2-Dichloropropane	7140	6100	85	4	30	38-127	
2-Chloroethyl vinyl ether	7140	5020 J	70	2	30	10-150	
2-Chlorotoluene	7140	6380	89	1	30	69-117	
2-Hexanone	14300	11800	83	4	30	47-139	
Bromobenzene	7140	6470	91	1	30	71-116	
Bromochloromethane	7140	7270	102	3	30	73-121	
4-Chlorotoluene	7140	6480	91	2	30	71-116	
p-Isopropyltoluene	7140	6550	92	1	30	64-122	
Acetone	14300	14100	86	3	30	33-145	
Benzene	7140	6900	95	0	30	72-121	
Bromoform	7140	5940	83	4	30	32-128	
Bromomethane	7140	7200	101	3	30	10-186	
Carbon disulfide	7140	6900	97	1	30	57-147	
Carbon tetrachloride	7140	6890	97	2	30	59-129	
Chlorobenzene	7140	6770	95	2	30	80-110	
Chloroethane	7140	9000	126	0	30	21-165	
Chloroform	7140	7210	101	2	30	76-118	
Chloromethane	7140	6330	89	3	30	33-132	
cis-1,2-Dichloroethene	7140	30500	95	0	30	70-120	E
cis-1,3-Dichloropropene	7140	5890	82	2	30	51-110	
Hexachlorobutadiene	7140	5460	76	12	30	27-132	
Dibromomethane	7140	7300	102	2	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7152.D

Lab ID: 240-28014-4 MSD Client ID: DR-DPT-26-25 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	7140	6790	95	2	30	67-120	
Dichlorodifluoromethane	7140	6020	84	3	30	17-128	
Ethylbenzene	7140	6590	92	5	30	75-116	
1,2-Dibromoethane	7140	6800	95	2	30	74-113	
Diisopropyl ether	7140	6870 J	96	4	30	73-118	
Naphthalene	7140	4670	65	24	30	15-158	
m-Xylene & p-Xylene	14300	13700	96	4	30	75-117	
n-Butylbenzene	7140	5930	83	2	30	56-127	
Isopropylbenzene	7140	6410	90	4	30	68-116	
n-Propylbenzene	7140	6630	93	0	30	64-124	
2-Butanone	14300	12300	86	1	30	54-129	
4-Methyl-2-pentanone	14300	11900	83	2	30	56-131	
sec-Butylbenzene	7140	5970	84	1	30	60-119	
Methyl tert-butyl ether	7140	6180	87	3	30	46-144	
Methylene Chloride	7140	9060	107	1	30	63-128	
o-Xylene	7140	6920	97	2	30	76-116	
Styrene	7140	7050	99	4	30	71-117	
tert-Butylbenzene	7140	6100	85	1	30	61-119	
Tetrachloroethene	7140	6710	94	4	30	70-117	
Toluene	7140	6800	94	1	30	78-114	
trans-1,2-Dichloroethene	7140	7160	100	3	30	80-119	
trans-1,3-Dichloropropene	7140	5830	82	4	30	46-116	
Trichloroethene	7140	7530	94	4	30	66-120	
Trichlorofluoromethane	7140	7150	100	0	30	46-157	
Vinyl acetate	7140	6510	91	9	30	43-157	
Vinyl chloride	7140	13700	85	3	30	49-130	
tert-Butyl alcohol	143000	106000	74	8	30	70-130	
Xylenes, Total	21400	20600	96	4	30	76-116	
Dibromochloromethane	7140	6540	92	3	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab File ID: UXR7188.D Lab Sample ID: MB 240-98511/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/22/2013 16:08

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98511/4	UXR7186.D	08/22/2013 15:23
DR-DPT-DUP01	240-28014-1	UXR7189.D	08/22/2013 17:17
DR-DPT-30-30	240-28014-7	UXR7190.D	08/22/2013 17:39
DR-DPT-30-40	240-28014-9	UXR7191.D	08/22/2013 18:00
DR-DPT-30-30 MS	240-28014-7 MS	UXR7209.D	08/23/2013 00:40
DR-DPT-30-30 MSD	240-28014-7 MSD	UXR7210.D	08/23/2013 01:02

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98511/6

Matrix: Water | Lab File ID: UXR7188.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/22/2013 16:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98511 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98511/6

Matrix: Water | Lab File ID: UXR7188.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/22/2013 16:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98511 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	2.27		1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28014-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98511/6

Matrix: Water | Lab File ID: UXR7188.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/22/2013 16:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98511 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98511/6

Matrix: Water Lab File ID: UXR7188.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/22/2013 16:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98511 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7186.D

Lab ID: LCS 240-98511/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.49	95	72-116	
1,1,1-Trichloroethane	10.0	9.43	94	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.20	92	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.4	114	74-151	
1,1-Dichloroethane	10.0	9.35	93	82-115	
1,1-Dichloroethene	10.0	9.69	97	78-131	
1,1-Dichloropropene	10.0	9.07	91	83-114	
1,2,3-Trichlorobenzene	10.0	6.80	68	54-126	
1,2,3-Trichloropropane	10.0	9.74	97	73-129	
1,2,3-Trimethylbenzene	10.0	10.3	103	70-130	
1,2,4-Trichlorobenzene	10.0	7.64	76	48-135	
1,2,4-Trimethylbenzene	10.0	9.68	97	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.44	74	42-136	
1,2-Dichlorobenzene	10.0	9.49	95	81-110	
1,2-Dichloroethane	10.0	10.2	102	71-127	
1,2-Dichloropropane	10.0	9.73	97	81-115	
1,3-Dichlorobenzene	10.0	9.54	95	80-110	
1,3-Dichloropropane	10.0	9.98	100	79-116	
1,4-Dichlorobenzene	10.0	9.61	96	82-110	
2,2-Dichloropropane	10.0	8.20	82	50-129	
2-Chloroethyl vinyl ether	10.0	9.01 J	90	52-131	
2-Chlorotoluene	10.0	9.58	96	76-116	
2-Hexanone	20.0	18.4	92	55-133	
Bromobenzene	10.0	9.52	95	76-115	
Bromochloromethane	10.0	10.2	102	77-120	
4-Chlorotoluene	10.0	9.55	96	77-115	
p-Isopropyltoluene	10.0	9.82	98	74-120	
Acetone	20.0	19.0	95	43-136	
Benzene	10.0	9.61	96	83-112	
Bromoform	10.0	9.04	90	40-131	
Bromomethane	10.0	6.02	60	11-185	
Carbon disulfide	10.0	8.96	90	62-142	
Carbon tetrachloride	10.0	9.68	97	66-128	
Chlorobenzene	10.0	9.73	97	85-110	
Chloroethane	10.0	4.64	46	25-153	
Chloroform	10.0	9.90	99	79-117	
Chloromethane	10.0	7.16	72	44-126	
cis-1,2-Dichloroethene	10.0	9.63	96	80-113	
cis-1,3-Dichloropropene	10.0	8.63	86	61-115	
Hexachlorobutadiene	10.0	7.62	76	36-134	
Dibromomethane	10.0	10.1	101	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7186.D

Lab ID: LCS 240-98511/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.47	95	72-121	
Dichlorodifluoromethane	10.0	8.19	82	19-129	
Ethylbenzene	10.0	9.93	99	83-112	
1,2-Dibromoethane	10.0	9.78	98	79-113	
Diisopropyl ether	10.0	9.55 J	96	77-118	
Naphthalene	10.0	6.75	67	32-141	
m-Xylene & p-Xylene	20.0	20.1	100	83-113	
n-Butylbenzene	10.0	9.01	90	66-125	
Isopropylbenzene	10.0	9.69	97	75-114	
n-Propylbenzene	10.0	9.94	99	74-121	
2-Butanone	20.0	19.0	95	60-126	
4-Methyl-2-pentanone	20.0	18.4	92	63-128	
sec-Butylbenzene	10.0	9.16	92	70-117	
Methyl tert-butyl ether	10.0	8.88	89	52-144	
Methylene Chloride	10.0	11.7	117	66-131	
o-Xylene	10.0	9.99	100	83-113	
Styrene	10.0	10.4	104	79-114	
tert-Butylbenzene	10.0	9.31	93	71-115	
Tetrachloroethene	10.0	9.98	100	79-114	
Toluene	10.0	9.93	99	84-111	
trans-1,2-Dichloroethene	10.0	9.90	99	83-117	
trans-1,3-Dichloropropene	10.0	8.46	85	58-117	
Trichloroethene	10.0	10.1	101	76-117	
Trichlorofluoromethane	10.0	8.66	87	49-157	
Vinyl acetate	10.0	9.01	90	46-161	
Vinyl chloride	10.0	7.90	79	53-127	
tert-Butyl alcohol	200	166	83	70-130	
Xylenes, Total	30.0	30.1	100	83-112	
Dibromochloromethane	10.0	9.30	93	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7209.D

Lab ID: 240-28014-7 MS Client ID: DR-DPT-30-30 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	400	40 U	371	93	64-118	
1,1,1-Trichloroethane	400	40 U	373	93	68-121	
1,1,2,2-Tetrachloroethane	400	40 U	338	85	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	400	40 U	415	104	70-152	
1,1-Dichloroethane	400	40 U	365	91	79-116	
1,1-Dichloroethene	400	40 U	380	95	74-135	
1,1-Dichloropropene	400	40 U	349	87	80-114	
1,2,3-Trichlorobenzene	400	40 U	229	57	45-129	
1,2,3-Trichloropropane	400	40 U	362	91	67-132	
1,2,3-Trimethylbenzene	400	200 U	393	98	70-130	
1,2,4-Trichlorobenzene	400	40 U	270	67	38-138	
1,2,4-Trimethylbenzene	400	40 U	371	93	67-124	
1,2-Dibromo-3-Chloropropane	400	80 U	261	65	32-139	
1,2-Dichlorobenzene	400	40 U	370	92	75-111	
1,2-Dichloroethane	400	40 U	406	102	68-129	
1,2-Dichloropropane	400	40 U	376	94	78-115	
1,3-Dichlorobenzene	400	40 U	364	91	73-110	
1,3-Dichloropropane	400	40 U	382	96	74-118	
1,4-Dichlorobenzene	400	40 U	365	91	75-110	
2,2-Dichloropropane	400	40 U	309	77	38-127	
2-Chloroethyl vinyl ether	400	400 U	400 U	0	10-150	F
2-Chlorotoluene	400	40 U	362	91	69-117	
2-Hexanone	800	400 U	628	79	47-139	
Bromobenzene	400	40 U	375	94	71-116	
Bromochloromethane	400	40 U	384	96	73-121	
4-Chlorotoluene	400	40 U	363	91	71-116	
p-Isopropyltoluene	400	40 U	377	94	64-122	
Acetone	800	53 J	721	84	33-145	
Benzene	400	14 J	388	93	72-121	
Bromoform	400	40 U	329	82	32-128	
Bromomethane	400	40 U	294	73	10-186	
Carbon disulfide	400	40 U	359	90	57-147	
Carbon tetrachloride	400	40 U	381	95	59-129	
Chlorobenzene	400	40 U	379	95	80-110	
Chloroethane	400	40 U	288	72	21-165	
Chloroform	400	40 U	387	97	76-118	
Chloromethane	400	40 U	304	76	33-132	
cis-1,2-Dichloroethene	400	920	1300	95	70-120	
cis-1,3-Dichloropropene	400	40 U	315	79	51-110	
Hexachlorobutadiene	400	40 U	270	68	27-132	
Dibromomethane	400	40 U	389	97	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7209.D

Lab ID: 240-28014-7 MS Client ID: DR-DPT-30-30 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	400	40 U	364	91	67-120	
Dichlorodifluoromethane	400	40 U	280	70	17-128	
Ethylbenzene	400	40 U	379	95	75-116	
1,2-Dibromoethane	400	40 U	369	92	74-113	
Diisopropyl ether	400	400 U	359 J	90	73-118	
Naphthalene	400	40 U	214	54	15-158	
m-Xylene & p-Xylene	800	80 U	794	99	75-117	
n-Butylbenzene	400	40 U	335	84	56-127	
Isopropylbenzene	400	40 U	373	93	68-116	
n-Propylbenzene	400	40 U	375	94	64-124	
2-Butanone	800	400 U	649	81	54-129	
4-Methyl-2-pentanone	800	400 U	653	82	56-131	
sec-Butylbenzene	400	40 U	345	86	60-119	
Methyl tert-butyl ether	400	40 U	332	83	46-144	
Methylene Chloride	400	40 U	387	97	63-128	
o-Xylene	400	40 U	390	97	76-116	
Styrene	400	40 U	400	100	71-117	
tert-Butylbenzene	400	40 U	353	88	61-119	
Tetrachloroethene	400	40 U	387	97	70-117	
Toluene	400	6.9 J	380	93	78-114	
trans-1,2-Dichloroethene	400	9.2 J	388	95	80-119	
trans-1,3-Dichloropropene	400	40 U	313	78	46-116	
Trichloroethene	400	270	655	97	66-120	
Trichlorofluoromethane	400	40 U	361	90	46-157	
Vinyl acetate	400	80 U	336	84	43-157	
Vinyl chloride	400	51	356	76	49-130	
tert-Butyl alcohol	8000	2000 U	5670	71	70-130	
Xylenes, Total	1200	80 U	1180	99	76-116	
Dibromochloromethane	400	40 U	351	88	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7210.D

Lab ID: 240-28014-7 MSD Client ID: DR-DPT-30-30 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	400	388	97	4	30	64-118	
1,1,1-Trichloroethane	400	384	96	3	30	68-121	
1,1,2,2-Tetrachloroethane	400	348	87	3	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	400	423	106	2	30	70-152	
1,1-Dichloroethane	400	377	94	3	30	79-116	
1,1-Dichloroethene	400	399	100	5	30	74-135	
1,1-Dichloropropene	400	362	90	4	30	80-114	
1,2,3-Trichlorobenzene	400	280	70	20	30	45-129	
1,2,3-Trichloropropane	400	357	89	1	30	67-132	
1,2,3-Trimethylbenzene	400	404	101	3	30	70-130	
1,2,4-Trichlorobenzene	400	301	75	11	30	38-138	
1,2,4-Trimethylbenzene	400	372	93	0	30	67-124	
1,2-Dibromo-3-Chloropropane	400	284	71	8	30	32-139	
1,2-Dichlorobenzene	400	378	95	2	30	75-111	
1,2-Dichloroethane	400	421	105	4	30	68-129	
1,2-Dichloropropane	400	380	95	1	30	78-115	
1,3-Dichlorobenzene	400	377	94	3	30	73-110	
1,3-Dichloropropane	400	394	99	3	30	74-118	
1,4-Dichlorobenzene	400	368	92	1	30	75-110	
2,2-Dichloropropane	400	330	83	7	30	38-127	
2-Chloroethyl vinyl ether	400	400 U	0	NC	30	10-150	F
2-Chlorotoluene	400	377	94	4	30	69-117	
2-Hexanone	800	674	84	7	30	47-139	
Bromobenzene	400	375	94	0	30	71-116	
Bromochloromethane	400	395	99	3	30	73-121	
4-Chlorotoluene	400	374	93	3	30	71-116	
p-Isopropyltoluene	400	381	95	1	30	64-122	
Acetone	800	718	83	0	30	33-145	
Benzene	400	397	96	2	30	72-121	
Bromoform	400	346	86	5	30	32-128	
Bromomethane	400	354	88	18	30	10-186	
Carbon disulfide	400	387	97	7	30	57-147	
Carbon tetrachloride	400	402	100	5	30	59-129	
Chlorobenzene	400	384	96	2	30	80-110	
Chloroethane	400	396	99	31	30	21-165	F
Chloroform	400	396	99	2	30	76-118	
Chloromethane	400	327	82	7	30	33-132	
cis-1,2-Dichloroethene	400	1300	95	0	30	70-120	
cis-1,3-Dichloropropene	400	336	84	6	30	51-110	
Hexachlorobutadiene	400	312	78	14	30	27-132	
Dibromomethane	400	404	101	4	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7210.D

Lab ID: 240-28014-7 MSD Client ID: DR-DPT-30-30 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	400	377	94	4	30	67-120	
Dichlorodifluoromethane	400	282	70	1	30	17-128	
Ethylbenzene	400	382	96	1	30	75-116	
1,2-Dibromoethane	400	380	95	3	30	74-113	
Diisopropyl ether	400	379 J	95	5	30	73-118	
Naphthalene	400	271	68	23	30	15-158	
m-Xylene & p-Xylene	800	810	101	2	30	75-117	
n-Butylbenzene	400	351	88	5	30	56-127	
Isopropylbenzene	400	391	98	5	30	68-116	
n-Propylbenzene	400	381	95	2	30	64-124	
2-Butanone	800	665	83	2	30	54-129	
4-Methyl-2-pentanone	800	697	87	7	30	56-131	
sec-Butylbenzene	400	354	89	3	30	60-119	
Methyl tert-butyl ether	400	345	86	4	30	46-144	
Methylene Chloride	400	398	99	3	30	63-128	
o-Xylene	400	404	101	4	30	76-116	
Styrene	400	409	102	2	30	71-117	
tert-Butylbenzene	400	366	91	4	30	61-119	
Tetrachloroethene	400	390	98	1	30	70-117	
Toluene	400	398	98	5	30	78-114	
trans-1,2-Dichloroethene	400	409	100	5	30	80-119	
trans-1,3-Dichloropropene	400	333	83	6	30	46-116	
Trichloroethene	400	660	99	1	30	66-120	
Trichlorofluoromethane	400	392	98	8	30	46-157	
Vinyl acetate	400	365	91	8	30	43-157	
Vinyl chloride	400	381	83	7	30	49-130	
tert-Butyl alcohol	8000	6140	77	8	30	70-130	
Xylenes, Total	1200	1210	101	3	30	76-116	
Dibromochloromethane	400	373	93	6	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-DUP01	240-28014-1	90	90	82	79
DR-DPT-DUP02	240-28014-2	95	92	90	87
DR-DPT-26-20	240-28014-3	91	90	84	82
DR-DPT-26-25	240-28014-4	96	95	87	83
DR-DPT-26-30	240-28014-5	92	94	85	81
DR-DPT-30-20	240-28014-6	91	91	84	81
DR-DPT-30-30	240-28014-7	93	94	85	81
DR-DPT-30-35	240-28014-8	94	95	86	79
DR-DPT-30-40	240-28014-9	94	95	87	82
DR-DPT-26-45	240-28014-10	97	98	90	84
TB-081513	240-28014-11	94	95	84	80
DR-DPT-26-40	240-28014-12	94	94	85	80
DR-DPT-26-35	240-28014-13	94	94	85	80
	MB 240-98201/6	91	90	86	84
	MB 240-98372/6	91	91	86	81
	MB 240-98511/6	93	93	84	82
	LCS 240-98201/4	97	91	94	98
	LCS 240-98372/4	98	90	92	101
	LCS 240-98511/4	91	90	90	96
DR-DPT-26-20 MS	240-28014-3 MS	94	90	90	95
DR-DPT-26-25 MS	240-28014-4 MS	97	94	94	101
DR-DPT-30-30 MS	240-28014-7 MS	93	89	89	94
DR-DPT-26-20 MSD	240-28014-3 MSD	87	86	87	90
DR-DPT-26-25 MSD	240-28014-4 MSD	96	91	91	98
DR-DPT-30-30 MSD	240-28014-7 MSD	93	91	89	95

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab File ID: BFB414.D BFB Injection Date: 08/17/2013

Instrument ID: A3UX17 BFB Injection Time: 15:32

Analysis Batch No.: 97903

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	42.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	89.6	
175	5.0 - 9.0 % of mass 174	6.2	(6.9)1
176	95.0 - 101.0 % of mass 174	89.6	(100.0)1
177	5.0 - 9.0 % of mass 176	5.4	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97903/2	UXR7004.D	08/17/2013	15:56
	STD8260 240-97903/3	UXR7005.D	08/17/2013	16:18
	STD8260 240-97903/4	UXR7006.D	08/17/2013	16:41
	STD8260 240-97903/5	UXR7007.D	08/17/2013	17:03
	STD8260 240-97903/6	UXR7008.D	08/17/2013	17:25
	STD8260 240-97903/7	UXR7009.D	08/17/2013	17:48
	STDA9 240-97903/8	UXR7010.D	08/17/2013	18:10
	STDA9 240-97903/9	UXR7011.D	08/17/2013	18:32
	STDA9 240-97903/10	UXR7012.D	08/17/2013	18:54
	STDA9 240-97903/11	UXR7013.D	08/17/2013	19:16
	STDA9 240-97903/12	UXR7014.D	08/17/2013	19:39
	STDA9 240-97903/13	UXR7015.D	08/17/2013	20:01
	ICV 240-97903/14	UXR7016.D	08/17/2013	20:23

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28014-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97903/7	UXR7009.D
Level 2	STD8260 240-97903/6	UXR7008.D
Level 3	STD8260 240-97903/5	UXR7007.D
Level 4	STD8260 240-97903/4	UXR7006.D
Level 5	STD8260 240-97903/3	UXR7005.D
Level 6	STD8260 240-97903/2	UXR7004.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3204 0.2926	0.2676	0.2764	0.2861	0.2872	Ave		0.2884				6.2		15.0			
Chloromethane	0.4139 0.3439	0.3668	0.3596	0.3531	0.3711	Ave		0.3681			0.1000	6.6		15.0			
Vinyl chloride	0.3940 0.3125	0.3245	0.3155	0.3332	0.3243	Ave		0.3340				9.1		15.0			
Bromomethane	0.1734 0.0852	0.1389	0.1172	0.1098	0.1078	Qua	0.0082	0.1248	-0.001						0.9990		0.9900
Chloroethane	0.1149 0.0795	0.1143	0.1007	0.0850	0.1011	Ave		0.0993				15.0		15.0			
Trichlorofluoromethane	0.2573 0.2239	0.2306	0.2276	0.2301	0.2270	Ave		0.2327				5.3		15.0			
Acrolein	0.0416 0.0342	0.0317	0.0345	0.0350	0.0348	Ave		0.0353				9.4		15.0			
1,1-Dichloroethene	0.2818 0.2716	0.2599	0.2612	0.2809	0.2682	Ave		0.2706				3.5		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2259 0.2105	0.1993	0.2023	0.2185	0.2130	Ave		0.2116				4.7		15.0			
Acetone	0.1943 0.0801	0.1013	0.0910	0.0876	0.0830	Lin1	0.1117	0.0795							1.0000		0.9900
Iodomethane	0.3883 0.3571	0.3803	0.3822	0.3812	0.3768	Ave		0.3777				2.8		15.0			
Carbon disulfide	0.7719 0.7593	0.6773	0.7122	0.7680	0.7537	Ave		0.7404				5.1		15.0			
Acetonitrile	0.0466 0.0335	0.0340	0.0368	0.0346	0.0344	Ave		0.0366				14.0		15.0			
Methyl acetate	0.2649 0.2101	0.2094	0.2214	0.2237	0.2177	Ave		0.2245				9.2		15.0			
Methylene Chloride	1.0972 0.2798	0.4538	0.3555	0.3214	0.2971	Lin1	0.4062	0.2728							1.0000		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28014-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0240 0.0204	0.0208	0.0212	0.0221	0.0216	Ave		0.0217				5.9		15.0			
Acrylonitrile	0.1371 0.1043	0.1034	0.1113	0.1144	0.1096	Ave		0.1133				11.0		15.0			
Methyl tert-butyl ether	0.7668 0.7487	0.7032	0.7304	0.7764	0.7508	Ave		0.7461				3.5		15.0			
trans-1,2-Dichloroethene	0.3148 0.2849	0.2867	0.2853	0.2966	0.2863	Ave		0.2924				4.0		15.0			
Hexane	0.0992 0.0780	0.0708	0.0695	0.0827	0.0800	Ave		0.0800				13.0		15.0			
1,1-Dichloroethane	0.5339 0.4884	0.4788	0.4796	0.5057	0.4874	Ave		0.4956			0.1000	4.3		15.0			
Vinyl acetate	0.0353 0.0410	0.0341	0.0395	0.0436	0.0431	Ave		0.0394				10.0		15.0			
2,2-Dichloropropane	0.2891 0.2547	0.2421	0.2517	0.2761	0.2630	Ave		0.2628				6.6		15.0			
cis-1,2-Dichloroethene	0.3348 0.2979	0.2915	0.3010	0.3187	0.3034	Ave		0.3079				5.2		15.0			
2-Butanone	0.1550 0.1121	0.1165	0.1152	0.1221	0.1194	Ave		0.1234				13.0		15.0			
Bromochloromethane	0.1627 0.1407	0.1371	0.1393	0.1472	0.1412	Ave		0.1447				6.5		15.0			
Tetrahydrofuran	0.1433 0.0739	0.0937	0.0801	0.0838	0.0777	Lin1	0.0363	0.0747							0.9990		0.9900
Chloroform	0.4968 0.4344	0.4333	0.4317	0.4548	0.4433	Ave		0.4491				5.6		15.0			
1,1,1-Trichloroethane	0.3491 0.3450	0.3369	0.3423	0.3732	0.3542	Ave		0.3501				3.6		15.0			
Cyclohexane	0.6528 0.5796	0.5383	0.5348	0.6061	0.5879	Ave		0.5833				7.6		15.0			
1,1-Dichloropropene	0.3835 0.3611	0.3385	0.3509	0.3855	0.3654	Ave		0.3641				5.0		15.0			
Carbon tetrachloride	0.3117 0.3191	0.2879	0.2913	0.3292	0.3199	Ave		0.3098				5.4		15.0			
Benzene	1.4198 1.1202	1.1585	1.1063	1.1850	1.1333	Ave		1.1872				9.9		15.0			
1,2-Dichloroethane	0.3511 0.3344	0.3323	0.3346	0.3528	0.3411	Ave		0.3411				2.6		15.0			
Trichloroethene	0.3448 0.2857	0.2917	0.2853	0.3070	0.2909	Ave		0.3009				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28014-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.5453 0.5080	0.4552	0.4671	0.5291	0.5232	Ave		0.5046				7.1		15.0			
1,2-Dichloropropane	0.2805 0.2809	0.2698	0.2732	0.2999	0.2828	Ave		0.2812				3.7		15.0			
1,4-Dioxane	0.0031 0.0025	0.0029	0.0029	0.0029	0.0027	Ave		0.0028				6.9		15.0			
Dibromomethane	0.1442 0.1421	0.1403	0.1425	0.1520	0.1431	Ave		0.1440				2.8		15.0			
Bromodichloromethane	0.3119 0.3254	0.2892	0.2930	0.3231	0.3176	Ave		0.3100				5.0		15.0			
2-Chloroethyl vinyl ether	0.1316 0.1591	0.1239	0.1453	0.1553	0.1616	Ave		0.1461				11.0		15.0			
cis-1,3-Dichloropropene	0.3392 0.4287	0.3324	0.3686	0.4103	0.4121	Ave		0.3819				11.0		15.0			
4-Methyl-2-pentanone	0.2607 0.2377	0.2157	0.2417	0.2472	0.2493	Ave		0.2420				6.2		15.0			
Toluene	1.6522 1.4698	1.4513	1.4774	1.5492	1.5164	Ave		1.5194				4.9		15.0			
trans-1,3-Dichloropropene	0.3213 0.4538	0.3447	0.3782	0.4331	0.4465	Ave		0.3963				14.0		15.0			
Ethyl methacrylate	0.4007 0.4327	0.3691	0.3814	0.4268	0.4329	Ave		0.4073				6.8		15.0			
1,1,2-Trichloroethane	0.3167 0.2763	0.2853	0.2849	0.2935	0.2866	Ave		0.2905				4.8		15.0			
Tetrachloroethene	0.3325 0.3049	0.3095	0.3044	0.3290	0.3164	Ave		0.3161				3.9		15.0			
1,3-Dichloropropane	0.5272 0.4996	0.4841	0.4918	0.5267	0.5162	Ave		0.5076				3.6		15.0			
2-Hexanone	0.1971 0.2006	0.1820	0.1978	0.2079	0.2150	Ave		0.2001				5.6		15.0			
Dibromochloromethane	0.2402 0.3001	0.2430	0.2552	0.2811	0.2927	Ave		0.2687				9.7		15.0			
1,2-Dibromoethane	0.2911 0.2813	0.2846	0.2815	0.2929	0.2953	Ave		0.2878				2.1		15.0			
Chlorobenzene	1.1274 0.9807	0.9718	0.9671	1.0149	1.0027	Ave		1.0107			0.3000	5.9		15.0			
1,1,1,2-Tetrachloroethane	0.3060 0.3269	0.2962	0.3098	0.3339	0.3317	Ave		0.3174				4.9		15.0			
Ethylbenzene	0.5443 0.5315	0.5042	0.5217	0.5506	0.5482	Ave		0.5334				3.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28014-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6588 0.6727	0.6095	0.6454	0.6967	0.6838	Ave		0.6612				4.7		15.0			
o-Xylene	0.5652 0.6364	0.5841	0.6074	0.6647	0.6500	Ave		0.6180				6.3		15.0			
Styrene	0.8997 1.0677	0.8939	0.9726	1.0763	1.0831	Ave		0.9989				8.9		15.0			
Bromoform	0.1401 0.1923	0.1362	0.1490	0.1704	0.1835	Ave		0.1619			0.1000	15.0		15.0			
Isopropylbenzene	1.5085 1.6272	1.4364	1.5259	1.6642	1.6725	Ave		1.5725				6.1		15.0			
1,1,2,2-Tetrachloroethane	0.6899 0.5937	0.6221	0.6118	0.6565	0.6264	Ave		0.6334			0.3000	5.4		15.0			
Bromobenzene	0.8428 0.7434	0.7732	0.7399	0.7988	0.7642	Ave		0.7771				5.0		15.0			
1,2,3-Trichloropropane	0.2256 0.1928	0.2102	0.2058	0.2230	0.2026	Ave		0.2100				6.0		15.0			
trans-1,4-Dichloro-2-butene	0.1193 0.1579	0.1115	0.1100	0.1265	0.1387	Ave		0.1273				14.0		15.0			
n-Propylbenzene	0.8083 0.8092	0.7417	0.7798	0.8729	0.8206	Ave		0.8054				5.4		15.0			
2-Chlorotoluene	0.7298 0.6717	0.6515	0.6649	0.7468	0.6980	Ave		0.6938				5.5		15.0			
1,3,5-Trimethylbenzene	2.1369 2.3790	2.1516	2.2670	2.4960	2.4224	Ave		2.3088				6.4		15.0			
4-Chlorotoluene	0.7933 0.7186	0.7058	0.7223	0.7864	0.7387	Ave		0.7442				5.0		15.0			
tert-Butylbenzene	2.0917 2.2012	2.0079	2.0434	2.2852	2.1947	Ave		2.1373				5.0		15.0			
1,2,4-Trimethylbenzene	2.1622 2.4480	2.1730	2.2959	2.5240	2.4090	Ave		2.3353				6.4		15.0			
sec-Butylbenzene	2.8644 2.9340	2.6593	2.7372	3.0508	2.9003	Ave		2.8577				4.9		15.0			
1,3-Dichlorobenzene	1.6000 1.4148	1.3939	1.3950	1.4783	1.4105	Ave		1.4487				5.5		15.0			
p-Isopropyltoluene	2.3644 2.5719	2.2377	2.3885	2.6865	2.5733	Ave		2.4704				6.8		15.0			
1,4-Dichlorobenzene	1.6117 1.4458	1.4717	1.4339	1.5395	1.4513	Ave		1.4923				4.7		15.0			
n-Butylbenzene	1.9979 2.1246	1.8316	1.8865	2.1547	2.0745	Ave		2.0116				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28014-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.5271 1.3033	1.3237	1.3061	1.3852	1.3171	Ave		1.3604				6.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1057 0.0982	0.0874	0.0888	0.0978	0.1015	Ave		0.0966				7.4		15.0			
1,3,5-Trichlorobenzene	1.1940 0.9716	1.0178	1.0187	1.0770	1.0108	Ave		1.0483				7.5		15.0			
1,2,4-Trichlorobenzene	1.1068 0.7641	0.9118	0.8790	0.9473	0.8677	Ave		0.9128				12.0		15.0			
Hexachlorobutadiene	0.6127 0.3153	0.4584	0.4366	0.4435	0.3631	Qua	0.1528	0.4230	-0.003						0.9980		0.9900
Naphthalene	2.0370 1.3497	1.6368	1.6979	1.8755	1.7777	Ave		1.7291				13.0		15.0			
1,2,3-Trichlorobenzene	1.1380 0.5313	0.8347	0.7936	0.8280	0.7164	Qua	-0.050	0.9072	-0.009						1.0000		0.9900
Dibromofluoromethane (Surr)	0.2446 0.2246	0.2310	0.2246	0.2337	0.2289	Ave		0.2312				3.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3381 0.2592	0.2726	0.2664	0.2732	0.2645	Ave		0.2790				11.0		15.0			
Toluene-d8 (Surr)	1.4464 1.2376	1.3008	1.2447	1.2828	1.2699	Ave		1.2971				5.9		15.0			
4-Bromofluorobenzene (Surr)	0.5369 0.4602	0.4610	0.4532	0.4686	0.4753	Ave		0.4759				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28014-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 18:10 Calibration End Date: 08/17/2013 20:01 Calibration ID: 16934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-97903/13	UXR7015.D
Level 2	STDA9 240-97903/12	UXR7014.D
Level 3	STDA9 240-97903/11	UXR7013.D
Level 4	STDA9 240-97903/10	UXR7012.D
Level 5	STDA9 240-97903/9	UXR7011.D
Level 6	STDA9 240-97903/8	UXR7010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4058 0.3150	0.2923	0.3314	0.3073	0.3098	Ave		0.3269				12.0		15.0			
Ethyl ether	0.2556 0.2493	0.2351	0.2562	0.2555	0.2582	Ave		0.2516				3.4		15.0			
3-Chloro-1-propene	0.1295 0.1407	0.1107	0.1227	0.1277	0.1381	Ave		0.1282				8.5		15.0			
Diisopropyl ether	0.2598 0.2542	0.2248	0.2497	0.2520	0.2611	Ave		0.2503				5.3		15.0			
2-Chloro-1,3-butadiene	0.4633 0.4486	0.4063	0.4234	0.4362	0.4556	Ave		0.4389				4.9		15.0			
Ethyl-t-butyl ether (ETBE)	0.8518 0.8690	0.7673	0.8096	0.8401	0.8700	Ave		0.8346				4.8		15.0			
Ethyl acetate	0.2494 0.2478	0.2117	0.2363	0.2410	0.2507	Ave		0.2395				6.1		15.0			
Propionitrile	0.0428 0.0394	0.0395	0.0384	0.0398	0.0403	Ave		0.0400				3.7		15.0			
Methacrylonitrile	0.1716 0.1599	0.1460	0.1626	0.1550	0.1635	Ave		0.1598				5.4		15.0			
Isobutyl alcohol	0.0115 0.0099	0.0089	0.0093	0.0098	0.0102	Ave		0.0099				8.9		15.0			
Tert-amyl-methyl ether (TAME)	0.6806 0.7154	0.5918	0.6571	0.6769	0.7228	Ave		0.6741				7.0		15.0			
n-Heptane	0.0793 0.0787	0.0664	0.0707	0.0732	0.0794	Ave		0.0746				7.3		15.0			
n-Butanol	0.0100 0.0096	0.0086	0.0090	0.0096	0.0098	Ave		0.0094				5.5		15.0			
Methyl methacrylate	0.2118 0.2263	0.1740	0.2034	0.2126	0.2275	Ave		0.2093				9.4		15.0			
2-Nitropropane	0.0419 0.0509	0.0409	0.0407	0.0447	0.0503	Ave		0.0449				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28014-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 18:10 Calibration End Date: 08/17/2013 20:01 Calibration ID: 16934

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0934 0.1169	0.0892	0.1098	0.1147	0.1227	Ave		0.1078				13.0		15.0			
1,2,3-Trimethylbenzene	2.2268 2.4130	1.8784	2.1822	2.2922	2.4829	Ave		2.2459				9.5		15.0			
2-Methylnaphthalene	0.8375	1.0311	1.0420	1.0385	0.8614	Ave		0.9621				11.0		15.0			
n-Butyl acetate	0.1966 0.2372	0.1786	0.2194	0.2183	0.2332	Ave		0.2139				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab File ID: BFB418.D BFB Injection Date: 08/20/2013

Instrument ID: A3UX17 BFB Injection Time: 13:14

Analysis Batch No.: 98201

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.1	
75	30.0 - 60.0 % of mass 95	44.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	85.3	
175	5.0 - 9.0 % of mass 174	6.1	(7.1)1
176	95.0 - 101.0 % of mass 174	82.6	(96.8)1
177	5.0 - 9.0 % of mass 176	5.5	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98201/2	UXR7071.D	08/20/2013	13:40
	CCV 240-98201/3	UXR7072.D	08/20/2013	14:03
	LCS 240-98201/4	UXR7073.D	08/20/2013	14:25
	MB 240-98201/6	UXR7075.D	08/20/2013	15:10
DR-DPT-DUP02	240-28014-2	UXR7095.D	08/20/2013	22:45
DR-DPT-26-20	240-28014-3	UXR7096.D	08/20/2013	23:07
DR-DPT-26-20 MS	240-28014-3 MS	UXR7097.D	08/20/2013	23:29
DR-DPT-26-20 MSD	240-28014-3 MSD	UXR7098.D	08/20/2013	23:51

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCVIS 240-98201/2 Calibration Date: 08/20/2013 13:40

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7071.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2884	0.2447		1.00	0.0100	-15.1	50.0
Chloromethane	Ave	0.3681	0.3358	0.1000	1.00	0.0100	-8.8	50.0
Vinyl chloride	Ave	0.3340	0.3014		1.00	0.0100	-9.8	20.0
Bromomethane	Qua		0.1058		1.00	0.0100	-9.4	50.0
Chloroethane	Ave	0.0993	0.0849		1.00	0.0100	-14.4	50.0
Trichlorofluoromethane	Ave	0.2327	0.2226		1.00	0.0100	-4.4	50.0
Acrolein	Ave	0.0353	0.0273		20.0	0.100	-22.6	50.0
1,1-Dichloroethene	Ave	0.2706	0.2674		1.00	0.0100	-1.2	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2196		1.00	0.0100	3.8	50.0
Acetone	Lin1		0.0753		10.0	0.0200	-12.2	50.0
Iodomethane	Ave	0.3777	0.3621		1.00	0.0100	-4.1	50.0
Carbon disulfide	Ave	0.7404	0.6825		1.00	0.0100	-7.8	50.0
Acetonitrile	Ave	0.0366	0.0328		20.0	0.100	-10.4	50.0
Methyl acetate	Ave	0.2245	0.2053		10.0	0.0200	-8.6	50.0
Methylene Chloride	Lin1		0.3617		1.00	0.0100	17.7	50.0
tert-Butyl alcohol	Ave	0.0217	0.0167		50.0	0.200	-23.2	50.0
Acrylonitrile	Ave	0.1133	0.1019		20.0	0.0200	-10.1	50.0
Methyl tert-butyl ether	Ave	0.7461	0.6714		1.00	0.0100	-10.0	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2897		1.00	0.0100	-0.9	50.0
Hexane	Ave	0.0800	0.0738		1.00	0.0100	-7.8	20.0
1,1-Dichloroethane	Ave	0.4956	0.4711	0.1000	1.00	0.0100	-4.9	50.0
Vinyl acetate	Ave	0.0394	0.0290		2.00	0.0100	-26.4	50.0
2,2-Dichloropropane	Ave	0.2628	0.2273		1.00	0.0100	-13.5	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.3007		1.00	0.0100	-2.3	50.0
2-Butanone	Ave	0.1234	0.1084		10.0	0.0200	-12.2	50.0
Bromochloromethane	Ave	0.1447	0.1444		1.00	0.0100	-0.2	50.0
Tetrahydrofuran	Lin1		0.0719		5.00	0.0100	-8.6	50.0
Chloroform	Ave	0.4491	0.4408		1.00	0.0100	-1.8	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3354		1.00	0.0100	-4.2	50.0
Cyclohexane	Ave	0.5833	0.5492		1.00	0.0100	-5.8	50.0
1,1-Dichloropropene	Ave	0.3641	0.3608		1.00	0.0100	-0.9	50.0
Carbon tetrachloride	Ave	0.3098	0.3037		1.00	0.0100	-2.0	50.0
Benzene	Ave	1.187	1.138		1.00	0.0100	-4.2	50.0
1,2-Dichloroethane	Ave	0.3411	0.3470		1.00	0.0100	1.7	50.0
Trichloroethene	Ave	0.3009	0.2948		1.00	0.0100	-2.0	50.0
Methylcyclohexane	Ave	0.5046	0.4822		1.00	0.0100	-4.5	50.0
1,2-Dichloropropane	Ave	0.2812	0.2756		1.00	0.0100	-2.0	20.0
1,4-Dioxane	Ave	0.0028	0.0026		50.0	0.500	-9.2	50.0
Dibromomethane	Ave	0.1440	0.1419		1.00	0.0100	-1.5	50.0
Bromodichloromethane	Ave	0.3100	0.2891		1.00	0.0100	-6.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCVIS 240-98201/2 Calibration Date: 08/20/2013 13:40

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7071.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1461	0.1350		10.0	0.0200	-7.6	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3552		1.00	0.0100	-7.0	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2097		10.0	0.0200	-13.4	50.0
Toluene	Ave	1.519	1.525		1.00	0.0100	0.3	20.0
trans-1,3-Dichloropropene	Ave	0.3963	0.3630		1.00	0.0100	-8.4	50.0
Ethyl methacrylate	Ave	0.4073	0.3785		1.00	0.0100	-7.1	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2835		1.00	0.0100	-2.4	50.0
Tetrachloroethene	Ave	0.3161	0.3288		1.00	0.0100	4.0	50.0
1,3-Dichloropropane	Ave	0.5076	0.5052		1.00	0.0100	-0.5	50.0
2-Hexanone	Ave	0.2001	0.1778		10.0	0.0200	-11.1	50.0
Dibromochloromethane	Ave	0.2687	0.2596		1.00	0.0100	-3.4	50.0
1,2-Dibromoethane	Ave	0.2878	0.2879		1.00	0.0100	0.0	50.0
Chlorobenzene	Ave	1.011	1.011	0.3000	1.00	0.0100	-0.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.3139		1.00	0.0100	-1.1	50.0
Ethylbenzene	Ave	0.5334	0.5342		1.00	0.0100	0.1	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6789		2.00	0.0200	2.7	50.0
o-Xylene	Ave	0.6180	0.6409		1.00	0.0100	3.7	50.0
Styrene	Ave	0.999	1.038		1.00	0.0100	3.9	50.0
Bromoform	Ave	0.1619	0.1518	0.1000	1.00	0.0100	-6.2	50.0
Isopropylbenzene	Ave	1.572	1.574		1.00	0.0100	0.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.5805	0.3000	1.00	0.0100	-8.4	50.0
Bromobenzene	Ave	0.7771	0.7557		1.00	0.0100	-2.7	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.1970		1.00	0.0100	-6.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.1183		1.00	0.0100	-7.1	50.0
n-Propylbenzene	Ave	0.8054	0.8095		1.00	0.0100	0.5	50.0
2-Chlorotoluene	Ave	0.6938	0.6885		1.00	0.0100	-0.8	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.266		1.00	0.0100	-1.9	50.0
4-Chlorotoluene	Ave	0.7442	0.7317		1.00	0.0100	-1.7	50.0
tert-Butylbenzene	Ave	2.137	2.059		1.00	0.0100	-3.7	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.285		1.00	0.0100	-2.2	50.0
sec-Butylbenzene	Ave	2.858	2.751		1.00	0.0100	-3.7	50.0
1,3-Dichlorobenzene	Ave	1.449	1.386		1.00	0.0100	-4.3	50.0
p-Isopropyltoluene	Ave	2.470	2.405		1.00	0.0100	-2.7	50.0
1,4-Dichlorobenzene	Ave	1.492	1.460		1.00	0.0100	-2.1	50.0
n-Butylbenzene	Ave	2.012	1.841		1.00	0.0100	-8.5	50.0
1,2-Dichlorobenzene	Ave	1.360	1.305		1.00	0.0100	-4.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0708		2.00	0.0100	-26.7	50.0
1,3,5-Trichlorobenzene	Ave	1.048	0.9233		1.00	0.0100	-11.9	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.6966		1.00	0.0100	-23.7	50.0
Hexachlorobutadiene	Qua		0.3304		1.00	0.0100	-21.4	50.0
Naphthalene	Ave	1.729	1.090		1.00	0.0100	-37.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCVIS 240-98201/2 Calibration Date: 08/20/2013 13:40

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7071.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua		0.5146		1.00	0.0100	-38.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2052		0.00791	0.00891	-11.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2353		0.00751	0.00891	-15.7	50.0
Toluene-d8 (Surr)	Ave	1.297	1.154		0.00793	0.00891	-11.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4383		0.00821	0.00891	-7.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCV 240-98201/3 Calibration Date: 08/20/2013 14:03

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7072.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3269	0.2989		2.00	0.0100	-8.6	50.0
Ethyl ether	Ave	0.2516	0.2385		2.00	0.0100	-5.2	50.0
3-Chloro-1-propene	Ave	0.1282	0.1197		2.00	0.0100	-6.6	50.0
Diisopropyl ether	Ave	0.2503	0.2430		10.0	0.0500	-2.9	50.0
2-Chloro-1,3-butadiene	Ave	0.4389	0.4261		2.00	0.0100	-2.9	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8346	0.7310		5.00	0.0100	-12.4	50.0
Ethyl acetate	Ave	0.2395	0.2200		4.00	0.0200	-8.1	50.0
Propionitrile	Ave	0.0400	0.0350	x	4.00	0.0200	-12.6	50.0
Methacrylonitrile	Ave	0.1598	0.1428		2.00	0.0100	-10.6	50.0
Isobutyl alcohol	Ave	0.0099	0.0091	x	50.0	0.200	-8.2	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6741	0.5897		5.00	0.0100	-12.5	50.0
n-Heptane	Ave	0.0746	0.0767		1.00	0.0100	2.7	50.0
n-Butanol	Ave	0.0094	0.0070	x	50.0	0.200	-26.0	50.0
Methyl methacrylate	Ave	0.2093	0.1908		2.00	0.0100	-8.8	50.0
2-Nitropropane	Ave	0.0449	0.0363	x	2.00	0.0200	-19.3	50.0
Cyclohexanone	Ave	0.1078	0.0875		20.0	0.100	-18.8	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.241		0.00998	0.0100	-0.2	50.0
2-Methylnaphthalene	Ave	0.9621			5.00	0.0200		

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab File ID: BFB421.D BFB Injection Date: 08/21/2013

Instrument ID: A3UX17 BFB Injection Time: 12:08

Analysis Batch No.: 98372

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.6	
75	30.0 - 60.0 % of mass 95	42.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.4	(0.4)1
174	50.0 - 120.00 % of mass 95	83.1	
175	5.0 - 9.0 % of mass 174	5.5	(6.6)1
176	95.0 - 101.0 % of mass 174	82.6	(99.5)1
177	5.0 - 9.0 % of mass 176	5.4	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98372/2	UXR7126.D	08/21/2013	12:34
	CCV 240-98372/3	UXR7127.D	08/21/2013	12:57
	LCS 240-98372/4	UXR7128.D	08/21/2013	13:19
	MB 240-98372/6	UXR7130.D	08/21/2013	14:04
DR-DPT-26-25	240-28014-4	UXR7133.D	08/21/2013	15:46
DR-DPT-26-30	240-28014-5	UXR7134.D	08/21/2013	16:08
DR-DPT-30-20	240-28014-6	UXR7135.D	08/21/2013	16:30
DR-DPT-30-35	240-28014-8	UXR7137.D	08/21/2013	17:14
DR-DPT-26-45	240-28014-10	UXR7139.D	08/21/2013	17:58
TB-081513	240-28014-11	UXR7140.D	08/21/2013	18:20
DR-DPT-26-40	240-28014-12	UXR7141.D	08/21/2013	18:42
DR-DPT-26-35	240-28014-13	UXR7142.D	08/21/2013	19:04
DR-DPT-26-25 MS	240-28014-4 MS	UXR7151.D	08/21/2013	22:21
DR-DPT-26-25 MSD	240-28014-4 MSD	UXR7152.D	08/21/2013	22:43

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCVIS 240-98372/2 Calibration Date: 08/21/2013 12:34

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7126.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2884	0.2509		1.00	0.0100	-13.0	50.0
Chloromethane	Ave	0.3681	0.2996	0.1000	1.00	0.0100	-18.6	50.0
Vinyl chloride	Ave	0.3340	0.2966		1.00	0.0100	-11.2	20.0
Bromomethane	Qua		0.0898		1.00	0.0100	-24.1	50.0
Chloroethane	Ave	0.0993	0.0608		1.00	0.0100	-38.8	50.0
Trichlorofluoromethane	Ave	0.2327	0.2142		1.00	0.0100	-8.0	50.0
Acrolein	Ave	0.0353	0.0424		20.0	0.100	20.2	50.0
1,1-Dichloroethene	Ave	0.2706	0.2600		1.00	0.0100	-3.9	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2159		1.00	0.0100	2.1	50.0
Acetone	Lin1		0.0762		10.0	0.0200	-11.2	50.0
Iodomethane	Ave	0.3777	0.3339		1.00	0.0100	-11.6	50.0
Carbon disulfide	Ave	0.7404	0.6233		1.00	0.0100	-15.8	50.0
Acetonitrile	Ave	0.0366	0.0340		20.0	0.100	-7.3	50.0
Methyl acetate	Ave	0.2245	0.1980		10.0	0.0200	-11.8	50.0
Methylene Chloride	Lin1		0.3424		1.00	0.0100	-10.6	50.0
tert-Butyl alcohol	Ave	0.0217	0.0154		50.0	0.200	-28.9	50.0
Acrylonitrile	Ave	0.1133	0.1085		20.0	0.0200	-4.3	50.0
Methyl tert-butyl ether	Ave	0.7461	0.6294		1.00	0.0100	-15.6	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2788		1.00	0.0100	-4.7	50.0
Hexane	Ave	0.0800	0.0682		1.00	0.0100	-14.8	20.0
1,1-Dichloroethane	Ave	0.4956	0.4503	0.1000	1.00	0.0100	-9.2	50.0
Vinyl acetate	Ave	0.0394	0.0452		2.00	0.0100	14.6	50.0
2,2-Dichloropropane	Ave	0.2628	0.2132		1.00	0.0100	-18.9	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.2826		1.00	0.0100	-8.2	50.0
2-Butanone	Ave	0.1234	0.1083		10.0	0.0200	-12.3	50.0
Bromochloromethane	Ave	0.1447	0.1441		1.00	0.0100	-0.4	50.0
Tetrahydrofuran	Lin1		0.0714		5.00	0.0100	-9.3	50.0
Chloroform	Ave	0.4491	0.4283		1.00	0.0100	-4.6	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3236		1.00	0.0100	-7.6	50.0
Cyclohexane	Ave	0.5833	0.5129		1.00	0.0100	-12.1	50.0
1,1-Dichloropropene	Ave	0.3641	0.3409		1.00	0.0100	-6.4	50.0
Carbon tetrachloride	Ave	0.3098	0.2891		1.00	0.0100	-6.7	50.0
Benzene	Ave	1.187	1.082		1.00	0.0100	-8.9	50.0
1,2-Dichloroethane	Ave	0.3411	0.3326		1.00	0.0100	-2.5	50.0
Trichloroethene	Ave	0.3009	0.2853		1.00	0.0100	-5.2	50.0
Methylcyclohexane	Ave	0.5046	0.4514		1.00	0.0100	-10.6	50.0
1,2-Dichloropropane	Ave	0.2812	0.2522		1.00	0.0100	-10.3	20.0
1,4-Dioxane	Ave	0.0028	0.0022		50.0	0.500	-20.8	50.0
Dibromomethane	Ave	0.1440	0.1384		1.00	0.0100	-4.0	50.0
Bromodichloromethane	Ave	0.3100	0.2803		1.00	0.0100	-9.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCVIS 240-98372/2 Calibration Date: 08/21/2013 12:34

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7126.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1461	0.1386		10.0	0.0200	-5.2	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3333		1.00	0.0100	-12.7	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2142		10.0	0.0200	-11.5	50.0
Toluene	Ave	1.519	1.453		1.00	0.0100	-4.3	20.0
trans-1,3-Dichloropropene	Ave	0.3963	0.3432		1.00	0.0100	-13.4	50.0
Ethyl methacrylate	Ave	0.4073	0.3527		1.00	0.0100	-13.4	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2750		1.00	0.0100	-5.3	50.0
Tetrachloroethene	Ave	0.3161	0.3152		1.00	0.0100	-0.3	50.0
1,3-Dichloropropane	Ave	0.5076	0.4841		1.00	0.0100	-4.6	50.0
2-Hexanone	Ave	0.2001	0.1751		10.0	0.0200	-12.5	50.0
Dibromochloromethane	Ave	0.2687	0.2429		1.00	0.0100	-9.6	50.0
1,2-Dibromoethane	Ave	0.2878	0.2700		1.00	0.0100	-6.2	50.0
Chlorobenzene	Ave	1.011	0.9521	0.3000	1.00	0.0100	-5.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.2969		1.00	0.0100	-6.5	50.0
Ethylbenzene	Ave	0.5334	0.5083		1.00	0.0100	-4.7	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6507		2.00	0.0200	-1.6	50.0
o-Xylene	Ave	0.6180	0.6098		1.00	0.0100	-1.3	50.0
Styrene	Ave	0.999	0.998		1.00	0.0100	-0.0	50.0
Bromoform	Ave	0.1619	0.1361	0.1000	1.00	0.0100	-15.9	50.0
Isopropylbenzene	Ave	1.572	1.486		1.00	0.0100	-5.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.5582	0.3000	1.00	0.0100	-11.9	50.0
Bromobenzene	Ave	0.7771	0.7266		1.00	0.0100	-6.5	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.1900		1.00	0.0100	-9.5	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.1007		1.00	0.0100	-20.9	50.0
n-Propylbenzene	Ave	0.8054	0.7631		1.00	0.0100	-5.3	50.0
2-Chlorotoluene	Ave	0.6938	0.6508		1.00	0.0100	-6.2	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.174		1.00	0.0100	-5.9	50.0
4-Chlorotoluene	Ave	0.7442	0.6987		1.00	0.0100	-6.1	50.0
tert-Butylbenzene	Ave	2.137	1.954		1.00	0.0100	-8.6	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.219		1.00	0.0100	-5.0	50.0
sec-Butylbenzene	Ave	2.858	2.605		1.00	0.0100	-8.8	50.0
1,3-Dichlorobenzene	Ave	1.449	1.335		1.00	0.0100	-7.9	50.0
p-Isopropyltoluene	Ave	2.470	2.302		1.00	0.0100	-6.8	50.0
1,4-Dichlorobenzene	Ave	1.492	1.400		1.00	0.0100	-6.2	50.0
n-Butylbenzene	Ave	2.012	1.740		1.00	0.0100	-13.5	50.0
1,2-Dichlorobenzene	Ave	1.360	1.263		1.00	0.0100	-7.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0654		2.00	0.0100	-32.3	50.0
1,3,5-Trichlorobenzene	Ave	1.048	0.8782		1.00	0.0100	-16.2	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.6521		1.00	0.0100	-28.6	50.0
Hexachlorobutadiene	Qua		0.3135		1.00	0.0100	-25.8	50.0
Naphthalene	Ave	1.729	1.024		1.00	0.0100	-40.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCVIS 240-98372/2 Calibration Date: 08/21/2013 12:34

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7126.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua		0.5061		1.00	0.0100	-39.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2102		0.00810	0.00891	-9.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2384		0.00761	0.00891	-14.5	50.0
Toluene-d8 (Surr)	Ave	1.297	1.164		0.00800	0.00891	-10.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4296		0.00804	0.00891	-9.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCV 240-98372/3 Calibration Date: 08/21/2013 12:57

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7127.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3269	0.2903		2.00	0.0100	-11.2	50.0
Ethyl ether	Ave	0.2516	0.2530		2.00	0.0100	0.6	50.0
3-Chloro-1-propene	Ave	0.1282	0.1236		2.00	0.0100	-3.6	50.0
Diisopropyl ether	Ave	0.2503	0.2521		10.0	0.0500	0.7	50.0
2-Chloro-1,3-butadiene	Ave	0.4389	0.4441		2.00	0.0100	1.2	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8346	0.7430		5.00	0.0100	-11.0	50.0
Ethyl acetate	Ave	0.2395	0.2319		4.00	0.0200	-3.2	50.0
Propionitrile	Ave	0.0400	0.0384	X	4.00	0.0200	-4.2	50.0
Methacrylonitrile	Ave	0.1598	0.1520		2.00	0.0100	-4.9	50.0
Isobutyl alcohol	Ave	0.0099	0.0093	X	50.0	0.200	-6.4	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6741	0.5882		5.00	0.0100	-12.7	50.0
n-Heptane	Ave	0.0746	0.0810		1.00	0.0100	8.5	50.0
n-Butanol	Ave	0.0094	0.0072	X	50.0	0.200	-23.9	X 50.0
Methyl methacrylate	Ave	0.2093	0.1946		2.00	0.0100	-7.0	50.0
2-Nitropropane	Ave	0.0449	0.0339	X	2.00	0.0200	-24.5	X 50.0
Cyclohexanone	Ave	0.1078	0.1081		20.0	0.100	0.3	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.347		0.0104	0.0100	4.5	50.0
2-Methylnaphthalene	Ave	0.9621	0.1681		5.00	0.0200	-82.5*	X 50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab File ID: BFB425.D BFB Injection Date: 08/22/2013

Instrument ID: A3UX17 BFB Injection Time: 14:14

Analysis Batch No.: 98511

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
75	30.0 - 60.0 % of mass 95	44.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.7	(0.9)1
174	50.0 - 120.00 % of mass 95	77.0	
175	5.0 - 9.0 % of mass 174	5.9	(7.6)1
176	95.0 - 101.0 % of mass 174	77.0	(99.9)1
177	5.0 - 9.0 % of mass 176	5.3	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98511/2	UXR7180.D	08/22/2013	14:38
	CCV 240-98511/3	UXR7181.D	08/22/2013	15:00
	LCS 240-98511/4	UXR7186.D	08/22/2013	15:23
	MB 240-98511/6	UXR7188.D	08/22/2013	16:08
DR-DPT-DUP01	240-28014-1	UXR7189.D	08/22/2013	17:17
DR-DPT-30-30	240-28014-7	UXR7190.D	08/22/2013	17:39
DR-DPT-30-40	240-28014-9	UXR7191.D	08/22/2013	18:00
DR-DPT-30-30 MS	240-28014-7 MS	UXR7209.D	08/23/2013	00:40
DR-DPT-30-30 MSD	240-28014-7 MSD	UXR7210.D	08/23/2013	01:02

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCVIS 240-98511/2 Calibration Date: 08/22/2013 14:38

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7180.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2884	0.2554		1.00	0.0100	-11.5	50.0
Chloromethane	Ave	0.3681	0.3066	0.1000	1.00	0.0100	-16.7	50.0
Vinyl chloride	Ave	0.3340	0.2885		1.00	0.0100	-13.6	20.0
Bromomethane	Qua		0.0876		1.00	0.0100	-26.1	50.0
Chloroethane	Ave	0.0993	0.0623		1.00	0.0100	-37.2	50.0
Trichlorofluoromethane	Ave	0.2327	0.2159		1.00	0.0100	-7.2	50.0
Acrolein	Ave	0.0353	0.0388		20.0	0.100	9.9	50.0
1,1-Dichloroethene	Ave	0.2706	0.2680		1.00	0.0100	-1.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2198		1.00	0.0100	3.9	50.0
Acetone	Lin1		0.0854		10.0	0.0200	0.4	50.0
Iodomethane	Ave	0.3777	0.3543		1.00	0.0100	-6.2	50.0
Carbon disulfide	Ave	0.7404	0.6440		1.00	0.0100	-13.0	50.0
Acetonitrile	Ave	0.0366	0.0362		20.0	0.100	-1.1	50.0
Methyl acetate	Ave	0.2245	0.2083		10.0	0.0200	-7.2	50.0
Methylene Chloride	Lin1		0.3728		1.00	0.0100	21.7	50.0
tert-Butyl alcohol	Ave	0.0217	0.0170		50.0	0.200	-21.4	50.0
Acrylonitrile	Ave	0.1133	0.1155		20.0	0.0200	1.9	50.0
Methyl tert-butyl ether	Ave	0.7461	0.6559		1.00	0.0100	-12.1	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2855		1.00	0.0100	-2.4	50.0
Hexane	Ave	0.0800	0.0728		1.00	0.0100	-9.1	20.0
1,1-Dichloroethane	Ave	0.4956	0.4707	0.1000	1.00	0.0100	-5.0	50.0
Vinyl acetate	Ave	0.0394	0.0414		2.00	0.0100	5.0	50.0
2,2-Dichloropropane	Ave	0.2628	0.2206		1.00	0.0100	-16.0	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.2980		1.00	0.0100	-3.2	50.0
2-Butanone	Ave	0.1234	0.1152		10.0	0.0200	-6.7	50.0
Bromochloromethane	Ave	0.1447	0.1476		1.00	0.0100	2.0	50.0
Tetrahydrofuran	Lin1		0.0687		5.00	0.0100	-12.8	50.0
Chloroform	Ave	0.4491	0.4434		1.00	0.0100	-1.3	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3304		1.00	0.0100	-5.6	50.0
Cyclohexane	Ave	0.5833	0.5370		1.00	0.0100	-7.9	50.0
1,1-Dichloropropene	Ave	0.3641	0.3561		1.00	0.0100	-2.2	50.0
Carbon tetrachloride	Ave	0.3098	0.3022		1.00	0.0100	-2.5	50.0
Benzene	Ave	1.187	1.104		1.00	0.0100	-7.0	50.0
1,2-Dichloroethane	Ave	0.3411	0.3553		1.00	0.0100	4.2	50.0
Trichloroethene	Ave	0.3009	0.2932		1.00	0.0100	-2.6	50.0
Methylcyclohexane	Ave	0.5046	0.4614		1.00	0.0100	-8.6	50.0
1,2-Dichloropropane	Ave	0.2812	0.2648		1.00	0.0100	-5.8	20.0
1,4-Dioxane	Ave	0.0028	0.0024		50.0	0.500	-13.8	50.0
Dibromomethane	Ave	0.1440	0.1445		1.00	0.0100	0.3	50.0
Bromodichloromethane	Ave	0.3100	0.2909		1.00	0.0100	-6.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCVIS 240-98511/2 Calibration Date: 08/22/2013 14:38

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7180.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1461	0.1460		10.0	0.0200	-0.1	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3238		1.00	0.0100	-15.2	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2302		10.0	0.0200	-4.9	50.0
Toluene	Ave	1.519	1.473		1.00	0.0100	-3.0	20.0
trans-1,3-Dichloropropene	Ave	0.3963	0.3423		1.00	0.0100	-13.6	50.0
Ethyl methacrylate	Ave	0.4073	0.3757		1.00	0.0100	-7.8	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2829		1.00	0.0100	-2.6	50.0
Tetrachloroethene	Ave	0.3161	0.3217		1.00	0.0100	1.7	50.0
1,3-Dichloropropane	Ave	0.5076	0.4984		1.00	0.0100	-1.8	50.0
2-Hexanone	Ave	0.2001	0.1925		10.0	0.0200	-3.8	50.0
Dibromochloromethane	Ave	0.2687	0.2586		1.00	0.0100	-3.8	50.0
1,2-Dibromoethane	Ave	0.2878	0.2844		1.00	0.0100	-1.2	50.0
Chlorobenzene	Ave	1.011	0.9739	0.3000	1.00	0.0100	-3.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.3118		1.00	0.0100	-1.8	50.0
Ethylbenzene	Ave	0.5334	0.5268		1.00	0.0100	-1.2	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6697		2.00	0.0200	1.3	50.0
o-Xylene	Ave	0.6180	0.6121		1.00	0.0100	-1.0	50.0
Styrene	Ave	0.999	1.022		1.00	0.0100	2.4	50.0
Bromoform	Ave	0.1619	0.1504	0.1000	1.00	0.0100	-7.1	50.0
Isopropylbenzene	Ave	1.572	1.517		1.00	0.0100	-3.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.5800	0.3000	1.00	0.0100	-8.4	50.0
Bromobenzene	Ave	0.7771	0.7496		1.00	0.0100	-3.5	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.1946		1.00	0.0100	-7.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.0781		1.00	0.0100	-38.7	50.0
n-Propylbenzene	Ave	0.8054	0.7636		1.00	0.0100	-5.2	50.0
2-Chlorotoluene	Ave	0.6938	0.6455		1.00	0.0100	-7.0	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.181		1.00	0.0100	-5.5	50.0
4-Chlorotoluene	Ave	0.7442	0.6886		1.00	0.0100	-7.5	50.0
tert-Butylbenzene	Ave	2.137	1.969		1.00	0.0100	-7.9	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.216		1.00	0.0100	-5.1	50.0
sec-Butylbenzene	Ave	2.858	2.596		1.00	0.0100	-9.2	50.0
1,3-Dichlorobenzene	Ave	1.449	1.370		1.00	0.0100	-5.4	50.0
p-Isopropyltoluene	Ave	2.470	2.330		1.00	0.0100	-5.7	50.0
1,4-Dichlorobenzene	Ave	1.492	1.392		1.00	0.0100	-6.7	50.0
n-Butylbenzene	Ave	2.012	1.767		1.00	0.0100	-12.2	50.0
1,2-Dichlorobenzene	Ave	1.360	1.276		1.00	0.0100	-6.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0720		2.00	0.0100	-25.5	50.0
1,3,5-Trichlorobenzene	Ave	1.048	0.8900		1.00	0.0100	-15.1	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.6834		1.00	0.0100	-25.1	50.0
Hexachlorobutadiene	Qua		0.3197		1.00	0.0100	-24.2	50.0
Naphthalene	Ave	1.729	1.090		1.00	0.0100	-36.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCVIS 240-98511/2 Calibration Date: 08/22/2013 14:38

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7180.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua		0.5282		1.00	0.0100	-37.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2106		0.00811	0.00891	-8.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2454		0.00784	0.00891	-12.1	50.0
Toluene-d8 (Surr)	Ave	1.297	1.147		0.00788	0.00891	-11.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4266		0.00799	0.00891	-10.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Lab Sample ID: CCV 240-98511/3 Calibration Date: 08/22/2013 15:00

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7181.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3269	0.2685		2.00	0.0100	-17.9	50.0
Ethyl ether	Ave	0.2516	0.2493		2.00	0.0100	-0.9	50.0
3-Chloro-1-propene	Ave	0.1282	0.1124		2.00	0.0100	-12.3	50.0
Diisopropyl ether	Ave	0.2503	0.2452		10.0	0.0500	-2.0	50.0
2-Chloro-1,3-butadiene	Ave	0.4389	0.4453		2.00	0.0100	1.5	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8346	0.7355		5.00	0.0100	-11.9	50.0
Ethyl acetate	Ave	0.2395	0.2376		4.00	0.0200	-0.8	50.0
Propionitrile	Ave	0.0400	0.0392		4.00	0.0200	-2.2	50.0
Methacrylonitrile	Ave	0.1598	0.1575		2.00	0.0100	-1.4	50.0
Isobutyl alcohol	Ave	0.0099	0.0093		50.0	0.200	-6.1	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6741	0.5843		5.00	0.0100	-13.3	50.0
n-Heptane	Ave	0.0746	0.0787		1.00	0.0100	5.5	50.0
n-Butanol	Ave	0.0094	0.0075		50.0	0.200	-21.1	50.0
Methyl methacrylate	Ave	0.2093	0.1964		2.00	0.0100	-6.2	50.0
2-Nitropropane	Ave	0.0449	0.0371		2.00	0.0200	-17.3	50.0
Cyclohexanone	Ave	0.1078	0.1126		20.0	0.100	4.5	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.305		0.0103	0.0100	2.6	50.0
2-Methylnaphthalene	Ave	0.9621	0.1799		5.00	0.0200	-81.3*	50.0

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Sample No.: STD8260 240-97903/4 Date Analyzed: 08/17/2013 16:41

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7006.D Heated Purge: (Y/N) N

Calibration ID: 16931

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1705267	5.76	1392950	8.48	758712	10.72
UPPER LIMIT		3410534	6.26	2785900	8.98	1517424	11.22
LOWER LIMIT		852634	5.26	696475	7.98	379356	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-98201/2		1736283	5.76	1392825	8.48	803037	10.72
CCVIS 240-98372/2		1633820	5.76	1328013	8.48	760176	10.72
CCVIS 240-98511/2		1517642	5.76	1243046	8.48	736173	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Sample No.: CCVIS 240-98201/2 Date Analyzed: 08/20/2013 13:40

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7071.D Heated Purge: (Y/N) N

Calibration ID: 16934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1736283	5.76	1392825	8.48	803037	10.72
UPPER LIMIT		3472566	6.26	2785650	8.98	1606074	11.22
LOWER LIMIT		868142	5.26	696413	7.98	401519	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-98201/3		1765049	5.76	1387370	8.48	735631	10.72
LCS 240-98201/4		1656834	5.76	1352788	8.48	789241	10.72
MB 240-98201/6		1638421	5.76	1341152	8.48	693040	10.72
240-28014-2	DR-DPT-DUP02	1655288	5.76	1343967	8.48	703274	10.72
240-28014-3	DR-DPT-26-20	1663065	5.76	1356826	8.48	701879	10.72
240-28014-3 MS	DR-DPT-26-20 MS	1672516	5.76	1354097	8.48	788977	10.72
240-28014-3 MSD	DR-DPT-26-20 MSD	1715479	5.76	1380433	8.48	790846	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Sample No.: CCVIS 240-98372/2 Date Analyzed: 08/21/2013 12:34

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7126.D Heated Purge: (Y/N) N

Calibration ID: 16934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1633820	5.76	1328013	8.48	760176	10.72
UPPER LIMIT		3267640	6.26	2656026	8.98	1520352	11.22
LOWER LIMIT		816910	5.26	664007	7.98	380088	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-98372/3		1646178	5.76	1274178	8.48	676377	10.72
LCS 240-98372/4		1566284	5.76	1281444	8.48	742193	10.72
MB 240-98372/6		1532829	5.76	1234002	8.48	642966	10.72
240-28014-4	DR-DPT-26-25	1508867	5.76	1224622	8.48	625415	10.72
240-28014-5	DR-DPT-26-30	1501479	5.76	1232749	8.48	645926	10.72
240-28014-6	DR-DPT-30-20	1520397	5.76	1223358	8.48	635909	10.72
240-28014-8	DR-DPT-30-35	1507746	5.76	1214651	8.48	621997	10.72
240-28014-10	DR-DPT-26-45	1454935	5.76	1174554	8.48	599150	10.72
240-28014-11	TB-081513	1430762	5.76	1166961	8.48	598951	10.72
240-28014-12	DR-DPT-26-40	1435495	5.76	1158587	8.48	590294	10.72
240-28014-13	DR-DPT-26-35	1415299	5.76	1158254	8.48	587880	10.72
240-28014-4 MS	DR-DPT-26-25 MS	1436841	5.76	1166621	8.48	719460	10.72
240-28014-4 MSD	DR-DPT-26-25 MSD	1448139	5.76	1186709	8.48	701879	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28014-1

SDG No.:

Sample No.: CCVIS 240-98511/2 Date Analyzed: 08/22/2013 14:38

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7180.D Heated Purge: (Y/N) N

Calibration ID: 16934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1517642	5.76	1243046	8.48	736173	10.72
UPPER LIMIT		3035284	6.26	2486092	8.98	1472346	11.22
LOWER LIMIT		758821	5.26	621523	7.98	368087	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-98511/3		1555133	5.76	1224225	8.48	646693	10.72
LCS 240-98511/4		1542338	5.76	1264507	8.48	733215	10.72
MB 240-98511/6		1435567	5.76	1186063	8.48	613382	10.72
240-28014-1	DR-DPT-DUP01	1463376	5.76	1189539	8.48	622613	10.72
240-28014-7	DR-DPT-30-30	1423383	5.76	1175510	8.48	608053	10.72
240-28014-9	DR-DPT-30-40	1422848	5.76	1142877	8.48	600648	10.72
240-28014-7 MS	DR-DPT-30-30 MS	1439794	5.76	1180044	8.48	695780	10.72
240-28014-7 MSD	DR-DPT-30-30 MSD	1450684	5.76	1193023	8.48	716238	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **November 6, 2013**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION-VOC**
LOCKHEED-MARTIN STATE AIRPORT (MSA)
DUMP ROAD SOURCE AREAS
SDG 240-28098-1

SAMPLES: 14/Aqueous/

DR-DPT-26-48	DR-DPT-32-30
DR-DPT-32-35	DR-DPT-32-40
DR-DPT-32-45	DR-DPT-32-50
DR-DPT-36-10	DR-DPT-36-30
DR-DPT-36-35	DR-DPT-36-40
DR-DPT-36-45	DR-DPT-DUP03
DR-DPT-DUP04	TB-081613

Overview

The sample set for Lockheed MSA, SDG 240-28098-1, consists of thirteen (13) aqueous environmental samples and one trip blank. This SDG contained two field duplicate pairs: DR-DPT-DUP03/DR-DPT-36-10 and DR-DPT-DUP04/DR-DPT-36-45.

All samples were analyzed for volatile organic compounds (VOCs). The samples were collected by Tetra Tech August 16, 2013 and analyzed by TestAmerica. VOC analyses were conducted using method 8260B.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, GC/MS tuning, initial and continuing calibration verification results, laboratory method / preparation blank results, internal standard recoveries, surrogate standard recoveries, laboratory control sample recoveries, matrix spike recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems-

- The initial calibration analyzed on 7/2/13 on instrument A3UX10 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. Samples DR-DPT-26-48, DR-DPT-32-30, DR-DPT-32-35, DR-DPT-32-45, DR-DPT-36-10, DR-DPT-36-30, DR-DPT-36-35, DR-DPT-36-40, DR-DPT-36-45, DR-DPT-DUP03, DR-DPT-DUP04, and TB-081613 were affected. Detected results were qualified as estimated (J). Non-detected results were qualified as rejected (UR).

- The continuing calibration analyzed on 8/27/13 at 00:19 on instrument A3UX10 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. Samples DR-DPT-26-48, DR-DPT-32-30, DR-DPT-32-35, DR-DPT-36-10, DR-DPT-36-35, DR-DPT-36-40, DR-DPT-36-45, DR-DPT-DUP03, DR-DPT-DUP04, and TB-081613 were affected. Detected results were qualified as estimated (J). Non-detected results were qualified as rejected (UR).

- The continuing calibration analyzed on 8/27/13 at 13:03 on instrument A3UX10 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. Samples DR-DPT-32-45 and DR-DPT-36-30 were affected. The non-detected results were qualified as rejected (UR).

- The initial calibration analyzed on 8/17/13 on instrument A3UX17 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. Samples DR-DPT-32-40 and DR-DPT-32-50 were affected. The non-detected results were qualified as rejected (UR).

- The continuing calibration analyzed on 8/29/13 on instrument A3UX17 had a relative response factor (RRF) <0.05 for tertiary butyl alcohol and vinyl acetate. Samples DR-DPT-32-40 and DR-DPT-32-50 were affected. The non-detected results were qualified as rejected (UR).

- TICs trimethyl-silanol and tert-butyldimethylsilanol were rejected (R) because silanol is used in operation of the instrumentation.

Minor Problems-

- The following contaminants were detected in method and calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Acetone (1)	3.8 ug/L	38 ug/L
Toluene (2)	0.29 ug/L	1.45 ug/L
Toluene (3)	0.34 ug/L	1.7 ug/L
Toluene (4)	0.4 ug/L	2.0 ug/L

(1) Maximum concentration found in a trip blank.
(2) Maximum concentration found in a preparation blank affecting samples in 240-99030.
(3) Maximum concentration found in a preparation blank affecting samples in 240-99157.
(4) Maximum concentration found in a preparation blank affecting samples in 240-99545.

An action level of 5X and 10X (Acetone only) the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the blank action level were qualified (B) for blank contamination.

- The continuing calibration standard analyzed on 8/27/13 at 00:19 on instrument A3UX10 had a percent difference > 20% but less than 50% for bromomethane, chloroethane, acetone, tert butyl-alcohol, vinyl acetate, 2,2-dichloropropane, 1,1,1-trichloroethane, carbon tertrachloride, bromodichloromethane, 4-methyl-2-pentanone, trans-1,3-dichloropropene, 1,1,1,2-trichloroethane, dibromochloromethane, bromoform, 1,2-dibromo-3-chloropropane, hexachlorobutadiene, and dichlorofluoromethane. Samples DR-DPT-26-48, DR-DPT-32-30, DR-DPT-32-35, DR-DPT-36-10, DR-DPT-36-35, DR-DPT-36-40, DR-DPT-36-45, DR-DPT-DUP03, DR-DPT-DUP04, and TB-081613 were affected. Positive chloroethane and carbon tetrachloride results were qualified as estimated (J). Non-detected results were not qualified as %D< 50%.

- The continuing calibration standard analyzed on 8/27/13 at 13:03 on instrument A3UX10 had a percent difference > 20% but less than 50% for chloroethane, tert butyl-alcohol, vinyl acetate, 2,2-dichloropropane, 1,1,1-trichloroethane, carbon tertrachloride, trans-1,3-dichloropropene,

dibromochloromethane, 1,1,1,2-trichloroethane, bromoform, 1,2-dibromo-3-chloropropane and a percent recovery > 50% for dichlorofluoromethane. Samples DR-DPT-32-45 and DR-DPT-36-30 were affected. The detected chloroethane result for sample DR-DPT-32-45 was qualified as estimated (J). Non-detected dichlorofluoromethane results were qualified as estimated (UJ). All other non-detected results were not qualified as %D< 50%.

- The laboratory control spike for preparation batch 240-99030 had a percent recovery greater than the upper control limit for tert-butyl alcohol and a percent recovery less than the lower limit for dibromochloromethane. Samples DR-DPT-26-48, DR-DPT-32-30, DR-DPT-32-35, DR-DPT-36-10, DR-DPT-36-35, DR-DPT-36-40, DR-DPT-36-45, DR-DPT-DUP03, DR-DPT-DUP04, and TB-081613 were affected. Detected ter-butyl alcohol results were qualified as estimated (J) and non-detected dibromochloromethane results were qualified as biased low (UL). No validation action was taken for non-detect tert-butyl alcohol as sample results were rejected for calibration non-compliances.

- The laboratory control spike for preparation batch 240-99157 had a percent recovery greater than the upper control limit for 1,1,1,2-tetrachloroethane, carbon tetrachloride, trans-1,3-dichloropropene, dibromochloromethane, and a percent recovery less than the lower control limit for tert-butyl alcohol. Samples DR-DPT-32-45 and DR-DPT-36-30 were affected. The detected carbon tetrachloride result for sample DR-DPT-32-45 was qualified as estimated (J). No validation action was warranted for 1,1,1,2-tetrachloroethane dibromochloromethane. and trans-1,3-dichloropropene as sample results were non-detected. No validation action was taken for tert-butyl alcohol as sample results were rejected for calibration non-compliances.

Notes

Non-detected results were reported at the MDL.

Tentatively Identified Compounds (TICs) were also analyzed for VOC analyses.

Compound chlorodibromomethane was listed in the lab data as dibromochloromethane.

No batch QC were analyzed on samples in this SDG.

Sample DR-DPT-26-48 was not listed on the original COC but want included in the cooler. Collect date and time were taken from the bottle.

The following samples were analyzed at the following dilutions for all VOCs:

Sample ID	Dilution Factor
DR-DPT-26-48	5X
DR-DPT-32-40	3.33X
DR-DPT-32-45	3.33X
DR-DPT-32-50	4X
DR-DPT-36-30	1.54X

The continuing calibration standard analyzed on 8/29/13 on instrument A3UX17 had a percent difference > 20% but these than 50% for tert butyl-alcohol, n-butylbenzene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzne, hexachlorobutadiene, naphthalene, 1,2,3-trichlorobenzene, and dichlorofluoromethane. Samples DR-DPT-32-40 and DR-DPT-32-50 were affected. No validation action was taken as sample results were non-detected.

Executive Summary

Laboratory Performance: Preparation blank contamination for acetone and toluene resulted in the qualification of sample results. Initial and continuing calibration RRF non-compliances resulted in the rejection of non-detect tert-butyl alcohol and vinyl acetate results. Continuing calibration %D non-compliances for chloroethane, chlorodibromomethane, and carbon tetrachloride resulted in the qualification of sample results. LCS non-compliances for dibromochloromethane, carbon tetrachloride, and tert-butyl alcohol resulted in the qualification of sample results.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Megan Carson

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04882	NSAMPLE	DR-DPT-26-48			DR-DPT-32-30			DR-DPT-32-35			DR-DPT-32-40		
SDG: 240-28098-1	LAB_ID	240-28098-14			240-28098-3			240-28098-4			240-28098-5		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	1.2	U		0.23	U		0.23	U		0.77	U	
1,1,1-TRICHLOROETHANE	1.1	U		0.22	U		0.22	U		0.73	U	
1,1,2,2-TETRACHLOROETHANE	0.9	U		0.18	U		0.18	U		0.6	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1.4	U		0.28	U		0.28	U		0.93	U	
1,1-DICHLOROETHANE	0.75	U		0.15	U		0.15	U		0.5	U	
1,1-DICHLOROETHENE	0.95	U		0.29	J	P	0.19	U		0.63	U	
1,1-DICHLOROPROPENE	0.65	U		0.13	U		0.13	U		0.43	U	
1,2,3-TRICHLOROBENZENE	0.85	U		0.17	U		0.17	U		0.57	U	
1,2,3-TRICHLOROPROPANE	2.2	U		0.43	U		0.43	U		1.4	U	
1,2,3-TRIMETHYLBENZENE	0.03	U		0.0059	U		0.0059	U		0.02	U	
1,2,4-TRICHLOROBENZENE	0.75	U		0.15	U		0.15	U		0.5	U	
1,2,4-TRIMETHYLBENZENE	0.6	U		0.12	U		0.12	U		0.4	U	
1,2-DIBROMO-3-CHLOROPROPANE	3.4	U		0.67	U		0.67	U		2.2	U	
1,2-DIBROMOETHANE	1.2	U		0.24	U		0.24	U		0.8	U	
1,2-DICHLOROBENZENE	0.65	U		0.13	U		0.13	U		0.43	U	
1,2-DICHLOROETHANE	3.1	J	P	0.22	U		0.22	U		0.73	U	
1,2-DICHLOROPROPANE	0.9	U		0.18	U		0.18	U		0.6	U	
1,3-DICHLOROBENZENE	0.7	U		0.14	U		0.14	U		0.47	U	
1,3-DICHLOROPROPANE	0.8	U		0.16	U		0.16	U		0.53	U	
1,4-DICHLOROBENZENE	0.65	U		0.13	U		0.13	U		0.43	U	
2,2-DICHLOROPROPANE	0.65	U		0.13	U		0.13	U		0.43	U	
2-BUTANONE	2.9	U		0.57	U		0.57	U		1.9	U	
2-CHLOROETHYL VINYL ETHER	5	U		0.99	U		0.99	U		3.3	U	
2-CHLOROTOLUENE	0.55	U		0.11	U		0.11	U		0.37	U	
2-HEXANONE	2.1	U		0.41	U		0.41	U		1.4	U	
4-CHLOROTOLUENE	0.9	U		0.18	U		0.18	U		0.6	U	
4-ISOPROPYLTOLUENE	0.6	U		0.12	U		0.12	U		0.4	U	
4-METHYL-2-PENTANONE	1.6	U		0.32	U		0.32	U		1.1	U	
ACETONE	9.4	B	A	4.9	B	A	6.8	B	A	3.7	U	
BENZENE	0.97	J	P	0.87	J	P	0.48	J	P	0.43	J	P
BROMOBENZENE	0.65	U		0.13	U		0.13	U		0.43	U	
BROMOCHLOROMETHANE	1.5	U		0.29	U		0.29	U		0.97	U	
BROMODICHLOROMETHANE	0.75	U		0.15	U		0.15	U		0.5	U	
BROMOFORM	3.2	U		0.64	U		0.64	U		2.1	U	
BROMOMETHANE	2.1	U		0.41	U		0.41	U		1.4	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-32-45			DR-DPT-32-50			DR-DPT-36-10			DR-DPT-36-30		
SDG: 240-28098-1	LAB_ID	240-28098-6			240-28098-7			240-28098-8			240-28098-9		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.77	U		0.92	U		0.23	U		0.35	U	
1,1,1-TRICHLOROETHANE		0.73	U		0.88	U		0.22	U		0.34	U	
1,1,2,2-TETRACHLOROETHANE		0.6	U		0.72	U		0.18	U		0.28	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.93	U		1.1	U		0.28	U		0.43	U	
1,1-DICHLOROETHANE		0.5	U		0.6	U		0.15	U		0.23	U	
1,1-DICHLOROETHENE		0.63	U		0.76	U		0.19	U		0.29	U	
1,1-DICHLOROPROPENE		0.43	U		0.52	U		0.13	U		0.2	U	
1,2,3-TRICHLOROBENZENE		0.57	U		0.68	U		0.17	U		0.26	U	
1,2,3-TRICHLOROPROPANE		1.4	U		1.7	U		0.43	U		0.66	U	
1,2,3-TRIMETHYLBENZENE		0.02	U		0.024	U		0.0059	U		0.0091	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.6	U		0.15	U		0.23	U	
1,2,4-TRIMETHYLBENZENE		0.4	U		0.48	U		0.12	U		0.18	U	
1,2-DIBROMO-3-CHLOROPROPANE		2.2	U		2.7	U		0.67	U		1	U	
1,2-DIBROMOETHANE		0.8	U		0.96	U		0.24	U		0.37	U	
1,2-DICHLOROBENZENE		0.43	U		0.52	U		0.13	U		0.2	U	
1,2-DICHLOROETHANE		0.73	U		0.88	U		0.22	U		0.34	U	
1,2-DICHLOROPROPANE		0.6	U		0.72	U		0.18	U		0.28	U	
1,3-DICHLOROBENZENE		0.47	U		0.56	U		0.14	U		0.22	U	
1,3-DICHLOROPROPANE		0.53	U		0.64	U		0.16	U		0.25	U	
1,4-DICHLOROBENZENE		0.43	U		0.52	U		0.13	U		0.2	U	
2,2-DICHLOROPROPANE		0.43	U		0.52	U		0.13	U		0.2	U	
2-BUTANONE		1.9	U		2.3	U		2.1	J	P	0.88	U	
2-CHLOROETHYL VINYL ETHER		3.3	U		4	U		0.99	U		1.5	U	
2-CHLOROTOLUENE		0.37	U		0.44	U		0.11	U		0.17	U	
2-HEXANONE		1.4	U		1.6	U		0.41	U		0.63	U	
4-CHLOROTOLUENE		0.6	U		0.72	U		0.18	U		0.28	U	
4-ISOPROPYLTOLUENE		0.4	U		0.48	U		0.12	U		0.18	U	
4-METHYL-2-PENTANONE		1.1	U		1.3	U		0.32	U		0.49	U	
ACETONE		12	B	A	5.5	B	A	23	B	A	7.7	B	A
BENZENE		0.43	U		0.63	J	P	0.13	U		0.22	J	P
BROMOBENZENE		0.43	U		0.52	U		0.13	U		0.2	U	
BROMOCHLOROMETHANE		0.97	U		1.2	U		0.29	U		0.45	U	
BROMODICHLOROMETHANE		0.5	U		0.6	U		0.15	U		0.23	U	
BROMOFORM		2.1	U		2.6	U		0.64	U		0.99	U	
BROMOMETHANE		1.4	U		1.6	U		0.41	U		0.63	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-36-35			DR-DPT-36-40			DR-DPT-36-45			DR-DPT-DUP03		
SDG: 240-28098-1	LAB_ID	240-28098-10			240-28098-11			240-28098-13			240-28098-1		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.7	J	P	0.39	J	P	0.69	J	P	0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE		0.57	U		0.57	U		0.57	U		1.4	J	P
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE		3.7	B	A	5.1	B	A	5.7	B	A	17	B	A
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-DUP04			TB-081613		
SDG: 240-28098-1	LAB_ID	240-28098-2			240-28098-12		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.64	J	P	0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U	
2-BUTANONE		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U	
ACETONE		4.3	B	A	3.8	J	P
BENZENE		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-26-48			DR-DPT-32-30			DR-DPT-32-35			DR-DPT-32-40		
SDG: 240-28098-1	LAB_ID	240-28098-14			240-28098-3			240-28098-4			240-28098-5		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1.6	J	P	0.66	J	P	1.2			0.43	U	
CARBON TETRACHLORIDE		0.65	U		0.13	U		0.13	U		12		
CHLOROBENZENE		0.75	U		0.15	U		0.15	U		0.5	U	
CHLORODIBROMOMETHANE		0.9	UL	E	0.18	UL	E	0.18	UL	E	0.6	U	
CHLOROETHANE		1.5	U		0.7	J	CP	0.73	J	CP	0.97	U	
CHLOROFORM		0.98	J	P	0.16	U		0.16	U		13		
CHLOROMETHANE		1.5	U		0.3	U		0.3	U		1	U	
CIS-1,2-DICHLOROETHENE		110			33			15			0.57	U	
CIS-1,3-DICHLOROPROPENE		0.7	U		0.14	U		0.14	U		0.47	U	
DIBROMOMETHANE		1.4	U		0.28	U		0.28	U		0.93	U	
DICHLORODIFLUOROMETHANE		1.6	U		0.31	U		0.31	U		1	U	
DIISOPROPYL ETHER		7.5	U		1.5	U		1.5	U		5	U	
ETHYL TERT-BUTYL ETHER		0.55	U		0.11	U		0.11	U		0.37	U	
ETHYLBENZENE		0.85	U		0.17	U		0.17	U		0.57	U	
HEXACHLOROBUTADIENE		1.5	U		0.3	U		0.3	U		1	U	
ISOPROPYLBENZENE		0.65	U		0.13	U		0.13	U		0.43	U	
M+P-XYLENES		1.2	U		0.24	U		0.24	U		0.8	U	
METHYL TERT-BUTYL ETHER		0.85	U		0.17	U		0.17	U		0.57	U	
METHYLENE CHLORIDE		1.7	U		0.33	U		0.33	U		1.1	U	
NAPHTHALENE		1.2	U		0.24	U		0.24	U		0.8	U	
N-BUTYLBENZENE		0.6	U		0.12	U		0.12	U		0.4	U	
N-PROPYLBENZENE		0.7	U		0.14	U		0.14	U		0.47	U	
O-XYLENE		0.7	U		0.14	U		0.14	U		0.47	U	
SEC-BUTYLBENZENE		0.65	U		0.13	U		0.13	U		0.43	U	
STYRENE		0.55	U		0.11	U		0.11	U		0.37	U	
TERT-AMYL METHYL ETHER		0.34	U		0.067	U		0.067	U		0.22	U	
TERT-BUTYLBENZENE		0.65	U		0.13	U		0.13	U		0.43	U	
TERTIARY-BUTYL ALCOHOL		38	J	CEP	8	J	CEP	3.9	UR	C	13	UR	C
TETRACHLOROETHENE		1.5	U		0.29	U		0.29	U		0.97	U	
TOLUENE		2.8	J	P	0.13	U		0.15	B	A	0.54	B	A
TOTAL XYLENES		0.7	U		0.14	U		0.14	U		0.47	U	
TRANS-1,2-DICHLOROETHENE		1.2	J	P	0.41	J	P	0.19	U		0.63	U	
TRANS-1,3-DICHLOROPROPENE		0.95	U		0.19	U		0.19	U		0.63	U	
TRICHLOROETHENE		140			3.7			2.8			120		
TRICHLOROFLUOROMETHANE		1.1	U		0.21	U		0.21	U		0.7	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-32-45			DR-DPT-32-50			DR-DPT-36-10			DR-DPT-36-30		
SDG: 240-28098-1	LAB_ID	240-28098-6			240-28098-7			240-28098-8			240-28098-9		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.43	U		0.52	U		0.13	J	P	0.2	U	
CARBON TETRACHLORIDE		2.3	J	EP	6.6			0.13	U		0.2	U	
CHLOROBENZENE		0.5	U		0.6	U		0.15	U		0.23	U	
CHLORODIBROMOMETHANE		0.6	U		0.72	U		0.18	UL	E	0.28	U	
CHLOROETHANE		0.97	U		1.2	U		0.29	U		0.45	U	
CHLOROFORM		16			12			0.16	U		0.25	U	
CHLOROMETHANE		1	U		1.2	U		0.3	U		0.46	U	
CIS-1,2-DICHLOROETHENE		0.92	J	P	0.68	U		0.17	U		41		
CIS-1,3-DICHLOROPROPENE		0.47	U		0.56	U		0.14	U		0.22	U	
DIBROMOMETHANE		0.93	U		1.1	U		0.28	U		0.43	U	
DICHLORODIFLUOROMETHANE		1	UJ	C	1.2	U		0.31	U		0.48	UJ	C
DIISOPROPYL ETHER		5	U		6	U		1.5	U		2.3	U	
ETHYL TERT-BUTYL ETHER		0.37	U		0.44	U		0.11	U		0.17	U	
ETHYLBENZENE		0.57	U		0.68	U		0.17	U		0.26	U	
HEXACHLOROBUTADIENE		1	U		1.2	U		0.3	U		0.46	U	
ISOPROPYLBENZENE		0.43	U		0.52	U		0.13	U		0.2	U	
M+P-XYLENES		0.8	U		0.96	U		0.24	U		0.37	U	
METHYL TERT-BUTYL ETHER		0.57	U		0.68	U		0.17	U		0.26	U	
METHYLENE CHLORIDE		1.1	U		1.3	U		0.33	U		0.51	U	
NAPHTHALENE		0.8	U		0.96	U		0.24	U		0.37	U	
N-BUTYLBENZENE		0.4	U		0.48	U		0.12	U		0.18	U	
N-PROPYLBENZENE		0.47	U		0.56	U		0.14	U		0.22	U	
O-XYLENE		0.47	U		0.56	U		0.14	U		0.22	U	
SEC-BUTYLBENZENE		0.43	U		0.52	U		0.13	U		0.2	U	
STYRENE		0.37	U		0.44	U		0.11	U		0.17	U	
TERT-AMYL METHYL ETHER		0.22	U		0.27	U		0.067	U		0.1	U	
TERT-BUTYLBENZENE		0.43	U		0.52	U		0.13	U		0.2	U	
TERTIARY-BUTYL ALCOHOL		13	UR	C	16	UR	C	3.9	UR	C	6	UR	C
TETRACHLOROETHENE		0.97	U		1.2	U		0.29	U		0.45	U	
TOLUENE		1	B	A	2	J	P	0.13	U		0.46	B	A
TOTAL XYLENES		0.47	U		0.56	U		0.14	U		0.22	U	
TRANS-1,2-DICHLOROETHENE		0.63	U		0.76	U		0.19	U		1.4	J	P
TRANS-1,3-DICHLOROPROPENE		0.63	U		0.76	U		0.19	U		0.29	U	
TRICHLOROETHENE		120			130			0.2	J	P	5.6		
TRICHLOROFLUOROMETHANE		0.7	U		0.84	U		0.21	U		0.32	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-36-35			DR-DPT-36-40			DR-DPT-36-45			DR-DPT-DUP03		
SDG: 240-28098-1	LAB_ID	240-28098-10			240-28098-11			240-28098-13			240-28098-1		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	J	P	0.22	J	P	0.27	J	P	0.13	J	P
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.27	J	CP	0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	UL	E	0.18	UL	E	0.18	UL	E	0.18	UL	E
CHLOROETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.16	U		0.27	J	P	0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.44	J	P	0.97	J	P	1.4			0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3.9	UR	C	8.6	J	CEP	8.8	J	CEP
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		4.6			19			5.6			0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-DUP04			TB-081613		
SDG: 240-28098-1	LAB_ID	240-28098-2			240-28098-12		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.24	J	P	0.13	U	
CARBON TETRACHLORIDE		0.29	J	CP	0.13	U	
CHLOROBENZENE		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	UL	E	0.18	UL	E
CHLOROETHANE		0.29	U		0.29	U	
CHLOROFORM		0.31	J	P	0.16	U	
CHLOROMETHANE		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		1.4			0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		7.9	J	CEP	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U	
TRICHLOROETHENE		5.6			0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-26-48			DR-DPT-32-30			DR-DPT-32-35			DR-DPT-32-40		
SDG: 240-28098-1	LAB_ID	240-28098-14			240-28098-3			240-28098-4			240-28098-5		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.95	UR	C	0.19	UR	C	0.19	UR	C	0.63	UR	C
VINYL CHLORIDE		26			19			8.6			0.73	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-32-45			DR-DPT-32-50			DR-DPT-36-10			DR-DPT-36-30		
SDG: 240-28098-1	LAB_ID	240-28098-6			240-28098-7			240-28098-8			240-28098-9		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.63	UR	C	0.76	UR	C	0.19	UR	C	0.29	UR	C
VINYL CHLORIDE		0.73	U		0.88	U		0.22	U		25		

PROJ_NO: 04882	NSAMPLE	DR-DPT-36-35			DR-DPT-36-40			DR-DPT-36-45			DR-DPT-DUP03		
SDG: 240-28098-1	LAB_ID	240-28098-10			240-28098-11			240-28098-13			240-28098-1		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.92	J	P	1.4			1			0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-DUP04			TB-081613		
SDG: 240-28098-1	LAB_ID	240-28098-2			240-28098-12		
FRACTION: OV	SAMP_DATE	8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		1.1			0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-26-48			DR-DPT-32-30			DR-DPT-32-35			DR-DPT-32-45		
SDG: 240-28098-1	LAB_ID	240-28098-14			240-28098-3			240-28098-4			240-28098-6		
FRACTION: TICOV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE					35	J	P	22	J	P			
1-PROPENE, 2-METHYL-											5.4	NJ	Z1
ETHYLENE OXIDE											8	NJ	Z1
N-BUTANOL								14	J	P			
SILANOL, TRIMETHYL-					1	R	Z2				4.5	R	Z2
TERT-BUTYLDIMETHYLSILANOL													
TETRAHYDROFURAN		2.5	J	P									

PROJ_NO: 04882	NSAMPLE	DR-DPT-32-50			DR-DPT-36-10			DR-DPT-36-30			DR-DPT-36-35		
SDG: 240-28098-1	LAB_ID	240-28098-7			240-28098-8			240-28098-9			240-28098-10		
FRACTION: TICOV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE													
1-PROPENE, 2-METHYL-													
ETHYLENE OXIDE													
N-BUTANOL					16	J	P						
SILANOL, TRIMETHYL-		5.9	R	Z2	6.3	R	Z2				1.4	R	Z2
TERT-BUTYLDIMETHYLSILANOL													
TETRAHYDROFURAN								0.74	J	P			

PROJ_NO: 04882	NSAMPLE	DR-DPT-36-40			DR-DPT-36-45			DR-DPT-DUP03			TB-081613		
SDG: 240-28098-1	LAB_ID	240-28098-11			240-28098-13			240-28098-1			240-28098-12		
FRACTION: TICOV	SAMP_DATE	8/16/2013			8/16/2013			8/16/2013			8/16/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE													
1-PROPENE, 2-METHYL-													
ETHYLENE OXIDE													
N-BUTANOL											13	J	P
SILANOL, TRIMETHYL-		1.4	R	Z2				3.1	R	Z2	4.3	R	Z2
TERT-BUTYLDIMETHYLSILANOL					2.2	R	Z2						
TETRAHYDROFURAN													

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-26-48 Lab Sample ID: 240-28098-14

Matrix: Water Lab File ID: UXX5517.D

Analysis Method: 8260B Date Collected: 08/16/2013 09:50

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 07:50

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.2
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.90
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	1.4
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.75
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.95
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.65
87-61-6	1,2,3-Trichlorobenzene	5.0	U	5.0	0.85
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	2.2
526-73-8	1,2,3-Trimethylbenzene	25	U	25	0.030
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	0.75
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	3.4
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.65
107-06-2	1,2-Dichloroethane	3.1	J	5.0	1.1
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.90
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.70
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.80
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.65
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.65
110-75-8	2-Chloroethyl vinyl ether	50	U	50	5.0
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.55
591-78-6	2-Hexanone	50	U	50	2.1
108-86-1	Bromobenzene	5.0	U	5.0	0.65
74-97-5	Bromochloromethane	5.0	U	5.0	1.5
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.90
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.60
67-64-1	Acetone	9.4	J	50	5.5
71-43-2	Benzene	0.97	J	5.0	0.65
75-25-2	Bromoform	5.0	U	5.0	3.2
74-83-9	Bromomethane	5.0	U	5.0	2.1
75-15-0	Carbon disulfide	1.6	J	5.0	0.65
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.65
108-90-7	Chlorobenzene	5.0	U	5.0	0.75
75-00-3	Chloroethane	5.0	U	5.0	1.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-26-48 Lab Sample ID: 240-28098-14

Matrix: Water Lab File ID: UXX5517.D

Analysis Method: 8260B Date Collected: 08/16/2013 09:50

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 07:50

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.98	J	5.0	0.80
74-87-3	Chloromethane	5.0	U	5.0	1.5
156-59-2	cis-1,2-Dichloroethene	110		5.0	0.85
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.70
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.5
74-95-3	Dibromomethane	5.0	U	5.0	1.4
75-27-4	Bromodichloromethane	5.0	U	5.0	0.75
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	1.6
100-41-4	Ethylbenzene	5.0	U	5.0	0.85
106-93-4	1,2-Dibromoethane	5.0	U	5.0	1.2
108-20-3	Diisopropyl ether	50	U	50	7.5
91-20-3	Naphthalene	5.0	U	5.0	1.2
179601-23-1	m-Xylene & p-Xylene	10	U	10	1.2
104-51-8	n-Butylbenzene	5.0	U	5.0	0.60
98-82-8	Isopropylbenzene	5.0	U	5.0	0.65
103-65-1	n-Propylbenzene	5.0	U	5.0	0.70
78-93-3	2-Butanone	50	U	50	2.9
108-10-1	4-Methyl-2-pentanone	50	U	50	1.6
135-98-8	sec-Butylbenzene	5.0	U	5.0	0.65
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.85
994-05-8	Tert-amyl-methyl ether (TAME)	25	U	25	0.34
75-09-2	Methylene Chloride	5.0	U	5.0	1.7
95-47-6	o-Xylene	5.0	U	5.0	0.70
100-42-5	Styrene	5.0	U	5.0	0.55
637-92-3	Ethyl-t-butyl ether (ETBE)	25	U	25	0.55
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.65
127-18-4	Tetrachloroethene	5.0	U	5.0	1.5
108-88-3	Toluene	2.8	J B	5.0	0.65
156-60-5	trans-1,2-Dichloroethene	1.2	J	5.0	0.95
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.95
79-01-6	Trichloroethene	140		5.0	0.85
75-69-4	Trichlorofluoromethane	5.0	U	5.0	1.1
108-05-4	Vinyl acetate	10	U	10	0.95
75-01-4	Vinyl chloride	26		5.0	1.1
75-65-0	tert-Butyl alcohol	38	J *	250	20
1330-20-7	Xylenes, Total	10	U	10	0.70

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-26-48 Lab Sample ID: 240-28098-14

Matrix: Water Lab File ID: UXX5517.D

Analysis Method: 8260B Date Collected: 08/16/2013 09:50

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 07:50

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	5.0	U *	5.0	0.90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-26-48 Lab Sample ID: 240-28098-14

Matrix: Water Lab File ID: UXX5517.D

Analysis Method: 8260B Date Collected: 08/16/2013 09:50

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 07:50

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

Number TICs Found: 1 TIC Result Total: 2.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	4.49	2.5	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-30 | Lab Sample ID: 240-28098-3

Matrix: Water | Lab File ID: UXX5509.D

Analysis Method: 8260B | Date Collected: 08/16/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 04:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	0.29	J	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	4.9	J	10	1.1
71-43-2	Benzene	0.87	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.66	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	0.70	J	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-30 Lab Sample ID: 240-28098-3

Matrix: Water Lab File ID: UXX5509.D

Analysis Method: 8260B Date Collected: 08/16/2013 11:30

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 04:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	33		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	0.41	J	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	3.7		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	19		1.0	0.22
75-65-0	tert-Butyl alcohol	8.0	J *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-30 | Lab Sample ID: 240-28098-3

Matrix: Water | Lab File ID: UXX5509.D

Analysis Method: 8260B | Date Collected: 08/16/2013 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 04:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-117
2037-26-5	Toluene-d8 (Surr)	94		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-35 | Lab Sample ID: 240-28098-4

Matrix: Water | Lab File ID: UXX5510.D

Analysis Method: 8260B | Date Collected: 08/16/2013 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 05:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	6.8	J	10	1.1
71-43-2	Benzene	0.48	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.2		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	0.73	J	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-35 Lab Sample ID: 240-28098-4

Matrix: Water Lab File ID: UXX5510.D

Analysis Method: 8260B Date Collected: 08/16/2013 12:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 05:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	15		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.15	J B	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	2.8		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	8.6		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-35 Lab Sample ID: 240-28098-4

Matrix: Water Lab File ID: UXX5510.D

Analysis Method: 8260B Date Collected: 08/16/2013 12:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 05:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-35 Lab Sample ID: 240-28098-4

Matrix: Water Lab File ID: UXX5510.D

Analysis Method: 8260B Date Collected: 08/16/2013 12:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 05:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

Number TICs Found: 2 TIC Result Total: 36

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
71-36-3	n-Butanol	5.40	14	J
123-91-1	1,4-Dioxane	5.80	22	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-40 | Lab Sample ID: 240-28098-5

Matrix: Water | Lab File ID: UXR7318.D

Analysis Method: 8260B | Date Collected: 08/16/2013 12:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2013 15:09

Soil Aliquot Vol: | Dilution Factor: 3.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.3	U	3.3	0.77
71-55-6	1,1,1-Trichloroethane	3.3	U	3.3	0.73
79-34-5	1,1,2,2-Tetrachloroethane	3.3	U	3.3	0.60
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	3.3	U	3.3	0.93
75-34-3	1,1-Dichloroethane	3.3	U	3.3	0.50
75-35-4	1,1-Dichloroethene	3.3	U	3.3	0.63
563-58-6	1,1-Dichloropropene	3.3	U	3.3	0.43
87-61-6	1,2,3-Trichlorobenzene	3.3	U	3.3	0.57
96-18-4	1,2,3-Trichloropropane	3.3	U	3.3	1.4
526-73-8	1,2,3-Trimethylbenzene	17	U	17	0.020
120-82-1	1,2,4-Trichlorobenzene	3.3	U	3.3	0.50
95-63-6	1,2,4-Trimethylbenzene	3.3	U	3.3	0.40
96-12-8	1,2-Dibromo-3-Chloropropane	6.7	U	6.7	2.2
95-50-1	1,2-Dichlorobenzene	3.3	U	3.3	0.43
107-06-2	1,2-Dichloroethane	3.3	U	3.3	0.73
78-87-5	1,2-Dichloropropane	3.3	U	3.3	0.60
541-73-1	1,3-Dichlorobenzene	3.3	U	3.3	0.47
142-28-9	1,3-Dichloropropane	3.3	U	3.3	0.53
106-46-7	1,4-Dichlorobenzene	3.3	U	3.3	0.43
594-20-7	2,2-Dichloropropane	3.3	U	3.3	0.43
110-75-8	2-Chloroethyl vinyl ether	33	U	33	3.3
95-49-8	2-Chlorotoluene	3.3	U	3.3	0.37
591-78-6	2-Hexanone	33	U	33	1.4
108-86-1	Bromobenzene	3.3	U	3.3	0.43
74-97-5	Bromochloromethane	3.3	U	3.3	0.97
106-43-4	4-Chlorotoluene	3.3	U	3.3	0.60
99-87-6	p-Isopropyltoluene	3.3	U	3.3	0.40
67-64-1	Acetone	33	U	33	3.7
71-43-2	Benzene	0.43	J	3.3	0.43
75-25-2	Bromoform	3.3	U	3.3	2.1
74-83-9	Bromomethane	3.3	U	3.3	1.4
75-15-0	Carbon disulfide	3.3	U	3.3	0.43
56-23-5	Carbon tetrachloride	12		3.3	0.43
108-90-7	Chlorobenzene	3.3	U	3.3	0.50
75-00-3	Chloroethane	3.3	U	3.3	0.97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-40 | Lab Sample ID: 240-28098-5

Matrix: Water | Lab File ID: UXR7318.D

Analysis Method: 8260B | Date Collected: 08/16/2013 12:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2013 15:09

Soil Aliquot Vol: | Dilution Factor: 3.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	13		3.3	0.53
74-87-3	Chloromethane	3.3	U	3.3	1.0
156-59-2	cis-1,2-Dichloroethene	3.3	U	3.3	0.57
10061-01-5	cis-1,3-Dichloropropene	3.3	U	3.3	0.47
87-68-3	Hexachlorobutadiene	3.3	U	3.3	1.0
74-95-3	Dibromomethane	3.3	U	3.3	0.93
75-27-4	Bromodichloromethane	3.3	U	3.3	0.50
75-71-8	Dichlorodifluoromethane	3.3	U	3.3	1.0
100-41-4	Ethylbenzene	3.3	U	3.3	0.57
106-93-4	1,2-Dibromoethane	3.3	U	3.3	0.80
108-20-3	Diisopropyl ether	33	U	33	5.0
91-20-3	Naphthalene	3.3	U	3.3	0.80
179601-23-1	m-Xylene & p-Xylene	6.7	U	6.7	0.80
104-51-8	n-Butylbenzene	3.3	U	3.3	0.40
98-82-8	Isopropylbenzene	3.3	U	3.3	0.43
103-65-1	n-Propylbenzene	3.3	U	3.3	0.47
78-93-3	2-Butanone	33	U	33	1.9
108-10-1	4-Methyl-2-pentanone	33	U	33	1.1
135-98-8	sec-Butylbenzene	3.3	U	3.3	0.43
1634-04-4	Methyl tert-butyl ether	3.3	U	3.3	0.57
994-05-8	Tert-amyl-methyl ether (TAME)	17	U	17	0.22
75-09-2	Methylene Chloride	3.3	U	3.3	1.1
95-47-6	o-Xylene	3.3	U	3.3	0.47
100-42-5	Styrene	3.3	U	3.3	0.37
637-92-3	Ethyl-t-butyl ether (ETBE)	17	U	17	0.37
98-06-6	tert-Butylbenzene	3.3	U	3.3	0.43
127-18-4	Tetrachloroethene	3.3	U	3.3	0.97
108-88-3	Toluene	0.54	J B	3.3	0.43
156-60-5	trans-1,2-Dichloroethene	3.3	U	3.3	0.63
10061-02-6	trans-1,3-Dichloropropene	3.3	U	3.3	0.63
79-01-6	Trichloroethene	120		3.3	0.57
75-69-4	Trichlorofluoromethane	3.3	U	3.3	0.70
108-05-4	Vinyl acetate	6.7	U	6.7	0.63
75-01-4	Vinyl chloride	3.3	U	3.3	0.73
75-65-0	tert-Butyl alcohol	170	U	170	13
1330-20-7	Xylenes, Total	6.7	U	6.7	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-40 | Lab Sample ID: 240-28098-5

Matrix: Water | Lab File ID: UXR7318.D

Analysis Method: 8260B | Date Collected: 08/16/2013 12:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2013 15:09

Soil Aliquot Vol: | Dilution Factor: 3.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.3	U	3.3	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	103		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-40 Lab Sample ID: 240-28098-5

Matrix: Water Lab File ID: UXR7318.D

Analysis Method: 8260B Date Collected: 08/16/2013 12:40

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2013 15:09

Soil Aliquot Vol: Dilution Factor: 3.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99545 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-45 Lab Sample ID: 240-28098-6

Matrix: Water Lab File ID: UXX5541.D

Analysis Method: 8260B Date Collected: 08/16/2013 13:15

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 19:46

Soil Aliquot Vol: Dilution Factor: 3.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99157 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	16		3.3	0.53
74-87-3	Chloromethane	3.3	U	3.3	1.0
156-59-2	cis-1,2-Dichloroethene	0.92	J	3.3	0.57
10061-01-5	cis-1,3-Dichloropropene	3.3	U	3.3	0.47
87-68-3	Hexachlorobutadiene	3.3	U	3.3	1.0
74-95-3	Dibromomethane	3.3	U	3.3	0.93
75-27-4	Bromodichloromethane	3.3	U	3.3	0.50
75-71-8	Dichlorodifluoromethane	3.3	U	3.3	1.0
100-41-4	Ethylbenzene	3.3	U	3.3	0.57
106-93-4	1,2-Dibromoethane	3.3	U	3.3	0.80
108-20-3	Diisopropyl ether	33	U	33	5.0
91-20-3	Naphthalene	3.3	U	3.3	0.80
179601-23-1	m-Xylene & p-Xylene	6.7	U	6.7	0.80
104-51-8	n-Butylbenzene	3.3	U	3.3	0.40
98-82-8	Isopropylbenzene	3.3	U	3.3	0.43
103-65-1	n-Propylbenzene	3.3	U	3.3	0.47
78-93-3	2-Butanone	33	U	33	1.9
108-10-1	4-Methyl-2-pentanone	33	U	33	1.1
135-98-8	sec-Butylbenzene	3.3	U	3.3	0.43
1634-04-4	Methyl tert-butyl ether	3.3	U	3.3	0.57
994-05-8	Tert-amyl-methyl ether (TAME)	17	U	17	0.22
75-09-2	Methylene Chloride	3.3	U	3.3	1.1
95-47-6	o-Xylene	3.3	U	3.3	0.47
100-42-5	Styrene	3.3	U	3.3	0.37
637-92-3	Ethyl-t-butyl ether (ETBE)	17	U	17	0.37
98-06-6	tert-Butylbenzene	3.3	U	3.3	0.43
127-18-4	Tetrachloroethene	3.3	U	3.3	0.97
108-88-3	Toluene	1.0	J B	3.3	0.43
156-60-5	trans-1,2-Dichloroethene	3.3	U	3.3	0.63
10061-02-6	trans-1,3-Dichloropropene	3.3	U *	3.3	0.63
79-01-6	Trichloroethene	120		3.3	0.57
75-69-4	Trichlorofluoromethane	3.3	U	3.3	0.70
108-05-4	Vinyl acetate	6.7	U	6.7	0.63
75-01-4	Vinyl chloride	3.3	U	3.3	0.73
75-65-0	tert-Butyl alcohol	170	U *	170	13
1330-20-7	Xylenes, Total	6.7	U	6.7	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-45 Lab Sample ID: 240-28098-6

Matrix: Water Lab File ID: UXX5541.D

Analysis Method: 8260B Date Collected: 08/16/2013 13:15

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 19:46

Soil Aliquot Vol: Dilution Factor: 3.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99157 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.3	U *	3.3	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-117
2037-26-5	Toluene-d8 (Surr)	95		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-45 Lab Sample ID: 240-28098-6

Matrix: Water Lab File ID: UXX5541.D

Analysis Method: 8260B Date Collected: 08/16/2013 13:15

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 19:46

Soil Aliquot Vol: Dilution Factor: 3.33

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99157 Units: ug/L

Number TICs Found: 4 TIC Result Total: 21.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
115-11-7	1-Propene, 2-methyl-	1.78	5.4	T J N
75-9-2	Methylene Chloride	3.20	3.4	T J N
1066-40-6	Silanol, trimethyl-	4.12	4.5	T J N
75-21-8	Ethylene oxide	8.69	8.0	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-50 Lab Sample ID: 240-28098-7

Matrix: Water Lab File ID: UXR7319.D

Analysis Method: 8260B Date Collected: 08/16/2013 14:00

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2013 15:31

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.0	U	4.0	0.92
71-55-6	1,1,1-Trichloroethane	4.0	U	4.0	0.88
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.72
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.0	U	4.0	1.1
75-34-3	1,1-Dichloroethane	4.0	U	4.0	0.60
75-35-4	1,1-Dichloroethene	4.0	U	4.0	0.76
563-58-6	1,1-Dichloropropene	4.0	U	4.0	0.52
87-61-6	1,2,3-Trichlorobenzene	4.0	U	4.0	0.68
96-18-4	1,2,3-Trichloropropane	4.0	U	4.0	1.7
526-73-8	1,2,3-Trimethylbenzene	20	U	20	0.024
120-82-1	1,2,4-Trichlorobenzene	4.0	U	4.0	0.60
95-63-6	1,2,4-Trimethylbenzene	4.0	U	4.0	0.48
96-12-8	1,2-Dibromo-3-Chloropropane	8.0	U	8.0	2.7
95-50-1	1,2-Dichlorobenzene	4.0	U	4.0	0.52
107-06-2	1,2-Dichloroethane	4.0	U	4.0	0.88
78-87-5	1,2-Dichloropropane	4.0	U	4.0	0.72
541-73-1	1,3-Dichlorobenzene	4.0	U	4.0	0.56
142-28-9	1,3-Dichloropropane	4.0	U	4.0	0.64
106-46-7	1,4-Dichlorobenzene	4.0	U	4.0	0.52
594-20-7	2,2-Dichloropropane	4.0	U	4.0	0.52
110-75-8	2-Chloroethyl vinyl ether	40	U	40	4.0
95-49-8	2-Chlorotoluene	4.0	U	4.0	0.44
591-78-6	2-Hexanone	40	U	40	1.6
108-86-1	Bromobenzene	4.0	U	4.0	0.52
74-97-5	Bromochloromethane	4.0	U	4.0	1.2
106-43-4	4-Chlorotoluene	4.0	U	4.0	0.72
99-87-6	p-Isopropyltoluene	4.0	U	4.0	0.48
67-64-1	Acetone	5.5	J	40	4.4
71-43-2	Benzene	0.63	J	4.0	0.52
75-25-2	Bromoform	4.0	U	4.0	2.6
74-83-9	Bromomethane	4.0	U	4.0	1.6
75-15-0	Carbon disulfide	4.0	U	4.0	0.52
56-23-5	Carbon tetrachloride	6.6		4.0	0.52
108-90-7	Chlorobenzene	4.0	U	4.0	0.60
75-00-3	Chloroethane	4.0	U	4.0	1.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-50 | Lab Sample ID: 240-28098-7

Matrix: Water | Lab File ID: UXR7319.D

Analysis Method: 8260B | Date Collected: 08/16/2013 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2013 15:31

Soil Aliquot Vol: | Dilution Factor: 4

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	12		4.0	0.64
74-87-3	Chloromethane	4.0	U	4.0	1.2
156-59-2	cis-1,2-Dichloroethene	4.0	U	4.0	0.68
10061-01-5	cis-1,3-Dichloropropene	4.0	U	4.0	0.56
87-68-3	Hexachlorobutadiene	4.0	U	4.0	1.2
74-95-3	Dibromomethane	4.0	U	4.0	1.1
75-27-4	Bromodichloromethane	4.0	U	4.0	0.60
75-71-8	Dichlorodifluoromethane	4.0	U	4.0	1.2
100-41-4	Ethylbenzene	4.0	U	4.0	0.68
106-93-4	1,2-Dibromoethane	4.0	U	4.0	0.96
108-20-3	Diisopropyl ether	40	U	40	6.0
91-20-3	Naphthalene	4.0	U	4.0	0.96
179601-23-1	m-Xylene & p-Xylene	8.0	U	8.0	0.96
104-51-8	n-Butylbenzene	4.0	U	4.0	0.48
98-82-8	Isopropylbenzene	4.0	U	4.0	0.52
103-65-1	n-Propylbenzene	4.0	U	4.0	0.56
78-93-3	2-Butanone	40	U	40	2.3
108-10-1	4-Methyl-2-pentanone	40	U	40	1.3
135-98-8	sec-Butylbenzene	4.0	U	4.0	0.52
1634-04-4	Methyl tert-butyl ether	4.0	U	4.0	0.68
994-05-8	Tert-amyl-methyl ether (TAME)	20	U	20	0.27
75-09-2	Methylene Chloride	4.0	U	4.0	1.3
95-47-6	o-Xylene	4.0	U	4.0	0.56
100-42-5	Styrene	4.0	U	4.0	0.44
637-92-3	Ethyl-t-butyl ether (ETBE)	20	U	20	0.44
98-06-6	tert-Butylbenzene	4.0	U	4.0	0.52
127-18-4	Tetrachloroethene	4.0	U	4.0	1.2
108-88-3	Toluene	2.0	J B	4.0	0.52
156-60-5	trans-1,2-Dichloroethene	4.0	U	4.0	0.76
10061-02-6	trans-1,3-Dichloropropene	4.0	U	4.0	0.76
79-01-6	Trichloroethene	130		4.0	0.68
75-69-4	Trichlorofluoromethane	4.0	U	4.0	0.84
108-05-4	Vinyl acetate	8.0	U	8.0	0.76
75-01-4	Vinyl chloride	4.0	U	4.0	0.88
75-65-0	tert-Butyl alcohol	200	U	200	16
1330-20-7	Xylenes, Total	8.0	U	8.0	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-50 | Lab Sample ID: 240-28098-7

Matrix: Water | Lab File ID: UXR7319.D

Analysis Method: 8260B | Date Collected: 08/16/2013 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2013 15:31

Soil Aliquot Vol: | Dilution Factor: 4

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	4.0	U	4.0	0.72

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	109		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-32-50 | Lab Sample ID: 240-28098-7

Matrix: Water | Lab File ID: UXR7319.D

Analysis Method: 8260B | Date Collected: 08/16/2013 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2013 15:31

Soil Aliquot Vol: | Dilution Factor: 4

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99545 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 5.9

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.68	5.9	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-10 | Lab Sample ID: 240-28098-8

Matrix: Water | Lab File ID: UXX5511.D

Analysis Method: 8260B | Date Collected: 08/16/2013 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 05:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	23		10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.13	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-10 | Lab Sample ID: 240-28098-8

Matrix: Water | Lab File ID: UXX5511.D

Analysis Method: 8260B | Date Collected: 08/16/2013 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 05:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	2.1	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.20	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-10 Lab Sample ID: 240-28098-8

Matrix: Water Lab File ID: UXX5511.D

Analysis Method: 8260B Date Collected: 08/16/2013 10:50

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 05:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-10 | Lab Sample ID: 240-28098-8

Matrix: Water | Lab File ID: UXX5511.D

Analysis Method: 8260B | Date Collected: 08/16/2013 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 05:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

Number TICs Found: 2 | TIC Result Total: 22.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	6.3	T J N
71-36-3	n-Butanol	5.42	16	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-30 | Lab Sample ID: 240-28098-9

Matrix: Water | Lab File ID: UXX5543.D

Analysis Method: 8260B | Date Collected: 08/16/2013 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 20:28

Soil Aliquot Vol: | Dilution Factor: 1.54

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99157 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.5	U *	1.5	0.35
71-55-6	1,1,1-Trichloroethane	1.5	U	1.5	0.34
79-34-5	1,1,2,2-Tetrachloroethane	1.5	U	1.5	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.5	U	1.5	0.43
75-34-3	1,1-Dichloroethane	1.5	U	1.5	0.23
75-35-4	1,1-Dichloroethene	1.5	U	1.5	0.29
563-58-6	1,1-Dichloropropene	1.5	U	1.5	0.20
87-61-6	1,2,3-Trichlorobenzene	1.5	U	1.5	0.26
96-18-4	1,2,3-Trichloropropane	1.5	U	1.5	0.66
526-73-8	1,2,3-Trimethylbenzene	7.7	U	7.7	0.0091
120-82-1	1,2,4-Trichlorobenzene	1.5	U	1.5	0.23
95-63-6	1,2,4-Trimethylbenzene	1.5	U	1.5	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	3.1	U	3.1	1.0
95-50-1	1,2-Dichlorobenzene	1.5	U	1.5	0.20
107-06-2	1,2-Dichloroethane	1.5	U	1.5	0.34
78-87-5	1,2-Dichloropropane	1.5	U	1.5	0.28
541-73-1	1,3-Dichlorobenzene	1.5	U	1.5	0.22
142-28-9	1,3-Dichloropropane	1.5	U	1.5	0.25
106-46-7	1,4-Dichlorobenzene	1.5	U	1.5	0.20
594-20-7	2,2-Dichloropropane	1.5	U	1.5	0.20
110-75-8	2-Chloroethyl vinyl ether	15	U	15	1.5
95-49-8	2-Chlorotoluene	1.5	U	1.5	0.17
591-78-6	2-Hexanone	15	U	15	0.63
108-86-1	Bromobenzene	1.5	U	1.5	0.20
74-97-5	Bromochloromethane	1.5	U	1.5	0.45
106-43-4	4-Chlorotoluene	1.5	U	1.5	0.28
99-87-6	p-Isopropyltoluene	1.5	U	1.5	0.18
67-64-1	Acetone	7.7	J	15	1.7
71-43-2	Benzene	0.22	J	1.5	0.20
75-25-2	Bromoform	1.5	U	1.5	0.99
74-83-9	Bromomethane	1.5	U	1.5	0.63
75-15-0	Carbon disulfide	1.5	U	1.5	0.20
56-23-5	Carbon tetrachloride	1.5	U *	1.5	0.20
108-90-7	Chlorobenzene	1.5	U	1.5	0.23
75-00-3	Chloroethane	1.5	U	1.5	0.45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-30 | Lab Sample ID: 240-28098-9

Matrix: Water | Lab File ID: UXX5543.D

Analysis Method: 8260B | Date Collected: 08/16/2013 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 20:28

Soil Aliquot Vol: | Dilution Factor: 1.54

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99157 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.5	U	1.5	0.25
74-87-3	Chloromethane	1.5	U	1.5	0.46
156-59-2	cis-1,2-Dichloroethene	41		1.5	0.26
10061-01-5	cis-1,3-Dichloropropene	1.5	U	1.5	0.22
87-68-3	Hexachlorobutadiene	1.5	U	1.5	0.46
74-95-3	Dibromomethane	1.5	U	1.5	0.43
75-27-4	Bromodichloromethane	1.5	U	1.5	0.23
75-71-8	Dichlorodifluoromethane	1.5	U	1.5	0.48
100-41-4	Ethylbenzene	1.5	U	1.5	0.26
106-93-4	1,2-Dibromoethane	1.5	U	1.5	0.37
108-20-3	Diisopropyl ether	15	U	15	2.3
91-20-3	Naphthalene	1.5	U	1.5	0.37
179601-23-1	m-Xylene & p-Xylene	3.1	U	3.1	0.37
104-51-8	n-Butylbenzene	1.5	U	1.5	0.18
98-82-8	Isopropylbenzene	1.5	U	1.5	0.20
103-65-1	n-Propylbenzene	1.5	U	1.5	0.22
78-93-3	2-Butanone	15	U	15	0.88
108-10-1	4-Methyl-2-pentanone	15	U	15	0.49
135-98-8	sec-Butylbenzene	1.5	U	1.5	0.20
1634-04-4	Methyl tert-butyl ether	1.5	U	1.5	0.26
994-05-8	Tert-amyl-methyl ether (TAME)	7.7	U	7.7	0.10
75-09-2	Methylene Chloride	1.5	U	1.5	0.51
95-47-6	o-Xylene	1.5	U	1.5	0.22
100-42-5	Styrene	1.5	U	1.5	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	7.7	U	7.7	0.17
98-06-6	tert-Butylbenzene	1.5	U	1.5	0.20
127-18-4	Tetrachloroethene	1.5	U	1.5	0.45
108-88-3	Toluene	0.46	J B	1.5	0.20
156-60-5	trans-1,2-Dichloroethene	1.4	J	1.5	0.29
10061-02-6	trans-1,3-Dichloropropene	1.5	U *	1.5	0.29
79-01-6	Trichloroethene	5.6		1.5	0.26
75-69-4	Trichlorofluoromethane	1.5	U	1.5	0.32
108-05-4	Vinyl acetate	3.1	U	3.1	0.29
75-01-4	Vinyl chloride	25		1.5	0.34
75-65-0	tert-Butyl alcohol	77	U *	77	6.0
1330-20-7	Xylenes, Total	3.1	U	3.1	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-30 | Lab Sample ID: 240-28098-9

Matrix: Water | Lab File ID: UXX5543.D

Analysis Method: 8260B | Date Collected: 08/16/2013 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 20:28

Soil Aliquot Vol: | Dilution Factor: 1.54

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99157 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.5	U *	1.5	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-30 Lab Sample ID: 240-28098-9

Matrix: Water Lab File ID: UXX5543.D

Analysis Method: 8260B Date Collected: 08/16/2013 12:15

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 20:28

Soil Aliquot Vol: Dilution Factor: 1.54

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99157 Units: ug/L

Number TICs Found: 1 TIC Result Total: 0.74

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	4.49	0.74	J B

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-35 | Lab Sample ID: 240-28098-10

Matrix: Water | Lab File ID: UXX5513.D

Analysis Method: 8260B | Date Collected: 08/16/2013 13:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 06:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.70	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	3.7	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.13	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-35 | Lab Sample ID: 240-28098-10

Matrix: Water | Lab File ID: UXX5513.D

Analysis Method: 8260B | Date Collected: 08/16/2013 13:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 06:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.44	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	4.6		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.92	J	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-35 Lab Sample ID: 240-28098-10

Matrix: Water Lab File ID: UXX5513.D

Analysis Method: 8260B Date Collected: 08/16/2013 13:30

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 06:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	73		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-35 Lab Sample ID: 240-28098-10

Matrix: Water Lab File ID: UXX5513.D

Analysis Method: 8260B Date Collected: 08/16/2013 13:30

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 06:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

Number TICs Found: 1 TIC Result Total: 1.4

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	1.4	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-40 | Lab Sample ID: 240-28098-11

Matrix: Water | Lab File ID: UXX5514.D

Analysis Method: 8260B | Date Collected: 08/16/2013 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 06:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.39	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	5.1	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.22	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-40 | Lab Sample ID: 240-28098-11

Matrix: Water | Lab File ID: UXX5514.D

Analysis Method: 8260B | Date Collected: 08/16/2013 14:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 06:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.97	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	19		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.4		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-40 Lab Sample ID: 240-28098-11

Matrix: Water Lab File ID: UXX5514.D

Analysis Method: 8260B Date Collected: 08/16/2013 14:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 06:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	72		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-40 Lab Sample ID: 240-28098-11

Matrix: Water Lab File ID: UXX5514.D

Analysis Method: 8260B Date Collected: 08/16/2013 14:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 06:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

Number TICs Found: 1 TIC Result Total: 1.4

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	1.4	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-45 Lab Sample ID: 240-28098-13

Matrix: Water Lab File ID: UXX5516.D

Analysis Method: 8260B Date Collected: 08/16/2013 14:30

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 07:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.69	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	5.7	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.27	J	1.0	0.13
56-23-5	Carbon tetrachloride	0.27	J	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-45 | Lab Sample ID: 240-28098-13

Matrix: Water | Lab File ID: UXX5516.D

Analysis Method: 8260B | Date Collected: 08/16/2013 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 07:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.27	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.4		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	5.6		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0		1.0	0.22
75-65-0	tert-Butyl alcohol	8.6	J *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-45 Lab Sample ID: 240-28098-13

Matrix: Water Lab File ID: UXX5516.D

Analysis Method: 8260B Date Collected: 08/16/2013 14:30

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 07:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-36-45 Lab Sample ID: 240-28098-13

Matrix: Water Lab File ID: UXX5516.D

Analysis Method: 8260B Date Collected: 08/16/2013 14:30

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 07:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

Number TICs Found: 1 TIC Result Total: 2.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
18173-64-3	tert-Butyldimethylsilanol	4.12	2.2	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-DUP03 Lab Sample ID: 240-28098-1

Matrix: Water Lab File ID: UXX5507.D

Analysis Method: 8260B Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 04:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	17		10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.13	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-DUP03 Lab Sample ID: 240-28098-1

Matrix: Water Lab File ID: UXX5507.D

Analysis Method: 8260B Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 04:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	1.4	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	8.8	J *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-DUP03 Lab Sample ID: 240-28098-1

Matrix: Water Lab File ID: UXX5507.D

Analysis Method: 8260B Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 04:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-DUP03 Lab Sample ID: 240-28098-1

Matrix: Water Lab File ID: UXX5507.D

Analysis Method: 8260B Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 04:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

Number TICs Found: 1 TIC Result Total: 3.1

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	3.1	T J N

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-DUP04 | Lab Sample ID: 240-28098-2

Matrix: Water | Lab File ID: UXX5508.D

Analysis Method: 8260B | Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 04:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.64	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	4.3	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.24	J	1.0	0.13
56-23-5	Carbon tetrachloride	0.29	J	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-DUP04 | Lab Sample ID: 240-28098-2

Matrix: Water | Lab File ID: UXX5508.D

Analysis Method: 8260B | Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 04:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.31	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.4		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	5.6		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.1		1.0	0.22
75-65-0	tert-Butyl alcohol	7.9	J *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-DUP04 Lab Sample ID: 240-28098-2

Matrix: Water Lab File ID: UXX5508.D

Analysis Method: 8260B Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 04:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: DR-DPT-DUP04 | Lab Sample ID: 240-28098-2

Matrix: Water | Lab File ID: UXX5508.D

Analysis Method: 8260B | Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 04:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: TB-081613 | Lab Sample ID: 240-28098-12

Matrix: WQ | Lab File ID: UXX5515.D

Analysis Method: 8260B | Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 07:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	3.8	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: TB-081613 | Lab Sample ID: 240-28098-12

Matrix: WQ | Lab File ID: UXX5515.D

Analysis Method: 8260B | Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 07:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: TB-081613 Lab Sample ID: 240-28098-12

Matrix: WQ Lab File ID: UXX5515.D

Analysis Method: 8260B Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 07:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: TB-081613 | Lab Sample ID: 240-28098-12

Matrix: WQ | Lab File ID: UXX5515.D

Analysis Method: 8260B | Date Collected: 08/16/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 07:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99030 | Units: ug/L

Number TICs Found: 2 | TIC Result Total: 17.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.12	4.3	T J N
71-36-3	n-Butanol	5.40	13	J

APPENDIX C

SUPPORT DOCUMENTATION

3.4

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/16/13	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 2 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W)			SDG No.
(301) 528-3021 Phone	TAT if different from Below: Standard			
(301) 528-3000 FAX	☐ 2 weeks			Sampler: S. Cameron
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs
DR-DPT- DP03	8/16/2013	0900	GW	Water	3		x
DR-DPT- DP04	8/16/2013	0945	GW	Water	3		x
DR-DPT- 32-30	8/16/2013	1130	GW	Water	3		x
DR-DPT- 32-35	8/16/2013	1200	GW	Water	3		x
DR-DPT- 32-40	8/16/2013	1240	GW	Water	3		x
DR-DPT- 32-45	8/16/2013	1315	GW	Water	3		x
DR-DPT- 32-50	8/16/2013	1400	GW	Water	3		x
DR-DPT- 36-10	8/16/2013	1050	GW	Water	3		x
DR-DPT- 36-30	8/16/2013	1215	GW	Water	3		x
DR-DPT- 36-35	8/16/2013	1330	GW	Water	3		x
DR-DPT- 36-40	8/16/2013	1400	GW	Water	3		x
TB-081613	8/16/2013	—	GW	Water	2		x

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

	Company	Date/Time		Company	Date/Time
Relinquished by:	Tetra Tech	8-16-13 1500	Received by:	TestAmerica	8/16/13 1540
Relinquished by:	TestAmerica	8/16/13 1630	Received by:		
Relinquished by:			Received by:		

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

3.4

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/16/13	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	2 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W)			SDG No.
(301) 528-3021 Phone	TAT if different from Below: Standard			
(301) 528-3000 FAX	☐ 2 weeks			Sampler: S. Cameron
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT- 36-45	8/16/2013	1430	GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	
DR-DPT-	8/16/2013		GW	Water	3		x	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

	Company:	Date/Time:		Company:	Date/Time:
Relinquished by:	Tetra Tech	8-16-13 1515	Received by:	TestAmerica	8/16/13 1540
Relinquished by:	TestAmerica	8/16/13 1630	Received by:		
Relinquished by:			Received by:		

DR-DPT-26-48 8/16/13 0950

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: DUMP ROAD SOURCE AREAS

Report Number: 240-28098-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/17/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.4 C.

The original chain of custody and cooler receipt form were misfiled and can not be located. Another cooler receipt form was created with the information that was on hand that is of certainty. The cooler temperature was taken from the copy of the chain of custody that is given to the project manager after the cooler is triaged. The temperature of the cooler(s) is taken during the triage process and written on the chain of custody before a copy is made to give to the project manager.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-DUP03 (240-28098-1), DR-DPT-DUP04 (240-28098-2), DR-DPT-32-30 (240-28098-3), DR-DPT-32-35 (240-28098-4), DR-DPT-32-40 (240-28098-5), DR-DPT-32-45 (240-28098-6), DR-DPT-32-50 (240-28098-7), DR-DPT-36-10 (240-28098-8), DR-DPT-36-30 (240-28098-9), DR-DPT-36-35 (240-28098-10), DR-DPT-36-40 (240-28098-11), TB-081613 (240-28098-12), DR-DPT-36-45 (240-28098-13) and DR-DPT-26-48 (240-28098-14) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/27/2013 and 08/29/2013.

Toluene was detected in method blank MB 240-99030/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Toluene was detected in method blank MB 240-99157/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Toluene was detected in method blank MB 240-99545/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-32-40 (240-28098-5)[3.33X], DR-DPT-32-45 (240-28098-6)[3.33X], DR-DPT-32-50 (240-28098-7)[4X], DR-DPT-36-30 (240-28098-9)[1.54X] and DR-DPT-26-48 (240-28098-14)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 99030 recovered outside control limits for the following analytes: Chlorodibromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

The laboratory control sample (LCS) for batch 99030 recovered outside control limits for the following analyte(s): 2-Methyl-2-propanol--has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

The laboratory control sample (LCS) for batch 99157 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 99157 recovered outside control limits for the following analyte(s): 2-Methyl-2-propanol--has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

Carson, Megan

From: McFadden, John <John.McFadden@testamericainc.com>
Sent: Monday, September 16, 2013 12:40 PM
To: Carson, Megan
Subject: RE: MSA DUMP ROAD SDG 240-28098-1

Hi Megan,

We could not find the original COC that was shipped from the site/field to the lab. We had two people looking for the original COC and Cooler Receipt Form for two days and they could not locate it. We had to use the COC that our receiving department copies when they open the coolers after they are dropped off from Fed Ex. Our receiving department takes the cooler temperature and writes the cooler temperature on the COC before they copy it. The copy of the original COCs then goes to the respective PM so they know what jobs they have in house that day. I still had the copy of the COCs so we knew that the samples arrived in good temp. Sample DR-DPT-26-48 was received at the lab but not listed on the COCs that we had. At the bottom of the 2nd COC in the data package you can see where I hand wrote the sample ID and date and time of the sample. Our receiving department called me about the sample and I wrote it at the bottom. Since we don't have the original paperwork we can not say with 100% accuracy that the sample was not listed on the COC since we can not find the original paperwork. There may have been a third COC that was in the cooler and not copied at the time of receipt.

Thanks,
John

JOHN MCFADDEN
Project Manager

TestAmerica
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www.testamericainc.com

From: Carson, Megan [mailto:Megan.Carson@tetratech.com]
Sent: Friday, September 13, 2013 9:45 AM
To: McFadden, John
Subject: MSA DUMP ROAD SDG 240-28098-1

HI John,
I have a question regarding the COC for this project. The Sample Receipt Form/Narrative states that "Original COC + CRF misfiled.". What does that mean? Was it lost? The COC supplied in the data package was missing sample DR-DPT-26-48, was this oversight or do you have more information on this?
Thanks!
Megan

Megan Carson | **Chemist I**
Direct: 412.921.8963 | Main: 412.921.7090 | Personal Fax: 412.921.4040
megan.carson@tetratech.com

Tetra Tech Inc. | Chemistry and Risk Assessment
661 Andersen Dr. | Pittsburgh, Pa 15220-2700 | www.tetratech.com

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TestAmerica Canton
Tentatively Identified Quantitation Report

Data File:	\\NCChrom\ChromData\A3UX10\20130827-22908.b\UXX5541.D		
Lims ID:	240-28098-B-6	Client ID:	DR-DPT-32-45
Inject. Date:	27-Aug-2013 19:46:30	Dil. Factor:	3.3300
Sample Type:	Client		
Sample ID:	240-0022908-020		
Misc. Info.:			
Operator:	1644	Instrument ID:	A3UX10
Purge Vol:	5.000 mL	ALS Bottle#:	19
Lims Batch ID:	99157	Lims Sample ID:	20
Detector:	MS SCAN		
Method:	\\NCChrom\ChromData\A3UX10\20130827-22908.b\8260_10.m		
Last Update:	28-Aug-2013 10:45:23	Calib Date:	02-Jul-2013 14:41:30
Tic RT Window:	1.600 -0.000	Response:	area
Quant By:	Nearest ISTD	Quant LOD:	10.00000
MS Library:	\\Ncchrom\ChromData\Database\NIST98.L		
Min. Match:	0		
Process Host:	XAWRK027		
First Level Reviewer: williamsla		Date:	28-Aug-2013 10:12:59

Tentative Identified Compound Results

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Flags
115-11-7	1-Propene, 2-methyl-					
1.777	590429	1.63	1	87	108669	
75-9-2	Methylene Chloride					
3.197	367695	1.01	1	97	12327	
1066-40-6	Silanol, trimethyl-					
4.120	493471	1.36	1	78	28642	
75-21-8	Ethylene oxide					
8.687	821030	2.41	2	5	108063	

Quantitation Compounds

Compound	RT	Response	Amount ug/l
* 1 Fluorobenzene	5.197	3623546	10.0
* 2 Chlorobenzene-d5	7.871	3401040	10.0

QC Flag Legend

Processing Flags

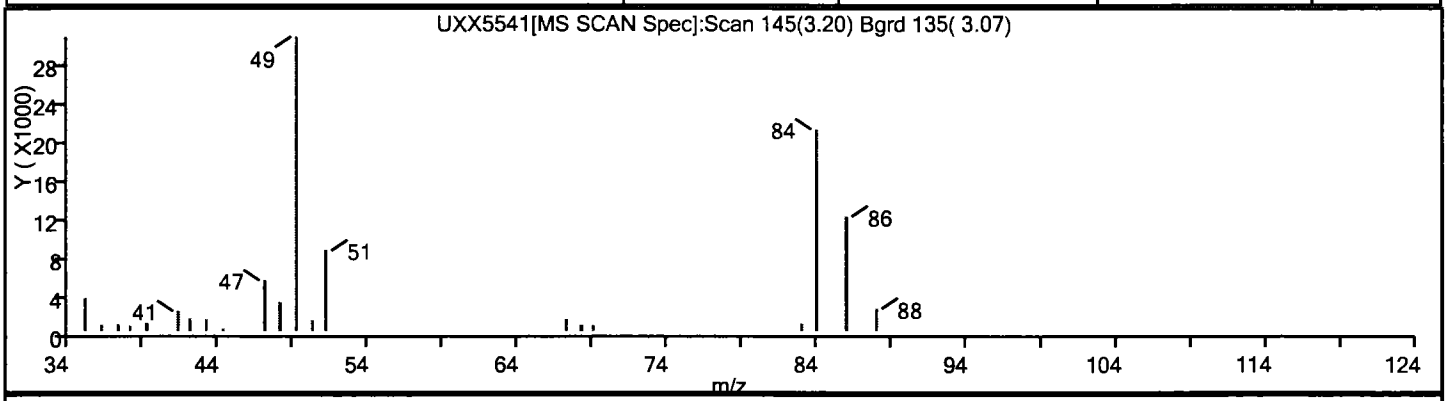
Report Date: 28-Aug-2013 10:45:28 Chrom Revision: 2.0 01-Apr-2013 21:16:10

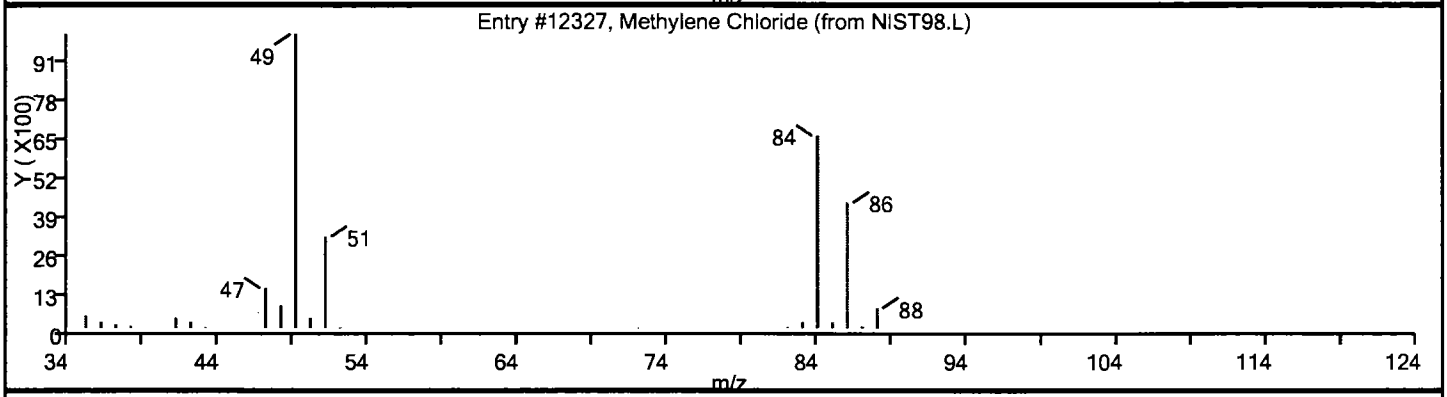
TestAmerica Canton

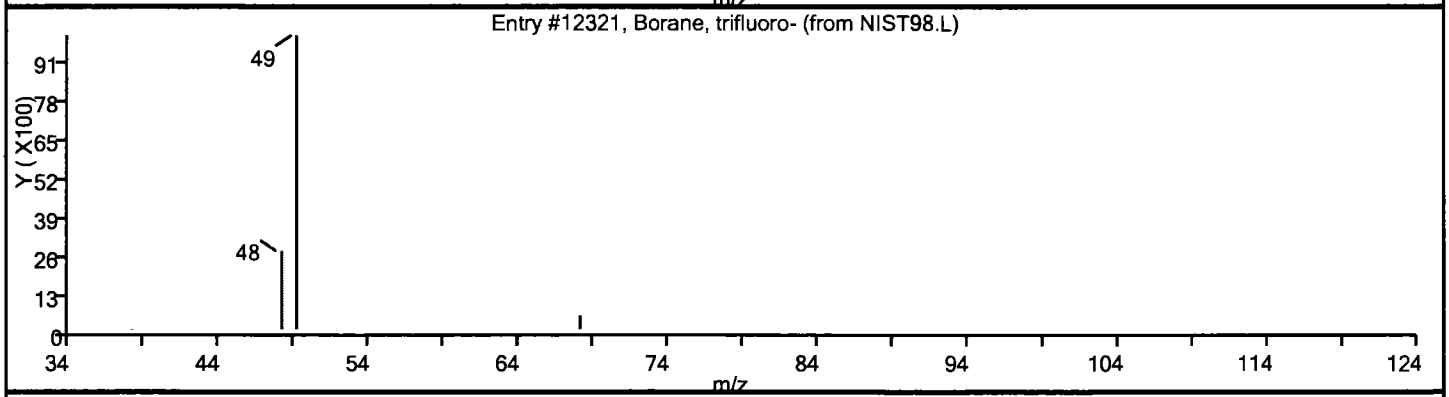
Data File: \\NCChrom\ChromData\A3UX10\20130827-22908.b\UXX5541.D

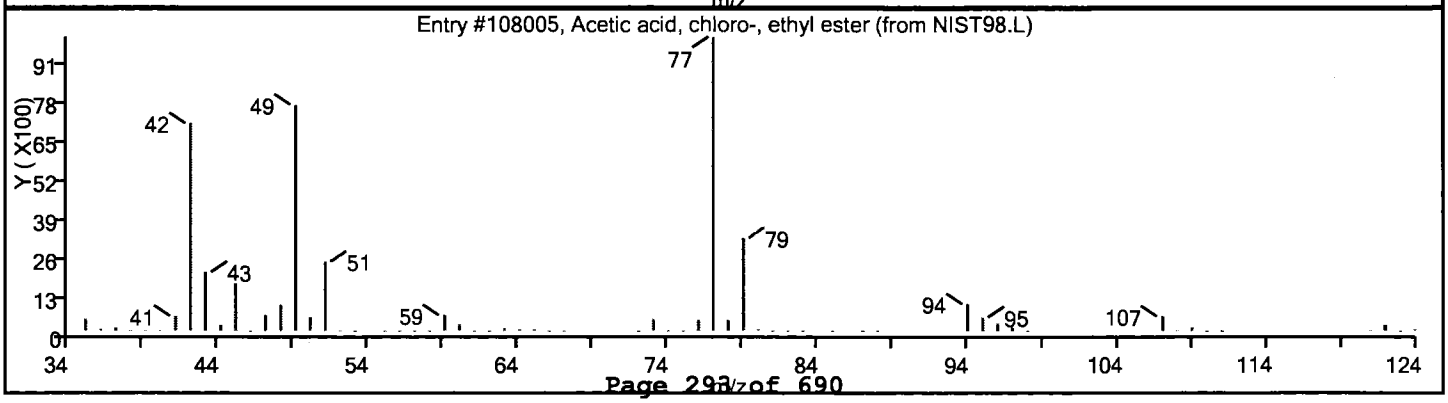
Injection Date:	27-Aug-2013 19:46:30	Limit Group:	MSV 8260B ICAL
Client ID:	DR-DPT-32-45	Instrument ID:	A3UX10
Lims Batch ID:	99157	Lims Sample ID:	20
Operator ID:	1644	Purge Vol:	5.000 mL
Column Type:	DB-624	Column Dia:	0.18 mm

Library Search Compound Match	CAS Number	Library	Entry	Quality
Methylene Chloride	75-9-2	NIST98.L	12327	97
Borane, trifluoro-	7637-7-2	NIST98.L	12321	3
Acetic acid, chloro-, ethyl ester	105-39-5	NIST98.L	108005	2









Carson, Megan

From: McFadden, John <John.McFadden@testamericainc.com>
Sent: Monday, September 23, 2013 4:42 PM
To: Carson, Megan
Subject: RE: MSA Dump Road, SDG 240-28098-1

Hi Megan,
Our MS Supervisor looked into the issue. He did say we do see this happen sometimes when TICs are requested.
As a quantitated compound based on the area of the quantitation ion for that compound, the methylene chloride result was less than the MDL therefore reported as a non detect. As a TIC the total area of the methylene chloride peak was greater than the threshold for a TIC, therefore had an estimated result. Since the quantitated result is more accurate than the TIC estimated result, the quantitated result of non detect should be used.
Thanks,
John

JOHN MCFADDEN
Project Manager

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www.testamericainc.com

From: Carson, Megan [mailto:Megan.Carson@tetratech.com]
Sent: Monday, September 23, 2013 1:21 PM
To: McFadden, John
Subject: MSA Dump Road, SDG 240-28098-1

Hi John,
I had a question regarding sample DR-DPT-32-45 (240-28098-6) in SDG 240-28098-1. Methylene chloride is listed as a TIC but is included in our target compound list as non-detected. Why is this? If it a positive methylene chloride result please include it on an updated form 1.
Thanks
Megan

Megan Carson | Chemist I
Direct: 412.921.8963 | Main: 412.921.7090 | Personal Fax: 412.921.4040
megan.carson@tetratech.com

Tetra Tech Inc. | Chemistry and Risk Assessment
661 Andersen Dr. | Pittsburgh, Pa 15220-2700 | www.tetratech.com

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Field Duplicate

	VLF-SD-DUP04-092712		VLF-SD-N00-Y2-0408		units	RPD	%D	CRDL	MDL
2-BUTANONE	2.1	J	1.4	J	UG/L	40	0.7 ✓	10	0.57
ACETONE	23		17		UG/L	30	6 ✓	10	1.1
CARBON DISULFIDE	0.13	J	0.13	J	UG/L	0	0 ✓	1	0.13
TERTIARY-BUTYL ALCOHOL	3.9	UR	8.8	J	UG/L	-77.1654	-4.9 ✓	50	3.9
TRICHLOROETHENE	0.2	J	0.17	U	UG/L	16.21622	0.03 ✓	1	0.17
	DR-DPT-36-45		DR-DPT-DUP04						
1,2-DICHLOROETHANE	0.69	J	0.64	J	UG/L	7.518797	0.05 ✓	1	0.22
ACETONE	5.7		4.3		UG/L	28	1.4 ✓	10	1.1
CARBON DISULFIDE	0.27	J	0.24	J	UG/L	11.76471	0.03 ✓	1	0.13
CARBON TETRACHLORIDE	0.27	J	0.29	J	UG/L	-7.14286	-0.02 ✓	1	0.13
CHLOROFORM	0.27	J	0.31	J	UG/L	-13.7931	-0.04 ✓	1	0.16
TERTIARY-BUTYL ALCOHOL	8.6	J	7.9	J	UG/L	8.484848	0.7 ✓	50	3.9
VINYL CHLORIDE	1		1.1		UG/L	-9.52381	-0.1 ✓	1	0.22

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
54 Carbon tetrachloride	117		4.820					
56 1,2-Dichloroethane	62	4.974	4.974	0.0	78	34864	0.6131	
57 Benzene	78	4.974	4.974	0.0	79	35653	0.1933	
58 Tert-amyl methyl ether	73		5.056					
61 Trichloroethene	130	5.519	5.518	0.001	95	1308254	27.5	
64 1,2-Dichloropropane	63		5.696					
66 Dibromomethane	93		5.791					
68 Dichlorobromomethane	83		5.921					
70 2-Chloroethyl vinyl ether	63		6.169					
71 cis-1,3-Dichloropropene	75		6.311					
72 4-Methyl-2-pentanone (MIBK)	43		6.430					
73 Toluene	91	6.619	6.619	0.0	87	96746	0.5645	
74 trans-1,3-Dichloropropene	75		6.796					
77 1,3-Dichloropropane	76		7.116					
78 Tetrachloroethene	164		7.128					9
79 2-Hexanone	43		7.175					
81 Chlorodibromomethane	129		7.329					
83 Ethylene Dibromide	107		7.447					
85 Chlorobenzene	112		7.897					9
86 1,1,1,2-Tetrachloroethane	131		7.968					
87 Ethylbenzene	106		8.003					9
88 m-Xylene & p-Xylene	106		8.110					9
89 o-Xylene	106		8.488					9
90 Styrene	104		8.488					
91 Bromoform	173		8.666					
92 Isopropylbenzene	105		8.832					
95 1,1,2,2-Tetrachloroethane	83		9.104					
96 Bromobenzene	156		9.139					
97 1,2,3-Trichloropropane	110		9.151					
99 N-Propylbenzene	120		9.234					
100 2-Chlorotoluene	126		9.329					
102 4-Chlorotoluene	126		9.423					
103 tert-Butylbenzene	119		9.719					
104 1,2,4-Trimethylbenzene	105		9.766					9
105 sec-Butylbenzene	105		9.944					
106 1,3-Dichlorobenzene	146		10.050					9
107 4-Isopropyltoluene	119		10.086					
108 1,4-Dichlorobenzene	146		10.133					9
109 1,2,3-Trimethylbenzene	105		10.191					9
110 n-Butylbenzene	91		10.488					
111 1,2-Dichlorobenzene	146		10.512					
112 1,2-Dibromo-3-Chloropropane	157		11.269					
114 1,2,4-Trichlorobenzene	180		12.109					9
115 Hexachlorobutadiene	225		12.287					
116 Naphthalene	128		12.358					9
117 1,2,3-Trichlorobenzene	180		12.606					
S 122 Xylenes, Total	106		16.530					7

1308254 Samp x 10 int / 1637468 Int / 0.2904 Ical x 5DF = 137.5 ug/L

reported as 140 ug/L

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 28098**
Canton Facility

Client Tetra Tech Site Name Dump Road Source Areas
Cooler Received on 8-17-13 Opened on 8-17-13
Cooler unpacked by:

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other
TestAmerica Cooler # Foam Box Client Cooler Box Other
Packing material used: Bubble Wrap Foam Plastic Bag None Other
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   - IR GUN# A (CF −1 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   - IR GUN# 4 (CF 0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C ☐ See Multiple Cooler Form
   - IR GUN# 5 (CF +1 °C) Observed Cooler Temp. 3.4 °C Corrected Cooler Temp. 3.4 °C
   - IR GUN# 8 (CF -0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2.	Were custody seals on the outside of the cooler(s)? If Yes Quantity	Yes	No
	-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
	-Were custody seals on the bottle(s)?	Yes	No
3.	Shippers' packing slip attached to the cooler(s)?	Yes	No
4.	Did custody papers accompany the sample(s)?	Yes	No
5.	Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6.	Did all bottles arrive in good condition (Unbroken)?	Yes	No
7.	Could all bottle labels be reconciled with the COC?	Yes	No
8.	Were correct bottle(s) used for the test(s) indicated?	Yes	No
9.	Sufficient quantity received to perform indicated analyses?	Yes	No
10.	Were sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC376062
11.	Were VOAs on the COC?	Yes	No
12.	Were air bubbles >6 mm in any VOA vials?	Yes	No NA
13.	Was a trip blank present in the cooler(s)?	Yes	No

Contacted PM Date by via Verbal Voice Mail Other
Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES
Samples processed by:

Original COC + CRF misfiled. gpk 8-31-13

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

HOLDTIME

SDG 240-28098-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-081613	240-28098-12	TB	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-DUP04	240-28098-2	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-DUP03	240-28098-1	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-36-45	240-28098-13	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-36-40	240-28098-11	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-36-35	240-28098-10	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-36-30	240-28098-9	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-36-10	240-28098-8	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-32-50	240-28098-7	NM	08/16/2013	08/29/2013	08/29/2013	13	0	13
OV	UG/L	DR-DPT-32-45	240-28098-6	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-32-40	240-28098-5	NM	08/16/2013	08/29/2013	08/29/2013	13	0	13
OV	UG/L	DR-DPT-32-35	240-28098-4	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-32-30	240-28098-3	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11
OV	UG/L	DR-DPT-26-48	240-28098-14	NM	08/16/2013	08/27/2013	08/27/2013	11	0	11

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab File ID: UXX5500.D Lab Sample ID: MB 240-99030/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/27/2013 01:44

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-99030/4	UXX5498.D	08/27/2013 01:02
DR-DPT-DUP03	240-28098-1	UXX5507.D	08/27/2013 04:13
DR-DPT-DUP04	240-28098-2	UXX5508.D	08/27/2013 04:35
DR-DPT-32-30	240-28098-3	UXX5509.D	08/27/2013 04:56
DR-DPT-32-35	240-28098-4	UXX5510.D	08/27/2013 05:18
DR-DPT-36-10	240-28098-8	UXX5511.D	08/27/2013 05:39
DR-DPT-36-35	240-28098-10	UXX5513.D	08/27/2013 06:23
DR-DPT-36-40	240-28098-11	UXX5514.D	08/27/2013 06:44
TB-081613	240-28098-12	UXX5515.D	08/27/2013 07:06
DR-DPT-36-45	240-28098-13	UXX5516.D	08/27/2013 07:28
DR-DPT-26-48	240-28098-14	UXX5517.D	08/27/2013 07:50
	240-28089-B-4 MS	UXX5521.D	08/27/2013 09:17
	240-28089-B-4 MSD	UXX5522.D	08/27/2013 09:39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99030/6

Matrix: Water Lab File ID: UXX5500.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 01:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99030/6

Matrix: Water Lab File ID: UXX5500.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 01:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.286	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99030/6

Matrix: Water Lab File ID: UXX5500.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 01:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99030/6

Matrix: Water Lab File ID: UXX5500.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 01:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99030 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5498.D

Lab ID: LCS 240-99030/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.4	114	72-116	
1,1,1-Trichloroethane	10.0	10.9	109	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.59	96	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.20	92	74-151	
1,1-Dichloroethane	10.0	9.75	98	82-115	
1,1-Dichloroethene	10.0	8.71	87	78-131	
1,1-Dichloropropene	10.0	8.62	86	83-114	
1,2,3-Trichlorobenzene	10.0	7.61	76	54-126	
1,2,3-Trichloropropane	10.0	9.43	94	73-129	
1,2,3-Trimethylbenzene	10.0	10.8	108	70-130	
1,2,4-Trichlorobenzene	10.0	7.62	76	48-135	
1,2,4-Trimethylbenzene	10.0	9.15	92	76-120	
1,2-Dibromo-3-Chloropropane	10.0	12.0	120	42-136	
1,2-Dichlorobenzene	10.0	9.07	91	81-110	
1,2-Dichloroethane	10.0	10.9	109	71-127	
1,2-Dichloropropane	10.0	10.2	102	81-115	
1,3-Dichlorobenzene	10.0	8.42	84	80-110	
1,3-Dichloropropane	10.0	10.2	102	79-116	
1,4-Dichlorobenzene	10.0	8.21	82	82-110	
2,2-Dichloropropane	10.0	11.3	113	50-129	
2-Chloroethyl vinyl ether	10.0	8.77 J	88	52-131	
2-Chlorotoluene	10.0	8.86	89	76-116	
2-Hexanone	20.0	20.2	101	55-133	
Bromobenzene	10.0	8.46	85	76-115	
Bromochloromethane	10.0	8.81	88	77-120	
4-Chlorotoluene	10.0	8.20	82	77-115	
p-Isopropyltoluene	10.0	8.98	90	74-120	
Acetone	20.0	16.6	83	43-136	
Benzene	10.0	9.66	97	83-112	
Bromoform	10.0	11.2	112	40-131	
Bromomethane	10.0	5.54	55	11-185	
Carbon disulfide	10.0	9.75	98	62-142	
Carbon tetrachloride	10.0	12.3	123	66-128	
Chlorobenzene	10.0	8.84	88	85-110	
Chloroethane	10.0	5.42	54	25-153	
Chloroform	10.0	9.85	98	79-117	
Chloromethane	10.0	7.80	78	44-126	
cis-1,2-Dichloroethene	10.0	9.00	90	80-113	
cis-1,3-Dichloropropene	10.0	10.1	101	61-115	
Hexachlorobutadiene	10.0	6.60	66	36-134	
Dibromomethane	10.0	9.78	98	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5498.D

Lab ID: LCS 240-99030/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.5	115	72-121	
Dichlorodifluoromethane	10.0	7.10	71	19-129	
Ethylbenzene	10.0	8.84	88	83-112	
1,2-Dibromoethane	10.0	9.43	94	79-113	
Diisopropyl ether	10.0	9.26 J	93	77-118	
Naphthalene	10.0	8.09	81	32-141	
m-Xylene & p-Xylene	20.0	17.2	86	83-113	
n-Butylbenzene	10.0	8.51	85	66-125	
Isopropylbenzene	10.0	8.59	86	75-114	
n-Propylbenzene	10.0	8.61	86	74-121	
2-Butanone	20.0	19.1	96	60-126	
4-Methyl-2-pentanone	20.0	20.9	104	63-128	
sec-Butylbenzene	10.0	8.31	83	70-117	
Methyl tert-butyl ether	10.0	9.45	94	52-144	
Methylene Chloride	10.0	9.80	98	66-131	
o-Xylene	10.0	8.72	87	83-113	
Styrene	10.0	8.33	83	79-114	
tert-Butylbenzene	10.0	8.29	83	71-115	
Tetrachloroethene	10.0	8.90	89	79-114	
Toluene	10.0	10.6	106	84-111	
trans-1,2-Dichloroethene	10.0	8.96	90	83-117	
trans-1,3-Dichloropropene	10.0	11.1	111	58-117	
Trichloroethene	10.0	8.71	87	76-117	
Trichlorofluoromethane	10.0	7.12	71	49-157	
Vinyl acetate	10.0	5.64	56	46-161	
Vinyl chloride	10.0	8.42	84	53-127	
tert-Butyl alcohol	200	134	67	70-130	*
Xylenes, Total	30.0	25.9	86	83-112	
Dibromochloromethane	10.0	12.2	122	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III ☆Sample not in SDG
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5521.D

Lab ID: 240-28089-B-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	76.9	7.7 U	86.3	112	68-121	
1,1,2,2-Tetrachloroethane	76.9	7.7 U	76.2	99	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	76.9	7.7 U	68.1	89	70-152	
1,1-Dichloroethane	76.9	7.7 U	77.4	101	79-116	
1,1-Dichloroethene	76.9	7.7 U	68.7	89	74-135	
1,2,3-Trimethylbenzene	76.9	33 J	118	112	70-130	
1,2,4-Trichlorobenzene	76.9	7.7 U	63.6	83	38-138	
1,2,4-Trimethylbenzene	76.9	82	152	91	67-124	
1,2-Dibromo-3-Chloropropane	76.9	15 U	97.5	127	32-139	
1,2-Dichlorobenzene	76.9	7.7 U	72.9	95	75-111	
1,2-Dichloroethane	76.9	7.7 U	89.6	117	68-129	
1,2-Dichloropropane	76.9	7.7 U	85.4	111	78-115	
1,3-Dichlorobenzene	76.9	7.7 U	66.6	87	73-110	
1,4-Dichlorobenzene	76.9	7.7 U	65.4	85	75-110	
2-Hexanone	154	77 U	160	104	47-139	
Acetone	154	71 J	192	79	33-145	
Benzene	76.9	53	131	102	72-121	
Bromoform	76.9	7.7 U	89.6	117	32-128	
Bromomethane	76.9	7.7 U	49.4	64	10-186	
Carbon disulfide	76.9	7.7 U	78.6	102	57-147	
Carbon tetrachloride	76.9	7.7 U	97.9	127	59-129	
Chlorobenzene	76.9	7.7 U	71.9	93	80-110	
Chloroethane	76.9	7.7 U	44.8	58	21-165	
Chloroform	76.9	7.7 U	78.0	101	76-118	
Chloromethane	76.9	7.7 U	65.2	85	33-132	
cis-1,2-Dichloroethene	76.9	7.7 U	72.7	94	70-120	
cis-1,3-Dichloropropene	76.9	7.7 U	78.2	102	51-110	
Bromodichloromethane	76.9	7.7 U	93.3	121	67-120	F
Dichlorodifluoromethane	76.9	7.7 U	55.0	71	17-128	
Ethylbenzene	76.9	48	121	94	75-116	
1,2-Dibromoethane	76.9	7.7 U	77.2	100	74-113	
m-Xylene & p-Xylene	154	170	315	94	75-117	
Isopropylbenzene	76.9	2.6 J	71.8	90	68-116	
2-Butanone	154	7.4 J	154	95	54-129	
4-Methyl-2-pentanone	154	2.5 J	166	106	56-131	
Methyl tert-butyl ether	76.9	7.7 U	72.9	95	46-144	
Methylene Chloride	76.9	7.7 U	71.9	94	63-128	
o-Xylene	76.9	71	145	96	76-116	
Styrene	76.9	7.7 U	70.8	92	71-117	
Tetrachloroethene	76.9	7.7 U	71.1	92	70-117	
Toluene	76.9	250	337	114	78-114	E

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5521.D

Lab ID: 240-28089-B-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
trans-1,2-Dichloroethene	76.9	7.7 U	70.5	92	80-119	
trans-1,3-Dichloropropene	76.9	7.7 U	91.2	119	46-116	F
Trichloroethene	76.9	7.7 U	69.6	91	66-120	
Trichlorofluoromethane	76.9	7.7 U	62.8	82	46-157	
Vinyl chloride	76.9	7.7 U	66.9	87	49-130	
Xylenes, Total	231	240	460	95	76-116	
Dibromochloromethane	76.9	7.7 U	96.3	125	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5522.D

Lab ID: 240-28089-B-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	76.9	86.6	113	0	30	68-121	
1,1,2,2-Tetrachloroethane	76.9	79.5	103	4	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	76.9	71.3	93	5	30	70-152	
1,1-Dichloroethane	76.9	79.6	104	3	30	79-116	
1,1-Dichloroethene	76.9	69.0	90	1	30	74-135	
1,2,3-Trimethylbenzene	76.9	114	105	4	30	70-130	
1,2,4-Trichlorobenzene	76.9	67.5	88	6	30	38-138	
1,2,4-Trimethylbenzene	76.9	145	82	5	30	67-124	
1,2-Dibromo-3-Chloropropane	76.9	105	137	8	30	32-139	
1,2-Dichlorobenzene	76.9	74.2	96	2	30	75-111	
1,2-Dichloroethane	76.9	90.8	118	1	30	68-129	
1,2-Dichloropropane	76.9	83.6	109	2	30	78-115	
1,3-Dichlorobenzene	76.9	67.3	88	1	30	73-110	
1,4-Dichlorobenzene	76.9	66.2	86	1	30	75-110	
2-Hexanone	154	160	104	0	30	47-139	
Acetone	154	203	86	5	30	33-145	
Benzene	76.9	129	99	2	30	72-121	
Bromoform	76.9	88.4	115	1	30	32-128	
Bromomethane	76.9	54.0	70	9	30	10-186	
Carbon disulfide	76.9	76.7	100	3	30	57-147	
Carbon tetrachloride	76.9	96.8	126	1	30	59-129	
Chlorobenzene	76.9	69.7	91	3	30	80-110	
Chloroethane	76.9	46.0	60	3	30	21-165	
Chloroform	76.9	79.7	104	2	30	76-118	
Chloromethane	76.9	72.6	94	11	30	33-132	
cis-1,2-Dichloroethene	76.9	74.4	97	2	30	70-120	
cis-1,3-Dichloropropene	76.9	80.1	104	2	30	51-110	
Bromodichloromethane	76.9	93.6	122	0	30	67-120	F
Dichlorodifluoromethane	76.9	57.9	75	5	30	17-128	
Ethylbenzene	76.9	114	85	6	30	75-116	
1,2-Dibromoethane	76.9	75.1	98	3	30	74-113	
m-Xylene & p-Xylene	154	293	80	7	30	75-117	
Isopropylbenzene	76.9	68.4	86	5	30	68-116	
2-Butanone	154	152	94	1	30	54-129	
4-Methyl-2-pentanone	154	169	108	2	30	56-131	
Methyl tert-butyl ether	76.9	76.6	100	5	30	46-144	
Methylene Chloride	76.9	74.6	97	4	30	63-128	
o-Xylene	76.9	137	86	6	30	76-116	
Styrene	76.9	66.0	86	7	30	71-117	
Tetrachloroethene	76.9	67.8	88	5	30	70-117	
Toluene	76.9	315	86	7	30	78-114	E

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5522.D

Lab ID: 240-28089-B-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
trans-1,2-Dichloroethene	76.9	71.9	93	2	30	80-119	
trans-1,3-Dichloropropene	76.9	91.3	119	0	30	46-116	F
Trichloroethene	76.9	68.4	89	2	30	66-120	
Trichlorofluoromethane	76.9	62.8	82	0	30	46-157	
Vinyl chloride	76.9	70.4	92	5	30	49-130	
Xylenes, Total	231	430	82	7	30	76-116	
Dibromochloromethane	76.9	95.5	124	1	30	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab File ID: UXX5527.D Lab Sample ID: MB 240-99157/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/27/2013 14:30

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-99157/4	UXX5525.D	08/27/2013 13:46
DR-DPT-32-45	240-28098-6	UXX5541.D	08/27/2013 19:46
DR-DPT-36-30	240-28098-9	UXX5543.D	08/27/2013 20:28
	240-28069-C-3 MS	UXX5547.D	08/27/2013 21:53
	240-28069-C-3 MSD	UXX5548.D	08/27/2013 22:15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99157/6

Matrix: Water | Lab File ID: UXX5527.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 14:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99157 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99157/6

Matrix: Water | Lab File ID: UXX5527.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 14:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99157 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.344	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99157/6

Matrix: Water | Lab File ID: UXX5527.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 14:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99157 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99157/6

Matrix: Water | Lab File ID: UXX5527.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 14:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99157 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 0.57

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	4.49	0.570	J

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5525.D

Lab ID: LCS 240-99157/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.8	118	72-116	*
1,1,1-Trichloroethane	10.0	11.0	110	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.84	98	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.2	102	74-151	
1,1-Dichloroethane	10.0	9.85	99	82-115	
1,1-Dichloroethene	10.0	8.54	85	78-131	
1,1-Dichloropropene	10.0	9.07	91	83-114	
1,2,3-Trichlorobenzene	10.0	8.56	86	54-126	
1,2,3-Trichloropropane	10.0	9.28	93	73-129	
1,2,3-Trimethylbenzene	10.0	11.4	114	70-130	
1,2,4-Trichlorobenzene	10.0	8.41	84	48-135	
1,2,4-Trimethylbenzene	10.0	9.90	99	76-120	
1,2-Dibromo-3-Chloropropane	10.0	12.9	129	42-136	
1,2-Dichlorobenzene	10.0	9.67	97	81-110	
1,2-Dichloroethane	10.0	10.8	108	71-127	
1,2-Dichloropropane	10.0	10.2	102	81-115	
1,3-Dichlorobenzene	10.0	8.87	89	80-110	
1,3-Dichloropropane	10.0	10.5	105	79-116	
1,4-Dichlorobenzene	10.0	8.75	87	82-110	
2,2-Dichloropropane	10.0	12.3	123	50-129	
2-Chloroethyl vinyl ether	10.0	8.97 J	90	52-131	
2-Chlorotoluene	10.0	9.41	94	76-116	
2-Hexanone	20.0	21.2	106	55-133	
Bromobenzene	10.0	8.57	86	76-115	
Bromochloromethane	10.0	8.84	88	77-120	
4-Chlorotoluene	10.0	8.65	87	77-115	
p-Isopropyltoluene	10.0	9.80	98	74-120	
Acetone	20.0	19.0	95	43-136	
Benzene	10.0	9.57	96	83-112	
Bromoform	10.0	11.4	114	40-131	
Bromomethane	10.0	6.30	63	11-185	
Carbon disulfide	10.0	9.60	96	62-142	
Carbon tetrachloride	10.0	12.9	129	66-128	*
Chlorobenzene	10.0	9.25	93	85-110	
Chloroethane	10.0	5.71	57	25-153	
Chloroform	10.0	9.80	98	79-117	
Chloromethane	10.0	8.29	83	44-126	
cis-1,2-Dichloroethene	10.0	9.07	91	80-113	
cis-1,3-Dichloropropene	10.0	10.6	106	61-115	
Hexachlorobutadiene	10.0	7.52	75	36-134	
Dibromomethane	10.0	9.48	95	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5525.D

Lab ID: LCS 240-99157/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.6	116	72-121	
Dichlorodifluoromethane	10.0	8.40	84	19-129	
Ethylbenzene	10.0	9.19	92	83-112	
1,2-Dibromoethane	10.0	9.69	97	79-113	
Diisopropyl ether	10.0	8.98 J	90	77-118	
Naphthalene	10.0	8.60	86	32-141	
m-Xylene & p-Xylene	20.0	18.4	92	83-113	
n-Butylbenzene	10.0	9.59	96	66-125	
Isopropylbenzene	10.0	9.08	91	75-114	
n-Propylbenzene	10.0	9.66	97	74-121	
2-Butanone	20.0	19.2	96	60-126	
4-Methyl-2-pentanone	20.0	20.5	102	63-128	
sec-Butylbenzene	10.0	9.17	92	70-117	
Methyl tert-butyl ether	10.0	9.34	93	52-144	
Methylene Chloride	10.0	9.13	91	66-131	
o-Xylene	10.0	9.33	93	83-113	
Styrene	10.0	8.64	86	79-114	
tert-Butylbenzene	10.0	8.86	89	71-115	
Tetrachloroethene	10.0	9.40	94	79-114	
Toluene	10.0	10.3	103	84-111	
trans-1,2-Dichloroethene	10.0	8.75	88	83-117	
trans-1,3-Dichloropropene	10.0	11.8	118	58-117	*
Trichloroethene	10.0	8.96	90	76-117	
Trichlorofluoromethane	10.0	8.22	82	49-157	
Vinyl acetate	10.0	7.69	77	46-161	
Vinyl chloride	10.0	8.34	83	53-127	
tert-Butyl alcohol	200	131	65	70-130	*
Xylenes, Total	30.0	27.7	92	83-112	
Dibromochloromethane	10.0	12.2	122	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

☆Sample not in SDG

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5547.D

Lab ID: 240-28069-C-3 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,2,2-Tetrachloroethane	40.0	4.0 U	41.0	102	63-122	
1,1-Dichloroethene	40.0	12	49.0	93	74-135	
1,2-Dichloroethane	40.0	4.3	51.3	117	68-129	
Carbon tetrachloride	40.0	4.0 U	56.3	141	59-129	F
Chloroform	40.0	4.0 U	45.2	113	76-118	
cis-1,2-Dichloroethene	40.0	130	154	70	70-120	
Methylene Chloride	40.0	34	72.0	95	63-128	
Tetrachloroethene	40.0	85	113	68	70-117	F
trans-1,2-Dichloroethene	40.0	8.2	47.3	98	80-119	
Trichloroethene	40.0	140	159	44	66-120	F
Vinyl chloride	40.0	84	110	66	49-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5548.D

Lab ID: 240-28069-C-3 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,2,2-Tetrachloroethane	40.0	41.0	103	0	30	63-122	
1,1-Dichloroethene	40.0	46.7	87	5	30	74-135	
1,2-Dichloroethane	40.0	49.8	114	3	30	68-129	
Carbon tetrachloride	40.0	54.0	135	4	30	59-129	F
Chloroform	40.0	42.7	107	6	30	76-118	
cis-1,2-Dichloroethene	40.0	147	52	5	30	70-120	F
Methylene Chloride	40.0	68.6	87	5	30	63-128	
Tetrachloroethene	40.0	111	64	2	30	70-117	F
trans-1,2-Dichloroethene	40.0	45.2	93	5	30	80-119	
Trichloroethene	40.0	153	29	4	30	66-120	F
Vinyl chloride	40.0	105	52	5	30	49-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab File ID: UXR7316.D Lab Sample ID: MB 240-99545/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/29/2013 14:23

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-99545/4	UXR7314.D	08/29/2013 13:38
DR-DPT-32-40	240-28098-5	UXR7318.D	08/29/2013 15:09
DR-DPT-32-50	240-28098-7	UXR7319.D	08/29/2013 15:31
	240-28273-B-1 MS	UXR7337.D	08/29/2013 22:19
	240-28273-B-1 MSD	UXR7338.D	08/29/2013 22:42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99545/6

Matrix: Water | Lab File ID: UXR7316.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2013 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99545/6

Matrix: Water | Lab File ID: UXR7316.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2013 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.401	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28098-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99545/6

Matrix: Water | Lab File ID: UXR7316.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2013 14:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		63-129
460-00-4	4-Bromofluorobenzene (Surr)	87		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	111		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99545/6

Matrix: Water Lab File ID: UXR7316.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2013 14:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99545 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7314.D

Lab ID: LCS 240-99545/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.96	100	72-116	
1,1,1-Trichloroethane	10.0	10.0	100	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.04	90	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.5	115	74-151	
1,1-Dichloroethane	10.0	9.85	99	82-115	
1,1-Dichloroethene	10.0	9.55	95	78-131	
1,1-Dichloropropene	10.0	9.08	91	83-114	
1,2,3-Trichlorobenzene	10.0	6.51	65	54-126	
1,2,3-Trichloropropane	10.0	9.94	99	73-129	
1,2,3-Trimethylbenzene	10.0	10.1	101	70-130	
1,2,4-Trichlorobenzene	10.0	7.36	74	48-135	
1,2,4-Trimethylbenzene	10.0	9.51	95	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.20	82	42-136	
1,2-Dichlorobenzene	10.0	9.40	94	81-110	
1,2-Dichloroethane	10.0	11.0	110	71-127	
1,2-Dichloropropane	10.0	9.78	98	81-115	
1,3-Dichlorobenzene	10.0	9.44	94	80-110	
1,3-Dichloropropane	10.0	10.1	101	79-116	
1,4-Dichlorobenzene	10.0	9.35	94	82-110	
2,2-Dichloropropane	10.0	8.46	85	50-129	
2-Chloroethyl vinyl ether	10.0	9.02 J	90	52-131	
2-Chlorotoluene	10.0	9.29	93	76-116	
2-Hexanone	20.0	17.5	87	55-133	
Bromobenzene	10.0	9.47	95	76-115	
Bromochloromethane	10.0	10.1	101	77-120	
4-Chlorotoluene	10.0	9.24	92	77-115	
p-Isopropyltoluene	10.0	9.58	96	74-120	
Acetone	20.0	18.2	91	43-136	
Benzene	10.0	9.71	97	83-112	
Bromoform	10.0	9.73	97	40-131	
Bromomethane	10.0	5.71	57	11-185	
Carbon disulfide	10.0	8.80	88	62-142	
Carbon tetrachloride	10.0	10.2	102	66-128	
Chlorobenzene	10.0	9.80	98	85-110	
Chloroethane	10.0	4.24	42	25-153	
Chloroform	10.0	10.2	102	79-117	
Chloromethane	10.0	6.99	70	44-126	
cis-1,2-Dichloroethene	10.0	9.47	95	80-113	
cis-1,3-Dichloropropene	10.0	8.65	86	61-115	
Hexachlorobutadiene	10.0	7.56	76	36-134	
Dibromomethane	10.0	10.5	105	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7314.D

Lab ID: LCS 240-99545/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.92	99	72-121	
Dichlorodifluoromethane	10.0	8.24	82	19-129	
Ethylbenzene	10.0	9.88	99	83-112	
1,2-Dibromoethane	10.0	9.85	98	79-113	
Diisopropyl ether	10.0	9.30 J	93	77-118	
Naphthalene	10.0	6.13	61	32-141	
m-Xylene & p-Xylene	20.0	20.1	100	83-113	
n-Butylbenzene	10.0	8.59	86	66-125	
Isopropylbenzene	10.0	9.43	94	75-114	
n-Propylbenzene	10.0	9.52	95	74-121	
2-Butanone	20.0	18.9	94	60-126	
4-Methyl-2-pentanone	20.0	18.2	91	63-128	
sec-Butylbenzene	10.0	8.72	87	70-117	
Methyl tert-butyl ether	10.0	8.89	89	52-144	
Methylene Chloride	10.0	9.39	94	66-131	
o-Xylene	10.0	9.84	98	83-113	
Styrene	10.0	9.45	94	79-114	
tert-Butylbenzene	10.0	9.03	90	71-115	
Tetrachloroethene	10.0	10.3	103	79-114	
Toluene	10.0	9.90	99	84-111	
trans-1,2-Dichloroethene	10.0	9.92	99	83-117	
trans-1,3-Dichloropropene	10.0	8.80	88	58-117	
Trichloroethene	10.0	9.84	98	76-117	
Trichlorofluoromethane	10.0	9.02	90	49-157	
Vinyl acetate	10.0	9.28	93	46-161	
Vinyl chloride	10.0	7.33	73	53-127	
tert-Butyl alcohol	200	165	82	70-130	
Xylenes, Total	30.0	29.9	100	83-112	
Dibromochloromethane	10.0	10.1	101	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III

GC/MS VOA MATRIX SPIKE RECOVERY ★Sample not in SDG

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7337.D

Lab ID: 240-28273-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	286	29 U	280	98	64-118	
1,1,1-Trichloroethane	286	29 U	280	98	68-121	
1,1,2,2-Tetrachloroethane	286	29 U	257	90	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	286	29 U	300	105	70-152	
1,1-Dichloroethane	286	29 U	284	99	79-116	
1,1-Dichloroethene	286	6.5 J	293	100	74-135	
1,1-Dichloropropene	286	29 U	262	92	80-114	
1,2,3-Trichlorobenzene	286	29 U	173	61	45-129	
1,2,3-Trichloropropane	286	29 U	273	96	67-132	
1,2,3-Trimethylbenzene	286	140 U	292	102	70-130	
1,2,4-Trichlorobenzene	286	29 U	199	70	38-138	
1,2,4-Trimethylbenzene	286	29 U	274	96	67-124	
1,2-Dibromo-3-Chloropropane	286	57 U	215	75	32-139	
1,2-Dichlorobenzene	286	29 U	272	95	75-111	
1,2-Dichloroethane	286	29 U	318	111	68-129	
1,2-Dichloropropane	286	29 U	275	96	78-115	
1,3-Dichlorobenzene	286	29 U	275	96	73-110	
1,3-Dichloropropane	286	29 U	280	98	74-118	
1,4-Dichlorobenzene	286	29 U	269	94	75-110	
2,2-Dichloropropane	286	29 U	223	78	38-127	
2-Chloroethyl vinyl ether	286	290 U	31.5 J	11	10-150	
2-Chlorotoluene	286	29 U	268	94	69-117	
2-Hexanone	571	290 U	491	86	47-139	
Bromobenzene	286	29 U	273	96	71-116	
Bromochloromethane	286	29 U	285	100	73-121	
4-Chlorotoluene	286	29 U	266	93	71-116	
p-Isopropyltoluene	286	29 U	274	96	64-122	
Acetone	571	290 U	504	88	33-145	
Benzene	286	29 U	279	98	72-121	
Bromoform	286	29 U	264	92	32-128	
Bromomethane	286	29 U	220	77	10-186	
Carbon disulfide	286	29 U	260	91	57-147	
Carbon tetrachloride	286	29 U	289	101	59-129	
Chlorobenzene	286	29 U	273	95	80-110	
Chloroethane	286	29 U	228	80	21-165	
Chloroform	286	29 U	296	104	76-118	
Chloromethane	286	29 U	221	77	33-132	
cis-1,2-Dichloroethene	286	290	601	107	70-120	
cis-1,3-Dichloropropene	286	29 U	235	82	51-110	
Hexachlorobutadiene	286	29 U	208	73	27-132	
Dibromomethane	286	29 U	297	104	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7337.D

Lab ID: 240-28273-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	286	29 U	283	99	67-120	
Dichlorodifluoromethane	286	29 U	209	73	17-128	
Ethylbenzene	286	29 U	281	98	75-116	
1,2-Dibromoethane	286	29 U	275	96	74-113	
Naphthalene	286	29 U	162	57	15-158	
m-Xylene & p-Xylene	571	57 U	576	101	75-117	
n-Butylbenzene	286	29 U	246	86	56-127	
Isopropylbenzene	286	29 U	277	97	68-116	
n-Propylbenzene	286	29 U	276	97	64-124	
2-Butanone	571	290 U	506	89	54-129	
4-Methyl-2-pentanone	571	290 U	496	87	56-131	
sec-Butylbenzene	286	29 U	254	89	60-119	
Methyl tert-butyl ether	286	29 U	250	88	46-144	
Methylene Chloride	286	29 U	291	102	63-128	
o-Xylene	286	29 U	284	99	76-116	
Styrene	286	29 U	291	102	71-117	
tert-Butylbenzene	286	29 U	259	91	61-119	
Tetrachloroethene	286	29 U	282	99	70-117	
Toluene	286	8.5 J	289	98	78-114	
trans-1,2-Dichloroethene	286	29 U	283	99	80-119	
trans-1,3-Dichloropropene	286	29 U	235	82	46-116	
Trichloroethene	286	770	1050	101	66-120	
Trichlorofluoromethane	286	29 U	257	90	46-157	
Vinyl acetate	286	57 U	255	89	43-157	
Vinyl chloride	286	29 U	229	80	49-130	
Xylenes, Total	857	57 U	860	100	76-116	
Dibromochloromethane	286	29 U	269	94	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7338.D

Lab ID: 240-28273-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	286	282	99	1	30	64-118	
1,1,1-Trichloroethane	286	290	102	4	30	68-121	
1,1,2,2-Tetrachloroethane	286	253	89	2	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	286	293	103	2	30	70-152	
1,1-Dichloroethane	286	280	98	1	30	79-116	
1,1-Dichloroethene	286	283	97	3	30	74-135	
1,1-Dichloropropene	286	266	93	1	30	80-114	
1,2,3-Trichlorobenzene	286	181	63	4	30	45-129	
1,2,3-Trichloropropane	286	265	93	3	30	67-132	
1,2,3-Trimethylbenzene	286	285	100	2	30	70-130	
1,2,4-Trichlorobenzene	286	205	72	3	30	38-138	
1,2,4-Trimethylbenzene	286	269	94	2	30	67-124	
1,2-Dibromo-3-Chloropropane	286	201	70	7	30	32-139	
1,2-Dichlorobenzene	286	266	93	2	30	75-111	
1,2-Dichloroethane	286	319	112	0	30	68-129	
1,2-Dichloropropane	286	275	96	0	30	78-115	
1,3-Dichlorobenzene	286	266	93	4	30	73-110	
1,3-Dichloropropane	286	282	99	1	30	74-118	
1,4-Dichlorobenzene	286	265	93	1	30	75-110	
2,2-Dichloropropane	286	230	81	3	30	38-127	
2-Chloroethyl vinyl ether	286	31.4 J	11	0	30	10-150	
2-Chlorotoluene	286	268	94	0	30	69-117	
2-Hexanone	571	493	86	1	30	47-139	
Bromobenzene	286	275	96	1	30	71-116	
Bromochloromethane	286	285	100	0	30	73-121	
4-Chlorotoluene	286	265	93	0	30	71-116	
p-Isopropyltoluene	286	272	95	1	30	64-122	
Acetone	571	500	88	1	30	33-145	
Benzene	286	281	98	1	30	72-121	
Bromoform	286	263	92	0	30	32-128	
Bromomethane	286	245	86	11	30	10-186	
Carbon disulfide	286	271	95	4	30	57-147	
Carbon tetrachloride	286	303	106	5	30	59-129	
Chlorobenzene	286	279	98	2	30	80-110	
Chloroethane	286	285	100	22	30	21-165	
Chloroform	286	305	107	3	30	76-118	
Chloromethane	286	234	82	6	30	33-132	
cis-1,2-Dichloroethene	286	589	103	2	30	70-120	
cis-1,3-Dichloropropene	286	237	83	1	30	51-110	
Hexachlorobutadiene	286	207	73	0	30	27-132	
Dibromomethane	286	301	105	1	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7338.D

Lab ID: 240-28273-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	286	287	100	1	30	67-120	
Dichlorodifluoromethane	286	207	72	1	30	17-128	
Ethylbenzene	286	276	96	2	30	75-116	
1,2-Dibromoethane	286	277	97	1	30	74-113	
Naphthalene	286	169	59	4	30	15-158	
m-Xylene & p-Xylene	571	580	101	1	30	75-117	
n-Butylbenzene	286	241	84	2	30	56-127	
Isopropylbenzene	286	281	98	1	30	68-116	
n-Propylbenzene	286	271	95	2	30	64-124	
2-Butanone	571	509	89	1	30	54-129	
4-Methyl-2-pentanone	571	501	88	1	30	56-131	
sec-Butylbenzene	286	250	88	1	30	60-119	
Methyl tert-butyl ether	286	255	89	2	30	46-144	
Methylene Chloride	286	290	102	0	30	63-128	
o-Xylene	286	293	103	3	30	76-116	
Styrene	286	298	104	2	30	71-117	
tert-Butylbenzene	286	258	90	1	30	61-119	
Tetrachloroethene	286	281	98	0	30	70-117	
Toluene	286	287	98	1	30	78-114	
trans-1,2-Dichloroethene	286	287	100	1	30	80-119	
trans-1,3-Dichloropropene	286	239	84	2	30	46-116	
Trichloroethene	286	1040	97	1	30	66-120	
Trichlorofluoromethane	286	279	98	8	30	46-157	
Vinyl acetate	286	263	92	3	30	43-157	
Vinyl chloride	286	233	82	2	30	49-130	
Xylenes, Total	857	873	102	2	30	76-116	
Dibromochloromethane	286	271	95	1	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-DUP03	240-28098-1	90	96	92	78
DR-DPT-DUP04	240-28098-2	95	99	93	77
DR-DPT-32-30	240-28098-3	90	97	94	77
DR-DPT-32-35	240-28098-4	91	96	91	76
DR-DPT-32-40	240-28098-5	103	105	85	76
DR-DPT-32-45	240-28098-6	89	95	95	79
DR-DPT-32-50	240-28098-7	109	113	92	82
DR-DPT-36-10	240-28098-8	92	97	93	78
DR-DPT-36-30	240-28098-9	89	96	93	76
DR-DPT-36-35	240-28098-10	92	99	91	73
DR-DPT-36-40	240-28098-11	92	99	91	72
TB-081613	240-28098-12	94	98	93	75
DR-DPT-36-45	240-28098-13	92	98	93	75
DR-DPT-26-48	240-28098-14	91	98	93	75
	MB 240-99030/6	92	98	91	77
	MB 240-99157/6	92	98	93	77
	MB 240-99545/6	111	116	93	87
	LCS 240-99030/4	88	97	96	84
	LCS 240-99157/4	87	99	96	87
	LCS 240-99545/4	100	98	94	99
	240-28089-B-4 MS	88	100	95	86
	240-28069-C-3 MS	93	102	96	88
	240-28273-B-1 MS	95	96	90	96
	240-28089-B-4 MSD	87	98	94	84
	240-28069-C-3 MSD	88	100	95	88
	240-28273-B-1 MSD	96	94	87	97

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab File ID: BFB5262.D BFB Injection Date: 05/28/2013

Instrument ID: A3UX10 BFB Injection Time: 13:16

Analysis Batch No.: 87495

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	52.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	98.2	
175	5.0 - 9.0 % of mass 174	6.7	(6.9)1
176	95.0 - 101.0 % of mass 174	93.5	(95.2)1
177	5.0 - 9.0 % of mass 176	6.1	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-87495/8	UXX4658.D	05/28/2013	15:50
	STDA9 240-87495/9	UXX4659.D	05/28/2013	16:11
	STDA9 240-87495/10	UXX4660.D	05/28/2013	16:32
	STDA9 240-87495/11	UXX4661.D	05/28/2013	16:53
	STDA9 240-87495/12	UXX4662.D	05/28/2013	17:15
	STDA9 240-87495/13	UXX4663.D	05/28/2013	17:36

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-87495/13	UXX4663.D
Level 2	STDA9 240-87495/12	UXX4662.D
Level 3	STDA9 240-87495/11	UXX4661.D
Level 4	STDA9 240-87495/10	UXX4660.D
Level 5	STDA9 240-87495/9	UXX4659.D
Level 6	STDA9 240-87495/8	UXX4658.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.9351 0.7200	0.8183	0.9669	0.7435	0.8522	Ave		0.8393				12.0		15.0			
Ethyl ether	0.3526 0.2524	0.2870	0.3279	0.2696	0.3339	Ave		0.3039				13.0		15.0			
3-Chloro-1-propene	0.1632 0.1612	0.1539	0.1609	0.1639	0.1752	Ave		0.1630				4.2		15.0			
Diisopropyl ether	0.2436 0.2941	0.2470	0.2427	0.2569	0.2816	Ave		0.2610				8.3		15.0			
2-Chloro-1,3-butadiene	0.4470 0.5692	0.4651	0.4677	0.4894	0.5665	Ave		0.5008				11.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.7474 0.9445	0.7998	0.8028	0.8547	0.9344	Ave		0.8473				9.3		15.0			
Propionitrile	0.0183 0.0231	0.0204	0.0273	0.0252	0.0240	Ave		0.0230				14.0		15.0			
Ethyl acetate	0.1590 0.1647	0.1524	0.2142	0.1705	0.1575	Ave		0.1697				13.0		15.0			
Methacrylonitrile	0.1102 0.1289	0.1319	0.1213	0.1325	0.1332	Ave		0.1263				7.1		15.0			
Isobutyl alcohol	0.0076 0.0057	0.0068	0.0075	0.0083	0.0073	Ave		0.0072				12.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6746 0.8156	0.6951	0.7166	0.7363	0.8000	Ave		0.7397				7.7		15.0			
n-Heptane	0.0683 0.0638	0.0609	0.0626	0.0604	0.0641	Ave		0.0634				4.5		15.0			
n-Butanol	0.0050	0.0051	0.0047	0.0072	0.0067	Lin	-0.083	0.0070							0.9920		0.9900
Methyl methacrylate	0.1815 0.1582	0.1559	0.1663	0.1628	0.1584	Ave		0.1639				5.8		15.0			
2-Nitropropane	0.0181 0.0163	0.0192	0.0150	0.0189	0.0149	Ave		0.0170				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0764 0.0641	0.0838	0.0840	0.0919	0.0886	Ave		0.0815				12.0		15.0			
1,2,3-Trimethylbenzene	2.1912 2.8021	2.2708	2.3128	2.4773	2.5677	Ave		2.4370				9.3		15.0			
2-Methylnaphthalene	1.0000 0.8868	0.9617	1.0575	1.0106	1.0960	Ave		1.0021				7.3		15.0			
n-Butyl acetate	0.1536 0.1805	0.1506	0.1861	0.1673	0.1756	Ave		0.1690				8.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab File ID: BFB5311.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX10 BFB Injection Time: 12:26

Analysis Batch No.: 92306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	86.8	
175	5.0 - 9.0 % of mass 174	6.2	(7.1)1
176	95.0 - 101.0 % of mass 174	86.3	(99.4)1
177	5.0 - 9.0 % of mass 176	5.5	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92306/2	UXX5740.D	07/02/2013	12:55
	STD8260 240-92306/3	UXX5741.D	07/02/2013	13:16
	STD8260 240-92306/4	UXX5742.D	07/02/2013	13:37
	STD8260 240-92306/5	UXX5743.D	07/02/2013	13:59
	STD8260 240-92306/6	UXX5744.D	07/02/2013	14:20
	STD8260 240-92306/7	UXX5745.D	07/02/2013	14:41
	ICV 240-92306/8	UXX5746.D	07/02/2013	15:03

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92306/7	UXX5745.D
Level 2	STD8260 240-92306/6	UXX5744.D
Level 3	STD8260 240-92306/5	UXX5743.D
Level 4	STD8260 240-92306/4	UXX5742.D
Level 5	STD8260 240-92306/3	UXX5741.D
Level 6	STD8260 240-92306/2	UXX5740.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2977 0.2838	0.2577	0.2748	0.2528	0.2566	Ave		0.2706				6.6		15.0			
Chloromethane	0.4636 0.3885	0.4208	0.4187	0.3892	0.3928	Ave		0.4122			0.1000	7.1		15.0			
Vinyl chloride	0.3817 0.3523	0.3628	0.3635	0.3478	0.3489	Ave		0.3595				3.6		15.0			
Bromomethane	0.1738 0.1513	0.1661	0.1687	0.1771	0.1716	Ave		0.1681				5.4		15.0			
Chloroethane	0.2457 0.2275	0.2302	0.2304	0.2310	0.2376	Ave		0.2338				2.9		15.0			
Trichlorofluoromethane	0.3575 0.3719	0.3350	0.3525	0.3679	0.3820	Ave		0.3611				4.6		15.0			
Acrolein	0.0359 0.0431	0.0395	0.0411	0.0449	0.0462	Ave		0.0418	X			9.0		15.0			
1,1-Dichloroethene	0.3190 0.2928	0.2948	0.2913	0.2993	0.3010	Ave		0.2997				3.4		15.0			
Acetone	0.0740 0.0622	0.0776	0.0718	0.0736	0.0689	Ave		0.0713				7.4		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2062 0.2056	0.2022	0.2152	0.2144	0.2141	Ave		0.2096				2.7		15.0			
Iodomethane	0.4548 0.4274	0.4570	0.4317	0.4435	0.4405	Ave		0.4425				2.7		15.0			
Carbon disulfide	0.8923 0.9201	0.8872	0.8823	0.9357	0.9395	Ave		0.9095				2.8		15.0			
Acetonitrile	0.0167 0.0157	0.0178	0.0214	0.0237	0.0177	Qua	0.0061	0.0220	X 0						0.9940		0.9900
Methyl acetate	0.1969 0.2006	0.2062	0.2102	0.2165	0.2151	Ave		0.2076				3.8		15.0			
Methylene Chloride	0.7288 0.3199	0.5369	0.3954	0.3695	0.3438	Lin1	0.4289	0.3150							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0095 0.0104	0.0120	0.0145	0.0164	0.0130	Qua	-0.124	0.0171	0						0.9970		0.9900
Acrylonitrile	0.0905 0.1021	0.0983	0.1034	0.1068	0.1082	Ave		0.1016				6.4		15.0			
Methyl tert-butyl ether	0.7590 0.7679	0.7484	0.7512	0.8058	0.8208	Ave		0.7755				3.9		15.0			
trans-1,2-Dichloroethene	0.3358 0.3195	0.3308	0.3296	0.3254	0.3340	Ave		0.3292				1.8		15.0			
Hexane	0.0712 0.0637	0.0646	0.0668	0.0661	0.0671	Ave		0.0666				3.9		15.0			
1,1-Dichloroethane	0.5578 0.5246	0.5449	0.5273	0.5247	0.5369	Ave		0.5360			0.1000	2.5		15.0			
Vinyl acetate	0.0458 0.0460	0.0362	0.0441	0.0416	0.0442	Ave		0.0430				8.6		15.0			
2-Butanone	0.0991 0.0997	0.0968	0.1003	0.0974	0.1064	Ave		0.0999				3.4		15.0			
cis-1,2-Dichloroethene	0.3285 0.3322	0.3571	0.3290	0.3348	0.3453	Ave		0.3378				3.3		15.0			
2,2-Dichloropropane	0.2688 0.2905	0.2819	0.2776	0.2821	0.3040	Ave		0.2842				4.2		15.0			
Bromochloromethane	0.1521 0.1504	0.1506	0.1534	0.1499	0.1524	Ave		0.1515				0.9		15.0			
Tetrahydrofuran	0.0772 0.0698	0.0789	0.0767	0.0752	0.0716	Ave		0.0749				4.7		15.0			
Chloroform	0.4907 0.4900	0.5020	0.4890	0.4920	0.4962	Ave		0.4933				1.0		15.0			
1,1,1-Trichloroethane	0.4106 0.3726	0.3778	0.3695	0.3890	0.3851	Ave		0.3841				3.9		15.0			
Cyclohexane	0.5528 0.5297	0.5227	0.5349	0.5435	0.5429	Ave		0.5378				2.0		15.0			
1,1-Dichloropropene	0.3609 0.3601	0.3698	0.3664	0.3618	0.3692	Ave		0.3647				1.2		15.0			
Carbon tetrachloride	0.2610 0.2765	0.2656	0.2674	0.2761	0.2887	Ave		0.2725				3.7		15.0			
1,2-Dichloroethane	0.3474 0.3376	0.3583	0.3351	0.3500	0.3553	Ave		0.3473				2.7		15.0			
Benzene	1.1681 1.1119	1.1203	1.0964	1.1265	1.1340	Ave		1.1262				2.2		15.0			
Trichloroethene	0.3214 0.2780	0.2821	0.2900	0.2862	0.2843	Ave		0.2904				5.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloropropane	0.2454 0.2502	0.2581	0.2466	0.2561	0.2683	Ave		0.2541				3.4		15.0			
Methylcyclohexane	0.4919 0.4866	0.4934	0.4893	0.5052	0.5090	Ave		0.4959				1.8		15.0			
Dibromomethane	0.1412 0.1445	0.1506	0.1469	0.1502	0.1477	Ave		0.1468				2.4		15.0			
1,4-Dioxane	0.0014 0.0009	0.0011	0.0016	0.0020	0.0013	Ave		0.0014	>			26.0	*	15.0			
Bromodichloromethane	0.2890 0.3042	0.2800	0.2808	0.2937	0.3002	Ave		0.2913				3.4		15.0			
2-Chloroethyl vinyl ether	0.1328 0.1460	0.1268	0.1340	0.1400	0.1524	Ave		0.1387				6.8		15.0			
cis-1,3-Dichloropropene	0.3136 0.3654	0.2925	0.3234	0.3329	0.3608	Ave		0.3314				8.4		15.0			
4-Methyl-2-pentanone	0.1851 0.2307	0.1947	0.2072	0.2263	0.2356	Ave		0.2133				9.7		15.0			
Toluene	1.5717 1.7749	1.5621	1.5832	1.5919	1.6670	Ave		1.6251				5.1		15.0			
trans-1,3-Dichloropropene	0.3281 0.4436	0.3301	0.3424	0.3783	0.4187	Ave		0.3735				13.0		15.0			
Ethyl methacrylate	0.3469 0.4669	0.3719	0.3886	0.4197	0.4555	Ave		0.4082				12.0		15.0			
1,1,2-Trichloroethane	0.3016 0.3098	0.3088	0.3075	0.2994	0.3063	Ave		0.3056				1.4		15.0			
1,3-Dichloropropane	0.5636 0.5513	0.5066	0.5178	0.5309	0.5453	Ave		0.5359				4.0		15.0			
Tetrachloroethene	0.3249 0.3137	0.3109	0.3123	0.3155	0.3171	Ave		0.3157				1.6		15.0			
2-Hexanone	0.1784 0.2174	0.1735	0.1912	0.2073	0.2193	Ave		0.1979				10.0		15.0			
Dibromochloromethane	0.2360 0.2992	0.2543	0.2535	0.2707	0.2882	Ave		0.2670				8.9		15.0			
1,2-Dibromoethane	0.2969 0.3100	0.2975	0.2857	0.3063	0.3126	Ave		0.3015				3.3		15.0			
Chlorobenzene	1.1153 1.1370	1.1006	1.0569	1.0906	1.1038	Ave		1.1007			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2824 0.3322	0.2829	0.2918	0.3108	0.3194	Ave		0.3032				6.8		15.0			
Ethylbenzene	0.5758 0.6262	0.5863	0.6011	0.6014	0.6212	Ave		0.6020				3.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.7270 0.8215	0.7355	0.7415	0.7771	0.8022	Ave		0.7675				5.1		15.0			
o-Xylene	0.6796 0.7942	0.7047	0.7272	0.7639	0.7596	Ave		0.7382				5.7		15.0			
Styrene	1.1077 1.3987	1.1933	1.1883	1.2806	1.3155	Ave		1.2474				8.4		15.0			
Bromoform	0.1365 0.1881	0.1411	0.1461	0.1592	0.1772	Ave		0.1580			0.1000	13.0		15.0			
Isopropylbenzene	1.7511 2.0343	1.7718	1.8148	1.9530	1.9719	Ave		1.8828				6.3		15.0			
1,1,2,2-Tetrachloroethane	0.7449 0.7423	0.7656	0.8018	0.7659	0.7719	Ave		0.7654			0.3000	2.8		15.0			
Bromobenzene	0.8881 0.8401	0.8893	0.8519	0.8109	0.8110	Ave		0.8485				4.1		15.0			
1,2,3-Trichloropropane	0.2528 0.2485	0.2436	0.2471	0.2523	0.2472	Ave		0.2486				1.4		15.0			
trans-1,4-Dichloro-2-butene	0.1594 0.2065	0.1645	0.1863	0.1935	0.1991	Ave		0.1849				10.0		15.0			
n-Propylbenzene	0.8836 0.9348	0.9225	0.9442	0.9060	0.9061	Ave		0.9162				2.4		15.0			
2-Chlorotoluene	0.8471 0.8107	0.8035	0.8145	0.8068	0.8122	Ave		0.8158				1.9		15.0			
1,3,5-Trimethylbenzene	2.5762 2.8611	2.6002	2.7221	2.7556	2.8139	Ave		2.7215				4.2		15.0			
4-Chlorotoluene	0.8988 0.9081	0.8802	0.8823	0.8848	0.8823	Ave		0.8894				1.3		15.0			
tert-Butylbenzene	2.5038 2.4500	2.2239	2.4167	2.3292	2.3560	Ave		2.3799				4.2		15.0			
1,2,4-Trimethylbenzene	2.6043 2.8929	2.6775	2.7491	2.8000	2.8183	Ave		2.7570				3.8		15.0			
sec-Butylbenzene	3.0300 3.4431	3.1666	3.3039	3.3542	3.3916	Ave		3.2816				4.7		15.0			
1,3-Dichlorobenzene	1.5092 1.5056	1.5998	1.5710	1.5273	1.5059	Ave		1.5365				2.6		15.0			
p-Isopropyltoluene	2.4424 2.7807	2.5538	2.6635	2.6618	2.7434	Ave		2.6409				4.7		15.0			
1,4-Dichlorobenzene	1.7229 1.6045	1.6252	1.6225	1.5715	1.5870	Ave		1.6223				3.3		15.0			
n-Butylbenzene	2.0630 2.2382	2.0945	2.2927	2.3221	2.3183	Ave		2.2215				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4074 1.3553	1.4151	1.4245	1.4040	1.3915	Ave		1.3996				1.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0897 0.0915	0.0866	0.1008	0.1037	0.0925	Ave		0.0941				7.1		15.0			
1,3,5-Trichlorobenzene	0.9389 0.8233	0.9547	0.9599	0.9476	0.8670	Ave		0.9152				6.2		15.0			
1,2,4-Trichlorobenzene	0.8510 0.7437	0.8164	0.8427	0.8344	0.7483	Ave		0.8061				5.9		15.0			
Hexachlorobutadiene	0.2820 0.2374	0.2926	0.3073	0.2714	0.2509	Ave		0.2736				9.5		15.0			
Naphthalene	1.9175 1.8952	1.9376	2.0220	2.1068	1.9312	Ave		1.9684				4.1		15.0			
1,2,3-Trichlorobenzene	0.7657 0.6768	0.7464	0.7504	0.7341	0.6861	Ave		0.7266				5.0		15.0			
Dibromofluoromethane (Surr)	0.2502 0.2509	0.2370	0.2459	0.2475	0.2591	Ave		0.2484				2.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3197 0.2982	0.2804	0.2943	0.2970	0.3023	Ave		0.2987				4.3		15.0			
Toluene-d8 (Surr)	1.3686 1.4472	1.2543	1.3081	1.3123	1.3963	Ave		1.3478				5.2		15.0			
4-Bromofluorobenzene (Surr)	0.5086 0.5764	0.5161	0.5353	0.5693	0.5900	Ave		0.5493				6.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab File ID: BFB5369.D BFB Injection Date: 08/26/2013

Instrument ID: A3UX10 BFB Injection Time: 23:58

Analysis Batch No.: 99030

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.4	
75	30.0 - 60.0 % of mass 95	51.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	76.6	
175	5.0 - 9.0 % of mass 174	6.1	(8.0)1
176	95.0 - 101.0 % of mass 174	74.6	(97.4)1
177	5.0 - 9.0 % of mass 176	4.4	(5.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-99030/2	UXX5496.D	08/27/2013	00:19
	CCV 240-99030/3	UXX5497.D	08/27/2013	00:40
	LCS 240-99030/4	UXX5498.D	08/27/2013	01:02
	MB 240-99030/6	UXX5500.D	08/27/2013	01:44
DR-DPT-DUP03	240-28098-1	UXX5507.D	08/27/2013	04:13
DR-DPT-DUP04	240-28098-2	UXX5508.D	08/27/2013	04:35
DR-DPT-32-30	240-28098-3	UXX5509.D	08/27/2013	04:56
DR-DPT-32-35	240-28098-4	UXX5510.D	08/27/2013	05:18
DR-DPT-36-10	240-28098-8	UXX5511.D	08/27/2013	05:39
DR-DPT-36-35	240-28098-10	UXX5513.D	08/27/2013	06:23
DR-DPT-36-40	240-28098-11	UXX5514.D	08/27/2013	06:44
TB-081613	240-28098-12	UXX5515.D	08/27/2013	07:06
DR-DPT-36-45	240-28098-13	UXX5516.D	08/27/2013	07:28
DR-DPT-26-48	240-28098-14	UXX5517.D	08/27/2013	07:50
	240-28089-B-4 MS	UXX5521.D	08/27/2013	09:17
	240-28089-B-4 MSD	UXX5522.D	08/27/2013	09:39

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCVIS 240-99030/2 Calibration Date: 08/27/2013 00:19

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5496.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2726		1.00	0.0100	0.8	50.0
Chloromethane	Ave	0.4122	0.3844	0.1000	1.00	0.0100	-6.8	50.0
Vinyl chloride	Ave	0.3595	0.3748		1.00	0.0100	4.3	20.0
Bromomethane	Ave	0.1681	0.1235		1.00	0.0100	-26.5	50.0
Chloroethane	Ave	0.2338	0.1734		1.00	0.0100	-25.8	50.0
Trichlorofluoromethane	Ave	0.3611	0.3072		1.00	0.0100	-14.9	50.0
Acrolein	Ave	0.0418	0.0204		20.0	0.100	-51.1	50.0
1,1-Dichloroethene	Ave	0.2997	0.2860		1.00	0.0100	-4.6	20.0
Acetone	Ave	0.0713	0.0871		10.0	0.0200	22.1	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.1977		1.00	0.0100	-5.7	50.0
Iodomethane	Ave	0.4425	0.4456		1.00	0.0100	0.7	50.0
Carbon disulfide	Ave	0.9095	0.9601		1.00	0.0100	5.6	50.0
Acetonitrile	Qua		0.0189		20.0	0.100	-8.5	50.0
Methyl acetate	Ave	0.2076	0.2354		10.0	0.0200	13.4	50.0
Methylene Chloride	Lin1		0.4033		1.00	0.0100	14.4	50.0
tert-Butyl alcohol	Qua		0.0115		50.0	0.200	-23.4	50.0
Acrylonitrile	Ave	0.1016	0.1108		20.0	0.0200	9.1	50.0
Methyl tert-butyl ether	Ave	0.7755	0.8647		1.00	0.0100	11.5	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3359		1.00	0.0100	2.0	50.0
Hexane	Ave	0.0666	0.0644		1.00	0.0100	-3.3	20.0
1,1-Dichloroethane	Ave	0.5360	0.5920	0.1000	1.00	0.0100	10.4	50.0
Vinyl acetate	Ave	0.0430	0.0280		2.00	0.0100	-34.9	50.0
2-Butanone	Ave	0.0999	0.1133		10.0	0.0200	13.4	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3461		1.00	0.0100	2.4	50.0
2,2-Dichloropropane	Ave	0.2842	0.3600		1.00	0.0100	26.7	50.0
Bromochloromethane	Ave	0.1515	0.1547		1.00	0.0100	2.1	50.0
Chloroform	Ave	0.4933	0.5486		1.00	0.0100	11.2	20.0
Tetrahydrofuran	Ave	0.0749	0.0846		5.00	0.0100	13.0	50.0
1,1,1-Trichloroethane	Ave	0.3841	0.4748		1.00	0.0100	23.6	50.0
Cyclohexane	Ave	0.5378	0.5776		1.00	0.0100	7.4	50.0
1,1-Dichloropropene	Ave	0.3647	0.3767		1.00	0.0100	3.3	50.0
Carbon tetrachloride	Ave	0.2725	0.3808		1.00	0.0100	39.7	50.0
1,2-Dichloroethane	Ave	0.3473	0.4192		1.00	0.0100	20.7	50.0
Benzene	Ave	1.126	1.150		1.00	0.0100	2.1	50.0
Trichloroethene	Ave	0.2904	0.2765		1.00	0.0100	-4.8	50.0
1,2-Dichloropropane	Ave	0.2541	0.2821		1.00	0.0100	11.0	20.0
Methylcyclohexane	Ave	0.4959	0.4777		1.00	0.0100	-3.7	50.0
Dibromomethane	Ave	0.1468	0.1574		1.00	0.0100	7.2	50.0
1,4-Dioxane	Ave	0.0014	0.0010		50.0	0.500	-28.7	50.0
Bromodichloromethane	Ave	0.2913	0.3585		1.00	0.0100	23.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCVIS 240-99030/2 Calibration Date: 08/27/2013 00:19

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5496.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1384		10.0	0.0200	-0.2	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3713		1.00	0.0100	12.0	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2584		10.0	0.0200	21.2	50.0
Toluene	Ave	1.625	1.858		1.00	0.0100	14.3	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4581		1.00	0.0100	22.6	50.0
Ethyl methacrylate	Ave	0.4082	0.4579		1.00	0.0100	12.2	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3229		1.00	0.0100	5.7	50.0
1,3-Dichloropropane	Ave	0.5359	0.5983		1.00	0.0100	11.6	50.0
Tetrachloroethene	Ave	0.3157	0.3043		1.00	0.0100	-3.6	50.0
2-Hexanone	Ave	0.1979	0.2299		10.0	0.0200	16.2	50.0
Dibromochloromethane	Ave	0.2670	0.3548		1.00	0.0100	32.9	50.0
1,2-Dibromoethane	Ave	0.3015	0.3144		1.00	0.0100	4.3	50.0
Chlorobenzene	Ave	1.101	1.055	0.3000	1.00	0.0100	-4.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3949		1.00	0.0100	30.2	50.0
Ethylbenzene	Ave	0.6020	0.5701		1.00	0.0100	-5.3	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7139		2.00	0.0200	-7.0	50.0
o-Xylene	Ave	0.7382	0.7038		1.00	0.0100	-4.7	50.0
Styrene	Ave	1.247	1.088		1.00	0.0100	-12.8	50.0
Bromoform	Ave	0.1580	0.1969	0.1000	1.00	0.0100	24.6	50.0
Isopropylbenzene	Ave	1.883	1.777		1.00	0.0100	-5.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.8113	0.3000	1.00	0.0100	6.0	50.0
Bromobenzene	Ave	0.8485	0.7754		1.00	0.0100	-8.6	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2543		1.00	0.0100	2.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.0507		1.00	0.0100	-72.6*	50.0
n-Propylbenzene	Ave	0.9162	0.8625		1.00	0.0100	-5.9	50.0
2-Chlorotoluene	Ave	0.8158	0.7701		1.00	0.0100	-5.6	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.760		1.00	0.0100	1.4	50.0
4-Chlorotoluene	Ave	0.8894	0.7839		1.00	0.0100	-11.9	50.0
tert-Butylbenzene	Ave	2.380	2.183		1.00	0.0100	-8.3	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.783		1.00	0.0100	0.9	50.0
sec-Butylbenzene	Ave	3.282	3.113		1.00	0.0100	-5.1	50.0
1,3-Dichlorobenzene	Ave	1.536	1.423		1.00	0.0100	-7.4	50.0
p-Isopropyltoluene	Ave	2.641	2.529		1.00	0.0100	-4.2	50.0
1,4-Dichlorobenzene	Ave	1.622	1.464		1.00	0.0100	-9.8	50.0
n-Butylbenzene	Ave	2.221	2.117		1.00	0.0100	-4.7	50.0
1,2-Dichlorobenzene	Ave	1.400	1.409		1.00	0.0100	0.7	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.1308		2.00	0.0100	39.0	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.8230		1.00	0.0100	-10.1	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.7003		1.00	0.0100	-13.1	50.0
Hexachlorobutadiene	Ave	0.2736	0.2166		1.00	0.0100	-20.8	50.0
Naphthalene	Ave	1.968	1.883		1.00	0.0100	-4.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCVIS 240-99030/2 Calibration Date: 08/27/2013 00:19

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5496.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.6304		1.00	0.0100	-13.2	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2284		0.00919	0.0100	-8.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.3002		0.0100	0.0100	0.5	50.0
Toluene-d8 (Surr)	Ave	1.348	1.321		0.00980	0.0100	-2.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4615		0.00840	0.0100	-16.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCV 240-99030/3 Calibration Date: 08/27/2013 00:40

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX5497.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.4676		2.00	0.0100	-44.3	50.0
Ethyl ether	Ave	0.3039	0.2412		2.00	0.0100	-20.6	50.0
3-Chloro-1-propene	Ave	0.1630	0.1526		2.00	0.0100	-6.4	50.0
Diisopropyl ether	Ave	0.2610	0.2610		10.0	0.0500	0.0	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5186		2.00	0.0100	3.5	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8877		5.00	0.0100	4.8	50.0
Propionitrile	Ave	0.0230	0.0287		4.00	0.0200	24.6	50.0
Ethyl acetate	Ave	0.1697	0.1834		4.00	0.0200	8.0	50.0
Methacrylonitrile	Ave	0.1263	0.1573		2.00	0.0100	24.5	50.0
Isobutyl alcohol	Ave	0.0072	0.0084		50.0	0.200	16.7	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6911		5.00	0.0100	-6.6	50.0
n-Heptane	Ave	0.0634	0.0511		1.00	0.0100	-19.4	50.0
n-Butanol	Lin		0.0061		50.0	0.200	-6.8	50.0
Methyl methacrylate	Ave	0.1639	0.2118		2.00	0.0100	29.2	50.0
2-Nitropropane	Ave	0.0170	0.0573		2.00	0.0200	235.9*	50.0
Cyclohexanone	Ave	0.0815	0.0503		20.0	0.100	-38.3	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.735		0.0112	0.0100	12.2	50.0
2-Methylnaphthalene	Ave	1.002	0.8306		5.00	0.0200	-17.1	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab File ID: BFB5370.D BFB Injection Date: 08/27/2013

Instrument ID: A3UX10 BFB Injection Time: 12:38

Analysis Batch No.: 99157

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.3	
75	30.0 - 60.0 % of mass 95	53.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	77.0	
175	5.0 - 9.0 % of mass 174	6.3	(8.2)1
176	95.0 - 101.0 % of mass 174	75.0	(97.4)1
177	5.0 - 9.0 % of mass 176	4.6	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-99157/2	UXX5523.D	08/27/2013	13:03
	CCV 240-99157/3	UXX5524.D	08/27/2013	13:24
	LCS 240-99157/4	UXX5525.D	08/27/2013	13:46
	MB 240-99157/6	UXX5527.D	08/27/2013	14:30
DR-DPT-32-45	240-28098-6	UXX5541.D	08/27/2013	19:46
DR-DPT-36-30	240-28098-9	UXX5543.D	08/27/2013	20:28
	240-28069-C-3 MS	UXX5547.D	08/27/2013	21:53
	240-28069-C-3 MSD	UXX5548.D	08/27/2013	22:15

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCVIS 240-99157/2 Calibration Date: 08/27/2013 13:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5523.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.3027		1.00	0.0100	11.9	50.0
Chloromethane	Ave	0.4122	0.4314	0.1000	1.00	0.0100	4.6	50.0
Vinyl chloride	Ave	0.3595	0.3607		1.00	0.0100	0.3	20.0
Bromomethane	Ave	0.1681	0.1363		1.00	0.0100	-18.9	50.0
Chloroethane	Ave	0.2338	0.1552		1.00	0.0100	-33.6	50.0
Trichlorofluoromethane	Ave	0.3611	0.3504		1.00	0.0100	-3.0	50.0
Acrolein	Ave	0.0418	0.0240		20.0	0.100	-42.5	50.0
1,1-Dichloroethene	Ave	0.2997	0.2843		1.00	0.0100	-5.1	20.0
Acetone	Ave	0.0713	0.0733		10.0	0.0200	2.8	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2197		1.00	0.0100	4.8	50.0
Iodomethane	Ave	0.4425	0.4139		1.00	0.0100	-6.5	50.0
Carbon disulfide	Ave	0.9095	0.9453		1.00	0.0100	3.9	50.0
Acetonitrile	Qua		0.0160		20.0	0.100	-23.2	50.0
Methyl acetate	Ave	0.2076	0.2347		10.0	0.0200	13.1	50.0
Methylene Chloride	Lin1		0.3673		1.00	0.0100	3.0	50.0
tert-Butyl alcohol	Qua		0.0099		50.0	0.200	-34.6	50.0
Acrylonitrile	Ave	0.1016	0.1040		20.0	0.0200	2.4	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7807		1.00	0.0100	0.7	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3235		1.00	0.0100	-1.7	50.0
Hexane	Ave	0.0666	0.0654		1.00	0.0100	-1.8	20.0
1,1-Dichloroethane	Ave	0.5360	0.5790	0.1000	1.00	0.0100	8.0	50.0
Vinyl acetate	Ave	0.0430	0.0339		2.00	0.0100	-21.2	50.0
2-Butanone	Ave	0.0999	0.1098		10.0	0.0200	9.9	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3341		1.00	0.0100	-1.1	50.0
2,2-Dichloropropane	Ave	0.2842	0.3914		1.00	0.0100	37.7	50.0
Bromochloromethane	Ave	0.1515	0.1486		1.00	0.0100	-1.9	50.0
Tetrahydrofuran	Ave	0.0749	0.0755		5.00	0.0100	0.8	50.0
Chloroform	Ave	0.4933	0.5409		1.00	0.0100	9.7	20.0
1,1,1-Trichloroethane	Ave	0.3841	0.4688		1.00	0.0100	22.1	50.0
Cyclohexane	Ave	0.5378	0.5888		1.00	0.0100	9.5	50.0
1,1-Dichloropropene	Ave	0.3647	0.3903		1.00	0.0100	7.0	50.0
Carbon tetrachloride	Ave	0.2725	0.3832		1.00	0.0100	40.6	50.0
1,2-Dichloroethane	Ave	0.3473	0.4117		1.00	0.0100	18.5	50.0
Benzene	Ave	1.126	1.135		1.00	0.0100	0.8	50.0
Trichloroethene	Ave	0.2904	0.2729		1.00	0.0100	-6.0	50.0
1,2-Dichloropropane	Ave	0.2541	0.2748		1.00	0.0100	8.1	20.0
Methylcyclohexane	Ave	0.4959	0.4970		1.00	0.0100	0.2	50.0
1,4-Dioxane	Ave	0.0014	0.0010		50.0	0.500	-31.5	50.0
Dibromomethane	Ave	0.1468	0.1504		1.00	0.0100	2.4	50.0
Bromodichloromethane	Ave	0.2913	0.3594		1.00	0.0100	23.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCVIS 240-99157/2 Calibration Date: 08/27/2013 13:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5523.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1406		10.0	0.0200	1.4	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3850		1.00	0.0100	16.2	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2498		10.0	0.0200	17.1	50.0
Toluene	Ave	1.625	1.818		1.00	0.0100	11.9	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4811		1.00	0.0100	28.8	50.0
Ethyl methacrylate	Ave	0.4082	0.4598		1.00	0.0100	12.6	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3168		1.00	0.0100	3.7	50.0
1,3-Dichloropropane	Ave	0.5359	0.5944		1.00	0.0100	10.9	50.0
Tetrachloroethene	Ave	0.3157	0.3300		1.00	0.0100	4.5	50.0
2-Hexanone	Ave	0.1979	0.2262		10.0	0.0200	14.3	50.0
Dibromochloromethane	Ave	0.2670	0.3658		1.00	0.0100	37.0	50.0
1,2-Dibromoethane	Ave	0.3015	0.3169		1.00	0.0100	5.1	50.0
Chlorobenzene	Ave	1.101	1.107	0.3000	1.00	0.0100	0.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3884		1.00	0.0100	28.1	50.0
Ethylbenzene	Ave	0.6020	0.6104		1.00	0.0100	1.4	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7694		2.00	0.0200	0.2	50.0
o-Xylene	Ave	0.7382	0.7311		1.00	0.0100	-1.0	50.0
Styrene	Ave	1.247	1.150		1.00	0.0100	-7.8	50.0
Bromoform	Ave	0.1580	0.2002	0.1000	1.00	0.0100	26.7	50.0
Isopropylbenzene	Ave	1.883	1.872		1.00	0.0100	-0.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.8298	0.3000	1.00	0.0100	8.4	50.0
Bromobenzene	Ave	0.8485	0.8249		1.00	0.0100	-2.8	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2683		1.00	0.0100	7.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1545		1.00	0.0100	-16.4	50.0
n-Propylbenzene	Ave	0.9162	0.9169		1.00	0.0100	0.0	50.0
2-Chlorotoluene	Ave	0.8158	0.8609		1.00	0.0100	5.5	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.972		1.00	0.0100	9.2	50.0
4-Chlorotoluene	Ave	0.8894	0.8633		1.00	0.0100	-2.9	50.0
tert-Butylbenzene	Ave	2.380	2.320		1.00	0.0100	-2.5	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.984		1.00	0.0100	8.2	50.0
sec-Butylbenzene	Ave	3.282	3.387		1.00	0.0100	3.2	50.0
1,3-Dichlorobenzene	Ave	1.536	1.542		1.00	0.0100	0.3	50.0
p-Isopropyltoluene	Ave	2.641	2.742		1.00	0.0100	3.8	50.0
1,4-Dichlorobenzene	Ave	1.622	1.585		1.00	0.0100	-2.3	50.0
n-Butylbenzene	Ave	2.221	2.333		1.00	0.0100	5.0	50.0
1,2-Dichlorobenzene	Ave	1.400	1.498		1.00	0.0100	7.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.1250		2.00	0.0100	32.7	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.9150		1.00	0.0100	-0.0	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.7571		1.00	0.0100	-6.1	50.0
Hexachlorobutadiene	Ave	0.2736	0.2406		1.00	0.0100	-12.1	50.0
Naphthalene	Ave	1.968	1.869		1.00	0.0100	-5.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCVIS 240-99157/2 Calibration Date: 08/27/2013 13:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5523.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.6969		1.00	0.0100	-4.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2191		0.00882	0.0100	-11.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2923		0.00979	0.0100	-2.1	50.0
Toluene-d8 (Surr)	Ave	1.348	1.249		0.00927	0.0100	-7.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4462		0.00812	0.0100	-18.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCV 240-99157/3 Calibration Date: 08/27/2013 13:24

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX5524.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.4078		2.00	0.0100	-51.4*	50.0
Ethyl ether	Ave	0.3039	0.2450		2.00	0.0100	-19.4	50.0
3-Chloro-1-propene	Ave	0.1630	0.1525		2.00	0.0100	-6.5	50.0
Diisopropyl ether	Ave	0.2610	0.2504		10.0	0.0500	-4.1	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5320		2.00	0.0100	6.2	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8389		5.00	0.0100	-1.0	50.0
Ethyl acetate	Ave	0.1697	0.2157		4.00	0.0200	27.1	50.0
Propionitrile	Ave	0.0230	0.0295		4.00	0.0200	27.9	50.0
Methacrylonitrile	Ave	0.1263	0.1602		2.00	0.0100	26.8	50.0
Isobutyl alcohol	Ave	0.0072	0.0086		50.0	0.200	19.2	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6500		5.00	0.0100	-12.1	50.0
n-Heptane	Ave	0.0634	0.0584		1.00	0.0100	-7.9	50.0
n-Butanol	Lin		0.0065		50.0	0.200	-1.3	50.0
Methyl methacrylate	Ave	0.1639	0.2128		2.00	0.0100	29.9	50.0
2-Nitropropane	Ave	0.0170	0.0520		2.00	0.0200	205.1*	50.0
Cyclohexanone	Ave	0.0815	0.0833		20.0	0.100	2.3	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.982		0.0122	0.0100	22.4	50.0
2-Methylnaphthalene	Ave	1.002	0.7855		5.00	0.0200	-21.6	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab File ID: BFB414.D BFB Injection Date: 08/17/2013

Instrument ID: A3UX17 BFB Injection Time: 15:32

Analysis Batch No.: 97903

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	42.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	89.6	
175	5.0 - 9.0 % of mass 174	6.2	(6.9)1
176	95.0 - 101.0 % of mass 174	89.6	(100.0)1
177	5.0 - 9.0 % of mass 176	5.4	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97903/2	UXR7004.D	08/17/2013	15:56
	STD8260 240-97903/3	UXR7005.D	08/17/2013	16:18
	STD8260 240-97903/4	UXR7006.D	08/17/2013	16:41
	STD8260 240-97903/5	UXR7007.D	08/17/2013	17:03
	STD8260 240-97903/6	UXR7008.D	08/17/2013	17:25
	STD8260 240-97903/7	UXR7009.D	08/17/2013	17:48
	STDA9 240-97903/8	UXR7010.D	08/17/2013	18:10
	STDA9 240-97903/9	UXR7011.D	08/17/2013	18:32
	STDA9 240-97903/10	UXR7012.D	08/17/2013	18:54
	STDA9 240-97903/11	UXR7013.D	08/17/2013	19:16
	STDA9 240-97903/12	UXR7014.D	08/17/2013	19:39
	STDA9 240-97903/13	UXR7015.D	08/17/2013	20:01
	ICV 240-97903/14	UXR7016.D	08/17/2013	20:23

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97903/7	UXR7009.D
Level 2	STD8260 240-97903/6	UXR7008.D
Level 3	STD8260 240-97903/5	UXR7007.D
Level 4	STD8260 240-97903/4	UXR7006.D
Level 5	STD8260 240-97903/3	UXR7005.D
Level 6	STD8260 240-97903/2	UXR7004.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3204 0.2926	0.2676	0.2764	0.2861	0.2872	Ave		0.2884				6.2		15.0			
Chloromethane	0.4139 0.3439	0.3668	0.3596	0.3531	0.3711	Ave		0.3681			0.1000	6.6		15.0			
Vinyl chloride	0.3940 0.3125	0.3245	0.3155	0.3332	0.3243	Ave		0.3340				9.1		15.0			
Bromomethane	0.1734 0.0852	0.1389	0.1172	0.1098	0.1078	Qua	0.0082	0.1248	-0.001						0.9990		0.9900
Chloroethane	0.1149 0.0795	0.1143	0.1007	0.0850	0.1011	Ave		0.0993				15.0		15.0			
Trichlorofluoromethane	0.2573 0.2239	0.2306	0.2276	0.2301	0.2270	Ave		0.2327				5.3		15.0			
Acrolein	0.0416 0.0342	0.0317	0.0345	0.0350	0.0348	Ave		0.0353	X			9.4		15.0			
1,1-Dichloroethene	0.2818 0.2716	0.2599	0.2612	0.2809	0.2682	Ave		0.2706				3.5		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2259 0.2105	0.1993	0.2023	0.2185	0.2130	Ave		0.2116				4.7		15.0			
Acetone	0.1943 0.0801	0.1013	0.0910	0.0876	0.0830	Lin1	0.1117	0.0795							1.0000		0.9900
Iodomethane	0.3883 0.3571	0.3803	0.3822	0.3812	0.3768	Ave		0.3777				2.8		15.0			
Carbon disulfide	0.7719 0.7593	0.6773	0.7122	0.7680	0.7537	Ave		0.7404				5.1		15.0			
Acetonitrile	0.0466 0.0335	0.0340	0.0368	0.0346	0.0344	Ave		0.0366	X			14.0		15.0			
Methyl acetate	0.2649 0.2101	0.2094	0.2214	0.2237	0.2177	Ave		0.2245				9.2		15.0			
Methylene Chloride	1.0972 0.2798	0.4538	0.3555	0.3214	0.2971	Lin1	0.4062	0.2728							1.0000		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0240 0.0204	0.0208	0.0212	0.0221	0.0216	Ave		0.0217				5.9		15.0			
Acrylonitrile	0.1371 0.1043	0.1034	0.1113	0.1144	0.1096	Ave		0.1133				11.0		15.0			
Methyl tert-butyl ether	0.7668 0.7487	0.7032	0.7304	0.7764	0.7508	Ave		0.7461				3.5		15.0			
trans-1,2-Dichloroethene	0.3148 0.2849	0.2867	0.2853	0.2966	0.2863	Ave		0.2924				4.0		15.0			
Hexane	0.0992 0.0780	0.0708	0.0695	0.0827	0.0800	Ave		0.0800				13.0		15.0			
1,1-Dichloroethane	0.5339 0.4884	0.4788	0.4796	0.5057	0.4874	Ave		0.4956			0.1000	4.3		15.0			
Vinyl acetate	0.0353 0.0410	0.0341	0.0395	0.0436	0.0431	Ave		0.0394				10.0		15.0			
2,2-Dichloropropane	0.2891 0.2547	0.2421	0.2517	0.2761	0.2630	Ave		0.2628				6.6		15.0			
cis-1,2-Dichloroethene	0.3348 0.2979	0.2915	0.3010	0.3187	0.3034	Ave		0.3079				5.2		15.0			
2-Butanone	0.1550 0.1121	0.1165	0.1152	0.1221	0.1194	Ave		0.1234				13.0		15.0			
Bromochloromethane	0.1627 0.1407	0.1371	0.1393	0.1472	0.1412	Ave		0.1447				6.5		15.0			
Tetrahydrofuran	0.1433 0.0739	0.0937	0.0801	0.0838	0.0777	Lin1	0.0363	0.0747							0.9990		0.9900
Chloroform	0.4968 0.4344	0.4333	0.4317	0.4548	0.4433	Ave		0.4491				5.6		15.0			
1,1,1-Trichloroethane	0.3491 0.3450	0.3369	0.3423	0.3732	0.3542	Ave		0.3501				3.6		15.0			
Cyclohexane	0.6528 0.5796	0.5383	0.5348	0.6061	0.5879	Ave		0.5833				7.6		15.0			
1,1-Dichloropropene	0.3835 0.3611	0.3385	0.3509	0.3855	0.3654	Ave		0.3641				5.0		15.0			
Carbon tetrachloride	0.3117 0.3191	0.2879	0.2913	0.3292	0.3199	Ave		0.3098				5.4		15.0			
Benzene	1.4198 1.1202	1.1585	1.1063	1.1850	1.1333	Ave		1.1872				9.9		15.0			
1,2-Dichloroethane	0.3511 0.3344	0.3323	0.3346	0.3528	0.3411	Ave		0.3411				2.6		15.0			
Trichloroethene	0.3448 0.2857	0.2917	0.2853	0.3070	0.2909	Ave		0.3009				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.5453 0.5080	0.4552	0.4671	0.5291	0.5232	Ave		0.5046				7.1		15.0			
1,2-Dichloropropane	0.2805 0.2809	0.2698	0.2732	0.2999	0.2828	Ave		0.2812				3.7		15.0			
1,4-Dioxane	0.0031 0.0025	0.0029	0.0029	0.0029	0.0027	Ave		0.0028	X			6.9		15.0			
Dibromomethane	0.1442 0.1421	0.1403	0.1425	0.1520	0.1431	Ave		0.1440				2.8		15.0			
Bromodichloromethane	0.3119 0.3254	0.2892	0.2930	0.3231	0.3176	Ave		0.3100				5.0		15.0			
2-Chloroethyl vinyl ether	0.1316 0.1591	0.1239	0.1453	0.1553	0.1616	Ave		0.1461				11.0		15.0			
cis-1,3-Dichloropropene	0.3392 0.4287	0.3324	0.3686	0.4103	0.4121	Ave		0.3819				11.0		15.0			
4-Methyl-2-pentanone	0.2607 0.2377	0.2157	0.2417	0.2472	0.2493	Ave		0.2420				6.2		15.0			
Toluene	1.6522 1.4698	1.4513	1.4774	1.5492	1.5164	Ave		1.5194				4.9		15.0			
trans-1,3-Dichloropropene	0.3213 0.4538	0.3447	0.3782	0.4331	0.4465	Ave		0.3963				14.0		15.0			
Ethyl methacrylate	0.4007 0.4327	0.3691	0.3814	0.4268	0.4329	Ave		0.4073				6.8		15.0			
1,1,2-Trichloroethane	0.3167 0.2763	0.2853	0.2849	0.2935	0.2866	Ave		0.2905				4.8		15.0			
Tetrachloroethene	0.3325 0.3049	0.3095	0.3044	0.3290	0.3164	Ave		0.3161				3.9		15.0			
1,3-Dichloropropane	0.5272 0.4996	0.4841	0.4918	0.5267	0.5162	Ave		0.5076				3.6		15.0			
2-Hexanone	0.1971 0.2006	0.1820	0.1978	0.2079	0.2150	Ave		0.2001				5.6		15.0			
Dibromochloromethane	0.2402 0.3001	0.2430	0.2552	0.2811	0.2927	Ave		0.2687				9.7		15.0			
1,2-Dibromoethane	0.2911 0.2813	0.2846	0.2815	0.2929	0.2953	Ave		0.2878				2.1		15.0			
Chlorobenzene	1.1274 0.9807	0.9718	0.9671	1.0149	1.0027	Ave		1.0107			0.3000	5.9		15.0			
1,1,1,2-Tetrachloroethane	0.3060 0.3269	0.2962	0.3098	0.3339	0.3317	Ave		0.3174				4.9		15.0			
Ethylbenzene	0.5443 0.5315	0.5042	0.5217	0.5506	0.5482	Ave		0.5334				3.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6588 0.6727	0.6095	0.6454	0.6967	0.6838	Ave		0.6612				4.7		15.0			
o-Xylene	0.5652 0.6364	0.5841	0.6074	0.6647	0.6500	Ave		0.6180				6.3		15.0			
Styrene	0.8997 1.0677	0.8939	0.9726	1.0763	1.0831	Ave		0.9989				8.9		15.0			
Bromoform	0.1401 0.1923	0.1362	0.1490	0.1704	0.1835	Ave		0.1619			0.1000	15.0		15.0			
Isopropylbenzene	1.5085 1.6272	1.4364	1.5259	1.6642	1.6725	Ave		1.5725				6.1		15.0			
1,1,2,2-Tetrachloroethane	0.6899 0.5937	0.6221	0.6118	0.6565	0.6264	Ave		0.6334			0.3000	5.4		15.0			
Bromobenzene	0.8428 0.7434	0.7732	0.7399	0.7988	0.7642	Ave		0.7771				5.0		15.0			
1,2,3-Trichloropropane	0.2256 0.1928	0.2102	0.2058	0.2230	0.2026	Ave		0.2100				6.0		15.0			
trans-1,4-Dichloro-2-butene	0.1193 0.1579	0.1115	0.1100	0.1265	0.1387	Ave		0.1273				14.0		15.0			
n-Propylbenzene	0.8083 0.8092	0.7417	0.7798	0.8729	0.8206	Ave		0.8054				5.4		15.0			
2-Chlorotoluene	0.7298 0.6717	0.6515	0.6649	0.7468	0.6980	Ave		0.6938				5.5		15.0			
1,3,5-Trimethylbenzene	2.1369 2.3790	2.1516	2.2670	2.4960	2.4224	Ave		2.3088				6.4		15.0			
4-Chlorotoluene	0.7933 0.7186	0.7058	0.7223	0.7864	0.7387	Ave		0.7442				5.0		15.0			
tert-Butylbenzene	2.0917 2.2012	2.0079	2.0434	2.2852	2.1947	Ave		2.1373				5.0		15.0			
1,2,4-Trimethylbenzene	2.1622 2.4480	2.1730	2.2959	2.5240	2.4090	Ave		2.3353				6.4		15.0			
sec-Butylbenzene	2.8644 2.9340	2.6593	2.7372	3.0508	2.9003	Ave		2.8577				4.9		15.0			
1,3-Dichlorobenzene	1.6000 1.4148	1.3939	1.3950	1.4783	1.4105	Ave		1.4487				5.5		15.0			
p-Isopropyltoluene	2.3644 2.5719	2.2377	2.3885	2.6865	2.5733	Ave		2.4704				6.8		15.0			
1,4-Dichlorobenzene	1.6117 1.4458	1.4717	1.4339	1.5395	1.4513	Ave		1.4923				4.7		15.0			
n-Butylbenzene	1.9979 2.1246	1.8316	1.8865	2.1547	2.0745	Ave		2.0116				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.5271 1.3033	1.3237	1.3061	1.3852	1.3171	Ave		1.3604				6.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1057 0.0982	0.0874	0.0888	0.0978	0.1015	Ave		0.0966				7.4		15.0			
1,3,5-Trichlorobenzene	1.1940 0.9716	1.0178	1.0187	1.0770	1.0108	Ave		1.0483				7.5		15.0			
1,2,4-Trichlorobenzene	1.1068 0.7641	0.9118	0.8790	0.9473	0.8677	Ave		0.9128				12.0		15.0			
Hexachlorobutadiene	0.6127 0.3153	0.4584	0.4366	0.4435	0.3631	Qua	0.1528	0.4230	-0.003						0.9980		0.9900
Naphthalene	2.0370 1.3497	1.6368	1.6979	1.8755	1.7777	Ave		1.7291				13.0		15.0			
1,2,3-Trichlorobenzene	1.1380 0.5313	0.8347	0.7936	0.8280	0.7164	Qua	-0.050	0.9072	-0.009						1.0000		0.9900
Dibromofluoromethane (Surr)	0.2446 0.2246	0.2310	0.2246	0.2337	0.2289	Ave		0.2312				3.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3381 0.2592	0.2726	0.2664	0.2732	0.2645	Ave		0.2790				11.0		15.0			
Toluene-d8 (Surr)	1.4464 1.2376	1.3008	1.2447	1.2828	1.2699	Ave		1.2971				5.9		15.0			
4-Bromofluorobenzene (Surr)	0.5369 0.4602	0.4610	0.4532	0.4686	0.4753	Ave		0.4759				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 18:10 Calibration End Date: 08/17/2013 20:01 Calibration ID: 16934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-97903/13	UXR7015.D
Level 2	STDA9 240-97903/12	UXR7014.D
Level 3	STDA9 240-97903/11	UXR7013.D
Level 4	STDA9 240-97903/10	UXR7012.D
Level 5	STDA9 240-97903/9	UXR7011.D
Level 6	STDA9 240-97903/8	UXR7010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4058 0.3150	0.2923	0.3314	0.3073	0.3098	Ave		0.3269				12.0		15.0			
Ethyl ether	0.2556 0.2493	0.2351	0.2562	0.2555	0.2582	Ave		0.2516				3.4		15.0			
3-Chloro-1-propene	0.1295 0.1407	0.1107	0.1227	0.1277	0.1381	Ave		0.1282				8.5		15.0			
Diisopropyl ether	0.2598 0.2542	0.2248	0.2497	0.2520	0.2611	Ave		0.2503				5.3		15.0			
2-Chloro-1,3-butadiene	0.4633 0.4486	0.4063	0.4234	0.4362	0.4556	Ave		0.4389				4.9		15.0			
Ethyl-t-butyl ether (ETBE)	0.8518 0.8690	0.7673	0.8096	0.8401	0.8700	Ave		0.8346				4.8		15.0			
Ethyl acetate	0.2494 0.2478	0.2117	0.2363	0.2410	0.2507	Ave		0.2395				6.1		15.0			
Propionitrile	0.0428 0.0394	0.0395	0.0384	0.0398	0.0403	Ave		0.0400	X			3.7		15.0			
Methacrylonitrile	0.1716 0.1599	0.1460	0.1626	0.1550	0.1635	Ave		0.1598				5.4		15.0			
Isobutyl alcohol	0.0115 0.0099	0.0089	0.0093	0.0098	0.0102	Ave		0.0099	X			8.9		15.0			
Tert-amyl-methyl ether (TAME)	0.6806 0.7154	0.5918	0.6571	0.6769	0.7228	Ave		0.6741				7.0		15.0			
n-Heptane	0.0793 0.0787	0.0664	0.0707	0.0732	0.0794	Ave		0.0746				7.3		15.0			
n-Butanol	0.0100 0.0096	0.0086	0.0090	0.0096	0.0098	Ave		0.0094	X			5.5		15.0			
Methyl methacrylate	0.2118 0.2263	0.1740	0.2034	0.2126	0.2275	Ave		0.2093				9.4		15.0			
2-Nitropropane	0.0419 0.0509	0.0409	0.0407	0.0447	0.0503	Ave		0.0449				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28098-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 18:10 Calibration End Date: 08/17/2013 20:01 Calibration ID: 16934

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0934 0.1169	0.0892	0.1098	0.1147	0.1227	Ave		0.1078				13.0		15.0			
1,2,3-Trimethylbenzene	2.2268 2.4130	1.8784	2.1822	2.2922	2.4829	Ave		2.2459				9.5		15.0			
2-Methylnaphthalene	0.8375	1.0311	1.0420	1.0385	0.8614	Ave		0.9621				11.0		15.0			
n-Butyl acetate	0.1966 0.2372	0.1786	0.2194	0.2183	0.2332	Ave		0.2139				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab File ID: BFB433.D BFB Injection Date: 08/29/2013

Instrument ID: A3UX17 BFB Injection Time: 12:26

Analysis Batch No.: 99545

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.1	
75	30.0 - 60.0 % of mass 95	46.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	85.1	
175	5.0 - 9.0 % of mass 174	6.0	(7.1)1
176	95.0 - 101.0 % of mass 174	85.9	(100.9)1
177	5.0 - 9.0 % of mass 176	5.3	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-99545/2	UXR7312.D	08/29/2013	12:52
	CCV 240-99545/3	UXR7313.D	08/29/2013	13:15
	LCS 240-99545/4	UXR7314.D	08/29/2013	13:38
	MB 240-99545/6	UXR7316.D	08/29/2013	14:23
DR-DPT-32-40	240-28098-5	UXR7318.D	08/29/2013	15:09
DR-DPT-32-50	240-28098-7	UXR7319.D	08/29/2013	15:31
	240-28273-B-1 MS	UXR7337.D	08/29/2013	22:19
	240-28273-B-1 MSD	UXR7338.D	08/29/2013	22:42

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCVIS 240-99545/2 Calibration Date: 08/29/2013 12:52

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7312.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2884	0.2964		1.00	0.0100	2.8	50.0
Chloromethane	Ave	0.3681	0.3236	0.1000	1.00	0.0100	-12.1	50.0
Vinyl chloride	Ave	0.3340	0.2840		1.00	0.0100	-15.0	20.0
Bromomethane	Qua		0.1042		1.00	0.0100	-10.8	50.0
Chloroethane	Ave	0.0993	0.0818		1.00	0.0100	-17.6	50.0
Trichlorofluoromethane	Ave	0.2327	0.2446		1.00	0.0100	5.1	50.0
Acrolein	Ave	0.0353	0.0353		20.0	0.100	-0.0	50.0
1,1-Dichloroethene	Ave	0.2706	0.2768		1.00	0.0100	2.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2363		1.00	0.0100	11.7	50.0
Acetone	Lin1		0.0867		10.0	0.0200	2.1	50.0
Iodomethane	Ave	0.3777	0.3681		1.00	0.0100	-2.5	50.0
Carbon disulfide	Ave	0.7404	0.6761		1.00	0.0100	-8.7	50.0
Acetonitrile	Ave	0.0366	0.0267		20.0	0.100	-27.2	50.0
Methyl acetate	Ave	0.2245	0.2090		10.0	0.0200	-6.9	50.0
Methylene Chloride	Lin1		0.3206		1.00	0.0100	2.6	50.0
tert-Butyl alcohol	Ave	0.0217	0.0138		50.0	0.200	-36.2	50.0
Acrylonitrile	Ave	0.1133	0.1101		20.0	0.0200	-2.9	50.0
Methyl tert-butyl ether	Ave	0.7461	0.6618		1.00	0.0100	-11.3	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2976		1.00	0.0100	1.8	50.0
Hexane	Ave	0.0800	0.0745		1.00	0.0100	-7.0	20.0
1,1-Dichloroethane	Ave	0.4956	0.4867	0.1000	1.00	0.0100	-1.8	50.0
Vinyl acetate	Ave	0.0394	0.0420		2.00	0.0100	6.5	50.0
2,2-Dichloropropane	Ave	0.2628	0.2243		1.00	0.0100	-14.6	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.2971		1.00	0.0100	-3.5	50.0
2-Butanone	Ave	0.1234	0.1174		10.0	0.0200	-4.9	50.0
Bromochloromethane	Ave	0.1447	0.1529		1.00	0.0100	5.6	50.0
Tetrahydrofuran	Lin1		0.0765		5.00	0.0100	-2.5	50.0
Chloroform	Ave	0.4491	0.4674		1.00	0.0100	4.1	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3547		1.00	0.0100	1.3	50.0
Cyclohexane	Ave	0.5833	0.5387		1.00	0.0100	-7.6	50.0
1,1-Dichloropropene	Ave	0.3641	0.3621		1.00	0.0100	-0.6	50.0
Carbon tetrachloride	Ave	0.3098	0.3332		1.00	0.0100	7.5	50.0
Benzene	Ave	1.187	1.117		1.00	0.0100	-5.9	50.0
1,2-Dichloroethane	Ave	0.3411	0.3781		1.00	0.0100	10.9	50.0
Trichloroethene	Ave	0.3009	0.2924		1.00	0.0100	-2.8	50.0
Methylcyclohexane	Ave	0.5046	0.4562		1.00	0.0100	-9.6	50.0
1,2-Dichloropropane	Ave	0.2812	0.2698		1.00	0.0100	-4.0	20.0
1,4-Dioxane	Ave	0.0028	0.0019		50.0	0.500	-31.9	50.0
Dibromomethane	Ave	0.1440	0.1474		1.00	0.0100	2.3	50.0
Bromodichloromethane	Ave	0.3100	0.3090		1.00	0.0100	-0.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCVIS 240-99545/2 Calibration Date: 08/29/2013 12:52

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7312.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1461	0.1498		10.0	0.0200	2.5	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3458		1.00	0.0100	-9.4	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2189		10.0	0.0200	-9.6	50.0
Toluene	Ave	1.519	1.604		1.00	0.0100	5.6	20.0
trans-1,3-Dichloropropene	Ave	0.3963	0.3614		1.00	0.0100	-8.8	50.0
Ethyl methacrylate	Ave	0.4073	0.3518		1.00	0.0100	-13.6	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2945		1.00	0.0100	1.4	50.0
Tetrachloroethene	Ave	0.3161	0.3265		1.00	0.0100	3.3	50.0
1,3-Dichloropropane	Ave	0.5076	0.5112		1.00	0.0100	0.7	50.0
2-Hexanone	Ave	0.2001	0.1872		10.0	0.0200	-6.4	50.0
Dibromochloromethane	Ave	0.2687	0.2751		1.00	0.0100	2.4	50.0
1,2-Dibromoethane	Ave	0.2878	0.2827		1.00	0.0100	-1.8	50.0
Chlorobenzene	Ave	1.011	0.9764	0.3000	1.00	0.0100	-3.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.3172		1.00	0.0100	-0.0	50.0
Ethylbenzene	Ave	0.5334	0.4979		1.00	0.0100	-6.7	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6435		2.00	0.0200	-2.7	50.0
o-Xylene	Ave	0.6180	0.5756		1.00	0.0100	-6.9	50.0
Styrene	Ave	0.999	0.9440		1.00	0.0100	-5.5	50.0
Bromoform	Ave	0.1619	0.1562	0.1000	1.00	0.0100	-3.5	50.0
Isopropylbenzene	Ave	1.572	1.376		1.00	0.0100	-12.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.6522	0.3000	1.00	0.0100	3.0	50.0
Bromobenzene	Ave	0.7771	0.8310		1.00	0.0100	6.9	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.2316		1.00	0.0100	10.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.1152		1.00	0.0100	-9.5	50.0
n-Propylbenzene	Ave	0.8054	0.8271		1.00	0.0100	2.7	50.0
2-Chlorotoluene	Ave	0.6938	0.7175		1.00	0.0100	3.4	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.282		1.00	0.0100	-1.2	50.0
4-Chlorotoluene	Ave	0.7442	0.7525		1.00	0.0100	1.1	50.0
tert-Butylbenzene	Ave	2.137	1.945		1.00	0.0100	-9.0	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.214		1.00	0.0100	-5.2	50.0
sec-Butylbenzene	Ave	2.858	2.492		1.00	0.0100	-12.8	50.0
1,3-Dichlorobenzene	Ave	1.449	1.362		1.00	0.0100	-6.0	50.0
p-Isopropyltoluene	Ave	2.470	2.162		1.00	0.0100	-12.5	50.0
1,4-Dichlorobenzene	Ave	1.492	1.397		1.00	0.0100	-6.4	50.0
n-Butylbenzene	Ave	2.012	1.474		1.00	0.0100	-26.7	50.0
1,2-Dichlorobenzene	Ave	1.360	1.214		1.00	0.0100	-10.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0675		2.00	0.0100	-30.1	50.0
1,3,5-Trichlorobenzene	Ave	1.048	0.6476		1.00	0.0100	-38.2	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.4576		1.00	0.0100	-49.9	50.0
Hexachlorobutadiene	Qua		0.2182		1.00	0.0100	-50.4*	50.0
Naphthalene	Ave	1.729	0.7277		1.00	0.0100	-57.9*	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCVIS 240-99545/2 Calibration Date: 08/29/2013 12:52

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7312.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua		0.3806		1.00	0.0100	-55.4*	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2273		0.00876	0.00891	-1.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2752		0.00879	0.00891	-1.3	50.0
Toluene-d8 (Surr)	Ave	1.297	1.199		0.00824	0.00891	-7.5	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4058		0.00760	0.00891	-14.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Lab Sample ID: CCV 240-99545/3 Calibration Date: 08/29/2013 13:15

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7313.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3269	0.2525		2.00	0.0100	-22.8	50.0
Ethyl ether	Ave	0.2516	0.2589		2.00	0.0100	2.9	50.0
3-Chloro-1-propene	Ave	0.1282	0.1107		2.00	0.0100	-13.7	50.0
Diisopropyl ether	Ave	0.2503	0.2429		10.0	0.0500	-3.0	50.0
2-Chloro-1,3-butadiene	Ave	0.4389	0.4519		2.00	0.0100	2.9	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8346	0.7190		5.00	0.0100	-13.9	50.0
Ethyl acetate	Ave	0.2395	0.2338		4.00	0.0200	-2.4	50.0
Propionitrile	Ave	0.0400	0.0398		4.00	0.0200	-0.5	50.0
Methacrylonitrile	Ave	0.1598	0.1568		2.00	0.0100	-1.8	50.0
Isobutyl alcohol	Ave	0.0099	0.0101		50.0	0.200	1.1	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6741	0.5642		5.00	0.0100	-16.3	50.0
n-Heptane	Ave	0.0746	0.0769		1.00	0.0100	3.0	50.0
n-Butanol	Ave	0.0094	0.0075		50.0	0.200	-21.1	50.0
Methyl methacrylate	Ave	0.2093	0.1886		2.00	0.0100	-9.9	50.0
2-Nitropropane	Ave	0.0449	0.0413		2.00	0.0200	-8.1	50.0
Cyclohexanone	Ave	0.1078	0.1110		20.0	0.100	3.0	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.324		0.0103	0.0100	3.5	50.0
2-Methylnaphthalene	Ave	0.9621	0.1958		5.00	0.0200	-79.7*	50.0

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Sample No.: CCVIS 240-99030/2 Date Analyzed: 08/27/2013 00:19

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): UXX5496.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1681096	5.20	1140510	7.87	585502	10.11
UPPER LIMIT		3362192	5.70	2281020	8.37	1171004	10.61
LOWER LIMIT		840548	4.70	570255	7.37	292751	9.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-99030/3		1743634	5.20	1133375	7.87	558889	10.11
LCS 240-99030/4		1771188	5.20	1201514	7.87	625330	10.12
MB 240-99030/6		1634642	5.20	1095219	7.88	538340	10.11
240-28098-1	DR-DPT-DUP03	1611130	5.20	1090845	7.87	538216	10.11
240-28098-2	DR-DPT-DUP04	1595334	5.20	1071102	7.87	528486	10.12
240-28098-3	DR-DPT-32-30	1620525	5.20	1062967	7.87	528558	10.12
240-28098-4	DR-DPT-32-35	1622211	5.20	1090875	7.87	517839	10.11
240-28098-8	DR-DPT-36-10	1607222	5.20	1074595	7.87	538593	10.12
240-28098-10	DR-DPT-36-35	1617524	5.20	1103998	7.87	509293	10.11
240-28098-11	DR-DPT-36-40	1590548	5.20	1086645	7.87	519445	10.12
240-28098-12	TB-081613	1575547	5.20	1042486	7.87	515944	10.12
240-28098-13	DR-DPT-36-45	1573446	5.20	1055249	7.87	510771	10.12
240-28098-14	DR-DPT-26-48	1637468	5.20	1054508	7.87	532291	10.11
240-28089-B-4 MS		1731237	5.20	1169832	7.87	620845	10.12
240-28089-B-4 MSD		1731880	5.20	1159652	7.87	595718	10.11

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Sample No.: CCVIS 240-99157/2 Date Analyzed: 08/27/2013 13:03

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): UXX5523.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1722017	5.20	1158772	7.87	596193	10.12
UPPER LIMIT		3444034	5.70	2317544	8.37	1192386	10.62
LOWER LIMIT		861009	4.70	579386	7.37	298097	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-99157/3		1790231	5.20	1159137	7.88	544336	10.11
LCS 240-99157/4		1749314	5.20	1167529	7.87	610958	10.12
MB 240-99157/6		1643900	5.20	1087758	7.87	530690	10.12
240-28098-6	DR-DPT-32-45	1669060	5.21	1060512	7.87	541024	10.12
240-28098-9	DR-DPT-36-30	1655157	5.20	1073637	7.87	536705	10.11
240-28069-C-3 MS		1652909	5.20	1107366	7.87	617481	10.11
240-28069-C-3 MSD		1757647	5.21	1166573	7.87	624116	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28098-1

SDG No.:

Sample No.: CCVIS 240-99545/2 Date Analyzed: 08/29/2013 12:52

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): UXR7312.D Heated Purge: (Y/N) N

Calibration ID: 16934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1239271	5.76	997024	8.48	472016	10.72
UPPER LIMIT		2478542	6.26	1994048	8.98	944032	11.22
LOWER LIMIT		619636	5.26	498512	7.98	236008	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-99545/3		1338348	5.76	1058451	8.48	542431	10.72
LCS 240-99545/4		1288066	5.76	1065224	8.48	630091	10.72
MB 240-99545/6		1109481	5.76	947130	8.48	481066	10.72
240-28098-5	DR-DPT-32-40	1167705	5.76	1008510	8.48	498059	10.72
240-28098-7	DR-DPT-32-50	1152735	5.76	985134	8.48	511481	10.72
240-28273-B-1 MS		1312562	5.76	1077575	8.48	639406	10.72
240-28273-B-1 MSD		1300355	5.76	1070058	8.48	655079	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

Tetra Tech, Inc. **INTERNAL CORRESPONDENCE**

TO: **A. APANAVAGE** **DATE:** **SEPTEMBER 26, 2013**

FROM: **MICHELLE L. ALLEN** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN CORPORATION (LMC) – MARTIN STATE AIRPORT (MSA)
DUMP ROAD SOURCE AREAS
SDG 240-28121-1

SAMPLES: 3/Aqueous/VOC

DR-DPT-31-25 DR-DPT-36-50 TB-081913

Overview

The sample set for LMC-MSA Dump Road source areas, SDG 240-28121-1 consisted of two (2) aqueous environmental samples and one (1) trip blank. Three (3) aqueous samples were analyzed for volatile organic compounds (VOC). No field duplicate sample pair was included in this SDG.

The samples were collected by Tetra Tech, Inc. on August 19, 2013 and analyzed by TestAmerica, Inc. All analyses were conducted in accordance with SW-846 Method 8260C analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blanks, trip blank results, surrogate spike recoveries, blank spike results, matrix spike/matrix spike duplicate results, internal standard areas and recoveries, chromatographic resolution, compound identification, tentatively identified compounds, compound quantitation, and detection limits. Areas of concern are listed below.

Major

- The initial and continuing calibrations performed on instrument A3UX10 had Relative Response Factors (RRFs) for tert-butyl alcohol and vinyl acetate below the 0.050 minimum response criterion. All samples were affected. The non-detected results reported for these compounds in the affected samples were qualified as rejected, (UR).

Minor

- The following contaminants were detected in the laboratory method and trip blanks at the following maximum concentrations:

Compound	Maximum Concentration (µg/L)	Action Level (µg/L)
Methylene Chloride [1]	0.342	3.42
Toluene [1]	0.222	1.11
Acetone [2]	1.9 µg/L	19

[1] Maximum concentration detected in the laboratory method blank, MB240-98707/6, affecting the environmental samples.
[2] Maximum concentration detected in the trip blank, TB -081913.

An action level of 10X the maximum concentration for the common laboratory contaminants, acetone and methylene chloride, and an action level of 5X the maximum concentration for toluene were used to evaluate for blank contamination. Sample aliquot and dilution factor, if applicable, were taken into consideration when evaluating for blank contamination. The detected results for the compounds below the established action levels were qualified as non-detected, (B).

- Tetrahydrofuran was detected as a Tentatively Identified Compound (TIC) in sample DR-DPT-36-50. The GCMS instrument was calibrated for this compound. The result for tetrahydrofuran was qualified as estimated, (J).

- Detected results reported below the Reporting Limit (RL) limit but above the Method Detection Limit (MDL) were qualified as estimated, (J).

Notes

The VOC continuing calibration performed on 08/23/13 @ 12:56 had Percent Differences (%Ds) which exceeded the 20% quality control limit but were less than 50% for bromomethane, chloroethane, tert-butyl alcohol, carbon tetrachloride, bromodichloromethane, trans-1,3-dichloropropene, dibromochloromethane, 1,1,1,2-tetrachloroethane, bromoform, 1,2-dibromo-3-chloropropane, and 1,2,3-trimethylbenzene. All samples were affected. No validation action was necessary because no detected results were reported for these compounds in the affected samples.

The blank spike analysis had Percent Recoveries (%Rs) for 1,1,1,2-tetrachloroethane, carbon tetrachloride, trans-1,3-dichloropropene, and dibromochloromethane above the upper quality control limits. No action was taken because the results for these compounds in the affected samples were non-detects.

The Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses had %Rs outside quality control limits. No action was taken because the parent sample was not a sample of interest.

The following samples were diluted prior to analysis in the fraction below:

Sample	Dilution
DR-DPT-31-25	66.7X
DR-DPT-36-50	6.67X

The RLs of the non-detected results were elevated.

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: Initial and continuing calibration RRFs for tert-butyl alcohol and vinyl acetate were below the quality control criterion resulting in the rejection of the non-detected results. VOC continuing calibration %Ds exceeded 20% but were less than 50%. Contaminants were detected in the laboratory method blank. Several blank spike %Rs were high.

Other Factors Affecting Data Quality: The environmental samples were diluted. Contaminants were detected in the trip blank. One TIC was detected. Results below the RL were estimated.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994) and SW-846 Method 8260C analytical and reporting protocols. The text of this report has been formulated to address only those areas affecting data quality.

Tetra Tech, Inc.
Michelle L. Allen
Chemist/Data Validator

Tetra Tech, Inc.
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-31-25			DR-DPT-36-50						TB-081913		
SDG: 240-28121-1	LAB_ID	240-28121-2			240-28121-1						240-28121-3		
FRACTION: OV	SAMP_DATE	8/19/2013			8/19/2013						8/19/2013		
MEDIA: WATER	QC_TYPE	NM			NM			TIC			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		15	U		1.5	U					0.23	U	
1,1,1-TRICHLOROETHANE		15	U		1.5	U					0.22	U	
1,1,2,2-TETRACHLOROETHANE		12	U		1.2	U					0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		19	U		1.9	U					0.28	U	
1,1-DICHLOROETHANE		10	U		1	U					0.15	U	
1,1-DICHLOROETHENE		13	U		1.3	U					0.19	U	
1,1-DICHLOROPROPENE		8.7	U		0.87	U					0.13	U	
1,2,3-TRICHLOROBENZENE		11	U		1.1	U					0.17	U	
1,2,3-TRICHLOROPROPANE		29	U		2.9	U					0.43	U	
1,2,3-TRIMETHYLBENZENE		0.39	U		0.039	U					0.0059	U	
1,2,4-TRICHLOROBENZENE		10	U		1	U					0.15	U	
1,2,4-TRIMETHYLBENZENE		8	U		0.8	U					0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		45	U		4.5	U					0.67	U	
1,2-DIBROMOETHANE		16	U		1.6	U					0.24	U	
1,2-DICHLOROBENZENE		8.7	U		0.87	U					0.13	U	
1,2-DICHLOROETHANE		15	U		1.5	U					0.22	U	
1,2-DICHLOROPROPANE		12	U		1.2	U					0.18	U	
1,3-DICHLOROBENZENE		9.3	U		0.93	U					0.14	U	
1,3-DICHLOROPROPANE		11	U		1.1	U					0.16	U	
1,4-DICHLOROBENZENE		8.7	U		0.87	U					0.13	U	
2,2-DICHLOROPROPANE		8.7	U		0.87	U					0.13	U	
2-BUTANONE		38	U		3.8	U					0.57	U	
2-CHLOROETHYL VINYL ETHER		66	U		6.6	U					0.99	U	
2-CHLOROTOLUENE		7.3	U		0.73	U					0.11	U	
2-HEXANONE		27	U		2.7	U					0.41	U	
4-CHLOROTOLUENE		12	U		1.2	U					0.18	U	
4-ISOPROPYLTOLUENE		8	U		0.8	U					0.12	U	
4-METHYL-2-PENTANONE		21	U		2.1	U					0.32	U	
ACETONE		73	U		34	B	B				1.9	J	P
BENZENE		8.7	U		0.87	U					0.13	U	
BROMOBENZENE		8.7	U		0.87	U					0.13	U	
BROMOCHLOROMETHANE		19	U		1.9	U					0.29	U	
BROMODICHLOROMETHANE		10	U		1	U					0.15	U	
BROMOFORM		43	U		4.3	U					0.64	U	
BROMOMETHANE		27	U		2.7	U					0.41	U	
CARBON DISULFIDE		8.7	U		0.87	U					0.13	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-31-25			DR-DPT-36-50						TB-081913		
SDG: 240-28121-1	LAB_ID	240-28121-2			240-28121-1						240-28121-3		
FRACTION: OV	SAMP_DATE	8/19/2013			8/19/2013						8/19/2013		
MEDIA: WATER	QC_TYPE	NM			NM			TIC			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON TETRACHLORIDE		8.7	U		0.87	U					0.13	U	
CHLOROBENZENE		10	U		1	U					0.15	U	
CHLORODIBROMOMETHANE		12	U		1.2	U					0.18	U	
CHLOROETHANE		19	U		1.9	U					0.29	U	
CHLOROFORM		11	U		1.1	U					0.16	U	
CHLOROMETHANE		20	U		2	U					0.3	U	
CIS-1,2-DICHLOROETHENE		2000			210						0.17	U	
CIS-1,3-DICHLOROPROPENE		9.3	U		0.93	U					0.14	U	
DIBROMOMETHANE		19	U		1.9	U					0.28	U	
DICHLORODIFLUOROMETHANE		21	U		2.1	U					0.31	U	
DIISOPROPYL ETHER		100	U		10	U					1.5	U	
ETHYL TERT-BUTYL ETHER		7.3	U		0.73	U					0.11	U	
ETHYLBENZENE		11	U		1.1	U					0.17	U	
HEXACHLOROBUTADIENE		20	U		2	U					0.3	U	
ISOPROPYLBENZENE		8.7	U		0.87	U					0.13	U	
M+P-XYLENES		16	U		1.6	U					0.24	U	
METHYL TERT-BUTYL ETHER		11	U		1.1	U					0.17	U	
METHYLENE CHLORIDE		35	B	A	2.3	B	A				0.33	U	
NAPHTHALENE		16	U		1.6	U					0.24	U	
N-BUTYLBENZENE		8	U		0.8	U					0.12	U	
N-PROPYLBENZENE		9.3	U		0.93	U					0.14	U	
O-XYLENE		9.3	U		0.93	U					0.14	U	
SEC-BUTYLBENZENE		8.7	U		0.87	U					0.13	U	
STYRENE		7.3	U		0.73	U					0.11	U	
TERT-AMYL METHYL ETHER		4.5	U		0.45	U					0.067	U	
TERT-BUTYLBENZENE		8.7	U		0.87	U					0.13	U	
TERTIARY-BUTYL ALCOHOL		260	UR	C	26	UR	C				3.9	UR	C
TETRACHLOROETHENE		19	U		1.9	U					0.29	U	
TETRAHYDROFURAN								2.9	J	P			
TOLUENE		16	B	A	3.5	B	A				0.13	U	
TOTAL XYLENES		9.3	U		0.93	U					0.14	U	
TRANS-1,2-DICHLOROETHENE		17	J	P	1.3	U					0.19	U	
TRANS-1,3-DICHLOROPROPENE		13	U		1.3	U					0.19	U	
TRICHLOROETHENE		61	J	P	9.3						0.17	U	
TRICHLOROFLUOROMETHANE		14	U		1.4	U					0.21	U	
VINYL ACETATE		13	UR	C	1.3	UR	C				0.19	UR	C

PROJ_NO: 04882	NSAMPLE	DR-DPT-31-25			DR-DPT-36-50						TB-081913		
SDG: 240-28121-1	LAB_ID	240-28121-2			240-28121-1						240-28121-3		
FRACTION: OV	SAMP_DATE	8/19/2013			8/19/2013						8/19/2013		
MEDIA: WATER	QC_TYPE	NM			NM			TIC			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL CHLORIDE		580			16						0.22	U	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28121-1

SDG No.:

Client Sample ID: DR-DPT-31-25 | Lab Sample ID: 240-28121-2

Matrix: Water | Lab File ID: UXX5434.D

Analysis Method: 8260B | Date Collected: 08/19/2013 15:06

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2013 20:55

Soil Aliquot Vol: | Dilution Factor: 66.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98707 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	67	U *	67	15
71-55-6	1,1,1-Trichloroethane	67	U	67	15
79-34-5	1,1,2,2-Tetrachloroethane	67	U	67	12
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	67	U	67	19
75-34-3	1,1-Dichloroethane	67	U	67	10
75-35-4	1,1-Dichloroethene	67	U	67	13
563-58-6	1,1-Dichloropropene	67	U	67	8.7
87-61-6	1,2,3-Trichlorobenzene	67	U	67	11
96-18-4	1,2,3-Trichloropropane	67	U	67	29
526-73-8	1,2,3-Trimethylbenzene	330	U	330	0.39
120-82-1	1,2,4-Trichlorobenzene	67	U	67	10
95-63-6	1,2,4-Trimethylbenzene	67	U	67	8.0
96-12-8	1,2-Dibromo-3-Chloropropane	130	U	130	45
95-50-1	1,2-Dichlorobenzene	67	U	67	8.7
107-06-2	1,2-Dichloroethane	67	U	67	15
78-87-5	1,2-Dichloropropane	67	U	67	12
541-73-1	1,3-Dichlorobenzene	67	U	67	9.3
142-28-9	1,3-Dichloropropane	67	U	67	11
106-46-7	1,4-Dichlorobenzene	67	U	67	8.7
594-20-7	2,2-Dichloropropane	67	U	67	8.7
110-75-8	2-Chloroethyl vinyl ether	670	U	670	66
95-49-8	2-Chlorotoluene	67	U	67	7.3
591-78-6	2-Hexanone	670	U	670	27
108-86-1	Bromobenzene	67	U	67	8.7
74-97-5	Bromochloromethane	67	U	67	19
106-43-4	4-Chlorotoluene	67	U	67	12
99-87-6	p-Isopropyltoluene	67	U	67	8.0
67-64-1	Acetone	670	U	670	73
71-43-2	Benzene	67	U	67	8.7
75-25-2	Bromoform	67	U	67	43
74-83-9	Bromomethane	67	U	67	27
75-15-0	Carbon disulfide	67	U	67	8.7
56-23-5	Carbon tetrachloride	67	U *	67	8.7
108-90-7	Chlorobenzene	67	U	67	10
75-00-3	Chloroethane	67	U	67	19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28121-1

SDG No.:

Client Sample ID: DR-DPT-31-25 | Lab Sample ID: 240-28121-2

Matrix: Water | Lab File ID: UXX5434.D

Analysis Method: 8260B | Date Collected: 08/19/2013 15:06

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2013 20:55

Soil Aliquot Vol: | Dilution Factor: 66.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98707 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	67	U	67	11
74-87-3	Chloromethane	67	U	67	20
156-59-2	cis-1,2-Dichloroethene	2000		67	11
10061-01-5	cis-1,3-Dichloropropene	67	U	67	9.3
87-68-3	Hexachlorobutadiene	67	U	67	20
74-95-3	Dibromomethane	67	U	67	19
75-27-4	Bromodichloromethane	67	U	67	10
75-71-8	Dichlorodifluoromethane	67	U	67	21
100-41-4	Ethylbenzene	67	U	67	11
106-93-4	1,2-Dibromoethane	67	U	67	16
108-20-3	Diisopropyl ether	670	U	670	100
91-20-3	Naphthalene	67	U	67	16
179601-23-1	m-Xylene & p-Xylene	130	U	130	16
104-51-8	n-Butylbenzene	67	U	67	8.0
98-82-8	Isopropylbenzene	67	U	67	8.7
103-65-1	n-Propylbenzene	67	U	67	9.3
78-93-3	2-Butanone	670	U	670	38
108-10-1	4-Methyl-2-pentanone	670	U	670	21
135-98-8	sec-Butylbenzene	67	U	67	8.7
1634-04-4	Methyl tert-butyl ether	67	U	67	11
994-05-8	Tert-amyl-methyl ether (TAME)	330	U	330	4.5
75-09-2	Methylene Chloride	35	J B	67	22
95-47-6	o-Xylene	67	U	67	9.3
100-42-5	Styrene	67	U	67	7.3
637-92-3	Ethyl-t-butyl ether (ETBE)	330	U	330	7.3
98-06-6	tert-Butylbenzene	67	U	67	8.7
127-18-4	Tetrachloroethene	67	U	67	19
108-88-3	Toluene	16	J B	67	8.7
156-60-5	trans-1,2-Dichloroethene	17	J	67	13
10061-02-6	trans-1,3-Dichloropropene	67	U *	67	13
79-01-6	Trichloroethene	61	J	67	11
75-69-4	Trichlorofluoromethane	67	U	67	14
108-05-4	Vinyl acetate	130	U	130	13
75-01-4	Vinyl chloride	580		67	15
75-65-0	tert-Butyl alcohol	3300	U	3300	260
1330-20-7	Xylenes, Total	130	U	130	9.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Client Sample ID: DR-DPT-31-25 Lab Sample ID: 240-28121-2

Matrix: Water Lab File ID: UXX5434.D

Analysis Method: 8260B Date Collected: 08/19/2013 15:06

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2013 20:55

Soil Aliquot Vol: Dilution Factor: 66.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98707 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	67	U *	67	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Client Sample ID: DR-DPT-31-25 Lab Sample ID: 240-28121-2

Matrix: Water Lab File ID: UXX5434.D

Analysis Method: 8260B Date Collected: 08/19/2013 15:06

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2013 20:55

Soil Aliquot Vol: Dilution Factor: 66.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98707 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28121-1

SDG No.:

Client Sample ID: DR-DPT-36-50 | Lab Sample ID: 240-28121-1

Matrix: Water | Lab File ID: UXX5433.D

Analysis Method: 8260B | Date Collected: 08/19/2013 12:36

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2013 20:34

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98707 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	6.7	U *	6.7	1.5
71-55-6	1,1,1-Trichloroethane	6.7	U	6.7	1.5
79-34-5	1,1,2,2-Tetrachloroethane	6.7	U	6.7	1.2
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	6.7	U	6.7	1.9
75-34-3	1,1-Dichloroethane	6.7	U	6.7	1.0
75-35-4	1,1-Dichloroethene	6.7	U	6.7	1.3
563-58-6	1,1-Dichloropropene	6.7	U	6.7	0.87
87-61-6	1,2,3-Trichlorobenzene	6.7	U	6.7	1.1
96-18-4	1,2,3-Trichloropropane	6.7	U	6.7	2.9
526-73-8	1,2,3-Trimethylbenzene	33	U	33	0.039
120-82-1	1,2,4-Trichlorobenzene	6.7	U	6.7	1.0
95-63-6	1,2,4-Trimethylbenzene	6.7	U	6.7	0.80
96-12-8	1,2-Dibromo-3-Chloropropane	13	U	13	4.5
95-50-1	1,2-Dichlorobenzene	6.7	U	6.7	0.87
107-06-2	1,2-Dichloroethane	6.7	U	6.7	1.5
78-87-5	1,2-Dichloropropane	6.7	U	6.7	1.2
541-73-1	1,3-Dichlorobenzene	6.7	U	6.7	0.93
142-28-9	1,3-Dichloropropane	6.7	U	6.7	1.1
106-46-7	1,4-Dichlorobenzene	6.7	U	6.7	0.87
594-20-7	2,2-Dichloropropane	6.7	U	6.7	0.87
110-75-8	2-Chloroethyl vinyl ether	67	U	67	6.6
95-49-8	2-Chlorotoluene	6.7	U	6.7	0.73
591-78-6	2-Hexanone	67	U	67	2.7
108-86-1	Bromobenzene	6.7	U	6.7	0.87
74-97-5	Bromochloromethane	6.7	U	6.7	1.9
106-43-4	4-Chlorotoluene	6.7	U	6.7	1.2
99-87-6	p-Isopropyltoluene	6.7	U	6.7	0.80
67-64-1	Acetone	34	J	67	7.3
71-43-2	Benzene	6.7	U	6.7	0.87
75-25-2	Bromoform	6.7	U	6.7	4.3
74-83-9	Bromomethane	6.7	U	6.7	2.7
75-15-0	Carbon disulfide	6.7	U	6.7	0.87
56-23-5	Carbon tetrachloride	6.7	U *	6.7	0.87
108-90-7	Chlorobenzene	6.7	U	6.7	1.0
75-00-3	Chloroethane	6.7	U	6.7	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28121-1

SDG No.:

Client Sample ID: DR-DPT-36-50 | Lab Sample ID: 240-28121-1

Matrix: Water | Lab File ID: UXX5433.D

Analysis Method: 8260B | Date Collected: 08/19/2013 12:36

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2013 20:34

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98707 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	6.7	U	6.7	1.1
74-87-3	Chloromethane	6.7	U	6.7	2.0
156-59-2	cis-1,2-Dichloroethene	210		6.7	1.1
10061-01-5	cis-1,3-Dichloropropene	6.7	U	6.7	0.93
87-68-3	Hexachlorobutadiene	6.7	U	6.7	2.0
74-95-3	Dibromomethane	6.7	U	6.7	1.9
75-27-4	Bromodichloromethane	6.7	U	6.7	1.0
75-71-8	Dichlorodifluoromethane	6.7	U	6.7	2.1
100-41-4	Ethylbenzene	6.7	U	6.7	1.1
106-93-4	1,2-Dibromoethane	6.7	U	6.7	1.6
108-20-3	Diisopropyl ether	67	U	67	10
91-20-3	Naphthalene	6.7	U	6.7	1.6
179601-23-1	m-Xylene & p-Xylene	13	U	13	1.6
104-51-8	n-Butylbenzene	6.7	U	6.7	0.80
98-82-8	Isopropylbenzene	6.7	U	6.7	0.87
103-65-1	n-Propylbenzene	6.7	U	6.7	0.93
78-93-3	2-Butanone	67	U	67	3.8
108-10-1	4-Methyl-2-pentanone	67	U	67	2.1
135-98-8	sec-Butylbenzene	6.7	U	6.7	0.87
1634-04-4	Methyl tert-butyl ether	6.7	U	6.7	1.1
994-05-8	Tert-amyl-methyl ether (TAME)	33	U	33	0.45
75-09-2	Methylene Chloride	2.3	J B	6.7	2.2
95-47-6	o-Xylene	6.7	U	6.7	0.93
100-42-5	Styrene	6.7	U	6.7	0.73
637-92-3	Ethyl-t-butyl ether (ETBE)	33	U	33	0.73
98-06-6	tert-Butylbenzene	6.7	U	6.7	0.87
127-18-4	Tetrachloroethene	6.7	U	6.7	1.9
108-88-3	Toluene	3.5	J B	6.7	0.87
156-60-5	trans-1,2-Dichloroethene	6.7	U	6.7	1.3
10061-02-6	trans-1,3-Dichloropropene	6.7	U *	6.7	1.3
79-01-6	Trichloroethene	9.3		6.7	1.1
75-69-4	Trichlorofluoromethane	6.7	U	6.7	1.4
108-05-4	Vinyl acetate	13	U	13	1.3
75-01-4	Vinyl chloride	16		6.7	1.5
75-65-0	tert-Butyl alcohol	330	U	330	26
1330-20-7	Xylenes, Total	13	U	13	0.93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Client Sample ID: DR-DPT-36-50 Lab Sample ID: 240-28121-1

Matrix: Water Lab File ID: UXX5433.D

Analysis Method: 8260B Date Collected: 08/19/2013 12:36

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2013 20:34

Soil Aliquot Vol: Dilution Factor: 6.67

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98707 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	6.7	U *	6.7	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28121-1

SDG No.:

Client Sample ID: DR-DPT-36-50 | Lab Sample ID: 240-28121-1

Matrix: Water | Lab File ID: UXX5433.D

Analysis Method: 8260B | Date Collected: 08/19/2013 12:36

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2013 20:34

Soil Aliquot Vol: | Dilution Factor: 6.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98707 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 2.9

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	4.49	2.9	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28121-1

SDG No.:

Client Sample ID: TB-081913 | Lab Sample ID: 240-28121-3

Matrix: Water | Lab File ID: UXX5435.D

Analysis Method: 8260B | Date Collected: 08/19/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2013 21:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98707 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	1.9	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U *	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28121-1

SDG No.:

Client Sample ID: TB-081913 | Lab Sample ID: 240-28121-3

Matrix: Water | Lab File ID: UXX5435.D

Analysis Method: 8260B | Date Collected: 08/19/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2013 21:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98707 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U *	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Client Sample ID: TB-081913 Lab Sample ID: 240-28121-3

Matrix: Water Lab File ID: UXX5435.D

Analysis Method: 8260B Date Collected: 08/19/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2013 21:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98707 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Client Sample ID: TB-081913 Lab Sample ID: 240-28121-3

Matrix: Water Lab File ID: UXX5435.D

Analysis Method: 8260B Date Collected: 08/19/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2013 21:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98707 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

Appendix C

Support Documentation

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\NCChrom\ChromData\A3UX10\20130823-22786.b\UXX5433.D		
Lims ID:	240-28121-A-1	Client ID:	DR-DPT-36-50
Inject. Date:	23-Aug-2013 20:34:30	Dil. Factor:	6.6700
Sample Type:	Client		
Sample ID:	240-0022786-023		
Misc. Info.:			
Operator:	1644	Instrument ID:	A3UX10
Purge Vol:	5.000 mL	ALS Bottle#:	22
Lims Batch ID:	98707	Lims Sample ID:	23
Detector:	MS SCAN		
Method:	\\NCChrom\ChromData\A3UX10\20130823-22786.b\8260_10.m		
Last Update:	24-Aug-2013 12:28:45	Calib Date:	02-Jul-2013 14:41:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\NCChrom\ChromData\A3UX10\20130702-21321.b\UXX5745.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK037		

RRF = 0.3595

First Level Reviewer: williamsla Date: 24-Aug-2013 12:23:55

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.198	5.197	0.001	98	1510504	10.0	
* 2 Chlorobenzene-d5	117	7.872	7.871	0.001	89	1007169	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.120	10.119	0.001	97	495149	10.0	
$ 5 Dibromofluoromethane (Surr)	113	4.630	4.630	0.0	62	356915	9.51	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.914	4.914	0.0	0	451776	10.0	
$ 7 Toluene-d8 (Surr)	98	6.558	6.558	0.0	94	1247832	9.19	
$ 8 4-Bromofluorobenzene (Surr)	95	8.984	8.984	0.0	86	410717	7.42	
12 Dichlorodifluoromethane	85		1.577					
13 Chloromethane	50		1.695					9
14 Vinyl chloride	62	1.790	1.802	-0.012	99	126513	2.33	
16 Bromomethane	94		2.086					
17 Chloroethane	64		2.169					
19 Trichlorofluoromethane	101		2.393					
23 1,1-Dichloroethene	96		2.807					9
24 Acetone	43	2.819	2.819	0.0	95	54618	5.07	
25 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.831					
27 Carbon disulfide	76		3.009					9
31 Methylene Chloride	84	3.186	3.198	-0.012	93	81335	0.3479	
32 2-Methyl-2-propanol	59		3.257					
35 Methyl tert-butyl ether	73		3.423					
34 trans-1,2-Dichloroethene	96	3.423	3.435	-0.012	66	7207	0.1449	
37 1,1-Dichloroethane	63		3.766					
38 Vinyl acetate	86		3.790					
39 Isopropyl ether	87		3.824					
41 Tert-butyl ethyl ether	59		4.120					9
43 cis-1,2-Dichloroethene	96	4.239	4.239	0.0	84	1604828	31.4	
42 2-Butanone (MEK)	43		4.239					9
44 2,2-Dichloropropane	77		4.251					
48 Chlorobromomethane	128		4.440					
50 Chloroform	83		4.500					9

LMC - MARTIN STATE AIRPORT
SDG 240-28121-1

SAMPLE IDENTIFICATION	DR-DPT-36-50
COMPOUND	VINYL CHLORIDE
COMPOUND AREA	126513
INTERNAL STANDARD AMOUNT (ng)	50
VOLUME WATER PURGED (ml)	5
DILUTION FACTOR	6.67
INTERNAL STANDARD AREA	1510504
AVERAGE RRF	0.3595
ml to µl	1000
ng to µg	1000

15.5 µg/L

126513 x 50ng x 6.67 x 1000ml X 1µg /1510504 x 0.3595 x 5ml x 1L x 1000ng

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1-4

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
Tetra Tech	Tony Apuzzage	8/19/13	015231
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
20251 Century Blvd. Ste. 200	301-233-8230		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Germantown / MD / 20874	J. Mullis	Pat O'meara	
Project Name and Location (State)	**Carrier/Waybill Number**		
Dump Road Source Area (MSA)	Fedex		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	VOCs (3x40mL)	Special Instructions/ Conditions of Receipt
OR-DPT-36-50	8/19/13	1236		X						X			X	
OR-DPT-31-25	8/19/13	1506		X						X			X	
TB-081913	8/19/13	—		X			X							

Analysis (Attach list if more space is needed)

240-28121 Chain of Custody

Page 244 of 245

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 days

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Tetra Tech	8/19/13	1531	1. Received By	8/19/13	1532
2. Relinquished By	8/19/13	1630	2. Received By	8/20/13	920
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 28121**
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by:

Cooler Received on 8-20-13 Opened on 8-20-13

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF -1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. 1.4 °C	Corrected Cooler Temp. 1.4 °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-Were custody seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were custody seals on the bottle(s)?	Yes	(No)
3. Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
7. Could all bottle labels be reconciled with the COC?	(Yes)	No
8. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
9. Sufficient quantity received to perform indicated analyses?	(Yes)	No
10. Were sample(s) at the correct pH upon receipt?	Yes	No (NA) pH Strip Lot# HC376062
11. Were VOAs on the COC?	(Yes)	No
12. Were air bubbles >6 mm in any VOA vials?	Yes	(No) NA
13. Was a trip blank present in the cooler(s)?	(Yes)	No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-28121-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/20/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.4 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-36-50 (240-28121-1), DR-DPT-31-25 (240-28121-2) and TB-081913 (240-28121-3) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/23/2013.

Methylene Chloride and Toluene were detected in method blank MB 240-98707/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,1,1,2-Tetrachloroethane, Carbon tetrachloride, Dibromochloromethane and trans-1,3-Dichloropropene failed the recovery criteria high for LCS 240-98707/4.

Samples DR-DPT-36-50 (240-28121-1)[6.67X] and DR-DPT-31-25 (240-28121-2)[66.67X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 98707 recovered outside control limits for the multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28121-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-28121-1	DR-DPT-36-50	Water	08/19/2013 1236	08/20/2013 0920
240-28121-2	DR-DPT-31-25	Water	08/19/2013 1506	08/20/2013 0920
240-28121-3TB	TB-081913	Water	08/19/2013 0000	08/20/2013 0920

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-36-50	240-28121-1	95	100	92	74
DR-DPT-31-25	240-28121-2	94	99	91	75
TB-081913	240-28121-3	94	99	92	74
	MB 240-98707/6	92	100	92	78
	LCS 240-98707/4	90	102	95	87
	240-27889-E-2 MS	90	102	97	87
	240-27889-F-2 MSD	92	102	96	86

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Sample No.: STD8260 240-92306/4 Date Analyzed: 07/02/2013 13:37

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX5742.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1899526	5.20	1402128	7.87	826109	10.11
UPPER LIMIT		3799052	5.70	2804256	8.37	1652218	10.61
LOWER LIMIT		949763	4.70	701064	7.37	413055	9.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-92306/8		1830940	5.20	1292823	7.87	693029	10.11
CCVIS 240-98707/2		1712797	5.20	1180629	7.87	632709	10.11

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Sample No.: CCVIS 240-98707/2 Date Analyzed: 08/23/2013 12:56

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX5412.D Heated Purge: (Y/N) N

Calibration ID: 16139

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1712797	5.20	1180629	7.87	632709	10.11
UPPER LIMIT		3425594	5.70	2361258	8.37	1265418	10.61
LOWER LIMIT		856399	4.70	590315	7.37	316355	9.61
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-98707/3		1775812	5.20	1141446	7.87	552981	10.12
LCS 240-98707/4		1709616	5.20	1184962	7.87	649536	10.12
MB 240-98707/6		1600140	5.20	1072776	7.87	529237	10.12
240-28121-1	DR-DPT-36-50	1510504	5.20	1007169	7.87	495149	10.12
240-28121-2	DR-DPT-31-25	1568807	5.20	1043428	7.87	506501	10.11
240-28121-3	TB-081913	1494525	5.20	1009531	7.87	480446	10.11
240-27889-E-2 MS		1605906	5.20	1084477	7.87	581390	10.12
240-27889-F-2 MSD		1637530	5.20	1111044	7.87	589742	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab File ID: BFB5262.D BFB Injection Date: 05/28/2013

Instrument ID: A3UX10 BFB Injection Time: 13:16

Analysis Batch No.: 87495

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	52.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	98.2	
175	5.0 - 9.0 % of mass 174	6.7	(6.9)1
176	95.0 - 101.0 % of mass 174	93.5	(95.2)1
177	5.0 - 9.0 % of mass 176	6.1	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-87495/8	UXX4658.D	05/28/2013	15:50
	STDA9 240-87495/9	UXX4659.D	05/28/2013	16:11
	STDA9 240-87495/10	UXX4660.D	05/28/2013	16:32
	STDA9 240-87495/11	UXX4661.D	05/28/2013	16:53
	STDA9 240-87495/12	UXX4662.D	05/28/2013	17:15
	STDA9 240-87495/13	UXX4663.D	05/28/2013	17:36

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-28121-1 | Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 | Calibration End Date: 05/28/2013 17:36 | Calibration ID: 15348

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-87495/13	UXX4663.D
Level 2	STDA9 240-87495/12	UXX4662.D
Level 3	STDA9 240-87495/11	UXX4661.D
Level 4	STDA9 240-87495/10	UXX4660.D
Level 5	STDA9 240-87495/9	UXX4659.D
Level 6	STDA9 240-87495/8	UXX4658.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.9351 0.7200	0.8183	0.9669	0.7435	0.8522	Ave		0.8393				12.0		15.0			
Ethyl ether	0.3526 0.2524	0.2870	0.3279	0.2696	0.3339	Ave		0.3039				13.0		15.0			
3-Chloro-1-propene	0.1632 0.1612	0.1539	0.1609	0.1639	0.1752	Ave		0.1630				4.2		15.0			
Diisopropyl ether	0.2436 0.2941	0.2470	0.2427	0.2569	0.2816	Ave		0.2610				8.3		15.0			
2-Chloro-1,3-butadiene	0.4470 0.5692	0.4651	0.4677	0.4894	0.5665	Ave		0.5008				11.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.7474 0.9445	0.7998	0.8028	0.8547	0.9344	Ave		0.8473				9.3		15.0			
Propionitrile	0.0183 0.0231	0.0204	0.0273	0.0252	0.0240	Ave		0.0230				14.0		15.0			
Ethyl acetate	0.1590 0.1647	0.1524	0.2142	0.1705	0.1575	Ave		0.1697				13.0		15.0			
Methacrylonitrile	0.1102 0.1289	0.1319	0.1213	0.1325	0.1332	Ave		0.1263				7.1		15.0			
Isobutyl alcohol	0.0076 0.0057	0.0068	0.0075	0.0083	0.0073	Ave		0.0072				12.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6746 0.8156	0.6951	0.7166	0.7363	0.8000	Ave		0.7397				7.7		15.0			
n-Heptane	0.0683 0.0638	0.0609	0.0626	0.0604	0.0641	Ave		0.0634				4.5		15.0			
n-Butanol	0.0050	0.0051	0.0047	0.0072	0.0067	Lin	-0.083	0.0070							0.9920		0.9900
Methyl methacrylate	0.1815 0.1582	0.1559	0.1663	0.1628	0.1584	Ave		0.1639				5.8		15.0			
2-Nitropropane	0.0181 0.0163	0.0192	0.0150	0.0189	0.0149	Ave		0.0170				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28121-1 Analy Batch No.: 87495

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/28/2013 15:50 Calibration End Date: 05/28/2013 17:36 Calibration ID: 15348

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0764 0.0641	0.0838	0.0840	0.0919	0.0886	Ave		0.0815				12.0		15.0			
1,2,3-Trimethylbenzene	2.1912 2.8021	2.2708	2.3128	2.4773	2.5677	Ave		2.4370				9.3		15.0			
2-Methylnaphthalene	1.0000 0.8868	0.9617	1.0575	1.0106	1.0960	Ave		1.0021				7.3		15.0			
n-Butyl acetate	0.1536 0.1805	0.1506	0.1861	0.1673	0.1756	Ave		0.1690				8.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab File ID: BFB5311.D BFB Injection Date: 07/02/2013

Instrument ID: A3UX10 BFB Injection Time: 12:26

Analysis Batch No.: 92306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.7	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	86.8	
175	5.0 - 9.0 % of mass 174	6.2	(7.1)1
176	95.0 - 101.0 % of mass 174	86.3	(99.4)1
177	5.0 - 9.0 % of mass 176	5.5	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-92306/2	UXX5740.D	07/02/2013	12:55
	STD8260 240-92306/3	UXX5741.D	07/02/2013	13:16
	STD8260 240-92306/4	UXX5742.D	07/02/2013	13:37
	STD8260 240-92306/5	UXX5743.D	07/02/2013	13:59
	STD8260 240-92306/6	UXX5744.D	07/02/2013	14:20
	STD8260 240-92306/7	UXX5745.D	07/02/2013	14:41
	ICV 240-92306/8	UXX5746.D	07/02/2013	15:03

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28121-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-92306/7	UXX5745.D
Level 2	STD8260 240-92306/6	UXX5744.D
Level 3	STD8260 240-92306/5	UXX5743.D
Level 4	STD8260 240-92306/4	UXX5742.D
Level 5	STD8260 240-92306/3	UXX5741.D
Level 6	STD8260 240-92306/2	UXX5740.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2977 0.2838	0.2577	0.2748	0.2528	0.2566	Ave		0.2706				6.6		15.0			
Chloromethane	0.4636 0.3885	0.4208	0.4187	0.3892	0.3928	Ave		0.4122			0.1000	7.1		15.0			
Vinyl chloride	0.3817 0.3523	0.3628	0.3635	0.3478	0.3489	Ave		0.3595				3.6		15.0			
Bromomethane	0.1738 0.1513	0.1661	0.1687	0.1771	0.1716	Ave		0.1681				5.4		15.0			
Chloroethane	0.2457 0.2275	0.2302	0.2304	0.2310	0.2376	Ave		0.2338				2.9		15.0			
Trichlorofluoromethane	0.3575 0.3719	0.3350	0.3525	0.3679	0.3820	Ave		0.3611				4.6		15.0			
Acrolein	0.0359 0.0431	0.0395	0.0411	0.0449	0.0462	Ave		0.0418				9.0		15.0			
1,1-Dichloroethene	0.3190 0.2928	0.2948	0.2913	0.2993	0.3010	Ave		0.2997				3.4		15.0			
Acetone	0.0740 0.0622	0.0776	0.0718	0.0736	0.0689	Ave		0.0713				7.4		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2062 0.2056	0.2022	0.2152	0.2144	0.2141	Ave		0.2096				2.7		15.0			
Iodomethane	0.4548 0.4274	0.4570	0.4317	0.4435	0.4405	Ave		0.4425				2.7		15.0			
Carbon disulfide	0.8923 0.9201	0.8872	0.8823	0.9357	0.9395	Ave		0.9095				2.8		15.0			
Acetonitrile	0.0167 0.0157	0.0178	0.0214	0.0237	0.0177	Qua	0.0061	0.0220	0						0.9940		0.9900
Methyl acetate	0.1969 0.2006	0.2062	0.2102	0.2165	0.2151	Ave		0.2076				3.8		15.0			
Methylene Chloride	0.7288 0.3199	0.5369	0.3954	0.3695	0.3438	Lin1	0.4289	0.3150							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28121-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0095 0.0104	0.0120	0.0145	0.0164	0.0130	Qua	-0.124	0.0171	0						0.9970		0.9900
Acrylonitrile	0.0905 0.1021	0.0983	0.1034	0.1068	0.1082	Ave		0.1016				6.4		15.0			
Methyl tert-butyl ether	0.7590 0.7679	0.7484	0.7512	0.8058	0.8208	Ave		0.7755				3.9		15.0			
trans-1,2-Dichloroethene	0.3358 0.3195	0.3308	0.3296	0.3254	0.3340	Ave		0.3292				1.8		15.0			
Hexane	0.0712 0.0637	0.0646	0.0668	0.0661	0.0671	Ave		0.0666				3.9		15.0			
1,1-Dichloroethane	0.5578 0.5246	0.5449	0.5273	0.5247	0.5369	Ave		0.5360			0.1000	2.5		15.0			
Vinyl acetate	0.0458 0.0460	0.0362	0.0441	0.0416	0.0442	Ave		0.0430				8.6		15.0			
2-Butanone	0.0991 0.0997	0.0968	0.1003	0.0974	0.1064	Ave		0.0999				3.4		15.0			
cis-1,2-Dichloroethene	0.3285 0.3322	0.3571	0.3290	0.3348	0.3453	Ave		0.3378				3.3		15.0			
2,2-Dichloropropane	0.2688 0.2905	0.2819	0.2776	0.2821	0.3040	Ave		0.2842				4.2		15.0			
Bromochloromethane	0.1521 0.1504	0.1506	0.1534	0.1499	0.1524	Ave		0.1515				0.9		15.0			
Tetrahydrofuran	0.0772 0.0698	0.0789	0.0767	0.0752	0.0716	Ave		0.0749				4.7		15.0			
Chloroform	0.4907 0.4900	0.5020	0.4890	0.4920	0.4962	Ave		0.4933				1.0		15.0			
1,1,1-Trichloroethane	0.4106 0.3726	0.3778	0.3695	0.3890	0.3851	Ave		0.3841				3.9		15.0			
Cyclohexane	0.5528 0.5297	0.5227	0.5349	0.5435	0.5429	Ave		0.5378				2.0		15.0			
1,1-Dichloropropene	0.3609 0.3601	0.3698	0.3664	0.3618	0.3692	Ave		0.3647				1.2		15.0			
Carbon tetrachloride	0.2610 0.2765	0.2656	0.2674	0.2761	0.2887	Ave		0.2725				3.7		15.0			
1,2-Dichloroethane	0.3474 0.3376	0.3583	0.3351	0.3500	0.3553	Ave		0.3473				2.7		15.0			
Benzene	1.1681 1.1119	1.1203	1.0964	1.1265	1.1340	Ave		1.1262				2.2		15.0			
Trichloroethene	0.3214 0.2780	0.2821	0.2900	0.2862	0.2843	Ave		0.2904				5.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28121-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloropropane	0.2454 0.2502	0.2581	0.2466	0.2561	0.2683	Ave		0.2541				3.4		15.0			
Methylcyclohexane	0.4919 0.4866	0.4934	0.4893	0.5052	0.5090	Ave		0.4959				1.8		15.0			
Dibromomethane	0.1412 0.1445	0.1506	0.1469	0.1502	0.1477	Ave		0.1468				2.4		15.0			
1,4-Dioxane	0.0014 0.0009	0.0011	0.0016	0.0020	0.0013	Ave		0.0014				26.0	*	15.0			
Bromodichloromethane	0.2890 0.3042	0.2800	0.2808	0.2937	0.3002	Ave		0.2913				3.4		15.0			
2-Chloroethyl vinyl ether	0.1328 0.1460	0.1268	0.1340	0.1400	0.1524	Ave		0.1387				6.8		15.0			
cis-1,3-Dichloropropene	0.3136 0.3654	0.2925	0.3234	0.3329	0.3608	Ave		0.3314				8.4		15.0			
4-Methyl-2-pentanone	0.1851 0.2307	0.1947	0.2072	0.2263	0.2356	Ave		0.2133				9.7		15.0			
Toluene	1.5717 1.7749	1.5621	1.5832	1.5919	1.6670	Ave		1.6251				5.1		15.0			
trans-1,3-Dichloropropene	0.3281 0.4436	0.3301	0.3424	0.3783	0.4187	Ave		0.3735				13.0		15.0			
Ethyl methacrylate	0.3469 0.4669	0.3719	0.3886	0.4197	0.4555	Ave		0.4082				12.0		15.0			
1,1,2-Trichloroethane	0.3016 0.3098	0.3088	0.3075	0.2994	0.3063	Ave		0.3056				1.4		15.0			
1,3-Dichloropropane	0.5636 0.5513	0.5066	0.5178	0.5309	0.5453	Ave		0.5359				4.0		15.0			
Tetrachloroethene	0.3249 0.3137	0.3109	0.3123	0.3155	0.3171	Ave		0.3157				1.6		15.0			
2-Hexanone	0.1784 0.2174	0.1735	0.1912	0.2073	0.2193	Ave		0.1979				10.0		15.0			
Dibromochloromethane	0.2360 0.2992	0.2543	0.2535	0.2707	0.2882	Ave		0.2670				8.9		15.0			
1,2-Dibromoethane	0.2969 0.3100	0.2975	0.2857	0.3063	0.3126	Ave		0.3015				3.3		15.0			
Chlorobenzene	1.1153 1.1370	1.1006	1.0569	1.0906	1.1038	Ave		1.1007			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2824 0.3322	0.2829	0.2918	0.3108	0.3194	Ave		0.3032				6.8		15.0			
Ethylbenzene	0.5758 0.6262	0.5863	0.6011	0.6014	0.6212	Ave		0.6020				3.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28121-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.7270 0.8215	0.7355	0.7415	0.7771	0.8022	Ave		0.7675				5.1		15.0			
o-Xylene	0.6796 0.7942	0.7047	0.7272	0.7639	0.7596	Ave		0.7382				5.7		15.0			
Styrene	1.1077 1.3987	1.1933	1.1883	1.2806	1.3155	Ave		1.2474				8.4		15.0			
Bromoform	0.1365 0.1881	0.1411	0.1461	0.1592	0.1772	Ave		0.1580			0.1000	13.0		15.0			
Isopropylbenzene	1.7511 2.0343	1.7718	1.8148	1.9530	1.9719	Ave		1.8828				6.3		15.0			
1,1,2,2-Tetrachloroethane	0.7449 0.7423	0.7656	0.8018	0.7659	0.7719	Ave		0.7654			0.3000	2.8		15.0			
Bromobenzene	0.8881 0.8401	0.8893	0.8519	0.8109	0.8110	Ave		0.8485				4.1		15.0			
1,2,3-Trichloropropane	0.2528 0.2485	0.2436	0.2471	0.2523	0.2472	Ave		0.2486				1.4		15.0			
trans-1,4-Dichloro-2-butene	0.1594 0.2065	0.1645	0.1863	0.1935	0.1991	Ave		0.1849				10.0		15.0			
n-Propylbenzene	0.8836 0.9348	0.9225	0.9442	0.9060	0.9061	Ave		0.9162				2.4		15.0			
2-Chlorotoluene	0.8471 0.8107	0.8035	0.8145	0.8068	0.8122	Ave		0.8158				1.9		15.0			
1,3,5-Trimethylbenzene	2.5762 2.8611	2.6002	2.7221	2.7556	2.8139	Ave		2.7215				4.2		15.0			
4-Chlorotoluene	0.8988 0.9081	0.8802	0.8823	0.8848	0.8823	Ave		0.8894				1.3		15.0			
tert-Butylbenzene	2.5038 2.4500	2.2239	2.4167	2.3292	2.3560	Ave		2.3799				4.2		15.0			
1,2,4-Trimethylbenzene	2.6043 2.8929	2.6775	2.7491	2.8000	2.8183	Ave		2.7570				3.8		15.0			
sec-Butylbenzene	3.0300 3.4431	3.1666	3.3039	3.3542	3.3916	Ave		3.2816				4.7		15.0			
1,3-Dichlorobenzene	1.5092 1.5056	1.5998	1.5710	1.5273	1.5059	Ave		1.5365				2.6		15.0			
p-Isopropyltoluene	2.4424 2.7807	2.5538	2.6635	2.6618	2.7434	Ave		2.6409				4.7		15.0			
1,4-Dichlorobenzene	1.7229 1.6045	1.6252	1.6225	1.5715	1.5870	Ave		1.6223				3.3		15.0			
n-Butylbenzene	2.0630 2.2382	2.0945	2.2927	2.3221	2.3183	Ave		2.2215				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28121-1 Analy Batch No.: 92306

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2013 12:55 Calibration End Date: 07/02/2013 14:41 Calibration ID: 16139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4074 1.3553	1.4151	1.4245	1.4040	1.3915	Ave		1.3996				1.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0897 0.0915	0.0866	0.1008	0.1037	0.0925	Ave		0.0941				7.1		15.0			
1,3,5-Trichlorobenzene	0.9389 0.8233	0.9547	0.9599	0.9476	0.8670	Ave		0.9152				6.2		15.0			
1,2,4-Trichlorobenzene	0.8510 0.7437	0.8164	0.8427	0.8344	0.7483	Ave		0.8061				5.9		15.0			
Hexachlorobutadiene	0.2820 0.2374	0.2926	0.3073	0.2714	0.2509	Ave		0.2736				9.5		15.0			
Naphthalene	1.9175 1.8952	1.9376	2.0220	2.1068	1.9312	Ave		1.9684				4.1		15.0			
1,2,3-Trichlorobenzene	0.7657 0.6768	0.7464	0.7504	0.7341	0.6861	Ave		0.7266				5.0		15.0			
Dibromofluoromethane (Surr)	0.2502 0.2509	0.2370	0.2459	0.2475	0.2591	Ave		0.2484				2.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3197 0.2982	0.2804	0.2943	0.2970	0.3023	Ave		0.2987				4.3		15.0			
Toluene-d8 (Surr)	1.3686 1.4472	1.2543	1.3081	1.3123	1.3963	Ave		1.3478				5.2		15.0			
4-Bromofluorobenzene (Surr)	0.5086 0.5764	0.5161	0.5353	0.5693	0.5900	Ave		0.5493				6.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

NO samples

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3039	0.2653		2.00	0.0100	-12.7	50.0
Diisopropyl ether	Ave	0.2610	0.2472		10.0	0.0100	-5.3	50.0
Isobutyl alcohol	Ave	0.0072	0.0082		50.0	0.500	14.4	50.0
Cyclohexanone	Ave	0.0815	0.0097		20.0	0.200	-88.1*	50.0
1,2,3-Trimethylbenzene	Ave	2.437	2.645		0.0109	0.0100	8.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2662		1.00	0.0100	-1.6	50.0
Chloromethane	Ave	0.4122	0.3834	0.1000	1.00	0.0100	-7.0	50.0
Vinyl chloride	Ave	0.3595	0.3419		1.00	0.0100	-4.9	20.0
Bromomethane	Ave	0.1681	0.1473		1.00	0.0100	-12.3	50.0
Chloroethane	Ave	0.2338	0.2161		1.00	0.0100	-7.6	50.0
Trichlorofluoromethane	Ave	0.3611	0.3584		1.00	0.0100	-0.8	50.0
Acrolein	Ave	0.0418	0.0369		20.0	0.0300	-11.7	50.0
1,1-Dichloroethene	Ave	0.2997	0.2858		1.00	0.0100	-4.6	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2096	0.2369		1.00	0.0100	13.0	50.0
Acetone	Ave	0.0713	0.0632		10.0	0.0200	-11.4	50.0
Iodomethane	Ave	0.4425	0.4338		1.00	0.0100	-2.0	50.0
Carbon disulfide	Ave	0.9095	0.9352		1.00	0.0100	2.8	50.0
Acetonitrile	Qua		0.0168		20.0	0.0300	-23.1	50.0
Methyl acetate	Ave	0.2076	0.1940		10.0	0.0100	-6.6	50.0
Methylene Chloride	Lin1		0.3201		1.00	0.0100	-12.0	50.0
tert-Butyl alcohol	Qua		0.0110		50.0	0.200	-27.1	50.0
Acrylonitrile	Ave	0.1016	0.0967		20.0	0.0300	-4.8	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7020		1.00	0.0100	-9.5	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3109		1.00	0.0100	-5.5	50.0
Hexane	Ave	0.0666	0.0720		1.00	0.0100	8.2	20.0
1,1-Dichloroethane	Ave	0.5360	0.5078	0.1000	1.00	0.0100	-5.3	50.0
Vinyl acetate	Ave	0.0430	0.0455		2.00	0.0100	5.9	50.0
2-Butanone	Ave	0.0999	0.0893		10.0	0.0200	-10.6	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3270		1.00	0.0100	-3.2	50.0
2,2-Dichloropropane	Ave	0.2842	0.2766		1.00	0.0100	-2.6	50.0
Bromochloromethane	Ave	0.1515	0.1430		1.00	0.0100	-5.6	50.0
Chloroform	Ave	0.4933	0.4800		1.00	0.0100	-2.7	20.0
Tetrahydrofuran	Ave	0.0749	0.0638		5.00	0.0100	-14.9	50.0
1,1,1-Trichloroethane	Ave	0.3841	0.3618		1.00	0.0100	-5.8	50.0
Cyclohexane	Ave	0.5378	0.5529		1.00	0.0100	2.8	50.0
1,1-Dichloropropene	Ave	0.3647	0.3597		1.00	0.0100	-1.4	50.0
Carbon tetrachloride	Ave	0.2725	0.2698		1.00	0.0100	-1.0	50.0
1,2-Dichloroethane	Ave	0.3473	0.3435		1.00	0.0100	-1.1	50.0
Benzene	Ave	1.126	1.099		1.00	0.0100	-2.4	50.0
Trichloroethene	Ave	0.2904	0.2787		1.00	0.0100	-4.0	50.0
1,2-Dichloropropane	Ave	0.2541	0.2548		1.00	0.0100	0.3	20.0
Methylcyclohexane	Ave	0.4959	0.5026		1.00	0.0100	1.4	50.0
Dibromomethane	Ave	0.1468	0.1511		1.00	0.0100	2.9	50.0
Bromodichloromethane	Ave	0.2913	0.2937		1.00	0.0100	0.8	50.0
2-Chloroethyl vinyl ether	Ave	0.1387	0.1358		10.0	0.0100	-2.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Ave	0.3314	0.3198		1.00	0.0100	-3.5	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2120		10.0	0.0200	-0.6	50.0
Toluene	Ave	1.625	1.565		1.00	0.0100	-3.7	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.3754		1.00	0.0100	0.5	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3043		1.00	0.0100	-0.4	50.0
1,3-Dichloropropane	Ave	0.5359	0.5408		1.00	0.0100	0.9	50.0
Tetrachloroethene	Ave	0.3157	0.3103		1.00	0.0100	-1.7	50.0
2-Hexanone	Ave	0.1979	0.1971		10.0	0.0200	-0.4	50.0
Dibromochloromethane	Ave	0.2670	0.2593		1.00	0.0100	-2.9	50.0
1,2-Dibromoethane	Ave	0.3015	0.2916		1.00	0.0100	-3.3	50.0
Chlorobenzene	Ave	1.101	1.054	0.3000	1.00	0.0100	-4.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.2950		1.00	0.0100	-2.7	50.0
Ethylbenzene	Ave	0.6020	0.5880		1.00	0.0100	-2.3	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7353		2.00	0.0200	-4.2	50.0
o-Xylene	Ave	0.7382	0.7063		1.00	0.0100	-4.3	50.0
Styrene	Ave	1.247	1.208		1.00	0.0100	-3.1	50.0
Bromoform	Ave	0.1580	0.1476	0.1000	1.00	0.0100	-6.6	50.0
Isopropylbenzene	Ave	1.883	1.773		1.00	0.0100	-5.8	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7464	0.3000	1.00	0.0100	-2.5	50.0
Bromobenzene	Ave	0.8485	0.8337		1.00	0.0100	-1.8	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2495		1.00	0.0100	0.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1877		1.00	0.0200	1.6	50.0
n-Propylbenzene	Ave	0.9162	0.9431		1.00	0.0100	2.9	50.0
2-Chlorotoluene	Ave	0.8158	0.7826		1.00	0.0100	-4.1	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.627		1.00	0.0100	-3.5	50.0
4-Chlorotoluene	Ave	0.8894	0.8613		1.00	0.0100	-3.2	50.0
tert-Butylbenzene	Ave	2.380	2.286		1.00	0.0100	-4.0	50.0
1,2,4-Trimethylbenzene	Ave	2.757	2.656		1.00	0.0100	-3.7	50.0
sec-Butylbenzene	Ave	3.282	3.199		1.00	0.0100	-2.5	50.0
1,3-Dichlorobenzene	Ave	1.536	1.461		1.00	0.0100	-4.9	50.0
p-Isopropyltoluene	Ave	2.641	2.626		1.00	0.0100	-0.6	50.0
1,4-Dichlorobenzene	Ave	1.622	1.546		1.00	0.0100	-4.7	50.0
n-Butylbenzene	Ave	2.221	2.238		1.00	0.0100	0.7	50.0
1,2-Dichlorobenzene	Ave	1.400	1.341		1.00	0.0100	-4.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.0955		2.00	0.0100	1.5	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.7202		1.00	0.0100	-10.7	50.0
Hexachlorobutadiene	Ave	0.2736	0.2467		1.00	0.0100	-9.8	50.0
Naphthalene	Ave	1.968	1.790		1.00	0.0100	-9.1	50.0
1,2,3-Trichlorobenzene	Ave	0.7266	0.6612		1.00	0.0100	-9.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2341		0.00942	0.0100	-5.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2638		0.00883	0.0100	-11.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab Sample ID: ICV 240-92306/8 Calibration Date: 07/02/2013 15:03

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5746.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.348	1.272		0.00944	0.0100	-5.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4913		0.00894	0.0100	-10.6	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab File ID: BFB5365.D BFB Injection Date: 08/23/2013

Instrument ID: A3UX10 BFB Injection Time: 12:32

Analysis Batch No.: 98707

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.1	
75	30.0 - 60.0 % of mass 95	50.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.3	(0.4)1
174	50.0 - 120.00 % of mass 95	80.4	
175	5.0 - 9.0 % of mass 174	5.8	(7.2)1
176	95.0 - 101.0 % of mass 174	80.1	(99.5)1
177	5.0 - 9.0 % of mass 176	5.2	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98707/2	UXX5412.D	08/23/2013	12:56
	CCV 240-98707/3	UXX5413.D	08/23/2013	13:18
	LCS 240-98707/4	UXX5414.D	08/23/2013	13:39
	MB 240-98707/6	UXX5416.D	08/23/2013	14:22
DR-DPT-36-50	240-28121-1	UXX5433.D	08/23/2013	20:34
DR-DPT-31-25	240-28121-2	UXX5434.D	08/23/2013	20:55
TB-081913	240-28121-3	UXX5435.D	08/23/2013	21:16
	240-27889-E-2 MS	UXX5437.D	08/23/2013	21:59
	240-27889-F-2 MSD	UXX5438.D	08/23/2013	22:20

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab Sample ID: CCVIS 240-98707/2 Calibration Date: 08/23/2013 12:56

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5412.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2706	0.2797		1.00	0.0100	3.4	50.0
Chloromethane	Ave	0.4122	0.4362	0.1000	1.00	0.0100	5.8	50.0
Vinyl chloride	Ave	0.3595	0.3598		1.00	0.0100	0.0	20.0
Bromomethane	Ave	0.1681	0.1228		1.00	0.0100	-26.9	50.0
Chloroethane	Ave	0.2338	0.1643		1.00	0.0100	-29.7	50.0
Trichlorofluoromethane	Ave	0.3611	0.3551		1.00	0.0100	-1.7	50.0
Acrolein	Ave	0.0418	0.0319		20.0	0.100	-23.6	50.0
1,1-Dichloroethene	Ave	0.2997	0.2532		1.00	0.0100	-15.5	20.0
Acetone	Ave	0.0713	0.0841		10.0	0.0200	17.8	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2096	0.2001		1.00	0.0100	-4.5	50.0
Iodomethane	Ave	0.4425	0.3719		1.00	0.0100	-16.0	50.0
Carbon disulfide	Ave	0.9095	0.7510		1.00	0.0100	-17.4	50.0
Acetonitrile	Qua		0.0185		20.0	0.100	-10.3	50.0
Methyl acetate	Ave	0.2076	0.2269		10.0	0.0200	9.3	50.0
Methylene Chloride	Lin1		0.3585		1.00	0.0100	0.2	50.0
tert-Butyl alcohol	Qua		0.0111		50.0	0.200	-26.1	50.0
Acrylonitrile	Ave	0.1016	0.1109		20.0	0.0200	9.2	50.0
Methyl tert-butyl ether	Ave	0.7755	0.7622		1.00	0.0100	-1.7	50.0
trans-1,2-Dichloroethene	Ave	0.3292	0.3103		1.00	0.0100	-5.7	50.0
Hexane	Ave	0.0666	0.0600		1.00	0.0100	-9.9	20.0
1,1-Dichloroethane	Ave	0.5360	0.5468	0.1000	1.00	0.0100	2.0	50.0
Vinyl acetate	Ave	0.0430	0.0368		2.00	0.0100	-14.4	50.0
2-Butanone	Ave	0.0999	0.1097		10.0	0.0200	9.7	50.0
cis-1,2-Dichloroethene	Ave	0.3378	0.3254		1.00	0.0100	-3.7	50.0
2,2-Dichloropropane	Ave	0.2842	0.3702		1.00	0.0100	30.3	50.0
Bromochloromethane	Ave	0.1515	0.1496		1.00	0.0100	-1.2	50.0
Tetrahydrofuran	Ave	0.0749	0.0751		5.00	0.0100	0.2	50.0
Chloroform	Ave	0.4933	0.5392		1.00	0.0100	9.3	20.0
1,1,1-Trichloroethane	Ave	0.3841	0.4511		1.00	0.0100	17.4	50.0
Cyclohexane	Ave	0.5378	0.5461		1.00	0.0100	1.5	50.0
1,1-Dichloropropene	Ave	0.3647	0.3900		1.00	0.0100	6.9	50.0
Carbon tetrachloride	Ave	0.2725	0.3805		1.00	0.0100	39.6	50.0
1,2-Dichloroethane	Ave	0.3473	0.4164		1.00	0.0100	19.9	50.0
Benzene	Ave	1.126	1.143		1.00	0.0100	1.5	50.0
Trichloroethene	Ave	0.2904	0.2771		1.00	0.0100	-4.6	50.0
1,2-Dichloropropane	Ave	0.2541	0.2755		1.00	0.0100	8.4	20.0
Methylcyclohexane	Ave	0.4959	0.4898		1.00	0.0100	-1.2	50.0
1,4-Dioxane	Ave	0.0014	0.0011		50.0	0.500	-20.3	50.0
Dibromomethane	Ave	0.1468	0.1538		1.00	0.0100	4.7	50.0
Bromodichloromethane	Ave	0.2913	0.3658		1.00	0.0100	25.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab Sample ID: CCVIS 240-98707/2 Calibration Date: 08/23/2013 12:56

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5412.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1387	0.1416		10.0	0.0200	2.1	50.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3900		1.00	0.0100	17.7	50.0
4-Methyl-2-pentanone	Ave	0.2133	0.2414		10.0	0.0200	13.2	50.0
Toluene	Ave	1.625	1.815		1.00	0.0100	11.7	20.0
trans-1,3-Dichloropropene	Ave	0.3735	0.4919		1.00	0.0100	31.7	50.0
Ethyl methacrylate	Ave	0.4082	0.4265		1.00	0.0100	4.5	50.0
1,1,2-Trichloroethane	Ave	0.3056	0.3202		1.00	0.0100	4.8	50.0
1,3-Dichloropropane	Ave	0.5359	0.5865		1.00	0.0100	9.4	50.0
Tetrachloroethene	Ave	0.3157	0.3256		1.00	0.0100	3.1	50.0
2-Hexanone	Ave	0.1979	0.2215		10.0	0.0200	11.9	50.0
Dibromochloromethane	Ave	0.2670	0.3545		1.00	0.0100	32.8	50.0
1,2-Dibromoethane	Ave	0.3015	0.3197		1.00	0.0100	6.0	50.0
Chlorobenzene	Ave	1.101	1.091	0.3000	1.00	0.0100	-0.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3032	0.3877		1.00	0.0100	27.8	50.0
Ethylbenzene	Ave	0.6020	0.6059		1.00	0.0100	0.6	20.0
m-Xylene & p-Xylene	Ave	0.7675	0.7593		2.00	0.0200	-1.1	50.0
o-Xylene	Ave	0.7382	0.7317		1.00	0.0100	-0.9	50.0
Styrene	Ave	1.247	1.186		1.00	0.0100	-4.9	50.0
Bromoform	Ave	0.1580	0.2008	0.1000	1.00	0.0100	27.1	50.0
Isopropylbenzene	Ave	1.883	1.915		1.00	0.0100	1.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7654	0.7836	0.3000	1.00	0.0100	2.4	50.0
Bromobenzene	Ave	0.8485	0.8066		1.00	0.0100	-4.9	50.0
1,2,3-Trichloropropane	Ave	0.2486	0.2470		1.00	0.0100	-0.6	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1849	0.1854		1.00	0.0100	0.3	50.0
n-Propylbenzene	Ave	0.9162	0.9076		1.00	0.0100	-0.9	50.0
2-Chlorotoluene	Ave	0.8158	0.8230		1.00	0.0100	0.9	50.0
1,3,5-Trimethylbenzene	Ave	2.722	2.969		1.00	0.0100	9.1	50.0
4-Chlorotoluene	Ave	0.8894	0.8291		1.00	0.0100	-6.8	50.0
tert-Butylbenzene	Ave	2.380	2.324		1.00	0.0100	-2.4	50.0
1,2,4-Trimethylbenzene	Ave	2.757	3.016		1.00	0.0100	9.4	50.0
sec-Butylbenzene	Ave	3.282	3.507		1.00	0.0100	6.9	50.0
1,3-Dichlorobenzene	Ave	1.536	1.524		1.00	0.0100	-0.8	50.0
p-Isopropyltoluene	Ave	2.641	2.810		1.00	0.0100	6.4	50.0
1,4-Dichlorobenzene	Ave	1.622	1.616		1.00	0.0100	-0.4	50.0
n-Butylbenzene	Ave	2.221	2.442		1.00	0.0100	9.9	50.0
1,2-Dichlorobenzene	Ave	1.400	1.520		1.00	0.0100	8.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0941	0.1228		2.00	0.0100	30.4	50.0
1,3,5-Trichlorobenzene	Ave	0.9152	0.9403		1.00	0.0100	2.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8061	0.7748		1.00	0.0100	-3.9	50.0
Hexachlorobutadiene	Ave	0.2736	0.2796		1.00	0.0100	2.2	50.0
Naphthalene	Ave	1.968	1.821		1.00	0.0100	-7.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab Sample ID: CCVIS 240-98707/2 Calibration Date: 08/23/2013 12:56

Instrument ID: A3UX10 Calib Start Date: 07/02/2013 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/02/2013 14:41

Lab File ID: UXX5412.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7266	0.6929		1.00	0.0100	-4.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2484	0.2204		0.00887	0.0100	-11.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2987	0.2978		0.00997	0.0100	-0.3	50.0
Toluene-d8 (Surr)	Ave	1.348	1.261		0.00935	0.0100	-6.5	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5493	0.4464		0.00813	0.0100	-18.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab Sample ID: CCV 240-98707/3 Calibration Date: 08/23/2013 13:18

Instrument ID: A3UX10 Calib Start Date: 05/28/2013 15:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/28/2013 17:36

Lab File ID: UXX5413.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.8393	0.4627		2.00	0.0100	-44.9	50.0
Ethyl ether	Ave	0.3039	0.2289		2.00	0.0100	-24.7	50.0
3-Chloro-1-propene	Ave	0.1630	0.1590		2.00	0.0100	-2.5	50.0
Diisopropyl ether	Ave	0.2610	0.2483		10.0	0.0500	-4.9	50.0
2-Chloro-1,3-butadiene	Ave	0.5008	0.5411		2.00	0.0100	8.0	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8473	0.8040		5.00	0.0100	-5.1	50.0
Ethyl acetate	Ave	0.1697	0.1819		4.00	0.0200	7.2	50.0
Propionitrile	Ave	0.0230	0.0212		4.00	0.0200	-7.9	50.0
Methacrylonitrile	Ave	0.1263	0.1320		2.00	0.0100	4.5	50.0
Isobutyl alcohol	Ave	0.0072	0.0073		50.0	0.200	1.0	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7397	0.6116		5.00	0.0100	-17.3	50.0
n-Heptane	Ave	0.0634	0.0618		1.00	0.0100	-2.5	50.0
n-Butanol	Lin		0.0057		50.0	0.200	-13.0	50.0
Methyl methacrylate	Ave	0.1639	0.1841		2.00	0.0100	12.4	50.0
2-Nitropropane	Ave	0.0170	0.0479		2.00	0.0200	180.7*	50.0
Cyclohexanone	Ave	0.0815	0.0726		20.0	0.100	-10.9	50.0
1,2,3-Trimethylbenzene	Ave	2.437	3.201		0.0131	0.0100	31.3	50.0
2-Methylnaphthalene	Ave	1.002	0.7408		5.00	0.0200	-26.1	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Lab File ID: UXX5416.D Lab Sample ID: MB 240-98707/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 08/23/2013 14:22

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98707/4	UXX5414.D	08/23/2013 13:39
DR-DPT-36-50	240-28121-1	UXX5433.D	08/23/2013 20:34
DR-DPT-31-25	240-28121-2	UXX5434.D	08/23/2013 20:55
TB-081913	240-28121-3	UXX5435.D	08/23/2013 21:16
	240-27889-E-2 MS	UXX5437.D	08/23/2013 21:59
	240-27889-F-2 MSD	UXX5438.D	08/23/2013 22:20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28121-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98707/6

Matrix: Water | Lab File ID: UXX5416.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2013 14:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98707 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98707/6

Matrix: Water Lab File ID: UXX5416.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2013 14:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98707 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	0.342	J	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.222	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98707/6

Matrix: Water Lab File ID: UXX5416.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2013 14:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98707 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98707/6

Matrix: Water Lab File ID: UXX5416.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2013 14:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98707 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5414.D

Lab ID: LCS 240-98707/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	12.1	121	72-116	*
1,1,1-Trichloroethane	10.0	11.2	112	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.72	97	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.6	106	74-151	
1,1-Dichloroethane	10.0	9.93	99	82-115	
1,1-Dichloroethene	10.0	8.80	88	78-131	
1,1-Dichloropropene	10.0	9.50	95	83-114	
1,2,3-Trichlorobenzene	10.0	8.74	87	54-126	
1,2,3-Trichloropropane	10.0	9.54	95	73-129	
1,2,3-Trimethylbenzene	10.0	11.5	115	70-130	
1,2,4-Trichlorobenzene	10.0	8.56	86	48-135	
1,2,4-Trimethylbenzene	10.0	9.93	99	76-120	
1,2-Dibromo-3-Chloropropane	10.0	12.4	124	42-136	
1,2-Dichlorobenzene	10.0	9.77	98	81-110	
1,2-Dichloroethane	10.0	11.4	114	71-127	
1,2-Dichloropropane	10.0	10.4	104	81-115	
1,3-Dichlorobenzene	10.0	9.11	91	80-110	
1,3-Dichloropropane	10.0	10.7	107	79-116	
1,4-Dichlorobenzene	10.0	9.03	90	82-110	
2,2-Dichloropropane	10.0	12.4	124	50-129	
2-Chloroethyl vinyl ether	10.0	9.40 J	94	52-131	
2-Chlorotoluene	10.0	9.28	93	76-116	
2-Hexanone	20.0	21.9	109	55-133	
Bromobenzene	10.0	8.74	87	76-115	
Bromochloromethane	10.0	9.12	91	77-120	
4-Chlorotoluene	10.0	8.65	86	77-115	
p-Isopropyltoluene	10.0	10.1	101	74-120	
Acetone	20.0	17.5	88	43-136	
Benzene	10.0	9.80	98	83-112	
Bromoform	10.0	11.8	118	40-131	
Bromomethane	10.0	5.67	57	11-185	
Carbon disulfide	10.0	9.76	98	62-142	
Carbon tetrachloride	10.0	13.5	135	66-128	*
Chlorobenzene	10.0	9.44	94	85-110	
Chloroethane	10.0	5.68	57	25-153	
Chloroform	10.0	10.1	101	79-117	
Chloromethane	10.0	8.63	86	44-126	
cis-1,2-Dichloroethene	10.0	9.08	91	80-113	
cis-1,3-Dichloropropene	10.0	10.8	108	61-115	
Hexachlorobutadiene	10.0	8.34	83	36-134	
Dibromomethane	10.0	9.84	98	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5414.D

Lab ID: LCS 240-98707/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.7	117	72-121	
Dichlorodifluoromethane	10.0	8.12	81	19-129	
Ethylbenzene	10.0	9.45	95	83-112	
1,2-Dibromoethane	10.0	10.1	101	79-113	
Diisopropyl ether	10.0	9.20 J	92	77-118	
Naphthalene	10.0	8.69	87	32-141	
m-Xylene & p-Xylene	20.0	18.6	93	83-113	
n-Butylbenzene	10.0	10.1	101	66-125	
Isopropylbenzene	10.0	9.40	94	75-114	
n-Propylbenzene	10.0	9.59	96	74-121	
2-Butanone	20.0	19.7	98	60-126	
4-Methyl-2-pentanone	20.0	22.9	115	63-128	
sec-Butylbenzene	10.0	9.49	95	70-117	
Methyl tert-butyl ether	10.0	9.59	96	52-144	
Methylene Chloride	10.0	9.44	94	66-131	
o-Xylene	10.0	9.55	96	83-113	
Styrene	10.0	9.03	90	79-114	
tert-Butylbenzene	10.0	8.91	89	71-115	
Tetrachloroethene	10.0	9.57	96	79-114	
Toluene	10.0	10.5	105	84-111	
trans-1,2-Dichloroethene	10.0	9.22	92	83-117	
trans-1,3-Dichloropropene	10.0	12.1	121	58-117	*
Trichloroethene	10.0	9.08	91	76-117	
Trichlorofluoromethane	10.0	8.58	86	49-157	
Vinyl acetate	10.0	7.94	79	46-161	
Vinyl chloride	10.0	8.23	82	53-127	
tert-Butyl alcohol	200	145	72	70-130	
Xylenes, Total	30.0	28.2	94	83-112	
Dibromochloromethane	10.0	12.3	123	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5437.D

Lab ID: 240-27889-E-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,2,2-Tetrachloroethane	200	20 U	207	103	63-122	
1,1-Dichloroethene	200	11 J	202	96	74-135	
1,2-Dichloroethane	200	9.4 J	245	118	68-129	
Carbon tetrachloride	200	20 U	274	137	59-129	F
Chloroform	200	15 J	230	108	76-118	
cis-1,2-Dichloroethene	200	630	813	90	70-120	E
Methylene Chloride	200	9.0 J	210	100	63-128	
Tetrachloroethene	200	20 U	194	97	70-117	
trans-1,2-Dichloroethene	200	9.6 J	205	97	80-119	
Trichloroethene	200	26	213	94	66-120	
Vinyl chloride	200	380	554	87	49-130	

Not sample in SDG

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX5438.D

Lab ID: 240-27889-F-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,2,2-Tetrachloroethane	200	210	105	2	30	63-122	
1,1-Dichloroethene	200	200	94	1	30	74-135	
1,2-Dichloroethane	200	241	116	1	30	68-129	
Carbon tetrachloride	200	280	140	2	30	59-129	F
Chloroform	200	228	106	1	30	76-118	
cis-1,2-Dichloroethene	200	823	96	1	30	70-120	E
Methylene Chloride	200	214	103	2	30	63-128	
Tetrachloroethene	200	196	98	1	30	70-117	
trans-1,2-Dichloroethene	200	203	97	1	30	80-119	
Trichloroethene	200	211	93	1	30	66-120	
Vinyl chloride	200	545	83	1	30	49-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28121-1

SDG No.:

Client Sample ID: TB-081913 Lab Sample ID: 240-28121-3

Matrix: Water Lab File ID: UXX5435.D

Analysis Method: 8260B Date Collected: 08/19/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2013 21:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98707 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U *	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	1.9	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U *	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

HOLDTIME

SDG 240-28121-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-081913	240-28121-3	TB	08/19/2013	08/23/2013	08/23/2013	4	0	4
OV	UG/L	DR-DPT-36-50	240-28121-1	NM	08/19/2013	08/23/2013	08/23/2013	4	0	4
OV	UG/L	DR-DPT-31-25	240-28121-2	NM	08/19/2013	08/23/2013	08/23/2013	4	0	4

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**T. AVANAVAGE**	**DATE:**	**SEPTEMBER 12, 2013**
FROM:	**A. COGNETTI**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOC**
MSA DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-28158-1

SAMPLES: 9/Aqueous/VOC

DR-DPT-31-30	DR-DPT-31-35	DR-DPT-31-40	DR-DPT-31-45
DR-DPT-43B-10	DR-DPT-43B-15	DR-DPT-43B-20	DUP05
TB-082013			

Overview

The sample set for MSA Dump Road Source Areas, SDG 240-28158-1 consisted of eight (8) aqueous environmental samples and a trip blank analyzed for volatile organic compounds (VOCs). There is one field duplicate pair included in this SDG: DUP05 and DR-DPT-43B-15.

The samples were collected on August 20, 2013 and analyzed by Test America Laboratories Inc. All analyses were conducted in accordance with SW-846 Methods 8260B for VOCs analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method /preparation blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate, internal standard recoveries, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major

- The initial calibration relative response factors (RRFs) for tert-butyl alcohol and vinyl acetate were less than the 0.05 quality control limit on August 22, 2013 for instrument A3UX15 and the continuing calibration on August 27, 2013 @ 11:48. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR) in the affected samples.

- The initial calibration RRFs for tert-butyl alcohol and vinyl acetate were less than the 0.05 quality control limit on August 16, 2013 for instrument A3UX11 and the continuing calibration on August 28, 2013 @ 11:16. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR) in the affected samples. The continuing calibration RRF for tert-butyl alcohol was less than the 0.05 quality control limit on August 29, 2013 @ 11:07 affecting sample DR-DPT-43B-20.

- The tentatively identified compound (TIC), containing silanol, were qualified as rejected. This compound is indicative of column bleed.

Minor

- Contamination was detected in the VOC laboratory method blank associated with batch 240-99104/5 analyzed on August 27, 2013 on instrument A3UX15.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Toluene	0.294	1.47

An action level of 5X the maximum concentration of contaminant was established in order to evaluate samples for blank contamination. Sample aliquot and dilution factors were applied. The detected toluene results in samples DR-DPT-31-30, DR-DPT-31-35, DR-DPT-31-40 and DR-DPT-31-45 were qualified as (B).

- Contamination was detected in the VOC laboratory method blank associated with batch 240-99528/5 analyzed on August 29, 2013 on instrument A3UX11 affecting sample DR-DPT-43B-20.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Toluene	0.393	1.965

An action level of 5X the maximum concentration of contaminant was established in order to evaluate samples for blank contamination. Sample aliquot and dilution factors were applied. The detected toluene result in sample DR-DPT-43B-20 was qualified as (B).

- Several TICs were detected and qualified as presumptively present (NJ) in several samples.

- Field duplicate imprecision was noted in the field duplicate pair DUP05 and DR-DPT-43B-15. The relative percent difference (RPD) was greater than the 30% quality control limit for ethylbenzene and trichloroethene. The detected ethylbenzene and trichloroethene results were qualified as estimated (J) in samples DUP05 and DR-DPT-43B-15.

- Positive results reported below the quantitation limit but above the method detection limit (MDL) were qualified as estimated, (J).

Notes

Sample DUP05 is not listed on the chain of custody.

The continuing calibration percent differences (%Ds) for bromomethane, trichlorofluoromethane and tert-butyl alcohol were greater than 20% and less than 50% on August 27, 2013 @ 11:48 on instrument A3UX15. No action was taken on the nondetected bromomethane, trichlorofluoromethane and tert-butyl alcohol results in the affected sample DR-DPT-31-30, DR-DPT-31-35, DR-DPT-31-40 and DR-DPT-31-45.

The laboratory control sample (LCS) percent recovery (%R) for tert-butyl alcohol was greater than the upper quality control limit in batch 240-99104/4. No action was taken on the nondetected tert-butyl results which were qualified as rejected due to a more severe noncompliance.

The LCS %Rs of bromoform and dibromochloromethane were greater than the upper quality control limit in batch 240-99295/4. No action was taken on the nondetected bromoform and dibromochloromethane results in the affected samples.

The LCS %Rs of bromoform, o-xylene and dibromochloromethane were greater than the upper quality control limit in batch 240-99528/4. No action was taken on the nondetected bromoform, o-xylene and dibromochloromethane results in the affected sample DR-DPT-43B-20.

The matrix spike/ matrix spike duplicate (MS/MSD) %Rs of several compounds were outside quality control limits in sample 240-28198-1. This sample is not included in this SDG. No action taken.

Nondetected results were reported to the MDL.

Executive Summary

Laboratory Performance: The VOC RRFs for tert-butyl alcohol and vinyl acetate were less than the quality control limit resulting in the rejection of nondetected results. Toluene was detected in several laboratory method blanks.

Other Factors Affecting Data Quality: TICs were detected in several samples. Field duplicate imprecision was noted in the field duplicate pair DUP05 and DR-DPT-43B-15. Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Ann Cognetti

Tetra Tech
Ann Cognetti
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-31-30			DR-DPT-31-35			DR-DPT-31-40			DR-DPT-31-45		
SDG: 240-28158-1	LAB_ID	240-28158-1			240-28158-2			240-28158-3			240-28158-4		
FRACTION: OV	SAMP_DATE	8/20/2013			8/20/2013			8/20/2013			8/20/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.58	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.55	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.45	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.7	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.38	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.48	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.33	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.43	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		1.1	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.015	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.38	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.3	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		1.7	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.6	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.33	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.55	U		0.27	J	P	0.74	J	P	0.22	U	
1,2-DICHLOROPROPANE		0.45	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.35	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.4	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.33	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.33	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE		1.4	U		0.57	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		2.5	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.28	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		1	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.45	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.3	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.8	U		0.32	U		0.32	U		0.32	U	
ACETONE		20	J	P	18			6.3	J	P	36		
BENZENE		0.62	J	P	0.67	J	P	0.97	J	P	0.27	J	P
BROMOBENZENE		0.33	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.73	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.38	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		1.6	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		1	U		0.41	U		0.41	U		0.41	U	
CARBON DISULFIDE		1.5	J	P	0.86	J	P	0.51	J	P	0.5	J	P

PROJ_NO: 04882	NSAMPLE	DR-DPT-43B-10			DR-DPT-43B-15			DR-DPT-43B-20			DUP05		
SDG: 240-28158-1	LAB_ID	240-28158-5			240-28158-6			240-28158-7			240-28158-9		
FRACTION: OV	SAMP_DATE	8/20/2013			8/20/2013			8/20/2013			8/20/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			FD		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF										DR-DPT-43B-15		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		230	U		230	U		230	U	
1,1,1-TRICHLOROETHANE		0.22	U		220	U		220	U		220	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		180	U		180	U		180	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		280	U		280	U		280	U	
1,1-DICHLOROETHANE		0.55	J	P	150	U		150	U		150	U	
1,1-DICHLOROETHENE		0.19	U		190	U		190	U		190	U	
1,1-DICHLOROPROPENE		0.13	U		130	U		130	U		130	U	
1,2,3-TRICHLOROBENZENE		0.17	U		170	U		170	U		170	U	
1,2,3-TRICHLOROPROPANE		0.43	U		430	U		430	U		430	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		5.9	U		5.9	U		5.9	U	
1,2,4-TRICHLOROBENZENE		0.15	U		150	U		150	U		150	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		120	U		120	U		120	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		670	U		670	U		670	U	
1,2-DIBROMOETHANE		0.24	U		240	U		240	U		240	U	
1,2-DICHLOROBENZENE		0.37	J	P	130	U		130	U		130	U	
1,2-DICHLOROETHANE		0.22	U		220	U		220	U		220	U	
1,2-DICHLOROPROPANE		0.18	U		180	U		180	U		180	U	
1,3-DICHLOROBENZENE		0.51	J	P	140	U		140	U		140	U	
1,3-DICHLOROPROPANE		0.16	U		160	U		160	U		160	U	
1,4-DICHLOROBENZENE		2.4			130	U		130	U		130	U	
2,2-DICHLOROPROPANE		0.13	U		130	U		130	U		130	U	
2-BUTANONE		0.69	J	P	570	U		570	U		570	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		990	U		990	U		990	U	
2-CHLOROTOLUENE		0.11	U		110	U		110	U		110	U	
2-HEXANONE		0.41	U		410	U		410	U		410	U	
4-CHLOROTOLUENE		0.18	U		180	U		180	U		180	U	
4-ISOPROPYLTOLUENE		0.12	U		120	U		120	U		120	U	
4-METHYL-2-PENTANONE		0.54	J	P	320	U		320	U		320	U	
ACETONE		1.1	U		1100	U		1100	U		1100	U	
BENZENE		3.7			130	U		130	U		130	U	
BROMOBENZENE		0.13	U		130	U		130	U		130	U	
BROMOCHLOROMETHANE		0.29	U		290	U		290	U		290	U	
BROMODICHLOROMETHANE		0.15	U		150	U		150	U		150	U	
BROMOFORM		0.64	U		640	U		640	U		640	U	
BROMOMETHANE		0.41	U		410	U		410	U		410	U	
CARBON DISULFIDE		0.13	U		130	U		130	U		130	U	

PROJ_NO: 04882	NSAMPLE	TB-082013
SDG: 240-28158-1	LAB_ID	240-28158-8
FRACTION: OV	SAMP_DATE	8/20/2013
MEDIA: WATER	QC_TYPE	TB
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U	
1,1-DICHLOROETHANE	0.15	U	
1,1-DICHLOROETHENE	0.19	U	
1,1-DICHLOROPROPENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U	
1,2-DIBROMOETHANE	0.24	U	
1,2-DICHLOROBENZENE	0.13	U	
1,2-DICHLOROETHANE	0.22	U	
1,2-DICHLOROPROPANE	0.18	U	
1,3-DICHLOROBENZENE	0.14	U	
1,3-DICHLOROPROPANE	0.16	U	
1,4-DICHLOROBENZENE	0.13	U	
2,2-DICHLOROPROPANE	0.13	U	
2-BUTANONE	0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U	
2-CHLOROTOLUENE	0.11	U	
2-HEXANONE	0.41	U	
4-CHLOROTOLUENE	0.18	U	
4-ISOPROPYLTOLUENE	0.12	U	
4-METHYL-2-PENTANONE	0.32	U	
ACETONE	1.1	U	
BENZENE	0.13	U	
BROMOBENZENE	0.13	U	
BROMOCHLOROMETHANE	0.29	U	
BROMODICHLOROMETHANE	0.15	U	
BROMOFORM	0.64	U	
BROMOMETHANE	0.41	U	
CARBON DISULFIDE	0.13	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-31-30			DR-DPT-31-35			DR-DPT-31-40			DR-DPT-31-45		
SDG: 240-28158-1	LAB_ID	240-28158-1			240-28158-2			240-28158-3			240-28158-4		
FRACTION: OV	SAMP_DATE	8/20/2013			8/20/2013			8/20/2013			8/20/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON TETRACHLORIDE		0.33	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.38	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.45	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.73	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		1.1	J	P	0.43	J	P	0.16	U		1.5		
CHLOROMETHANE		0.75	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		61			13			15			23		
CIS-1,3-DICHLOROPROPENE		0.35	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.7	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.78	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		3.8	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.28	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.43	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.75	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.33	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.6	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.43	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.83	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.6	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE		0.3	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.35	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.35	U		0.14	U		0.72	J	P	0.14	U	
SEC-BUTYLBENZENE		0.33	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.28	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.17	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.33	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		9.8	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.73	U		0.29	U		0.29	U		0.29	U	
TOLUENE		1.2	B	A	0.33	B	A	0.26	B	A	0.36	B	A
TOTAL XYLENES		0.35	U		0.14	U		0.72	J	P	0.14	U	
TRANS-1,2-DICHLOROETHENE		0.64	J	P	0.21	J	P	0.27	J	P	0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.48	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		3.6			3.1			6			11		
TRICHLOROFLUOROMETHANE		0.53	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.48	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		41			6.5			14			2.8		

PROJ_NO: 04882	NSAMPLE	DR-DPT-43B-10			DR-DPT-43B-15			DR-DPT-43B-20			DUP05		
SDG: 240-28158-1	LAB_ID	240-28158-5			240-28158-6			240-28158-7			240-28158-9		
FRACTION: OV	SAMP_DATE	8/20/2013			8/20/2013			8/20/2013			8/20/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			FD		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF										DR-DPT-43B-15		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON TETRACHLORIDE		0.13	U		130	U		130	U		130	U	
CHLOROBENZENE		13			150	U		150	U		150	U	
CHLORODIBROMOMETHANE		0.18	U		180	U		180	U		180	U	
CHLOROETHANE		0.29	U		290	U		290	U		290	U	
CHLOROFORM		0.16	U		160	U		160	U		160	U	
CHLOROMETHANE		0.3	U		300	U		300	U		300	U	
CIS-1,2-DICHLOROETHENE		7.1			29000			5700			27000		
CIS-1,3-DICHLOROPROPENE		0.14	U		140	U		140	U		140	U	
DIBROMOMETHANE		0.28	U		280	U		280	U		280	U	
DICHLORODIFLUOROMETHANE		0.31	U		310	U		310	U		310	U	
DIISOPROPYL ETHER		1.5	U		1500	U		1500	U		1500	U	
ETHYL TERT-BUTYL ETHER		0.11	U		110	U		110	U		110	U	
ETHYLBENZENE		0.19	J	P	360	J	GP	170	U		230	J	GP
HEXACHLOROBUTADIENE		0.3	U		300	U		300	U		300	U	
ISOPROPYLBENZENE		0.13	U		130	U		130	U		130	U	
M+P-XYLENES		0.35	J	P	420	J	P	240	U		420	J	P
METHYL TERT-BUTYL ETHER		0.17	U		170	U		170	U		170	U	
METHYLENE CHLORIDE		0.33	U		330	U		330	U		330	U	
NAPHTHALENE		7.1			240	U		240	U		240	U	
N-BUTYLBENZENE		0.12	U		120	U		120	U		120	U	
N-PROPYLBENZENE		0.14	U		140	U		140	U		140	U	
O-XYLENE		0.14	J	P	250	J	P	140	U		210	J	P
SEC-BUTYLBENZENE		0.13	U		130	U		130	U		130	U	
STYRENE		0.11	U		110	U		110	U		110	U	
TERT-AMYL METHYL ETHER		0.067	U		67	U		67	U		67	U	
TERT-BUTYLBENZENE		0.13	U		130	U		130	U		130	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3900	UR	C	3900	UR	C	3900	UR	C
TETRACHLOROETHENE		0.29	U		290	U		290	U		290	U	
TOLUENE		1			10000			1800	B	A	9400		
TOTAL XYLENES		0.49	J	P	670	J	P	140	U		630	J	P
TRANS-1,2-DICHLOROETHENE		0.67	J	P	190	U		190	U		190	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		190	U		190	U		190	U	
TRICHLOROETHENE		0.17	U		3700	J	G	22000			820	J	GP
TRICHLOROFLUOROMETHANE		0.21	U		210	U		210	U		210	U	
VINYL ACETATE		0.19	UR	C	190	UR	C	190	UR	C	190	UR	C
VINYL CHLORIDE		6.2			5700			1300			5600		

PROJ_NO: 04882	NSAMPLE	TB-082013
SDG: 240-28158-1	LAB_ID	240-28158-8
FRACTION: OV	SAMP_DATE	8/20/2013
MEDIA: WATER	QC_TYPE	TB
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
CARBON TETRACHLORIDE	0.13	U	
CHLOROBENZENE	0.15	U	
CHLORODIBROMOMETHANE	0.18	U	
CHLOROETHANE	0.29	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U	
DIBROMOMETHANE	0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U	
DIISOPROPYL ETHER	1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U	
ETHYLBENZENE	0.17	U	
HEXACHLOROBUTADIENE	0.3	U	
ISOPROPYLBENZENE	0.13	U	
M+P-XYLENES	0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U	
METHYLENE CHLORIDE	0.33	U	
NAPHTHALENE	0.24	U	
N-BUTYLBENZENE	0.12	U	
N-PROPYLBENZENE	0.14	U	
O-XYLENE	0.14	U	
SEC-BUTYLBENZENE	0.13	U	
STYRENE	0.11	U	
TERT-AMYL METHYL ETHER	0.067	U	
TERT-BUTYLBENZENE	0.13	U	
TERTIARY-BUTYL ALCOHOL	3.9	UR	C
TETRACHLOROETHENE	0.29	U	
TOLUENE	0.13	U	
TOTAL XYLENES	0.14	U	
TRANS-1,2-DICHLOROETHENE	0.19	U	
TRANS-1,3-DICHLOROPROPENE	0.19	U	
TRICHLOROETHENE	0.17	U	
TRICHLOROFLUOROMETHANE	0.21	U	
VINYL ACETATE	0.19	UR	C
VINYL CHLORIDE	0.22	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-31-30			DR-DPT-31-35			DR-DPT-31-40			DR-DPT-31-45		
SDG: 240-28158-1	LAB_ID	240-28158-1			240-28158-2			240-28158-3			240-28158-4		
FRACTION: TICOV	SAMP_DATE	8/20/2013			8/20/2013			8/20/2013			8/20/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-BUTENE											1.9	NJ	Z1
1-BUTENE, 2-METHYL-											1.4	NJ	Z1
1-HEXENE											1.1	NJ	Z1
1-PENTENE											3.4	NJ	Z1
2-METHYLNAPHTHALENE													
BUTANOIC ACID, TRIMETHYLSILYL ESTER								2	NJ	Z1			
CYCLOHEXANE													
CYCLOPROPANE, 1,2-DIMETHYL-, TRANS-											1.2	NJ	Z1
CYCLOPROPANE, 1-ETHYL-1-METHYL-											1.3	NJ	Z1
CYCLOPROPANE, ETHYL-					1.2	NJ	Z1						
DICHLOROFLUOROMETHANE													
HEXANE					0.28	J	P				0.61	J	P
METHYLCYCLOHEXANE													
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)					3.1	R	Z2						
SILANOL, TRIMETHYL-													
TETRAHYDROFURAN		2.9	J	P	1.4	J	P	1.8	J	P	1	J	P
UNKNOWN		3.2	NJ	Z1							2.7	NJ	Z1

PROJ_NO: 04882	NSAMPLE	DR-DPT-43B-10			DR-DPT-43B-15			DR-DPT-43B-20			DUP05		
SDG: 240-28158-1	LAB_ID	240-28158-5			240-28158-6			240-28158-7			240-28158-9		
FRACTION: TICOV	SAMP_DATE	8/20/2013			8/20/2013			8/20/2013			8/20/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF										DR-DPT-43B-15		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-BUTENE													
1-BUTENE, 2-METHYL-													
1-HEXENE													
1-PENTENE													
2-METHYLNAPHTHALENE		1.7	J	P									
BUTANOIC ACID, TRIMETHYLSILYL ESTER													
CYCLOHEXANE		0.6	J	P									
CYCLOPROPANE, 1,2-DIMETHYL-, TRANS-													
CYCLOPROPANE, 1-ETHYL-1-METHYL-													
CYCLOPROPANE, ETHYL-													
DICHLOROFLUOROMETHANE		0.85	J	P									
HEXANE													
METHYLCYCLOHEXANE		1.1											
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)													
SILANOL, TRIMETHYL-		3	R	Z2									
TETRAHYDROFURAN													
UNKNOWN		5.9	NJ	Z1	1100	NJ	Z1	1400	NJ	Z1	1400	NJ	Z1

PROJ_NO: 04882	NSAMPLE	DUP05A		
SDG: 240-28158-1	LAB_ID	240-28158-9		
FRACTION: TICOV	SAMP_DATE	8/20/2013		
MEDIA: WATER	QC_TYPE	TIC		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF	DR-DPT-43B-15		
PARAMETER		RESULT	VQL	QLCD
1-BUTENE				
1-BUTENE, 2-METHYL-				
1-HEXENE				
1-PENTENE				
2-METHYLNAPHTHALENE				
BUTANOIC ACID, TRIMETHYLSILYL ESTER				
CYCLOHEXANE				
CYCLOPROPANE, 1,2-DIMETHYL-, TRANS-				
CYCLOPROPANE, 1-ETHYL-1-METHYL-				
CYCLOPROPANE, ETHYL-				
DICHLOROFLUOROMETHANE				
HEXANE				
METHYLCYCLOHEXANE				
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)				
SILANOL, TRIMETHYL-				
TETRAHYDROFURAN				
UNKNOWN		1000	NJ	Z1

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-30 Lab Sample ID: 240-28158-1

Matrix: Water Lab File ID: UXC4435.D

Analysis Method: 8260B Date Collected: 08/20/2013 09:40

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 16:10

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	2.5	U	2.5	0.58
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	0.55
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.45
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	2.5	U	2.5	0.70
75-34-3	1,1-Dichloroethane	2.5	U	2.5	0.38
75-35-4	1,1-Dichloroethene	2.5	U	2.5	0.48
563-58-6	1,1-Dichloropropene	2.5	U	2.5	0.33
87-61-6	1,2,3-Trichlorobenzene	2.5	U	2.5	0.43
96-18-4	1,2,3-Trichloropropane	2.5	U	2.5	1.1
526-73-8	1,2,3-Trimethylbenzene	13	U	13	0.015
120-82-1	1,2,4-Trichlorobenzene	2.5	U	2.5	0.38
95-63-6	1,2,4-Trimethylbenzene	2.5	U	2.5	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.7
95-50-1	1,2-Dichlorobenzene	2.5	U	2.5	0.33
107-06-2	1,2-Dichloroethane	2.5	U	2.5	0.55
78-87-5	1,2-Dichloropropane	2.5	U	2.5	0.45
541-73-1	1,3-Dichlorobenzene	2.5	U	2.5	0.35
142-28-9	1,3-Dichloropropane	2.5	U	2.5	0.40
106-46-7	1,4-Dichlorobenzene	2.5	U	2.5	0.33
594-20-7	2,2-Dichloropropane	2.5	U	2.5	0.33
110-75-8	2-Chloroethyl vinyl ether	25	U	25	2.5
95-49-8	2-Chlorotoluene	2.5	U	2.5	0.28
591-78-6	2-Hexanone	25	U	25	1.0
108-86-1	Bromobenzene	2.5	U	2.5	0.33
74-97-5	Bromochloromethane	2.5	U	2.5	0.73
106-43-4	4-Chlorotoluene	2.5	U	2.5	0.45
99-87-6	p-Isopropyltoluene	2.5	U	2.5	0.30
67-64-1	Acetone	20	J	25	2.8
71-43-2	Benzene	0.62	J	2.5	0.33
75-25-2	Bromoform	2.5	U	2.5	1.6
74-83-9	Bromomethane	2.5	U	2.5	1.0
75-15-0	Carbon disulfide	1.5	J	2.5	0.33
56-23-5	Carbon tetrachloride	2.5	U	2.5	0.33
108-90-7	Chlorobenzene	2.5	U	2.5	0.38
75-00-3	Chloroethane	2.5	U	2.5	0.73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-30 | Lab Sample ID: 240-28158-1

Matrix: Water | Lab File ID: UXC4435.D

Analysis Method: 8260B | Date Collected: 08/20/2013 09:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 16:10

Soil Aliquot Vol: | Dilution Factor: 2.5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99104 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.1	J	2.5	0.40
74-87-3	Chloromethane	2.5	U	2.5	0.75
156-59-2	cis-1,2-Dichloroethene	61		2.5	0.43
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	0.35
87-68-3	Hexachlorobutadiene	2.5	U	2.5	0.75
74-95-3	Dibromomethane	2.5	U	2.5	0.70
75-27-4	Bromodichloromethane	2.5	U	2.5	0.38
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	0.78
100-41-4	Ethylbenzene	2.5	U	2.5	0.43
106-93-4	1,2-Dibromoethane	2.5	U	2.5	0.60
108-20-3	Diisopropyl ether	25	U	25	3.8
91-20-3	Naphthalene	2.5	U	2.5	0.60
179601-23-1	m-Xylene & p-Xylene	5.0	U	5.0	0.60
104-51-8	n-Butylbenzene	2.5	U	2.5	0.30
98-82-8	Isopropylbenzene	2.5	U	2.5	0.33
103-65-1	n-Propylbenzene	2.5	U	2.5	0.35
78-93-3	2-Butanone	25	U	25	1.4
108-10-1	4-Methyl-2-pentanone	25	U	25	0.80
135-98-8	sec-Butylbenzene	2.5	U	2.5	0.33
1634-04-4	Methyl tert-butyl ether	2.5	U	2.5	0.43
994-05-8	Tert-amyl-methyl ether (TAME)	13	U	13	0.17
75-09-2	Methylene Chloride	2.5	U	2.5	0.83
95-47-6	o-Xylene	2.5	U	2.5	0.35
100-42-5	Styrene	2.5	U	2.5	0.28
637-92-3	Ethyl-t-butyl ether (ETBE)	13	U	13	0.28
98-06-6	tert-Butylbenzene	2.5	U	2.5	0.33
127-18-4	Tetrachloroethene	2.5	U	2.5	0.73
108-88-3	Toluene	1.2	J B	2.5	0.33
156-60-5	trans-1,2-Dichloroethene	0.64	J	2.5	0.48
10061-02-6	trans-1,3-Dichloropropene	2.5	U	2.5	0.48
79-01-6	Trichloroethene	3.6		2.5	0.43
75-69-4	Trichlorofluoromethane	2.5	U	2.5	0.53
108-05-4	Vinyl acetate	5.0	U	5.0	0.48
75-01-4	Vinyl chloride	41		2.5	0.55
75-65-0	tert-Butyl alcohol	130	U *	130	9.8
1330-20-7	Xylenes, Total	5.0	U	5.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-30 Lab Sample ID: 240-28158-1

Matrix: Water Lab File ID: UXC4435.D

Analysis Method: 8260B Date Collected: 08/20/2013 09:40

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 16:10

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	2.5	U	2.5	0.45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		63-129
460-00-4	4-Bromofluorobenzene (Surr)	87		66-117
2037-26-5	Toluene-d8 (Surr)	83		74-115
1868-53-7	Dibromofluoromethane (Surr)	105		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-30 Lab Sample ID: 240-28158-1

Matrix: Water Lab File ID: UXC4435.D

Analysis Method: 8260B Date Collected: 08/20/2013 09:40

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 16:10

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

Number TICs Found: 2 TIC Result Total: 6.1

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	4.18	3.2	T J
109-99-9	Tetrahydrofuran	4.49	2.9	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-35 | Lab Sample ID: 240-28158-2

Matrix: Water | Lab File ID: UXC4436.D

Analysis Method: 8260B | Date Collected: 08/20/2013 10:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 16:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99104 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.27	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	18		10	1.1
71-43-2	Benzene	0.67	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.86	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-35 Lab Sample ID: 240-28158-2

Matrix: Water Lab File ID: UXC4436.D

Analysis Method: 8260B Date Collected: 08/20/2013 10:03

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 16:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.43	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	13		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.33	J B	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	0.21	J	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	3.1		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	6.5		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-35 Lab Sample ID: 240-28158-2

Matrix: Water Lab File ID: UXC4436.D

Analysis Method: 8260B Date Collected: 08/20/2013 10:03

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 16:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	100		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-35 | Lab Sample ID: 240-28158-2

Matrix: Water | Lab File ID: UXC4436.D

Analysis Method: 8260B | Date Collected: 08/20/2013 10:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 16:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99104 | Units: ug/L

Number TICs Found: 4 | TIC Result Total: 5.98

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1191-96-4	Cyclopropane, ethyl-	2.25	1.2	T J N
110-54-3	Hexane	3.61	0.28	J
55644-10-5	Silanol, dimethyl(1,1,2-trimethylpropyl)	4.18	3.1	T J N
109-99-9	Tetrahydrofuran	4.47	1.4	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-40 Lab Sample ID: 240-28158-3

Matrix: Water Lab File ID: UXC4437.D

Analysis Method: 8260B Date Collected: 08/20/2013 10:34

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 16:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	0.74	J	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	6.3	J	10	1.1
71-43-2	Benzene	0.97	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.51	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-40 Lab Sample ID: 240-28158-3

Matrix: Water Lab File ID: UXC4437.D

Analysis Method: 8260B Date Collected: 08/20/2013 10:34

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 16:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	15		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	0.72	J	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.26	J B	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	0.27	J	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	6.0		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	14		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	0.72	J	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-40 | Lab Sample ID: 240-28158-3

Matrix: Water | Lab File ID: UXC4437.D

Analysis Method: 8260B | Date Collected: 08/20/2013 10:34

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 16:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99104 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
2037-26-5	Toluene-d8 (Surr)	83		74-115
1868-53-7	Dibromofluoromethane (Surr)	97		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-40 Lab Sample ID: 240-28158-3

Matrix: Water Lab File ID: UXC4437.D

Analysis Method: 8260B Date Collected: 08/20/2013 10:34

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 16:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

Number TICs Found: 2 TIC Result Total: 3.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
16844-99-8	Butanoic acid, trimethylsilyl ester	4.18	2.0	T J N
109-99-9	Tetrahydrofuran	4.49	1.8	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-45 Lab Sample ID: 240-28158-4

Matrix: Water Lab File ID: UXC4438.D

Analysis Method: 8260B Date Collected: 08/20/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 17:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	36		10	1.1
71-43-2	Benzene	0.27	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.50	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-45 Lab Sample ID: 240-28158-4

Matrix: Water Lab File ID: UXC4438.D

Analysis Method: 8260B Date Collected: 08/20/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 17:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.5		1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	23		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.36	J B	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	11		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	2.8		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U *	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-45 Lab Sample ID: 240-28158-4

Matrix: Water Lab File ID: UXC4438.D

Analysis Method: 8260B Date Collected: 08/20/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 17:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		63-129
460-00-4	4-Bromofluorobenzene (Surr)	87		66-117
2037-26-5	Toluene-d8 (Surr)	83		74-115
1868-53-7	Dibromofluoromethane (Surr)	100		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-31-45 Lab Sample ID: 240-28158-4

Matrix: Water Lab File ID: UXC4438.D

Analysis Method: 8260B Date Collected: 08/20/2013 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 17:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

Number TICs Found: 10 TIC Result Total: 17.31

CAS NO.	COMPOUND NAME	RT	RESULT	Q
106-98-9	1-Butene	1.76	1.9	T J N
563-46-2	1-Butene, 2-methyl-	1.96	1.4	T J N
	Unknown	2.08	2.7	T J
109-67-1	1-Pentene	2.25	3.4	T J N
	Unknown	2.30	2.7	T J
2402-6-4	Cyclopropane, 1,2-dimethyl-, trans-	2.53	1.2	T J N
53778-43-1	Cyclopropane, 1-ethyl-1-methyl-	3.06	1.3	T J N
592-41-6	1-Hexene	3.54	1.1	T J N
110-54-3	Hexane	3.61	0.61	J
109-99-9	Tetrahydrofuran	4.47	1.0	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-10 Lab Sample ID: 240-28158-5

Matrix: Water Lab File ID: UXJ3714.D

Analysis Method: 8260B Date Collected: 08/20/2013 13:50

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 14:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	0.55	J	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	0.37	J	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	0.51	J	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	2.4		1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	3.7		1.0	0.13
75-25-2	Bromoform	1.0	U *	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	13		1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-10 Lab Sample ID: 240-28158-5

Matrix: Water Lab File ID: UXJ3714.D

Analysis Method: 8260B Date Collected: 08/20/2013 13:50

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 14:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	7.1		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	0.19	J	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	7.1		1.0	0.24
179601-23-1	m-Xylene & p-Xylene	0.35	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	0.69	J	10	0.57
108-10-1	4-Methyl-2-pentanone	0.54	J	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	0.14	J	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	0.67	J	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	6.2		1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	0.49	J	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-10 Lab Sample ID: 240-28158-5

Matrix: Water Lab File ID: UXJ3714.D

Analysis Method: 8260B Date Collected: 08/20/2013 13:50

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 14:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	91		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-10 | Lab Sample ID: 240-28158-5

Matrix: Water | Lab File ID: UXJ3714.D

Analysis Method: 8260B | Date Collected: 08/20/2013 13:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/28/2013 14:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99295 | Units: ug/L

Number TICs Found: 6 | TIC Result Total: 13.15

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	2.22	5.9	T J
75-43-4	Dichlorofluoromethane	2.57	0.85	J
1066-40-6	Silanol, trimethyl-	4.38	3.0	T J N
110-82-7	Cyclohexane	5.01	0.60	J
108-87-2	Methylcyclohexane	5.96	1.1	
91-57-6	2-Methylnaphthalene	14.06	1.7	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-15 Lab Sample ID: 240-28158-6

Matrix: Water Lab File ID: UXJ3715.D

Analysis Method: 8260B Date Collected: 08/20/2013 14:10

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1000	U	1000	230
71-55-6	1,1,1-Trichloroethane	1000	U	1000	220
79-34-5	1,1,2,2-Tetrachloroethane	1000	U	1000	180
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1000	U	1000	280
75-34-3	1,1-Dichloroethane	1000	U	1000	150
75-35-4	1,1-Dichloroethene	1000	U	1000	190
563-58-6	1,1-Dichloropropene	1000	U	1000	130
87-61-6	1,2,3-Trichlorobenzene	1000	U	1000	170
96-18-4	1,2,3-Trichloropropane	1000	U	1000	430
526-73-8	1,2,3-Trimethylbenzene	5000	U	5000	5.9
120-82-1	1,2,4-Trichlorobenzene	1000	U	1000	150
95-63-6	1,2,4-Trimethylbenzene	1000	U	1000	120
96-12-8	1,2-Dibromo-3-Chloropropane	2000	U	2000	670
95-50-1	1,2-Dichlorobenzene	1000	U	1000	130
107-06-2	1,2-Dichloroethane	1000	U	1000	220
78-87-5	1,2-Dichloropropane	1000	U	1000	180
541-73-1	1,3-Dichlorobenzene	1000	U	1000	140
142-28-9	1,3-Dichloropropane	1000	U	1000	160
106-46-7	1,4-Dichlorobenzene	1000	U	1000	130
594-20-7	2,2-Dichloropropane	1000	U	1000	130
110-75-8	2-Chloroethyl vinyl ether	10000	U	10000	990
95-49-8	2-Chlorotoluene	1000	U	1000	110
591-78-6	2-Hexanone	10000	U	10000	410
108-86-1	Bromobenzene	1000	U	1000	130
74-97-5	Bromochloromethane	1000	U	1000	290
106-43-4	4-Chlorotoluene	1000	U	1000	180
99-87-6	p-Isopropyltoluene	1000	U	1000	120
67-64-1	Acetone	10000	U	10000	1100
71-43-2	Benzene	1000	U	1000	130
75-25-2	Bromoform	1000	U *	1000	640
74-83-9	Bromomethane	1000	U	1000	410
75-15-0	Carbon disulfide	1000	U	1000	130
56-23-5	Carbon tetrachloride	1000	U	1000	130
108-90-7	Chlorobenzene	1000	U	1000	150
75-00-3	Chloroethane	1000	U	1000	290

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-15 Lab Sample ID: 240-28158-6

Matrix: Water Lab File ID: UXJ3715.D

Analysis Method: 8260B Date Collected: 08/20/2013 14:10

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1000	U	1000	160
74-87-3	Chloromethane	1000	U	1000	300
156-59-2	cis-1,2-Dichloroethene	29000		1000	170
10061-01-5	cis-1,3-Dichloropropene	1000	U	1000	140
87-68-3	Hexachlorobutadiene	1000	U	1000	300
74-95-3	Dibromomethane	1000	U	1000	280
75-27-4	Bromodichloromethane	1000	U	1000	150
75-71-8	Dichlorodifluoromethane	1000	U	1000	310
100-41-4	Ethylbenzene	360	J	1000	170
106-93-4	1,2-Dibromoethane	1000	U	1000	240
108-20-3	Diisopropyl ether	10000	U	10000	1500
91-20-3	Naphthalene	1000	U	1000	240
179601-23-1	m-Xylene & p-Xylene	420	J	2000	240
104-51-8	n-Butylbenzene	1000	U	1000	120
98-82-8	Isopropylbenzene	1000	U	1000	130
103-65-1	n-Propylbenzene	1000	U	1000	140
78-93-3	2-Butanone	10000	U	10000	570
108-10-1	4-Methyl-2-pentanone	10000	U	10000	320
135-98-8	sec-Butylbenzene	1000	U	1000	130
1634-04-4	Methyl tert-butyl ether	1000	U	1000	170
994-05-8	Tert-amyl-methyl ether (TAME)	5000	U	5000	67
75-09-2	Methylene Chloride	1000	U	1000	330
95-47-6	o-Xylene	250	J	1000	140
100-42-5	Styrene	1000	U	1000	110
637-92-3	Ethyl-t-butyl ether (ETBE)	5000	U	5000	110
98-06-6	tert-Butylbenzene	1000	U	1000	130
127-18-4	Tetrachloroethene	1000	U	1000	290
108-88-3	Toluene	10000		1000	130
156-60-5	trans-1,2-Dichloroethene	1000	U	1000	190
10061-02-6	trans-1,3-Dichloropropene	1000	U	1000	190
79-01-6	Trichloroethene	3700		1000	170
75-69-4	Trichlorofluoromethane	1000	U	1000	210
108-05-4	Vinyl acetate	2000	U	2000	190
75-01-4	Vinyl chloride	5700		1000	220
75-65-0	tert-Butyl alcohol	50000	U	50000	3900
1330-20-7	Xylenes, Total	670	J	2000	140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-15 Lab Sample ID: 240-28158-6

Matrix: Water Lab File ID: UXJ3715.D

Analysis Method: 8260B Date Collected: 08/20/2013 14:10

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1000	U *	1000	180

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-15 Lab Sample ID: 240-28158-6

Matrix: Water Lab File ID: UXJ3715.D

Analysis Method: 8260B Date Collected: 08/20/2013 14:10

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

Number TICs Found: 4 TIC Result Total: 5200

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	2.14	1100	T J
	Unknown	2.27	1600	T J
	Unknown	2.80	1100	T J
	Unknown	3.12	1400	T J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-20 Lab Sample ID: 240-28158-7

Matrix: Water Lab File ID: UXJ3772.D

Analysis Method: 8260B Date Collected: 08/20/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2013 13:59

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99528 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1000	U	1000	230
71-55-6	1,1,1-Trichloroethane	1000	U	1000	220
79-34-5	1,1,2,2-Tetrachloroethane	1000	U	1000	180
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1000	U	1000	280
75-34-3	1,1-Dichloroethane	1000	U	1000	150
75-35-4	1,1-Dichloroethene	1000	U	1000	190
563-58-6	1,1-Dichloropropene	1000	U	1000	130
87-61-6	1,2,3-Trichlorobenzene	1000	U	1000	170
96-18-4	1,2,3-Trichloropropane	1000	U	1000	430
526-73-8	1,2,3-Trimethylbenzene	5000	U	5000	5.9
120-82-1	1,2,4-Trichlorobenzene	1000	U	1000	150
95-63-6	1,2,4-Trimethylbenzene	1000	U	1000	120
96-12-8	1,2-Dibromo-3-Chloropropane	2000	U	2000	670
95-50-1	1,2-Dichlorobenzene	1000	U	1000	130
107-06-2	1,2-Dichloroethane	1000	U	1000	220
78-87-5	1,2-Dichloropropane	1000	U	1000	180
541-73-1	1,3-Dichlorobenzene	1000	U	1000	140
142-28-9	1,3-Dichloropropane	1000	U	1000	160
106-46-7	1,4-Dichlorobenzene	1000	U	1000	130
594-20-7	2,2-Dichloropropane	1000	U	1000	130
110-75-8	2-Chloroethyl vinyl ether	10000	U	10000	990
95-49-8	2-Chlorotoluene	1000	U	1000	110
591-78-6	2-Hexanone	10000	U	10000	410
108-86-1	Bromobenzene	1000	U	1000	130
74-97-5	Bromochloromethane	1000	U	1000	290
106-43-4	4-Chlorotoluene	1000	U	1000	180
99-87-6	p-Isopropyltoluene	1000	U	1000	120
67-64-1	Acetone	10000	U	10000	1100
71-43-2	Benzene	1000	U	1000	130
75-25-2	Bromoform	1000	U *	1000	640
74-83-9	Bromomethane	1000	U	1000	410
75-15-0	Carbon disulfide	1000	U	1000	130
56-23-5	Carbon tetrachloride	1000	U	1000	130
108-90-7	Chlorobenzene	1000	U	1000	150
75-00-3	Chloroethane	1000	U	1000	290

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-20 Lab Sample ID: 240-28158-7

Matrix: Water Lab File ID: UXJ3772.D

Analysis Method: 8260B Date Collected: 08/20/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2013 13:59

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99528 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1000	U	1000	160
74-87-3	Chloromethane	1000	U	1000	300
156-59-2	cis-1,2-Dichloroethene	5700		1000	170
10061-01-5	cis-1,3-Dichloropropene	1000	U	1000	140
87-68-3	Hexachlorobutadiene	1000	U	1000	300
74-95-3	Dibromomethane	1000	U	1000	280
75-27-4	Bromodichloromethane	1000	U	1000	150
75-71-8	Dichlorodifluoromethane	1000	U	1000	310
100-41-4	Ethylbenzene	1000	U	1000	170
106-93-4	1,2-Dibromoethane	1000	U	1000	240
108-20-3	Diisopropyl ether	10000	U	10000	1500
91-20-3	Naphthalene	1000	U	1000	240
179601-23-1	m-Xylene & p-Xylene	2000	U	2000	240
104-51-8	n-Butylbenzene	1000	U	1000	120
98-82-8	Isopropylbenzene	1000	U	1000	130
103-65-1	n-Propylbenzene	1000	U	1000	140
78-93-3	2-Butanone	10000	U	10000	570
108-10-1	4-Methyl-2-pentanone	10000	U	10000	320
135-98-8	sec-Butylbenzene	1000	U	1000	130
1634-04-4	Methyl tert-butyl ether	1000	U	1000	170
994-05-8	Tert-amyl-methyl ether (TAME)	5000	U	5000	67
75-09-2	Methylene Chloride	1000	U	1000	330
95-47-6	o-Xylene	1000	U *	1000	140
100-42-5	Styrene	1000	U	1000	110
637-92-3	Ethyl-t-butyl ether (ETBE)	5000	U	5000	110
98-06-6	tert-Butylbenzene	1000	U	1000	130
127-18-4	Tetrachloroethene	1000	U	1000	290
108-88-3	Toluene	1800	B	1000	130
156-60-5	trans-1,2-Dichloroethene	1000	U	1000	190
10061-02-6	trans-1,3-Dichloropropene	1000	U	1000	190
79-01-6	Trichloroethene	22000		1000	170
75-69-4	Trichlorofluoromethane	1000	U	1000	210
108-05-4	Vinyl acetate	2000	U	2000	190
75-01-4	Vinyl chloride	1300		1000	220
75-65-0	tert-Butyl alcohol	50000	U	50000	3900
1330-20-7	Xylenes, Total	2000	U	2000	140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-20 Lab Sample ID: 240-28158-7

Matrix: Water Lab File ID: UXJ3772.D

Analysis Method: 8260B Date Collected: 08/20/2013 14:40

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2013 13:59

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99528 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1000	U *	1000	180

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-20 | Lab Sample ID: 240-28158-7

Matrix: Water | Lab File ID: UXJ3772.D

Analysis Method: 8260B | Date Collected: 08/20/2013 14:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2013 13:59

Soil Aliquot Vol: | Dilution Factor: 1000

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99528 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 1400

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	2.15	1400	T J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DUP05 Lab Sample ID: 240-28158-9

Matrix: Water Lab File ID: UXJ3718.D

Analysis Method: 8260B Date Collected: 08/20/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 15:41

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1000	U	1000	230
71-55-6	1,1,1-Trichloroethane	1000	U	1000	220
79-34-5	1,1,2,2-Tetrachloroethane	1000	U	1000	180
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1000	U	1000	280
75-34-3	1,1-Dichloroethane	1000	U	1000	150
75-35-4	1,1-Dichloroethene	1000	U	1000	190
563-58-6	1,1-Dichloropropene	1000	U	1000	130
87-61-6	1,2,3-Trichlorobenzene	1000	U	1000	170
96-18-4	1,2,3-Trichloropropane	1000	U	1000	430
526-73-8	1,2,3-Trimethylbenzene	5000	U	5000	5.9
120-82-1	1,2,4-Trichlorobenzene	1000	U	1000	150
95-63-6	1,2,4-Trimethylbenzene	1000	U	1000	120
96-12-8	1,2-Dibromo-3-Chloropropane	2000	U	2000	670
95-50-1	1,2-Dichlorobenzene	1000	U	1000	130
107-06-2	1,2-Dichloroethane	1000	U	1000	220
78-87-5	1,2-Dichloropropane	1000	U	1000	180
541-73-1	1,3-Dichlorobenzene	1000	U	1000	140
142-28-9	1,3-Dichloropropane	1000	U	1000	160
106-46-7	1,4-Dichlorobenzene	1000	U	1000	130
594-20-7	2,2-Dichloropropane	1000	U	1000	130
110-75-8	2-Chloroethyl vinyl ether	10000	U	10000	990
95-49-8	2-Chlorotoluene	1000	U	1000	110
591-78-6	2-Hexanone	10000	U	10000	410
108-86-1	Bromobenzene	1000	U	1000	130
74-97-5	Bromochloromethane	1000	U	1000	290
106-43-4	4-Chlorotoluene	1000	U	1000	180
99-87-6	p-Isopropyltoluene	1000	U	1000	120
67-64-1	Acetone	10000	U	10000	1100
71-43-2	Benzene	1000	U	1000	130
75-25-2	Bromoform	1000	U *	1000	640
74-83-9	Bromomethane	1000	U	1000	410
75-15-0	Carbon disulfide	1000	U	1000	130
56-23-5	Carbon tetrachloride	1000	U	1000	130
108-90-7	Chlorobenzene	1000	U	1000	150
75-00-3	Chloroethane	1000	U	1000	290

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DUP05 Lab Sample ID: 240-28158-9

Matrix: Water Lab File ID: UXJ3718.D

Analysis Method: 8260B Date Collected: 08/20/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 15:41

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1000	U	1000	160
74-87-3	Chloromethane	1000	U	1000	300
156-59-2	cis-1,2-Dichloroethene	27000		1000	170
10061-01-5	cis-1,3-Dichloropropene	1000	U	1000	140
87-68-3	Hexachlorobutadiene	1000	U	1000	300
74-95-3	Dibromomethane	1000	U	1000	280
75-27-4	Bromodichloromethane	1000	U	1000	150
75-71-8	Dichlorodifluoromethane	1000	U	1000	310
100-41-4	Ethylbenzene	230	J	1000	170
106-93-4	1,2-Dibromoethane	1000	U	1000	240
108-20-3	Diisopropyl ether	10000	U	10000	1500
91-20-3	Naphthalene	1000	U	1000	240
179601-23-1	m-Xylene & p-Xylene	420	J	2000	240
104-51-8	n-Butylbenzene	1000	U	1000	120
98-82-8	Isopropylbenzene	1000	U	1000	130
103-65-1	n-Propylbenzene	1000	U	1000	140
78-93-3	2-Butanone	10000	U	10000	570
108-10-1	4-Methyl-2-pentanone	10000	U	10000	320
135-98-8	sec-Butylbenzene	1000	U	1000	130
1634-04-4	Methyl tert-butyl ether	1000	U	1000	170
994-05-8	Tert-amyl-methyl ether (TAME)	5000	U	5000	67
75-09-2	Methylene Chloride	1000	U	1000	330
95-47-6	o-Xylene	210	J	1000	140
100-42-5	Styrene	1000	U	1000	110
637-92-3	Ethyl-t-butyl ether (ETBE)	5000	U	5000	110
98-06-6	tert-Butylbenzene	1000	U	1000	130
127-18-4	Tetrachloroethene	1000	U	1000	290
108-88-3	Toluene	9400		1000	130
156-60-5	trans-1,2-Dichloroethene	1000	U	1000	190
10061-02-6	trans-1,3-Dichloropropene	1000	U	1000	190
79-01-6	Trichloroethene	820	J	1000	170
75-69-4	Trichlorofluoromethane	1000	U	1000	210
108-05-4	Vinyl acetate	2000	U	2000	190
75-01-4	Vinyl chloride	5600		1000	220
75-65-0	tert-Butyl alcohol	50000	U	50000	3900
1330-20-7	Xylenes, Total	630	J	2000	140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28158-1

SDG No.:

Client Sample ID: DUP05 | Lab Sample ID: 240-28158-9

Matrix: Water | Lab File ID: UXJ3718.D

Analysis Method: 8260B | Date Collected: 08/20/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/28/2013 15:41

Soil Aliquot Vol: | Dilution Factor: 1000

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99295 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1000	U *	1000	180

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DUP05 Lab Sample ID: 240-28158-9

Matrix: Water Lab File ID: UXJ3718.D

Analysis Method: 8260B Date Collected: 08/20/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 15:41

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

Number TICs Found: 2 TIC Result Total: 2400

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	2.60	1400	T J
	Unknown	3.15	1000	T J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: TB-082013 Lab Sample ID: 240-28158-8

Matrix: Water Lab File ID: UXJ3717.D

Analysis Method: 8260B Date Collected: 08/20/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 15:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U *	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: TB-082013 Lab Sample ID: 240-28158-8

Matrix: Water Lab File ID: UXJ3717.D

Analysis Method: 8260B Date Collected: 08/20/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 15:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: TB-082013 Lab Sample ID: 240-28158-8

Matrix: Water Lab File ID: UXJ3717.D

Analysis Method: 8260B Date Collected: 08/20/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 15:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	90		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: TB-082013 Lab Sample ID: 240-28158-8

Matrix: Water Lab File ID: UXJ3717.D

Analysis Method: 8260B Date Collected: 08/20/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 15:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-28158-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/21/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.4 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-31-30 (240-28158-1), DR-DPT-31-35 (240-28158-2), DR-DPT-31-40 (240-28158-3), DR-DPT-31-45 (240-28158-4), DR-DPT-43B-10 (240-28158-5), DR-DPT-43B-15 (240-28158-6), DR-DPT-43B-20 (240-28158-7), TB-082013 (240-28158-8) and DUP05 (240-28158-9) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/27/2013, 08/28/2013 and 08/29/2013.

Toluene was detected in method blank MB 240-99104/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-31-30 (240-28158-1)[2.5X], DR-DPT-43B-15 (240-28158-6)[1000X], DR-DPT-43B-20 (240-28158-7)[1000X] and DUP05 (240-28158-9)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The laboratory control sample (LCS) for batch 99104 recovered outside control limits for the following analyte(s): 2-Methyl-2-propanol. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

The laboratory control sample (LCS) for batch 99295 recovered outside control limits for the following analytes: Chlorodibromomethane, Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 23000 recovered outside control limits for the following analytes: o-xylene, Chlorodibromomethane, Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No MS/MSD in batch 99104 due to an instrument failure.

The MSD for batch 99295 is out of the 12 hour tune time limit by 8 minutes but is still being reported.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

3.4

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/20/13	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	___ of ___ COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W) 5 days			SDG No.
(301) 528-3021 Phone	TAT if different from Below: Standard			
(301) 528-3000 FAX	☐ 2 weeks			Sampler: S. Cameron
Project Name: Dump Road Source Areas	☐ 1 week			
Site: MSA	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
DR-DPT- 31-30	8/20/2013	0940	GW	Water	3		x	
DR-DPT- 31-35	8/20/2013	1003	GW	Water	3		x	
DR-DPT- 31-40	8/20/2013	1034	GW	Water	3		x	
DR-DPT- 31-45	8/20/2013	1115	GW	Water	3		x	
DR-DPT- 43B-10	8/20/2013	1350	GW	Water	3		x	
DR-DPT- 43B-15	8/20/2013	1410	GW	Water	3		x	
DR-DPT- 43B-20	8/20/2013	1440	GW	Water	3		x	
DR-DPT-	8/20/2013		GW	Water	3		x	
DR-DPT-	8/20/2013		GW	Water	3		x	
DR-DPT-	8/20/2013		GW	Water	3		x	
DR-DPT-	8/20/2013		GW	Water	3		x	
TB-082013	8/20/2013		GW	Water	2		x	

240-28158 Chain of Custody

Preservation Used: (1= Ice) 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
(X) Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client (X) Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: DUP05 sampled 5 days TAT

	Company	Date/Time		Company	Date/Time
Relinquished by:	Tetra Tech	8/20/13 1530	Received by:	TestAmerica	8/20/13 1530
Relinquished by:	TestAmerica	8/20/13 1630	Received by:	TAC	8/21/13 915
Relinquished by:			Received by:		

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 28158
Canton Facility

Client TETRA TECH Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 8-21-13 Opened on 8-21-13

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF -1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. 3.4 °C	Corrected Cooler Temp. 3.4 °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes) No	
-Were custody seals on the outside of the cooler(s) signed & dated?	(Yes) No	NA
-Were custody seals on the bottle(s)?	Yes (No)	
3. Shippers' packing slip attached to the cooler(s)?	(Yes) No	
4. Did custody papers accompany the sample(s)?	(Yes) No	
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes) No	
6. Did all bottles arrive in good condition (Unbroken)?	(Yes) No	
7. Could all bottle labels be reconciled with the COC?	(Yes) No	DTS
8. Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
9. Sufficient quantity received to perform indicated analyses?	(Yes) No	
10. Were sample(s) at the correct pH upon receipt?	Yes No (NA)	pH Strip Lot# HC376062
11. Were VOAs on the COC?	(Yes) No	
12. Were air bubbles >6 mm in any VOA vials?	(Yes) No	NA
13. Was a trip blank present in the cooler(s)?	(Yes) No	

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

DR-DPT-DUP05 RECEIVED BUT NOT ON COC

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) DR-DPT 31-45 1X40ml were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28158-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-28158-1	DR-DPT-31-30	Water	08/20/2013 0940	08/21/2013 0915
240-28158-2	DR-DPT-31-35	Water	08/20/2013 1003	08/21/2013 0915
240-28158-3	DR-DPT-31-40	Water	08/20/2013 1034	08/21/2013 0915
240-28158-4	DR-DPT-31-45	Water	08/20/2013 1115	08/21/2013 0915
240-28158-5	DR-DPT-43B-10	Water	08/20/2013 1350	08/21/2013 0915
240-28158-6	DR-DPT-43B-15	Water	08/20/2013 1410	08/21/2013 0915
240-28158-7	DR-DPT-43B-20	Water	08/20/2013 1440	08/21/2013 0915
240-28158-8TB	TB-082013	Water	08/20/2013 0000	08/21/2013 0915
240-28158-9FD	DUP05	Water	08/20/2013 0000	08/21/2013 0915

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28158-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

HOLDTIME

SDG 240-27719-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-42-10	240-27831-1	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-31-35	240-28158-2	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-31-40	240-28158-3	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-31-45	240-28158-4	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-38-15	240-27760-1	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-30	240-27760-2	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-35	240-27760-3	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-40	240-27760-4	NM	08/08/2013	08/16/2013	08/16/2013	8	0	8
OV	UG/L	DR-DPT-40-20	240-27719-4	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-25	240-27719-5	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-30	240-27719-6	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-35	240-27719-7	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-40	240-27719-8	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-41-35	240-27719-1	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-31-30	240-28158-1	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-43B-10	240-28158-5	NM	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	TB-082013	240-28158-8	TB	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	TB-080913	240-27831-7	TB	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	TB-080813	240-27760-5	NM	08/08/2013	08/16/2013	08/16/2013	8	0	8
OV	UG/L	TB-080713	240-27719-9	TB	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-70-20	240-28270-1	NM	08/22/2013	08/28/2013	08/28/2013	6	0	6
OV	UG/L	DR-DPT-41-40	240-27719-2	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-43B-15	240-28158-6	NM	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	DR-DPT-41-45	240-27719-3	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-42-35	240-27831-6	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-30	240-27831-5	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-25	240-27831-4	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-20	240-27831-3	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-15	240-27831-2	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	TB-082213	240-28270-2	TB	08/22/2013	08/28/2013	08/28/2013	6	0	6
OV	UG/L	DR-DPT-43B-20	240-28158-7	NM	08/20/2013	08/29/2013	08/29/2013	9	0	9

Field Duplicate Precision

ANALYTE	DUP05	DR-DPT-43B-15	RPD	DIFFERENCE
CIS-1,2-DICHLOROETHENE	27000	29000	7.14	2000
ETHYLBENZENE	230	360	44.07	130
M+P-XYLENES	420	420	0.00	0
O-XYLENE	210	250	17.39	40
TOLUENE	9400	10000	6.19	600
TOTAL XYLENES	630	670	6.15	40
TRICHLOROETHENE	820	3700	127.43	2880
VINYL CHLORIDE	5600	5700	1.77	100

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab File ID: BFB208A.D BFB Injection Date: 08/22/2013

Instrument ID: A3UX15 BFB Injection Time: 14:12

Analysis Batch No.: 98656

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	48.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.3	(0.3)1
174	50.0 - 120.00 % of mass 95	97.8	
175	5.0 - 9.0 % of mass 174	5.8	(5.9)1
176	95.0 - 101.0 % of mass 174	93.9	(96.1)1
177	5.0 - 9.0 % of mass 176	5.9	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-98656/2	UXC4298.D	08/22/2013	16:48
	STD8260 240-98656/3	UXC4299.D	08/22/2013	17:10
	STD8260 240-98656/4	UXC4300.D	08/22/2013	17:32
	STD8260 240-98656/5	UXC4301.D	08/22/2013	17:55
	STD8260 240-98656/6	UXC4302.D	08/22/2013	18:17
	STD8260 240-98656/7	UXC4303.D	08/22/2013	18:39
	STD 240-98656/8	UXC4304.D	08/22/2013	19:01
	STD 240-98656/9	UXC4305.D	08/22/2013	19:23
	STD 240-98656/10	UXC4306.D	08/22/2013	19:46
	STD 240-98656/11	UXC4307.D	08/22/2013	20:08
	STD 240-98656/12	UXC4308.D	08/22/2013	20:30
	STD 240-98656/13	UXC4309.D	08/22/2013	20:52
	ICV 240-98656/20	UXC4316.D	08/22/2013	23:29

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-98656/7	UXC4303.D
Level 2	STD8260 240-98656/6	UXC4302.D
Level 3	STD8260 240-98656/5	UXC4301.D
Level 4	STD8260 240-98656/4	UXC4300.D
Level 5	STD8260 240-98656/3	UXC4299.D
Level 6	STD8260 240-98656/2	UXC4298.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.4086 0.3921	0.3945	0.3636	0.4031	0.4141	Ave		0.3960				4.5		15.0			
Chloromethane	0.5219 0.4026	0.5299	0.4360	0.4576	0.4543	Ave		0.4670			0.1000	11.0		15.0			
Vinyl chloride	0.4826 0.4161	0.4955	0.4244	0.4441	0.4452	Ave		0.4513				7.0		15.0			
Bromomethane	0.2825 0.1848	0.2719	0.2220	0.2251	0.2207	Ave		0.2345				15.0		15.0			
Chloroethane	0.3072 0.2073	0.2964	0.2445	0.2489	0.2377	Ave		0.2570				15.0		15.0			
Trichlorofluoromethane	0.5068 0.4575	0.4705	0.4276	0.4729	0.4813	Ave		0.4695				5.6		15.0			
Acrolein	0.0311 0.0337	0.0359	0.0330	0.0358	0.0359	Ave		0.0342				5.7		15.0			
1,1-Dichloroethene	0.4321 0.3704	0.4167	0.3738	0.3995	0.4015	Ave		0.3990				6.0		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.3407 0.3025	0.3508	0.2971	0.3203	0.3342	Ave		0.3243				6.6		15.0			
Acetone	0.1195 0.0720	0.1006	0.0781	0.0812	0.0731	Lin1	0.1037	0.0712							0.9990		0.9900
Iodomethane	0.7327 0.6374	0.6949	0.6512	0.6854	0.6906	Ave		0.6820				5.0		15.0			
Carbon disulfide	1.3512 1.1983	1.3360	1.1843	1.2682	1.2832	Ave		1.2702				5.4		15.0			
Acetonitrile	0.0212 0.0274	0.0241	0.0238	0.0269	0.0271	Ave		0.0251				9.9		15.0			
Methyl acetate	0.1978 0.1740	0.1942	0.1756	0.1861	0.1882	Ave		0.1860				5.2		15.0			
Methylene Chloride	0.8395 0.4010	0.6441	0.4784	0.4677	0.4417	Lin1	0.4609	0.4014							0.9980		0.9900

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0109 0.0150	0.0126	0.0145	0.0155	0.0164	Ave		0.0141				14.0		15.0			
Acrylonitrile	0.0870 0.0932	0.0941	0.0865	0.0976	0.0962	Ave		0.0924				5.0		15.0			
Methyl tert-butyl ether	0.8438 0.8198	0.8751	0.8092	0.8445	0.8674	Ave		0.8433				3.1		15.0			
trans-1,2-Dichloroethene	0.4671 0.4054	0.4591	0.4324	0.4401	0.4365	Ave		0.4401				4.9		15.0			
Hexane	0.0783 0.0743	0.0784	0.0709	0.0762	0.0797	Ave		0.0763				4.3		15.0			
1,1-Dichloroethane	0.7084 0.6404	0.7270	0.6483	0.6818	0.6915	Ave		0.6829			0.1000	4.9		15.0			
Vinyl acetate	0.0302 0.0382	0.0316	0.0308	0.0366	0.0400	Ave		0.0346				12.0		15.0			
2,2-Dichloropropane	0.3958 0.4009	0.3735	0.3839	0.4008	0.4249	Ave		0.3966				4.4		15.0			
cis-1,2-Dichloroethene	0.4660 0.4187	0.4620	0.4274	0.4484	0.4474	Ave		0.4450				4.2		15.0			
2-Butanone	0.1045 0.0871	0.0892	0.0856	0.0898	0.0881	Ave		0.0907				7.6		15.0			
Bromochloromethane	0.1947 0.1841	0.1961	0.1864	0.1964	0.2028	Ave		0.1934				3.6		15.0			
Tetrahydrofuran	0.0635 0.0588	0.0774	0.0604	0.0602	0.0611	Ave		0.0636				11.0		15.0			
Chloroform	0.6744 0.6305	0.7025	0.6442	0.6657	0.6803	Ave		0.6663				3.9		15.0			
1,1,1-Trichloroethane	0.5450 0.5334	0.5431	0.5073	0.5454	0.5680	Ave		0.5404				3.7		15.0			
Cyclohexane	0.6423 0.6349	0.6599	0.5833	0.6490	0.6763	Ave		0.6410				4.9		15.0			
1,1-Dichloropropene	0.4789 0.4865	0.5165	0.4636	0.4873	0.5075	Ave		0.4900				3.9		15.0			
Carbon tetrachloride	0.4202 0.4681	0.4558	0.4209	0.4739	0.4888	Ave		0.4546				6.3		15.0			
Benzene	1.4584 1.4225	1.4726	1.3976	1.4474	1.4776	Ave		1.4460				2.1		15.0			
1,2-Dichloroethane	0.4014 0.3945	0.4249	0.3869	0.4040	0.4084	Ave		0.4033				3.2		15.0			
Trichloroethene	0.3974 0.3713	0.3745	0.3600	0.3804	0.3838	Ave		0.3779				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.5490 0.5638	0.5676	0.5191	0.5805	0.6022	Ave		0.5637				5.0		15.0			
1,2-Dichloropropane	0.2924 0.3026	0.2999	0.2710	0.3117	0.3082	Ave		0.2976				4.9		15.0			
Dibromomethane	0.1561 0.1655	0.1739	0.1585	0.1659	0.1690	Ave		0.1648				4.0		15.0			
1,4-Dioxane	0.0017 0.0021	0.0024	0.0019	0.0021	0.0024	Ave		0.0021				12.0		15.0			
Bromodichloromethane	0.2858 0.3738	0.3245	0.3253	0.3562	0.3681	Ave		0.3390				9.9		15.0			
2-Chloroethyl vinyl ether	0.0637 0.1165	0.0730	0.0875	0.0969	0.0997	Lin1	-0.140	0.1114							0.9930		0.9900
cis-1,3-Dichloropropene	0.2485 0.4004	0.2728	0.2997	0.3426	0.3620	Lin1	-0.214	0.3880							0.9960		0.9900
4-Methyl-2-pentanone	0.1251 0.1761	0.1569	0.1441	0.1685	0.1717	Ave		0.1571				12.0		15.0			
Toluene	2.4964 2.0082	2.5638	2.0462	2.0392	2.1864	Ave		2.2234				11.0		15.0			
trans-1,3-Dichloropropene	0.3289 0.4446	0.3264	0.3542	0.3786	0.4299	Ave		0.3771				13.0		15.0			
Ethyl methacrylate	0.2604 0.3589	0.2922	0.3068	0.3273	0.3807	Ave		0.3210				14.0		15.0			
1,1,2-Trichloroethane	0.2925 0.2959	0.3077	0.2929	0.3030	0.3114	Ave		0.3006				2.7		15.0			
Tetrachloroethene	0.4133 0.4146	0.4404	0.4027	0.4246	0.4476	Ave		0.4239				4.1		15.0			
1,3-Dichloropropane	0.4880 0.5288	0.5105	0.4996	0.5046	0.5404	Ave		0.5120				3.8		15.0			
2-Hexanone	0.1207 0.1483	0.1358	0.1377	0.1386	0.1554	Ave		0.1394				8.5		15.0			
Dibromochloromethane	0.2911 0.3578	0.2870	0.2947	0.3152	0.3542	Ave		0.3167				10.0		15.0			
1,2-Dibromoethane	0.2566 0.3058	0.2753	0.2844	0.2921	0.3136	Ave		0.2880				7.2		15.0			
Chlorobenzene	1.2828 1.2480	1.2633	1.2272	1.2366	1.3261	Ave		1.2640			0.3000	2.9		15.0			
1,1,1,2-Tetrachloroethane	0.4392 0.4848	0.4850	0.4607	0.4803	0.5401	Ave		0.4817				7.0		15.0			
Ethylbenzene	0.6619 0.6922	0.6533	0.6794	0.6915	0.7531	Ave		0.6886				5.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	1.5336 1.4861	1.6352	1.6595	1.7309	1.8773	Ave		1.6538				8.5		15.0			
o-Xylene	0.8230 0.9047	0.8706	0.8915	0.9245	1.0088	Ave		0.9038				6.9		15.0			
Styrene	1.1282 1.3929	1.1899	1.2597	1.3494	1.4622	Ave		1.2970				9.8		15.0			
Bromoform	0.1634 0.2260	0.1790	0.1835	0.1954	0.2249	Ave		0.1954			0.1000	13.0		15.0			
Isopropylbenzene	1.9701 2.3478	2.0502	2.1946	2.3528	2.5810	Ave		2.2494				10.0		15.0			
1,1,2,2-Tetrachloroethane	0.6612 0.6315	0.6452	0.5887	0.6416	0.6406	Ave		0.6348			0.3000	3.9		15.0			
Bromobenzene	0.8873 0.9012	0.8688	0.8194	0.8700	0.9013	Ave		0.8747				3.5		15.0			
1,2,3-Trichloropropane	0.1965 0.1952	0.2146	0.1828	0.1910	0.2080	Ave		0.1980				5.8		15.0			
trans-1,4-Dichloro-2-butene	0.1249 0.1203	0.1232	0.1053	0.1137	0.1164	Ave		0.1173				6.1		15.0			
n-Propylbenzene	0.7511 0.8885	0.8079	0.7930	0.8782	0.9113	Ave		0.8383				7.5		15.0			
2-Chlorotoluene	0.8162 0.8410	0.7903	0.8095	0.8442	0.8659	Ave		0.8278				3.3		15.0			
1,3,5-Trimethylbenzene	2.2799 2.9229	2.3979	2.5338	2.8013	2.9366	Ave		2.6454				11.0		15.0			
4-Chlorotoluene	2.6515 2.7164	2.5944	2.5470	2.6738	2.7232	Ave		2.6510				2.6		15.0			
tert-Butylbenzene	1.8297 2.5112	1.8781	2.0570	2.3874	2.5069	Ave		2.1951				14.0		15.0			
1,2,4-Trimethylbenzene	2.3578 2.9656	2.4916	2.6670	2.8810	2.9934	Ave		2.7261				9.7		15.0			
sec-Butylbenzene	2.7131 3.3725	2.7512	2.9385	3.2729	3.4117	Ave		3.0767				10.0		15.0			
1,3-Dichlorobenzene	1.8155 1.7683	1.8196	1.6936	1.7695	1.8121	Ave		1.7798				2.7		15.0			
p-Isopropyltoluene	2.2226 2.9651	2.4005	2.5470	2.8918	2.9922	Ave		2.6699				12.0		15.0			
1,4-Dichlorobenzene	1.9308 1.8321	1.8364	1.7737	1.8677	1.8955	Ave		1.8560				3.0		15.0			
n-Butylbenzene	2.1121 2.5030	2.1368	2.2000	2.4493	2.5690	Ave		2.3284				8.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.7483 1.7094	1.7439	1.6963	1.7751	1.8225	Ave		1.7493				2.6		15.0			
1,2-Dibromo-3-Chloropropane	0.0927 0.1171	0.1051	0.0883	0.1129	0.1215	Ave		0.1063				13.0		15.0			
1,3,5-Trichlorobenzene	1.2362 1.2346	1.2878	1.2042	1.3188	1.3360	Ave		1.2696				4.1		15.0			
1,2,4-Trichlorobenzene	0.9557 1.0150	0.9746	0.9417	1.0654	1.1003	Ave		1.0088				6.3		15.0			
Hexachlorobutadiene	0.5783 0.5334	0.5938	0.5590	0.6380	0.6215	Ave		0.5873				6.6		15.0			
Naphthalene	1.4625 2.0692	1.6561	1.6653	2.0093	2.2516	Lin1	-0.899	2.1332							0.9960		0.9900
1,2,3-Trichlorobenzene	0.9002 0.8311	0.9217	0.8176	0.9158	0.9348	Ave		0.8869				5.6		15.0			
Dibromofluoromethane (Surr)	0.3112 0.3193	0.3246	0.3087	0.3413	0.3345	Ave		0.3233				4.0		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3194 0.3179	0.3251	0.3051	0.3223	0.3263	Ave		0.3193				2.4		15.0			
Toluene-d8 (Surr)	1.5842 1.6556	1.6671	1.5555	1.6537	1.7721	Ave		1.6480				4.6		15.0			
4-Bromofluorobenzene (Surr)	0.5415 0.5744	0.5701	0.5631	0.5629	0.6103	Ave		0.5704				4.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 19:01 Calibration End Date: 08/22/2013 20:52 Calibration ID: 17024

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-98656/13	UXC4309.D
Level 2	STD 240-98656/12	UXC4308.D
Level 3	STD 240-98656/11	UXC4307.D
Level 4	STD 240-98656/10	UXC4306.D
Level 5	STD 240-98656/9	UXC4305.D
Level 6	STD 240-98656/8	UXC4304.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.6779 0.6367	0.6657	0.6646	0.6374	0.6342	Ave		0.6527				2.9		15.0			
Ethyl ether	0.2477 0.2516	0.2495	0.2526	0.2474	0.2391	Ave		0.2480				1.9		15.0			
3-Chloro-1-propene	0.1914 0.2222	0.1985	0.1893	0.2056	0.2132	Ave		0.2034				6.3		15.0			
Diisopropyl ether	0.2998 0.3561	0.3194	0.3264	0.3307	0.3418	Ave		0.3290				5.8		15.0			
2-Chloro-1,3-butadiene	0.5528 0.6048	0.5476	0.5730	0.5869	0.5906	Ave		0.5759				3.9		15.0			
Ethyl-t-butyl ether (ETBE)	0.8226 0.9697	0.8804	0.8735	0.8939	0.9288	Ave		0.8948				5.6		15.0			
Ethyl acetate	0.1339 0.1475	0.1333	0.1362	0.1297	0.1506	Ave		0.1385				6.1		15.0			
Propionitrile	0.0200 0.0324	0.0312	0.0284	0.0282	0.0293	Ave		0.0283				15.0		15.0			
Methacrylonitrile	0.0994 0.1237	0.1209	0.1029	0.1140	0.1210	Ave		0.1137				9.0		15.0			
Isobutyl alcohol	0.0050 0.0057	0.0048	0.0049	0.0042	0.0055	Ave		0.0050				11.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6038 0.7912	0.6480	0.6872	0.7136	0.7558	Ave		0.6999				9.8		15.0			
n-Heptane	0.0571 0.0694	0.0609	0.0612	0.0680	0.0692	Ave		0.0643				8.1		15.0			
n-Butanol	0.0030 0.0043	0.0038	0.0042	0.0039	0.0045	Ave		0.0039				14.0		15.0			
Methyl methacrylate	0.1090 0.1178	0.1025	0.0908	0.1002	0.1113	Ave		0.1053				9.0		15.0			
2-Nitropropane	0.0255 0.0246	0.0232	0.0198	0.0219	0.0230	Ave		0.0230				8.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 19:01 Calibration End Date: 08/22/2013 20:52 Calibration ID: 17024

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0603 0.1016	0.0697	0.0814	0.0802	0.0914	Lin1	-0.545	0.0978							0.9940		0.9900
1,2,3-Trimethylbenzene	2.1936 3.3662	2.3500	2.7504	2.8092	3.2831	Lin1	-1.702	3.3238							0.9970		0.9900
2-Methylnaphthalene	0.5728 0.8431	0.5680	0.5198	0.8556	0.9803	Qua	-2.945	1.1289	-0.003						0.9950		0.9900
n-Butyl acetate	0.1618 0.2104	0.1591	0.1739	0.1804	0.2013	Ave		0.1812				12.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab File ID: BFB212A.D BFB Injection Date: 08/27/2013

Instrument ID: A3UX15 BFB Injection Time: 10:32

Analysis Batch No.: 99104

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.6	
75	30.0 - 60.0 % of mass 95	49.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.5	(0.5)1
174	50.0 - 120.00 % of mass 95	91.6	
175	5.0 - 9.0 % of mass 174	6.4	(7.0)1
176	95.0 - 101.0 % of mass 174	91.3	(99.7)1
177	5.0 - 9.0 % of mass 176	6.0	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	LCS 240-99104/4	UXC4424.D	08/27/2013	11:25
	CCVIS 240-99104/2	UXC4425.D	08/27/2013	11:48
	CCV 240-99104/3	UXC4426.D	08/27/2013	12:10
	MB 240-99104/5	UXC4428.D	08/27/2013	12:55
DR-DPT-31-30	240-28158-1	UXC4435.D	08/27/2013	16:10
DR-DPT-31-35	240-28158-2	UXC4436.D	08/27/2013	16:32
DR-DPT-31-40	240-28158-3	UXC4437.D	08/27/2013	16:55
DR-DPT-31-45	240-28158-4	UXC4438.D	08/27/2013	17:18

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCVIS 240-99104/2 Calibration Date: 08/27/2013 11:48

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC4425.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3960	0.3608		1.00	0.0100	-8.9	50.0
Chloromethane	Ave	0.4670	0.4233	0.1000	1.00	0.0100	-9.4	50.0
Vinyl chloride	Ave	0.4513	0.4368		1.00	0.0100	-3.2	20.0
Bromomethane	Ave	0.2345	0.1862		1.00	0.0100	-20.6	50.0
Chloroethane	Ave	0.2570	0.2303		1.00	0.0100	-10.4	50.0
Trichlorofluoromethane	Ave	0.4695	0.3426		1.00	0.0100	-27.0	50.0
Acrolein	Ave	0.0342	0.0311		20.0	0.100	-9.3	50.0
1,1-Dichloroethene	Ave	0.3990	0.3843		1.00	0.0100	-3.7	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.3243	0.2803		1.00	0.0100	-13.6	50.0
Acetone	Lin1		0.0896		10.0	0.0200	18.5	50.0
Iodomethane	Ave	0.6820	0.6881		1.00	0.0100	0.9	50.0
Carbon disulfide	Ave	1.270	1.228		1.00	0.0100	-3.3	50.0
Acetonitrile	Ave	0.0251	0.0335		20.0	0.100	33.7	50.0
Methyl acetate	Ave	0.1860	0.2208		10.0	0.0200	18.7	50.0
Methylene Chloride	Lin1		0.4894		1.00	0.0100	10.4	50.0
tert-Butyl alcohol	Ave	0.0141	0.0183		50.0	0.200	29.2	50.0
Acrylonitrile	Ave	0.0924	0.1044		20.0	0.0200	13.0	50.0
Methyl tert-butyl ether	Ave	0.8433	0.9309		1.00	0.0100	10.4	50.0
trans-1,2-Dichloroethene	Ave	0.4401	0.4421		1.00	0.0100	0.5	50.0
Hexane	Ave	0.0763	0.0739		1.00	0.0100	-3.1	20.0
1,1-Dichloroethane	Ave	0.6829	0.6882	0.1000	1.00	0.0100	0.8	50.0
Vinyl acetate	Ave	0.0346	0.0348		2.00	0.0100	0.8	50.0
2,2-Dichloropropane	Ave	0.3966	0.3803		1.00	0.0100	-4.1	50.0
cis-1,2-Dichloroethene	Ave	0.4450	0.4520		1.00	0.0100	1.6	50.0
2-Butanone	Ave	0.0907	0.1024		10.0	0.0200	12.8	50.0
Bromochloromethane	Ave	0.1934	0.2117		1.00	0.0100	9.4	50.0
Tetrahydrofuran	Ave	0.0636	0.0706		5.00	0.0100	11.1	50.0
Chloroform	Ave	0.6663	0.6834		1.00	0.0100	2.6	20.0
1,1,1-Trichloroethane	Ave	0.5404	0.5406		1.00	0.0100	0.0	50.0
Cyclohexane	Ave	0.6410	0.6350		1.00	0.0100	-0.9	50.0
1,1-Dichloropropene	Ave	0.4900	0.4877		1.00	0.0100	-0.5	50.0
Carbon tetrachloride	Ave	0.4546	0.4635		1.00	0.0100	2.0	50.0
Benzene	Ave	1.446	1.472		1.00	0.0100	1.8	50.0
1,2-Dichloroethane	Ave	0.4033	0.4264		1.00	0.0100	5.7	50.0
Trichloroethene	Ave	0.3779	0.3797		1.00	0.0100	0.5	50.0
Methylcyclohexane	Ave	0.5637	0.5583		1.00	0.0100	-1.0	50.0
1,2-Dichloropropane	Ave	0.2976	0.3123		1.00	0.0100	4.9	20.0
Dibromomethane	Ave	0.1648	0.1773		1.00	0.0100	7.6	50.0
1,4-Dioxane	Ave	0.0021	0.0021		50.0	0.500	1.0	50.0
Bromodichloromethane	Ave	0.3390	0.3747		1.00	0.0100	10.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCVIS 240-99104/2 Calibration Date: 08/27/2013 11:48

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC4425.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Lin1		0.1086		10.0	0.0200	3.8	50.0
cis-1,3-Dichloropropene	Lin1		0.3794		1.00	0.0100	3.3	50.0
4-Methyl-2-pentanone	Ave	0.1571	0.1751		10.0	0.0200	11.5	50.0
Toluene	Ave	2.223	2.012		1.00	0.0100	-9.5	20.0
trans-1,3-Dichloropropene	Ave	0.3771	0.4392		1.00	0.0100	16.5	50.0
Ethyl methacrylate	Ave	0.3210	0.3515		1.00	0.0100	9.5	50.0
1,1,2-Trichloroethane	Ave	0.3006	0.3182		1.00	0.0100	5.9	50.0
Tetrachloroethene	Ave	0.4239	0.4047		1.00	0.0100	-4.5	50.0
1,3-Dichloropropane	Ave	0.5120	0.5545		1.00	0.0100	8.3	50.0
2-Hexanone	Ave	0.1394	0.1537		10.0	0.0200	10.2	50.0
Dibromochloromethane	Ave	0.3167	0.3542		1.00	0.0100	11.8	50.0
1,2-Dibromoethane	Ave	0.2880	0.3292		1.00	0.0100	14.3	50.0
Chlorobenzene	Ave	1.264	1.288	0.3000	1.00	0.0100	1.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4817	0.4970		1.00	0.0100	3.2	50.0
Ethylbenzene	Ave	0.6886	0.6936		1.00	0.0100	0.7	20.0
m-Xylene & p-Xylene	Ave	1.654	1.689		2.00	0.0200	2.2	50.0
o-Xylene	Ave	0.9038	0.9273		1.00	0.0100	2.6	50.0
Styrene	Ave	1.297	1.400		1.00	0.0100	7.9	50.0
Bromoform	Ave	0.1954	0.2207	0.1000	1.00	0.0100	13.0	50.0
Isopropylbenzene	Ave	2.249	2.298		1.00	0.0100	2.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6348	0.6818	0.3000	1.00	0.0100	7.4	50.0
Bromobenzene	Ave	0.8747	0.8988		1.00	0.0100	2.8	50.0
1,2,3-Trichloropropane	Ave	0.1980	0.2092		1.00	0.0100	5.6	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1173	0.1559		1.00	0.0100	32.9	50.0
n-Propylbenzene	Ave	0.8383	0.8802		1.00	0.0100	5.0	50.0
2-Chlorotoluene	Ave	0.8278	0.8689		1.00	0.0100	5.0	50.0
1,3,5-Trimethylbenzene	Ave	2.645	2.912		1.00	0.0100	10.1	50.0
4-Chlorotoluene	Ave	2.651	2.749		1.00	0.0100	3.7	50.0
tert-Butylbenzene	Ave	2.195	2.420		1.00	0.0100	10.3	50.0
1,2,4-Trimethylbenzene	Ave	2.726	2.964		1.00	0.0100	8.7	50.0
sec-Butylbenzene	Ave	3.077	3.286		1.00	0.0100	6.8	50.0
1,3-Dichlorobenzene	Ave	1.780	1.776		1.00	0.0100	-0.2	50.0
p-Isopropyltoluene	Ave	2.670	2.877		1.00	0.0100	7.8	50.0
1,4-Dichlorobenzene	Ave	1.856	1.865		1.00	0.0100	0.5	50.0
n-Butylbenzene	Ave	2.328	2.400		1.00	0.0100	3.1	50.0
1,2-Dichlorobenzene	Ave	1.749	1.764		1.00	0.0100	0.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1063	0.1067		2.00	0.0100	0.4	50.0
1,3,5-Trichlorobenzene	Ave	1.270	1.245		1.00	0.0100	-1.9	50.0
1,2,4-Trichlorobenzene	Ave	1.009	0.9923		1.00	0.0100	-1.6	50.0
Hexachlorobutadiene	Ave	0.5873	0.5675		1.00	0.0100	-3.4	50.0
Naphthalene	Lin1		1.809		1.00	0.0100	-11.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCVIS 240-99104/2 Calibration Date: 08/27/2013 11:48

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC4425.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.8869	0.8476		1.00	0.0100	-4.4	50.0
Dibromofluoromethane (Surr)	Ave	0.3233	0.3289		0.00906	0.00890	1.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.3172		0.00884	0.00890	-0.7	50.0
Toluene-d8 (Surr)	Ave	1.648	1.543		0.00833	0.00890	-6.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5704	0.5535		0.00864	0.00890	-3.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCV 240-99104/3 Calibration Date: 08/27/2013 12:10

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 19:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 20:52

Lab File ID: UXC4426.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.6527	0.6339		2.00	0.0100	-2.9	50.0
Ethyl ether	Ave	0.2480	0.2470		2.00	0.0100	-0.4	50.0
3-Chloro-1-propene	Ave	0.2034	0.2099		2.00	0.0100	3.2	50.0
Diisopropyl ether	Ave	0.3290	0.3384		10.0	0.0500	2.9	50.0
2-Chloro-1,3-butadiene	Ave	0.5759	0.5628		2.00	0.0100	-2.3	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8948	0.9263		5.00	0.0100	3.5	50.0
Ethyl acetate	Ave	0.1385	0.1358		4.00	0.0200	-2.0	50.0
Propionitrile	Ave	0.0283	0.0334		4.00	0.0200	18.1	50.0
Methacrylonitrile	Ave	0.1137	0.1266		2.00	0.0100	11.4	50.0
Isobutyl alcohol	Ave	0.0050	0.0062		50.0	0.200	24.3	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6999	0.7742		5.00	0.0100	10.6	50.0
n-Heptane	Ave	0.0643	0.0584		1.00	0.0100	-9.2	50.0
n-Butanol	Ave	0.0039	0.0043		50.0	0.200	8.2	50.0
Methyl methacrylate	Ave	0.1053	0.1151		2.00	0.0100	9.3	50.0
2-Nitropropane	Ave	0.0230	0.0236		2.00	0.0200	2.5	50.0
Cyclohexanone	Lin1		0.0866		20.0	0.100	-5.9	50.0
1,2,3-Trimethylbenzene	Lin1		2.927		0.00932	0.0100	-6.8	50.0
2-Methylnaphthalene	Qua		0.5971		5.00	0.0200	-31.5	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab File ID: UXC4428.D Lab Sample ID: MB 240-99104/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 08/27/2013 12:55

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-99104/4	UXC4424.D	08/27/2013 11:25
DR-DPT-31-30	240-28158-1	UXC4435.D	08/27/2013 16:10
DR-DPT-31-35	240-28158-2	UXC4436.D	08/27/2013 16:32
DR-DPT-31-40	240-28158-3	UXC4437.D	08/27/2013 16:55
DR-DPT-31-45	240-28158-4	UXC4438.D	08/27/2013 17:18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99104/5

Matrix: Water Lab File ID: UXC4428.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 12:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28158-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99104/5

Matrix: Water | Lab File ID: UXC4428.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/27/2013 12:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99104 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.294	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99104/5

Matrix: Water Lab File ID: UXC4428.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 12:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		63-129
460-00-4	4-Bromofluorobenzene (Surr)	92		66-117
2037-26-5	Toluene-d8 (Surr)	88		74-115
1868-53-7	Dibromofluoromethane (Surr)	103		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99104/5

Matrix: Water Lab File ID: UXC4428.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/27/2013 12:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99104 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab File ID: BFB182.D BFB Injection Date: 08/16/2013

Instrument ID: A3UX11 BFB Injection Time: 14:53

Analysis Batch No.: 97870

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	27.9	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.0	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	77.0	
175	5.0 - 9.0 % of mass 174	5.6	(7.3)1
176	95.0 - 101.0 % of mass 174	75.2	(97.8)1
177	5.0 - 9.0 % of mass 176	5.4	(7.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97870/2	UXJ3342.D	08/16/2013	15:26
	STD8260 240-97870/3	UXJ3343.D	08/16/2013	15:50
	STD8260 240-97870/4	UXJ3344.D	08/16/2013	16:14
	STD8260 240-97870/5	UXJ3345.D	08/16/2013	16:38
	STD8260 240-97870/6	UXJ3346.D	08/16/2013	17:02
	STD8260 240-97870/7	UXJ3347.D	08/16/2013	17:25
	STD6 240-97870/8	UXJ3348.D	08/16/2013	17:49
	STD5 240-97870/9	UXJ3349.D	08/16/2013	18:13
	STD4 240-97870/10	UXJ3350.D	08/16/2013	18:36
	STD3 240-97870/11	UXJ3351.D	08/16/2013	19:00
	STD2 240-97870/12	UXJ3352.D	08/16/2013	19:23
	STD1 240-97870/13	UXJ3353.D	08/16/2013	19:47
	ICV 240-97870/14	UXJ3354.D	08/16/2013	20:11

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97870/7	UXJ3347.D
Level 2	STD8260 240-97870/6	UXJ3346.D
Level 3	STD8260 240-97870/5	UXJ3345.D
Level 4	STD8260 240-97870/4	UXJ3344.D
Level 5	STD8260 240-97870/3	UXJ3343.D
Level 6	STD8260 240-97870/2	UXJ3342.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2050 0.2069	0.2165	0.1905	0.1835	0.1962	Ave		0.1997				6.0		15.0			
Chloromethane	0.3836 0.3627	0.3744	0.3702	0.3585	0.3773	Ave		0.3711			0.1000	2.5		15.0			
Vinyl chloride	0.2970 0.2796	0.2816	0.2875	0.2788	0.2885	Ave		0.2855				2.4		15.0			
Bromomethane	0.0902 0.0928	0.0896	0.0882	0.0875	0.0852	Ave		0.0889				2.9		15.0			
Chloroethane	0.1253 0.1277	0.1308	0.1309	0.1239	0.1308	Ave		0.1282				2.4		15.0			
Trichlorofluoromethane	0.2678 0.2756	0.3067	0.2866	0.2745	0.2715	Ave		0.2804				5.1		15.0			
Acrolein	0.0410 0.0438	0.0438	0.0475	0.0482	0.0465	Ave		0.0451				6.0		15.0			
1,1-Dichloroethene	0.2532 0.2375	0.2478	0.2468	0.2446	0.2555	Ave		0.2476				2.6		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.0966 0.1399	0.1660	0.1326	0.1231	0.1275	Lin1	-0.014	0.1353							0.9940		0.9900
Acetone	0.3092 0.1071	0.2325	0.1721	0.1479	0.1289	Qua	0.3734	0.1375	0						1.0000		0.9900
Iodomethane	0.4129 0.3606	0.3709	0.3932	0.3933	0.4004	Ave		0.3885				5.0		15.0			
Carbon disulfide	0.7531 0.6075	0.7219	0.6836	0.6918	0.6835	Ave		0.6903				7.1		15.0			
Acetonitrile	0.0421 0.0334	0.0425	0.0426	0.0378	0.0368	Ave		0.0392				9.7		15.0			
Methyl acetate	0.3974 0.3192	0.3727	0.3681	0.3403	0.3439	Ave		0.3569				7.8		15.0			
Methylene Chloride	0.9491 0.2806	0.5689	0.4243	0.3380	0.3142	Lin1	0.6684	0.2703							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0210 0.0156	0.0209	0.0211	0.0210	0.0207	Ave		0.0200				11.0		15.0			
Acrylonitrile	0.1870 0.1457	0.1597	0.1621	0.1513	0.1512	Ave		0.1595				9.2		15.0			
trans-1,2-Dichloroethene	0.3533 0.3481	0.3265	0.3317	0.3389	0.3315	Ave		0.3383				3.1		15.0			
Methyl tert-butyl ether	0.9157 0.7559	0.7542	0.7730	0.7847	0.7711	Ave		0.7924				7.8		15.0			
Hexane	0.0451 0.0680	0.0773	0.0574	0.0681	0.0579	Lin1	-0.010	0.0654							0.9910		0.9900
1,1-Dichloroethane	0.8025 0.7508	0.7293	0.7254	0.7239	0.7105	Ave		0.7404			0.1000	4.5		15.0			
Vinyl acetate	0.0440 0.0495	0.0415	0.0482	0.0494	0.0501	Ave		0.0471				7.5		15.0			
2-Butanone	0.2005 0.1535	0.2003	0.1813	0.1847	0.1769	Ave		0.1829				9.5		15.0			
cis-1,2-Dichloroethene	0.3848 0.3690	0.3500	0.3592	0.3622	0.3649	Ave		0.3650				3.2		15.0			
2,2-Dichloropropane	0.3421 0.3268	0.3667	0.3653	0.3538	0.3552	Ave		0.3517				4.3		15.0			
Bromochloromethane	0.2257 0.2057	0.2118	0.1996	0.2003	0.2019	Ave		0.2075				4.8		15.0			
Tetrahydrofuran	0.1645 0.0965	0.1385	0.1158	0.1182	0.1091	Lin1	0.0767	0.0998							0.9950		0.9900
Chloroform	0.6517 0.6334	0.5981	0.6259	0.6108	0.6111	Ave		0.6218				3.1		15.0			
1,1,1-Trichloroethane	0.5102 0.4815	0.4629	0.4993	0.5043	0.4946	Ave		0.4921				3.5		15.0			
Cyclohexane	0.4992 0.6461	0.6130	0.5552	0.5930	0.5967	Ave		0.5839				8.7		15.0			
1,1-Dichloropropene	0.4438 0.4620	0.4196	0.4258	0.4347	0.4394	Ave		0.4375				3.4		15.0			
Carbon tetrachloride	0.4398 0.4455	0.4494	0.4270	0.4294	0.4398	Ave		0.4385				2.0		15.0			
Benzene	1.4334 1.4434	1.3464	1.3831	1.3517	1.3641	Ave		1.3870				3.0		15.0			
1,2-Dichloroethane	0.6202 0.5720	0.5573	0.5676	0.5564	0.5589	Ave		0.5721				4.3		15.0			
Trichloroethene	0.3938 0.4061	0.3696	0.3948	0.3853	0.4011	Ave		0.3918				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.2867 0.4356	0.3998	0.3263	0.3585	0.3855	Ave		0.3654				15.0		15.0			
1,2-Dichloropropane	0.4686 0.4171	0.4119	0.4140	0.4117	0.4108	Ave		0.4224				5.4		15.0			
Dibromomethane	0.2258 0.1875	0.1961	0.2070	0.1936	0.1955	Ave		0.2009				6.8		15.0			
1,4-Dioxane	0.0021	0.0025	0.0021	0.0024	0.0023	Ave		0.0023				8.1		15.0			
Bromodichloromethane	0.4259 0.4382	0.4007	0.4398	0.4113	0.4323	Ave		0.4247				3.7		15.0			
2-Chloroethyl vinyl ether	0.1674 0.1999	0.1676	0.1836	0.1888	0.1996	Ave		0.1845				7.9		15.0			
cis-1,3-Dichloropropene	0.4258 0.5097	0.4513	0.4726	0.4900	0.4938	Ave		0.4739				6.5		15.0			
4-Methyl-2-pentanone	0.3283 0.3278	0.3102	0.3353	0.3435	0.3475	Ave		0.3321				4.0		15.0			
Toluene	1.9738 2.1996	1.9199	2.0481	1.9932	2.1061	Ave		2.0401				4.9		15.0			
trans-1,3-Dichloropropene	0.5561 0.6042	0.5109	0.5712	0.5535	0.6213	Ave		0.5695				6.9		15.0			
Ethyl methacrylate	0.3733 0.4741	0.3854	0.4094	0.4308	0.5051	Ave		0.4297				12.0		15.0			
1,1,2-Trichloroethane	0.3726 0.3696	0.3942	0.4092	0.3712	0.3880	Ave		0.3841				4.1		15.0			
1,3-Dichloropropane	0.6458 0.6562	0.6480	0.6624	0.6374	0.6625	Ave		0.6520				1.5		15.0			
Tetrachloroethene	0.3366 0.3931	0.3605	0.3772	0.3618	0.3806	Ave		0.3683				5.4		15.0			
2-Hexanone	0.3457 0.2741	0.2638	0.2961	0.2980	0.3086	Ave		0.2977				9.7		15.0			
Dibromochloromethane	0.3797 0.4126	0.4179	0.4031	0.3981	0.4254	Ave		0.4062				4.0		15.0			
1,2-Dibromoethane	0.3707 0.3552	0.3627	0.3824	0.3517	0.3646	Ave		0.3645				3.0		15.0			
Chlorobenzene	1.3056 1.2616	1.2440	1.2606	1.1898	1.2600	Ave		1.2536			0.3000	3.0		15.0			
1,1,1,2-Tetrachloroethane	0.5187 0.4648	0.4407	0.4570	0.4455	0.4642	Ave		0.4652				6.0		15.0			
Ethylbenzene	0.5355 0.6600	0.5148	0.5782	0.6019	0.6572	Ave		0.5913				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6035 0.8215	0.6401	0.7252	0.7630	0.8230	Ave		0.7294				13.0		15.0			
o-Xylene	0.4762 0.6977	0.5965	0.6715	0.6753	0.6992	Ave		0.6361				14.0		15.0			
Styrene	0.8804 1.1787	0.9115	1.0905	1.0960	1.1784	Ave		1.0559				12.0		15.0			
Bromoform	0.1460 0.1361	0.1380	0.1257	0.1414	0.1505	Ave		0.1396			0.1000	6.2		15.0			
Isopropylbenzene	1.2466 1.5529	1.2639	1.4086	1.4368	1.5595	Ave		1.4114				9.6		15.0			
1,1,2,2-Tetrachloroethane	0.9587 0.7953	1.0655	0.9025	0.8644	0.8466	Ave		0.9055			0.3000	11.0		15.0			
Bromobenzene	1.1396 1.1159	1.1021	1.1178	1.1227	1.1382	Ave		1.1227				1.3		15.0			
1,2,3-Trichloropropane	0.3575 0.2637	0.3351	0.3244	0.2971	0.3012	Ave		0.3132				11.0		15.0			
trans-1,4-Dichloro-2-butene	0.2307 0.3110	0.3162	0.3231	0.3423	0.3074	Ave		0.3051				13.0		15.0			
n-Propylbenzene	0.9191 1.1733	1.0676	1.1471	1.0923	1.1433	Ave		1.0904				8.5		15.0			
2-Chlorotoluene	0.9723 1.0388	1.0833	0.9766	1.0638	1.0250	Ave		1.0267				4.4		15.0			
1,3,5-Trimethylbenzene	2.2255 3.0948	2.4704	2.7655	2.8790	3.0227	Ave		2.7430				12.0		15.0			
4-Chlorotoluene	0.9022 1.0802	1.0922	1.0204	1.0932	1.1027	Ave		1.0485				7.4		15.0			
tert-Butylbenzene	2.3013 2.5187	2.0190	2.5477	2.3018	2.3935	Ave		2.3470				8.2		15.0			
1,2,4-Trimethylbenzene	2.3778 3.0042	2.4562	2.7519	2.8622	2.8954	Ave		2.7246				9.3		15.0			
sec-Butylbenzene	2.3846 3.2334	2.6094	2.8211	2.9668	3.0465	Ave		2.8437				11.0		15.0			
1,3-Dichlorobenzene	1.8146 1.7530	1.6766	1.7132	1.6859	1.7001	Ave		1.7239				3.0		15.0			
p-Isopropyltoluene	1.7896 2.9109	2.1277	2.3539	2.4650	2.6051	Lin1	-1.400	2.8129							0.9960		0.9900
1,4-Dichlorobenzene	1.7782 1.7983	1.6803	1.7506	1.7134	1.7528	Ave		1.7456				2.5		15.0			
n-Butylbenzene	1.6781 2.1478	1.6030	1.5894	1.7118	1.8847	Ave		1.7691				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.6012 1.7185	1.6454	1.6361	1.6347	1.6381	Ave		1.6456				2.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1173 0.1360	0.1296	0.1578	0.1336	0.1458	Ave		0.1367				10.0		15.0			
1,3,5-Trichlorobenzene	1.0740 1.0627	1.0062	0.9283	0.9748	1.0091	Ave		1.0092				5.4		15.0			
1,2,4-Trichlorobenzene	0.8062 0.9580	0.7810	0.8479	0.8703	0.8928	Ave		0.8593				7.4		15.0			
Hexachlorobutadiene	0.3379 0.3800	0.4642	0.3382	0.3624	0.3737	Ave		0.3761				12.0		15.0			
Naphthalene	1.8724 2.4357	1.9574	2.0186	2.1470	2.4485	Ave		2.1466				11.0		15.0			
1,2,3-Trichlorobenzene	0.6297 0.8837	0.7184	0.7887	0.8500	0.8932	Ave		0.7939				13.0		15.0			
Dibromofluoromethane (Surr)	0.3664 0.3558	0.3145	0.3367	0.3468	0.3406	Ave		0.3435				5.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4791 0.4478	0.3961	0.4397	0.4403	0.4527	Ave		0.4426				6.1		15.0			
Toluene-d8 (Surr)	1.5671 1.8861	1.4287	1.6925	1.6839	1.8197	Ave		1.6797				9.9		15.0			
4-Bromofluorobenzene (Surr)	0.3557 0.3927	0.3559	0.3695	0.3822	0.4071	Ave		0.3772				5.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97870/13	UXJ3353.D
Level 2	STD2 240-97870/12	UXJ3352.D
Level 3	STD3 240-97870/11	UXJ3351.D
Level 4	STD4 240-97870/10	UXJ3350.D
Level 5	STD5 240-97870/9	UXJ3349.D
Level 6	STD6 240-97870/8	UXJ3348.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.2683 0.2447	0.2194	0.2342	0.2458	0.2389	Ave		0.2419				6.6		15.0			
Ethyl ether	0.4166 0.3363	0.3272	0.3580	0.3443	0.3257	Ave		0.3513				9.7		15.0			
3-Chloro-1-propene	0.1711 0.1594	0.1649	0.1607	0.1637	0.1626	Ave		0.1637				2.5		15.0			
Diisopropyl ether	0.2951 0.2879	0.2590	0.2753	0.2826	0.2723	Ave		0.2787				4.6		15.0			
2-Chloro-1,3-butadiene	0.8909 0.8067	0.7747	0.8019	0.7869	0.8028	Ave		0.8107				5.1		15.0			
Ethyl-t-butyl ether (ETBE)	1.2969 1.2223	1.0767	1.2033	1.1860	1.1554	Ave		1.1901				6.1		15.0			
Ethyl acetate	0.4121 0.3700	0.3322	0.3751	0.3629	0.3625	Ave		0.3691				7.0		15.0			
Propionitrile	0.0505 0.0472	0.0443	0.0487	0.0440	0.0440	Ave		0.0464				5.9		15.0			
Methacrylonitrile	0.2783 0.2434	0.2519	0.2401	0.2378	0.2377	Ave		0.2482				6.3		15.0			
Isobutyl alcohol	0.0164 0.0113	0.0121	0.0129	0.0136	0.0123	Ave		0.0131				14.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6900 0.7425	0.6114	0.6799	0.6892	0.7000	Ave		0.6855				6.2		15.0			
n-Heptane	0.0493 0.0610	0.0648	0.0455	0.0478	0.0794	Ave		0.0580				22.0	*	15.0			
n-Butanol	0.0080 0.0063	0.0099	0.0087	0.0109	0.0102	Qua	-0.239	0.0143	0						0.9960		0.9900
Methyl methacrylate	0.2857 0.3339	0.2857	0.2922	0.3108	0.3261	Ave		0.3057				6.9		15.0			
2-Nitropropane	0.1138 0.0943	0.0892	0.0956	0.0928	0.0925	Ave		0.0964				9.1		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1426 0.1291	0.1384	0.1537	0.1626	0.1663	Ave		0.1488				9.8		15.0			
1,2,3-Trimethylbenzene	2.0795 3.3094	1.9372	2.2909	2.5402	2.5808	Qua	0.4789	1.9657	0.0331						0.9990		0.9900
2-Methylnaphthalene	0.8153 1.3785	0.8449	0.8722	0.9460	1.0548	Qua	0.3760	0.7406	0.0079						1.0000		0.9900
n-Butyl acetate	0.3377 0.5103	0.3088	0.3478	0.4216	0.4644	Lin1	-0.602	0.4925							0.9930		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab File ID: BFB193.D BFB Injection Date: 08/28/2013

Instrument ID: A3UX11 BFB Injection Time: 09:50

Analysis Batch No.: 99295

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.1	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.9	
173	Less than 2.0 % of mass 174	1.6	(1.7)1
174	50.0 - 120.00 % of mass 95	89.4	
175	5.0 - 9.0 % of mass 174	6.4	(7.2)1
176	95.0 - 101.0 % of mass 174	89.1	(99.6)1
177	5.0 - 9.0 % of mass 176	5.2	(5.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-99295/2	UXJ3707.D	08/28/2013	11:16
	LCS 240-99295/4	UXJ3708.D	08/28/2013	11:41
	CCV 240-99295/3	UXJ3709.D	08/28/2013	12:04
	MB 240-99295/5	UXJ3711.D	08/28/2013	12:52
DR-DPT-43B-10	240-28158-5	UXJ3714.D	08/28/2013	14:06
DR-DPT-43B-15	240-28158-6	UXJ3715.D	08/28/2013	14:29
TB-082013	240-28158-8	UXJ3717.D	08/28/2013	15:17
DUP05	240-28158-9	UXJ3718.D	08/28/2013	15:41
	190-1785-B-1 MS	UXJ3733.D	08/28/2013	21:35
	190-1785-B-1 MSD	UXJ3734.D	08/28/2013	21:58

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCVIS 240-99295/2 Calibration Date: 08/28/2013 11:16

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3707.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.1869		1.00	0.0100	-6.4	50.0
Chloromethane	Ave	0.3711	0.2891	0.1000	1.00	0.0100	-22.1	50.0
Vinyl chloride	Ave	0.2855	0.2491		1.00	0.0100	-12.8	20.0
Bromomethane	Ave	0.0889	0.0763		1.00	0.0100	-14.2	50.0
Chloroethane	Ave	0.1282	0.1228		1.00	0.0100	-4.2	50.0
Trichlorofluoromethane	Ave	0.2804	0.2936		1.00	0.0100	4.7	50.0
Acrolein	Ave	0.0451	0.0406		20.0	0.100	-10.0	50.0
1,1-Dichloroethene	Ave	0.2476	0.2541		1.00	0.0100	2.6	20.0
Acetone	Qua		0.1232		10.0	0.0200	-19.9	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1618		1.00	0.0100	20.6	50.0
Iodomethane	Ave	0.3885	0.4104		1.00	0.0100	5.6	50.0
Carbon disulfide	Ave	0.6903	0.6672		1.00	0.0100	-3.3	50.0
Acetonitrile	Ave	0.0392	0.0400		20.0	0.100	2.0	50.0
Methyl acetate	Ave	0.3569	0.3713		10.0	0.0200	4.0	50.0
Methylene Chloride	Lin1		0.3268		1.00	0.0100	-3.8	50.0
tert-Butyl alcohol	Ave	0.0200	0.0224		50.0	0.200	11.7	50.0
Acrylonitrile	Ave	0.1595	0.1691		20.0	0.0200	6.0	50.0
Methyl tert-butyl ether	Ave	0.7924	0.8228		1.00	0.0100	3.8	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3674		1.00	0.0100	8.6	50.0
Hexane	Lin1		0.0764		1.00	0.0100	18.2	20.0
1,1-Dichloroethane	Ave	0.7404	0.7391	0.1000	1.00	0.0100	-0.2	50.0
Vinyl acetate	Ave	0.0471	0.0442		2.00	0.0100	-6.1	50.0
2,2-Dichloropropane	Ave	0.3517	0.3322		1.00	0.0100	-5.6	50.0
2-Butanone	Ave	0.1829	0.1553		10.0	0.0200	-15.1	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.3567		1.00	0.0100	-2.3	50.0
Bromochloromethane	Ave	0.2075	0.2110		1.00	0.0100	1.7	50.0
Chloroform	Ave	0.6218	0.5857		1.00	0.0100	-5.8	20.0
Tetrahydrofuran	Lin1		0.1044		5.00	0.0100	-3.1	50.0
1,1,1-Trichloroethane	Ave	0.4921	0.4917		1.00	0.0100	-0.0	50.0
Cyclohexane	Ave	0.5839	0.5789		1.00	0.0100	-0.9	50.0
1,1-Dichloropropene	Ave	0.4375	0.4283		1.00	0.0100	-2.1	50.0
Carbon tetrachloride	Ave	0.4385	0.4610		1.00	0.0100	5.1	50.0
1,2-Dichloroethane	Ave	0.5721	0.5333		1.00	0.0100	-6.8	50.0
Benzene	Ave	1.387	1.248		1.00	0.0100	-10.0	50.0
Trichloroethene	Ave	0.3918	0.4050		1.00	0.0100	3.4	50.0
Methylcyclohexane	Ave	0.3654	0.3799		1.00	0.0100	4.0	50.0
1,2-Dichloropropane	Ave	0.4224	0.3779		1.00	0.0100	-10.5	20.0
1,4-Dioxane	Ave	0.0023	0.0012		50.0	0.500	-46.0	50.0
Dibromomethane	Ave	0.2009	0.1958		1.00	0.0100	-2.6	50.0
Bromodichloromethane	Ave	0.4247	0.4352		1.00	0.0100	2.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCVIS 240-99295/2 Calibration Date: 08/28/2013 11:16

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3707.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1845	0.1556		10.0	0.0200	-15.6	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4507		1.00	0.0100	-4.9	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.2877		10.0	0.0200	-13.4	50.0
Toluene	Ave	2.040	2.025		1.00	0.0100	-0.7	20.0
trans-1,3-Dichloropropene	Ave	0.5695	0.5686		1.00	0.0100	-0.2	50.0
Ethyl methacrylate	Ave	0.4297	0.4424		1.00	0.0100	3.0	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.3921		1.00	0.0100	2.1	50.0
1,3-Dichloropropane	Ave	0.6520	0.6553		1.00	0.0100	0.5	50.0
Tetrachloroethene	Ave	0.3683	0.4131		1.00	0.0100	12.1	50.0
2-Hexanone	Ave	0.2977	0.2469		10.0	0.0200	-17.1	50.0
Dibromochloromethane	Ave	0.4062	0.4793		1.00	0.0100	18.0	50.0
1,2-Dibromoethane	Ave	0.3645	0.3921		1.00	0.0100	7.6	50.0
Chlorobenzene	Ave	1.254	1.249	0.3000	1.00	0.0100	-0.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.4799		1.00	0.0100	3.2	50.0
Ethylbenzene	Ave	0.5913	0.6141		1.00	0.0100	3.9	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.7756		2.00	0.0200	6.3	50.0
o-Xylene	Ave	0.6361	0.6547		1.00	0.0100	2.9	50.0
Styrene	Ave	1.056	1.115		1.00	0.0100	5.6	50.0
Bromoform	Ave	0.1396	0.1995	0.1000	1.00	0.0100	42.9	50.0
Isopropylbenzene	Ave	1.411	1.422		1.00	0.0100	0.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.8566	0.3000	1.00	0.0100	-5.4	50.0
Bromobenzene	Ave	1.123	1.128		1.00	0.0100	0.5	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2890		1.00	0.0100	-7.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.2080		1.00	0.0100	-31.8	50.0
n-Propylbenzene	Ave	1.090	1.144		1.00	0.0100	4.9	50.0
2-Chlorotoluene	Ave	1.027	0.9815		1.00	0.0100	-4.4	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.784		1.00	0.0100	1.5	50.0
4-Chlorotoluene	Ave	1.048	1.047		1.00	0.0100	-0.1	50.0
tert-Butylbenzene	Ave	2.347	2.213		1.00	0.0100	-5.7	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.502		1.00	0.0100	-8.2	50.0
sec-Butylbenzene	Ave	2.844	2.872		1.00	0.0100	1.0	50.0
1,3-Dichlorobenzene	Ave	1.724	1.650		1.00	0.0100	-4.3	50.0
p-Isopropyltoluene	Lin1		2.266		1.00	0.0100	-14.5	50.0
1,4-Dichlorobenzene	Ave	1.746	1.672		1.00	0.0100	-4.2	50.0
n-Butylbenzene	Ave	1.769	1.512		1.00	0.0100	-14.6	50.0
1,2-Dichlorobenzene	Ave	1.646	1.656		1.00	0.0100	0.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1790		2.00	0.0100	30.9	50.0
1,3,5-Trichlorobenzene	Ave	1.009	0.9183		1.00	0.0100	-9.0	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7732		1.00	0.0100	-10.0	50.0
Hexachlorobutadiene	Ave	0.3761	0.3473		1.00	0.0100	-7.6	50.0
Naphthalene	Ave	2.147	1.967		1.00	0.0100	-8.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCVIS 240-99295/2 Calibration Date: 08/28/2013 11:16

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3707.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7939	0.7160		1.00	0.0100	-9.8	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.3004		0.00729	0.00834	-12.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3550		0.00669	0.00834	-19.8	50.0
Toluene-d8 (Surr)	Ave	1.680	1.617		0.00803	0.00834	-3.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.4186		0.00926	0.00834	11.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCV 240-99295/3 Calibration Date: 08/28/2013 12:04

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3709.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2419	0.2321		2.00	0.0100	-4.0	50.0
Ethyl ether	Ave	0.3513	0.3329		2.00	0.0100	-5.2	50.0
3-Chloro-1-propene	Ave	0.1637	0.1533		2.00	0.0100	-6.4	50.0
Diisopropyl ether	Ave	0.2787	0.2797		10.0	0.0500	0.3	50.0
2-Chloro-1,3-butadiene	Ave	0.8107	0.7364		2.00	0.0100	-9.2	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.190	1.085		5.00	0.0100	-8.8	50.0
Ethyl acetate	Ave	0.3691	0.3312		4.00	0.0200	-10.3	50.0
Propionitrile	Ave	0.0464	0.0484		4.00	0.0200	4.1	50.0
Methacrylonitrile	Ave	0.2482	0.2134		2.00	0.0100	-14.0	50.0
Isobutyl alcohol	Ave	0.0131	0.0128		50.0	0.200	-1.9	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6855	0.6250		5.00	0.0100	-8.8	50.0
n-Heptane	Ave	0.0580	0.0702		1.00	0.0100	21.0	50.0
n-Butanol	Qua		0.0068		50.0	0.200	-39.4	50.0
Methyl methacrylate	Ave	0.3057	0.2677		2.00	0.0100	-12.5	50.0
2-Nitropropane	Ave	0.0964	0.0850		2.00	0.0200	-11.8	50.0
Cyclohexanone	Ave	0.1488	0.1380		20.0	0.100	-7.3	50.0
1,2,3-Trimethylbenzene	Qua		2.292		0.00980	0.0100	-2.0	50.0
2-Methylnaphthalene	Qua		0.7310		5.00	0.0200	-18.1	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab File ID: UXJ3711.D Lab Sample ID: MB 240-99295/5

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX11 Date Analyzed: 08/28/2013 12:52

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-99295/4	UXJ3708.D	08/28/2013 11:41
DR-DPT-43B-10	240-28158-5	UXJ3714.D	08/28/2013 14:06
DR-DPT-43B-15	240-28158-6	UXJ3715.D	08/28/2013 14:29
TB-082013	240-28158-8	UXJ3717.D	08/28/2013 15:17
DUP05	240-28158-9	UXJ3718.D	08/28/2013 15:41
	190-1785-B-1 MS	UXJ3733.D	08/28/2013 21:35
	190-1785-B-1 MSD	UXJ3734.D	08/28/2013 21:58

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99295/5

Matrix: Water Lab File ID: UXJ3711.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 12:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99295/5

Matrix: Water Lab File ID: UXJ3711.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 12:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99295/5

Matrix: Water Lab File ID: UXJ3711.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 12:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	96		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99295/5

Matrix: Water Lab File ID: UXJ3711.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 12:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab File ID: BFB194.D BFB Injection Date: 08/29/2013

Instrument ID: A3UX11 BFB Injection Time: 10:43

Analysis Batch No.: 99528

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.3	
75	30.0 - 60.0 % of mass 95	42.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	1.5	(1.9)1
174	50.0 - 120.00 % of mass 95	78.7	
175	5.0 - 9.0 % of mass 174	6.3	(7.9)1
176	95.0 - 101.0 % of mass 174	78.0	(99.1)1
177	5.0 - 9.0 % of mass 176	5.1	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-99528/2	UXJ3766.D	08/29/2013	11:07
	LCS 240-99528/4	UXJ3767.D	08/29/2013	11:31
	CCV 240-99528/3	UXJ3768.D	08/29/2013	11:55
	MB 240-99528/5	UXJ3770.D	08/29/2013	12:43
DR-DPT-43B-20	240-28158-7	UXJ3772.D	08/29/2013	13:59
	240-28198-B-1 MS	UXJ3791.D	08/29/2013	21:30
	240-28198-B-1 MSD	UXJ3792.D	08/29/2013	21:54

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCVIS 240-99528/2 Calibration Date: 08/29/2013 11:07

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3766.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.1655		1.00	0.0100	-17.2	50.0
Chloromethane	Ave	0.3711	0.3163	0.1000	1.00	0.0100	-14.8	50.0
Vinyl chloride	Ave	0.2855	0.2564		1.00	0.0100	-10.2	20.0
Bromomethane	Ave	0.0889	0.0888		1.00	0.0100	-0.0	50.0
Chloroethane	Ave	0.1282	0.1406		1.00	0.0100	9.7	50.0
Trichlorofluoromethane	Ave	0.2804	0.2579		1.00	0.0100	-8.0	50.0
Acrolein	Ave	0.0451	0.0565		20.0	0.100	25.1	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1470		1.00	0.0100	9.7	50.0
Acetone	Qua		0.1193		10.0	0.0200	-23.0	50.0
1,1-Dichloroethene	Ave	0.2476	0.2518		1.00	0.0100	1.7	20.0
Iodomethane	Ave	0.3885	0.3191		1.00	0.0100	-17.9	50.0
Carbon disulfide	Ave	0.6903	0.4921		1.00	0.0100	-28.7	50.0
Acetonitrile	Ave	0.0392	0.0392		20.0	0.100	-0.2	50.0
Methyl acetate	Ave	0.3569	0.3524		10.0	0.0200	-1.3	50.0
Methylene Chloride	Lin1		0.3144		1.00	0.0100	-8.4	50.0
tert-Butyl alcohol	Ave	0.0200	0.0210		50.0	0.200	4.6	50.0
Acrylonitrile	Ave	0.1595	0.1712		20.0	0.0200	7.3	50.0
Methyl tert-butyl ether	Ave	0.7924	0.8521		1.00	0.0100	7.5	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3623		1.00	0.0100	7.1	50.0
Hexane	Lin1		0.0647		1.00	0.0100	0.3	20.0
1,1-Dichloroethane	Ave	0.7404	0.7713	0.1000	1.00	0.0100	4.2	50.0
Vinyl acetate	Ave	0.0471	0.0730		2.00	0.0100	54.8*	50.0
2-Butanone	Ave	0.1829	0.1714		10.0	0.0200	-6.3	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.4046		1.00	0.0100	10.8	50.0
2,2-Dichloropropane	Ave	0.3517	0.3362		1.00	0.0100	-4.4	50.0
Bromochloromethane	Ave	0.2075	0.2273		1.00	0.0100	9.6	50.0
Chloroform	Ave	0.6218	0.6333		1.00	0.0100	1.8	20.0
Tetrahydrofuran	Lin1		0.1041		5.00	0.0100	-3.4	50.0
1,1,1-Trichloroethane	Ave	0.4921	0.4736		1.00	0.0100	-3.8	50.0
Cyclohexane	Ave	0.5839	0.5099		1.00	0.0100	-12.7	50.0
1,1-Dichloropropene	Ave	0.4375	0.4222		1.00	0.0100	-3.5	50.0
Carbon tetrachloride	Ave	0.4385	0.4267		1.00	0.0100	-2.7	50.0
1,2-Dichloroethane	Ave	0.5721	0.5812		1.00	0.0100	1.6	50.0
Benzene	Ave	1.387	1.301		1.00	0.0100	-6.2	50.0
Trichloroethene	Ave	0.3918	0.4131		1.00	0.0100	5.4	50.0
Methylcyclohexane	Ave	0.3654	0.3480		1.00	0.0100	-4.8	50.0
1,2-Dichloropropane	Ave	0.4224	0.3955		1.00	0.0100	-6.4	20.0
Dibromomethane	Ave	0.2009	0.2033		1.00	0.0100	1.2	50.0
1,4-Dioxane	Ave	0.0023	0.0014		50.0	0.500	-39.7	50.0
Bromodichloromethane	Ave	0.4247	0.4594		1.00	0.0100	8.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCVIS 240-99528/2 Calibration Date: 08/29/2013 11:07

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3766.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1845	0.1780		10.0	0.0200	-3.5	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4564		1.00	0.0100	-3.7	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.3005		10.0	0.0200	-9.5	50.0
Toluene	Ave	2.040	2.154		1.00	0.0100	5.6	20.0
trans-1,3-Dichloropropene	Ave	0.5695	0.5664		1.00	0.0100	-0.6	50.0
Ethyl methacrylate	Ave	0.4297	0.4325		1.00	0.0100	0.7	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.4433		1.00	0.0100	15.4	50.0
1,3-Dichloropropane	Ave	0.6520	0.6777		1.00	0.0100	3.9	50.0
Tetrachloroethene	Ave	0.3683	0.4205		1.00	0.0100	14.2	50.0
2-Hexanone	Ave	0.2977	0.2683		10.0	0.0200	-9.9	50.0
Dibromochloromethane	Ave	0.4062	0.4864		1.00	0.0100	19.7	50.0
1,2-Dibromoethane	Ave	0.3645	0.3990		1.00	0.0100	9.4	50.0
Chlorobenzene	Ave	1.254	1.315	0.3000	1.00	0.0100	4.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.5182		1.00	0.0100	11.4	50.0
Ethylbenzene	Ave	0.5913	0.6433		1.00	0.0100	8.8	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.8152		2.00	0.0200	11.8	50.0
o-Xylene	Ave	0.6361	0.7045		1.00	0.0100	10.8	50.0
Styrene	Ave	1.056	1.180		1.00	0.0100	11.7	50.0
Bromoform	Ave	0.1396	0.2092	0.1000	1.00	0.0100	49.8	50.0
Isopropylbenzene	Ave	1.411	1.512		1.00	0.0100	7.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.9001	0.3000	1.00	0.0100	-0.6	50.0
Bromobenzene	Ave	1.123	1.173		1.00	0.0100	4.5	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.3055		1.00	0.0100	-2.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.1580		1.00	0.0100	-48.2	50.0
n-Propylbenzene	Ave	1.090	1.134		1.00	0.0100	4.0	50.0
2-Chlorotoluene	Ave	1.027	1.070		1.00	0.0100	4.2	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.907		1.00	0.0100	6.0	50.0
4-Chlorotoluene	Ave	1.048	1.126		1.00	0.0100	7.4	50.0
tert-Butylbenzene	Ave	2.347	2.350		1.00	0.0100	0.1	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.798		1.00	0.0100	2.7	50.0
sec-Butylbenzene	Ave	2.844	2.882		1.00	0.0100	1.3	50.0
1,3-Dichlorobenzene	Ave	1.724	1.737		1.00	0.0100	0.7	50.0
p-Isopropyltoluene	Lin1		2.383		1.00	0.0100	-10.3	50.0
1,4-Dichlorobenzene	Ave	1.746	1.879		1.00	0.0100	7.7	50.0
n-Butylbenzene	Ave	1.769	1.622		1.00	0.0100	-8.3	50.0
1,2-Dichlorobenzene	Ave	1.646	1.725		1.00	0.0100	4.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1431		2.00	0.0100	4.7	50.0
1,3,5-Trichlorobenzene	Ave	1.009	0.9574		1.00	0.0100	-5.1	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7973		1.00	0.0100	-7.2	50.0
Hexachlorobutadiene	Ave	0.3761	0.3395		1.00	0.0100	-9.7	50.0
Naphthalene	Ave	2.147	2.019		1.00	0.0100	-5.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCVIS 240-99528/2 Calibration Date: 08/29/2013 11:07

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3766.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7939	0.7810		1.00	0.0100	-1.6	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.3013		0.00732	0.00834	-12.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3298		0.00621	0.00834	-25.5	50.0
Toluene-d8 (Surr)	Ave	1.680	1.553		0.00771	0.00834	-7.5	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.3864		0.00854	0.00834	2.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab Sample ID: CCV 240-99528/3 Calibration Date: 08/29/2013 11:55

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3768.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2419	0.2283		2.00	0.0100	-5.6	50.0
Ethyl ether	Ave	0.3513	0.3496		2.00	0.0100	-0.5	50.0
3-Chloro-1-propene	Ave	0.1637	0.1619		2.00	0.0100	-1.1	50.0
Diisopropyl ether	Ave	0.2787	0.2853		10.0	0.0500	2.4	50.0
2-Chloro-1,3-butadiene	Ave	0.8107	0.7116		2.00	0.0100	-12.2	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.190	1.057		5.00	0.0100	-11.2	50.0
Ethyl acetate	Ave	0.3691	0.3136		4.00	0.0200	-15.0	50.0
Propionitrile	Ave	0.0464	0.0423		4.00	0.0200	-9.0	50.0
Methacrylonitrile	Ave	0.2482	0.2121		2.00	0.0100	-14.6	50.0
Isobutyl alcohol	Ave	0.0131	0.0116		50.0	0.200	-11.2	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6855	0.6293		5.00	0.0100	-8.2	50.0
n-Heptane	Ave	0.0580	0.0458		1.00	0.0100	-21.0	50.0
n-Butanol	Qua		0.0063		50.0	0.200	-43.4	50.0
Methyl methacrylate	Ave	0.3057	0.2568		2.00	0.0100	-16.0	50.0
2-Nitropropane	Ave	0.0964	0.0845		2.00	0.0200	-12.3	50.0
Cyclohexanone	Ave	0.1488	0.1221		20.0	0.100	-17.9	50.0
1,2,3-Trimethylbenzene	Qua		2.292		0.00980	0.0100	-2.0	50.0
2-Methylnaphthalene	Qua		0.7349		5.00	0.0200	-17.8	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Lab File ID: UXJ3770.D Lab Sample ID: MB 240-99528/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 08/29/2013 12:43

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-99528/4	UXJ3767.D	08/29/2013 11:31
DR-DPT-43B-20	240-28158-7	UXJ3772.D	08/29/2013 13:59
	240-28198-B-1 MS	UXJ3791.D	08/29/2013 21:30
	240-28198-B-1 MSD	UXJ3792.D	08/29/2013 21:54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99528/5

Matrix: Water Lab File ID: UXJ3770.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2013 12:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99528 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.393	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99528/5

Matrix: Water Lab File ID: UXJ3770.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2013 12:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99528 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99528/5

Matrix: Water Lab File ID: UXJ3770.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2013 12:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99528 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99528/5

Matrix: Water Lab File ID: UXJ3770.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2013 12:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99528 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-31-30	240-28158-1	105	106	83	87
DR-DPT-31-35	240-28158-2	100	103	84	88
DR-DPT-31-40	240-28158-3	97	103	83	89
DR-DPT-31-45	240-28158-4	100	103	83	87
DR-DPT-43B-10	240-28158-5	94	80	84	91
DR-DPT-43B-15	240-28158-6	89	79	85	88
DR-DPT-43B-20	240-28158-7	91	81	84	82
TB-082013	240-28158-8	93	83	90	86
DUP05	240-28158-9	94	81	86	89
	MB 240-99104/5	103	103	88	92
	MB 240-99295/5	96	78	86	88
	MB 240-99528/5	94	79	84	83
	LCS 240-99104/4	103	99	90	97
	LCS 240-99295/4	90	79	93	105
	LCS 240-99528/4	87	78	91	110
	190-1785-B-1 MS	84	77	88	100
	240-28198-B-1 MS	85	79	91	113
	190-1785-B-1 MSD	84	77	90	101
	240-28198-B-1 MSD	89	78	90	107

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC4424.D

Lab ID: LCS 240-99104/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.99	100	72-116	
1,1,1-Trichloroethane	10.0	10.5	105	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.37	94	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.98	100	74-151	
1,1-Dichloroethane	10.0	10.5	105	82-115	
1,1-Dichloroethene	10.0	10.4	104	78-131	
1,1-Dichloropropene	10.0	9.09	91	83-114	
1,2,3-Trichlorobenzene	10.0	9.37	94	54-126	
1,2,3-Trichloropropane	10.0	9.36	94	73-129	
1,2,3-Trimethylbenzene	10.0	9.54	95	70-130	
1,2,4-Trichlorobenzene	10.0	9.36	94	48-135	
1,2,4-Trimethylbenzene	10.0	10.3	103	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.4	104	42-136	
1,2-Dichlorobenzene	10.0	9.54	95	81-110	
1,2-Dichloroethane	10.0	10.0	100	71-127	
1,2-Dichloropropane	10.0	10.4	104	81-115	
1,3-Dichlorobenzene	10.0	9.42	94	80-110	
1,3-Dichloropropane	10.0	10.1	101	79-116	
1,4-Dichlorobenzene	10.0	9.31	93	82-110	
2,2-Dichloropropane	10.0	10.5	105	50-129	
2-Chloroethyl vinyl ether	10.0	9.49 J	95	52-131	
2-Chlorotoluene	10.0	9.81	98	76-116	
2-Hexanone	20.0	18.2	91	55-133	
Bromobenzene	10.0	9.72	97	76-115	
Bromochloromethane	10.0	10.6	106	77-120	
4-Chlorotoluene	10.0	9.67	97	77-115	
p-Isopropyltoluene	10.0	10.7	107	74-120	
Acetone	20.0	22.6	113	43-136	
Benzene	10.0	10.1	101	83-112	
Bromoform	10.0	10.5	105	40-131	
Bromomethane	10.0	8.37	84	11-185	
Carbon disulfide	10.0	11.0	110	62-142	
Carbon tetrachloride	10.0	10.7	107	66-128	
Chlorobenzene	10.0	9.70	97	85-110	
Chloroethane	10.0	9.56	96	25-153	
Chloroform	10.0	10.3	103	79-117	
Chloromethane	10.0	8.68	87	44-126	
cis-1,2-Dichloroethene	10.0	10.4	104	80-113	
cis-1,3-Dichloropropene	10.0	9.35	93	61-115	
Hexachlorobutadiene	10.0	9.59	96	36-134	
Dibromomethane	10.0	10.4	104	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC4424.D

Lab ID: LCS 240-99104/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.2	112	72-121	
Dichlorodifluoromethane	10.0	7.91	79	19-129	
Ethylbenzene	10.0	9.75	97	83-112	
1,2-Dibromoethane	10.0	10.4	104	79-113	
Diisopropyl ether	10.0	10.7	107	77-118	
Naphthalene	10.0	8.60	86	32-141	
m-Xylene & p-Xylene	20.0	19.7	98	83-113	
n-Butylbenzene	10.0	10.1	101	66-125	
Isopropylbenzene	10.0	9.98	100	75-114	
n-Propylbenzene	10.0	10.5	105	74-121	
2-Butanone	20.0	20.4	102	60-126	
4-Methyl-2-pentanone	20.0	20.9	104	63-128	
sec-Butylbenzene	10.0	10.3	103	70-117	
Methyl tert-butyl ether	10.0	11.1	111	52-144	
Methylene Chloride	10.0	11.3	113	66-131	
o-Xylene	10.0	9.92	99	83-113	
Styrene	10.0	10.3	103	79-114	
tert-Butylbenzene	10.0	10.1	101	71-115	
Tetrachloroethene	10.0	9.04	90	79-114	
Toluene	10.0	8.59	86	84-111	
trans-1,2-Dichloroethene	10.0	10.1	101	83-117	
trans-1,3-Dichloropropene	10.0	10.4	104	58-117	
Trichloroethene	10.0	10.0	100	76-117	
Trichlorofluoromethane	10.0	7.46	75	49-157	
Vinyl acetate	10.0	10.1	101	46-161	
Vinyl chloride	10.0	9.40	94	53-127	
tert-Butyl alcohol	200	266	133	70-130	*
Xylenes, Total	30.0	29.6	99	83-112	
Dibromochloromethane	10.0	10.1	101	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3708.D

Lab ID: LCS 240-99295/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.6	106	72-116	
1,1,1-Trichloroethane	10.0	9.40	94	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.91	89	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.8	118	74-151	
1,1-Dichloroethane	10.0	10.5	105	82-115	
1,1-Dichloroethene	10.0	10.7	107	78-131	
1,1-Dichloropropene	10.0	9.08	91	83-114	
1,2,3-Trichlorobenzene	10.0	9.35	94	54-126	
1,2,3-Trichloropropane	10.0	9.79	98	73-129	
1,2,3-Trimethylbenzene	10.0	10.8	108	70-130	
1,2,4-Trichlorobenzene	10.0	8.48	85	48-135	
1,2,4-Trimethylbenzene	10.0	9.40	94	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.3	103	42-136	
1,2-Dichlorobenzene	10.0	10.3	103	81-110	
1,2-Dichloroethane	10.0	9.64	96	71-127	
1,2-Dichloropropane	10.0	9.24	92	81-115	
1,3-Dichlorobenzene	10.0	9.66	97	80-110	
1,3-Dichloropropane	10.0	10.4	104	79-116	
1,4-Dichlorobenzene	10.0	10.1	101	82-110	
2,2-Dichloropropane	10.0	9.95	99	50-129	
2-Chloroethyl vinyl ether	10.0	8.87 J	89	52-131	
2-Chlorotoluene	10.0	9.94	99	76-116	
2-Hexanone	20.0	17.0	85	55-133	
Bromobenzene	10.0	10.3	103	76-115	
Bromochloromethane	10.0	10.7	107	77-120	
4-Chlorotoluene	10.0	9.74	97	77-115	
p-Isopropyltoluene	10.0	8.97	90	74-120	
Acetone	20.0	14.1	70	43-136	
Benzene	10.0	9.40	94	83-112	
Bromoform	10.0	14.1	141	40-131	*
Bromomethane	10.0	8.67	87	11-185	
Carbon disulfide	10.0	9.90	99	62-142	
Carbon tetrachloride	10.0	10.2	102	66-128	
Chlorobenzene	10.0	10.1	101	85-110	
Chloroethane	10.0	9.78	98	25-153	
Chloroform	10.0	9.67	97	79-117	
Chloromethane	10.0	8.23	82	44-126	
cis-1,2-Dichloroethene	10.0	10.8	108	80-113	
cis-1,3-Dichloropropene	10.0	9.52	95	61-115	
Hexachlorobutadiene	10.0	8.76	88	36-134	
Dibromomethane	10.0	9.81	98	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3708.D

Lab ID: LCS 240-99295/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.8	108	72-121	
Dichlorodifluoromethane	10.0	7.62	76	19-129	
Ethylbenzene	10.0	10.8	108	83-112	
1,2-Dibromoethane	10.0	10.9	109	79-113	
Diisopropyl ether	10.0	11.8	118	77-118	
Naphthalene	10.0	9.20	92	32-141	
m-Xylene & p-Xylene	20.0	22.3	111	83-113	
n-Butylbenzene	10.0	9.20	92	66-125	
Isopropylbenzene	10.0	10.4	104	75-114	
n-Propylbenzene	10.0	10.3	103	74-121	
2-Butanone	20.0	17.9	89	60-126	
4-Methyl-2-pentanone	20.0	18.4	92	63-128	
sec-Butylbenzene	10.0	9.46	95	70-117	
Methyl tert-butyl ether	10.0	11.1	111	52-144	
Methylene Chloride	10.0	9.70	97	66-131	
o-Xylene	10.0	10.6	106	83-113	
Styrene	10.0	11.1	111	79-114	
tert-Butylbenzene	10.0	9.01	90	71-115	
Tetrachloroethene	10.0	11.3	113	79-114	
Toluene	10.0	10.4	104	84-111	
trans-1,2-Dichloroethene	10.0	11.2	112	83-117	
trans-1,3-Dichloropropene	10.0	10.2	102	58-117	
Trichloroethene	10.0	10.8	108	76-117	
Trichlorofluoromethane	10.0	9.59	96	49-157	
Vinyl acetate	10.0	12.9	129	46-161	
Vinyl chloride	10.0	8.44	84	53-127	
tert-Butyl alcohol	200	235	117	70-130	
Xylenes, Total	30.0	32.9	110	83-112	
Dibromochloromethane	10.0	12.3	123	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3767.D

Lab ID: LCS 240-99528/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.4	104	72-116	
1,1,1-Trichloroethane	10.0	9.60	96	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.74	97	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.3	113	74-151	
1,1-Dichloroethane	10.0	10.5	105	82-115	
1,1-Dichloroethene	10.0	10.7	107	78-131	
1,1-Dichloropropene	10.0	8.78	88	83-114	
1,2,3-Trichlorobenzene	10.0	9.79	98	54-126	
1,2,3-Trichloropropane	10.0	10.7	107	73-129	
1,2,3-Trimethylbenzene	10.0	11.4	114	70-130	
1,2,4-Trichlorobenzene	10.0	9.02	90	48-135	
1,2,4-Trimethylbenzene	10.0	10.3	103	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.8	108	42-136	
1,2-Dichlorobenzene	10.0	10.8	108	81-110	
1,2-Dichloroethane	10.0	10.2	102	71-127	
1,2-Dichloropropane	10.0	9.13	91	81-115	
1,3-Dichlorobenzene	10.0	10.1	101	80-110	
1,3-Dichloropropane	10.0	10.3	103	79-116	
1,4-Dichlorobenzene	10.0	10.3	103	82-110	
2,2-Dichloropropane	10.0	10.2	102	50-129	
2-Chloroethyl vinyl ether	10.0	9.27 J	93	52-131	
2-Chlorotoluene	10.0	10.5	105	76-116	
2-Hexanone	20.0	16.4	82	55-133	
Bromobenzene	10.0	10.8	108	76-115	
Bromochloromethane	10.0	10.6	106	77-120	
4-Chlorotoluene	10.0	10.7	107	77-115	
p-Isopropyltoluene	10.0	9.60	96	74-120	
Acetone	20.0	14.3	71	43-136	
Benzene	10.0	9.40	94	83-112	
Bromoform	10.0	13.4	134	40-131	*
Bromomethane	10.0	8.85	88	11-185	
Carbon disulfide	10.0	10.2	102	62-142	
Carbon tetrachloride	10.0	10.3	103	66-128	
Chlorobenzene	10.0	10.2	102	85-110	
Chloroethane	10.0	10.1	101	25-153	
Chloroform	10.0	9.95	100	79-117	
Chloromethane	10.0	8.01	80	44-126	
cis-1,2-Dichloroethene	10.0	11.0	110	80-113	
cis-1,3-Dichloropropene	10.0	9.19	92	61-115	
Hexachlorobutadiene	10.0	8.98	90	36-134	
Dibromomethane	10.0	10.2	102	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3767.D

Lab ID: LCS 240-99528/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.8	108	72-121	
Dichlorodifluoromethane	10.0	6.92	69	19-129	
Ethylbenzene	10.0	10.3	103	83-112	
1,2-Dibromoethane	10.0	10.9	109	79-113	
Diisopropyl ether	10.0	11.2	112	77-118	
Naphthalene	10.0	9.26	93	32-141	
m-Xylene & p-Xylene	20.0	21.7	109	83-113	
n-Butylbenzene	10.0	9.33	93	66-125	
Isopropylbenzene	10.0	10.3	103	75-114	
n-Propylbenzene	10.0	10.6	106	74-121	
2-Butanone	20.0	18.8	94	60-126	
4-Methyl-2-pentanone	20.0	17.8	89	63-128	
sec-Butylbenzene	10.0	9.91	99	70-117	
Methyl tert-butyl ether	10.0	10.7	107	52-144	
Methylene Chloride	10.0	10.3	103	66-131	
o-Xylene	10.0	11.4	114	83-113	*
Styrene	10.0	11.3	113	79-114	
tert-Butylbenzene	10.0	9.49	95	71-115	
Tetrachloroethene	10.0	10.4	104	79-114	
Toluene	10.0	10.3	103	84-111	
trans-1,2-Dichloroethene	10.0	10.9	109	83-117	
trans-1,3-Dichloropropene	10.0	10.0	100	58-117	
Trichloroethene	10.0	10.3	103	76-117	
Trichlorofluoromethane	10.0	8.77	88	49-157	
Vinyl acetate	10.0	11.6	116	46-161	
Vinyl chloride	10.0	8.31	83	53-127	
tert-Butyl alcohol	200	218	109	70-130	
Xylenes, Total	30.0	33.1	110	83-112	
Dibromochloromethane	10.0	12.1	121	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3733.D

Lab ID: 190-1785-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,2,4-Trimethylbenzene	400	1400	1480	10	67-124	F
1,2-Dichloroethane	400	40 U	345	86	68-129	
Benzene	400	40 U	328	82	72-121	
Ethylbenzene	400	40 U	325	81	75-116	
1,2-Dibromoethane	400	40 U	377	94	74-113	
Naphthalene	400	58	404	87	15-158	
m-Xylene & p-Xylene	800	21 J	747	91	75-117	
Isopropylbenzene	400	13 J	346	83	68-116	
Methyl tert-butyl ether	400	40 U	379	95	46-144	
o-Xylene	400	40 U	348	87	76-116	
Toluene	400	11 J	344	83	78-114	
Xylenes, Total	1200	21 J	1100	90	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3791.D

Lab ID: 240-28198-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	1430	1800	3190	95	68-121	
1,1,2,2-Tetrachloroethane	1430	140 U	1470	103	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	1430	2100	3160	76	70-152	
1,1-Dichloroethane	1430	370	2030	116	79-116	
1,1-Dichloroethene	1430	520	2170	115	74-135	
1,2-Dichlorobenzene	1430	140 U	1630	114	75-111	F
1,2-Dichloroethane	1430	140 U	1540	108	68-129	
1,2-Dichloropropane	1430	140 U	1480	104	78-115	
1,3-Dichlorobenzene	1430	140 U	1530	107	73-110	
1,4-Dichlorobenzene	1430	140 U	1500	105	75-110	
2-Chloroethyl vinyl ether	1430	1400 U	1130 J	79	10-150	
2-Hexanone	2860	1400 U	2620	92	47-139	
Acetone	2860	1400 U	2370	83	33-145	
Benzene	1430	140 U	1490	104	72-121	
Bromoform	1430	140 U	2260	158	32-128	F
Bromomethane	1430	140 U	1460	102	10-186	
Carbon disulfide	1430	140 U	1530	107	57-147	
Carbon tetrachloride	1430	140 U	1570	110	59-129	
Chlorobenzene	1430	140 U	1570	110	80-110	
Chloroethane	1430	140 U	1590	111	21-165	
Chloroform	1430	140 U	1560	109	76-118	
Chloromethane	1430	140 U	1330	93	33-132	
cis-1,2-Dichloroethene	1430	3900	5150	87	70-120	
cis-1,3-Dichloropropene	1430	140 U	1440	101	51-110	
Bromodichloromethane	1430	140 U	1680	118	67-120	
Ethylbenzene	1430	140 U	1580	111	75-116	
m-Xylene & p-Xylene	2860	290 U	3310	116	75-117	
2-Butanone	2860	1400 U	2740	96	54-129	
4-Methyl-2-pentanone	2860	1400 U	2780	97	56-131	
Methylene Chloride	1430	140 U	1760	123	63-128	
o-Xylene	1430	140 U	1640	115	76-116	
Styrene	1430	140 U	1770	124	71-117	F
Tetrachloroethene	1430	140 U	1660	116	70-117	
Toluene	1430	52 J	1630	110	78-114	
trans-1,2-Dichloroethene	1430	140 U	1720	120	80-119	F
trans-1,3-Dichloropropene	1430	140 U	1530	107	46-116	
Trichloroethene	1430	4800	5860	77	66-120	E
Trichlorofluoromethane	1430	140 U	1360	96	46-157	
Vinyl chloride	1430	58 J	1280	86	49-130	
Xylenes, Total	4290	290 U	4950	115	76-116	
Dibromochloromethane	1430	140 U	1970	138	56-118	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3734.D

Lab ID: 190-1785-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2,4-Trimethylbenzene	400	1560	30	5	30	67-124	F
1,2-Dichloroethane	400	338	85	2	30	68-129	
Benzene	400	333	83	2	30	72-121	
Ethylbenzene	400	345	86	6	30	75-116	
1,2-Dibromoethane	400	366	92	3	30	74-113	
Naphthalene	400	453	99	11	30	15-158	
m-Xylene & p-Xylene	800	734	89	2	30	75-117	
Isopropylbenzene	400	356	86	3	30	68-116	
Methyl tert-butyl ether	400	385	96	2	30	46-144	
o-Xylene	400	355	89	2	30	76-116	
Toluene	400	354	86	3	30	78-114	
Xylenes, Total	1200	1090	89	1	30	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3792.D

Lab ID: 240-28198-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	1430	3100	88	3	30	68-121	
1,1,2,2-Tetrachloroethane	1430	1240	87	17	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	1430	3300	86	4	30	70-152	
1,1-Dichloroethane	1430	1870	105	8	30	79-116	
1,1-Dichloroethene	1430	1940	99	11	30	74-135	
1,2-Dichlorobenzene	1430	1420	99	14	30	75-111	
1,2-Dichloroethane	1430	1390	97	10	30	68-129	
1,2-Dichloropropane	1430	1310	92	12	30	78-115	
1,3-Dichlorobenzene	1430	1290	90	17	30	73-110	
1,4-Dichlorobenzene	1430	1370	96	9	30	75-110	
2-Chloroethyl vinyl ether	1430	1040 J	73	9	30	10-150	
2-Hexanone	2860	2190	77	18	30	47-139	
Acetone	2860	2020	71	16	30	33-145	
Benzene	1430	1330	93	11	30	72-121	
Bromoform	1430	1950	137	14	30	32-128	F
Bromomethane	1430	1280	90	13	30	10-186	
Carbon disulfide	1430	1420	99	8	30	57-147	
Carbon tetrachloride	1430	1470	103	7	30	59-129	
Chlorobenzene	1430	1300	91	19	30	80-110	
Chloroethane	1430	1290	91	20	30	21-165	
Chloroform	1430	1400	98	11	30	76-118	
Chloromethane	1430	1130	79	16	30	33-132	
cis-1,2-Dichloroethene	1430	5110	85	1	30	70-120	
cis-1,3-Dichloropropene	1430	1290	90	11	30	51-110	
Bromodichloromethane	1430	1500	105	11	30	67-120	
Ethylbenzene	1430	1330	93	17	30	75-116	
m-Xylene & p-Xylene	2860	2800	98	17	30	75-117	
2-Butanone	2860	2430	85	12	30	54-129	
4-Methyl-2-pentanone	2860	2430	85	13	30	56-131	
Methylene Chloride	1430	1470	103	18	30	63-128	
o-Xylene	1430	1360	95	18	30	76-116	
Styrene	1430	1430	100	21	30	71-117	
Tetrachloroethene	1430	1450	102	13	30	70-117	
Toluene	1430	1360	91	18	30	78-114	
trans-1,2-Dichloroethene	1430	1550	109	10	30	80-119	
trans-1,3-Dichloropropene	1430	1300	91	16	30	46-116	
Trichloroethene	1430	5970	84	2	30	66-120	E
Trichlorofluoromethane	1430	1270	89	7	30	46-157	
Vinyl chloride	1430	1180	79	8	30	49-130	
Xylenes, Total	4290	4160	97	17	30	76-116	
Dibromochloromethane	1430	1580	111	22	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Sample No.: STD8260 240-97870/4 Date Analyzed: 08/16/2013 16:14

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3344.D Heated Purge: (Y/N) N

Calibration ID: 16865

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1950817	5.47	1433793	8.15	447870	10.40
UPPER LIMIT		3901634	5.97	2867586	8.65	895740	10.90
LOWER LIMIT		975409	4.97	716897	7.65	223935	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-97870/14		1860770	5.47	1316767	8.15	441226	10.40
CCVIS 240-99295/2		1477164	5.47	1016576	8.15	344050	10.40
CCVIS 240-99528/2		1460645	5.47	1010890	8.15	344957	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Sample No.: CCVIS 240-99295/2 Date Analyzed: 08/28/2013 11:16

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3707.D Heated Purge: (Y/N) N

Calibration ID: 17020

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1477164	5.47	1016576	8.15	344050	10.40
UPPER LIMIT		2954328	5.97	2033152	8.65	688100	10.90
LOWER LIMIT		738582	4.97	508288	7.65	172025	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-99295/4		1509220	5.47	1036158	8.15	364322	10.40
CCV 240-99295/3		1568830	5.47	1033761	8.15	269843	10.40
MB 240-99295/5		1360992	5.47	943236	8.15	250371	10.40
240-28158-5	DR-DPT-43B-10	1377403	5.47	932447	8.15	253603	10.40
240-28158-6	DR-DPT-43B-15	1397199	5.47	947933	8.15	249585	10.40
240-28158-8	TB-082013	1320278	5.47	869965	8.15	242958	10.40
240-28158-9	DUP05	1339749	5.47	918374	8.15	235197	10.40
190-1785-B-1 MS		1460686	5.47	1026361	8.15	354403	10.40
190-1785-B-1 MSD		1456534	5.47	1024923	8.15	337706	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Sample No.: CCVIS 240-99528/2 Date Analyzed: 08/29/2013 11:07

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3766.D Heated Purge: (Y/N) N

Calibration ID: 17020

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1460645	5.47	1010890	8.15	344957	10.40
UPPER LIMIT		2921290	5.97	2021780	8.65	689914	10.90
LOWER LIMIT		730323	4.97	505445	7.65	172479	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-99528/4		1464842	5.47	1010490	8.15	327791	10.40
CCV 240-99528/3		1536885	5.47	1024262	8.15	261835	10.40
MB 240-99528/5		1353365	5.47	922984	8.15	239554	10.40
240-28158-7	DR-DPT-43B-20	1288708	5.47	932990	8.15	246200	10.40
240-28198-B-1 MS		1347992	5.47	936480	8.15	321783	10.40
240-28198-B-1 MSD		1322631	5.47	973850	8.15	320753	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Sample No.: STD8260 240-98656/4 Date Analyzed: 08/22/2013 17:32

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): UXC4300.D Heated Purge: (Y/N) N

Calibration ID: 17022

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1751146	5.21	1161548	7.89	800526	10.12
UPPER LIMIT		3502292	5.71	2323096	8.39	1601052	10.62
LOWER LIMIT		875573	4.71	580774	7.39	400263	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-98656/20		1748692	5.21	1103221	7.89	799466	10.12
CCVIS 240-99104/2		1565191	5.21	1081269	7.89	729771	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Sample No.: CCVIS 240-99104/2 Date Analyzed: 08/27/2013 11:48

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC4425.D Heated Purge: (Y/N) N

Calibration ID: 17026

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1565191	5.21	1081269	7.89	729771	10.12
UPPER LIMIT		3130382	5.71	2162538	8.39	1459542	10.62
LOWER LIMIT		782596	4.71	540635	7.39	364886	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-99104/3		1426104	5.21	946845	7.89	655072	10.12
MB 240-99104/5		1349633	5.21	921661	7.89	616521	10.12
240-28158-1	DR-DPT-31-30	1332768	5.21	983969	7.89	587547	10.12
240-28158-2	DR-DPT-31-35	1358776	5.21	1002839	7.89	604073	10.12
240-28158-3	DR-DPT-31-40	1435141	5.21	1048261	7.89	622317	10.12
240-28158-4	DR-DPT-31-45	1354438	5.21	964639	7.89	584007	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

Sample Calculation

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28158-1

SDG No.:

Client Sample ID: DR-DPT-43B-15 Lab Sample ID: 240-28158-6

Matrix: Water Lab File ID: UXJ3715.D

Analysis Method: 8260B Date Collected: 08/20/2013 14:10

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 14:29

Soil Aliquot Vol: Dilution Factor: 1000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1000	U	1000	160
74-87-3	Chloromethane	1000	U	1000	300
156-59-2	cis-1,2-Dichloroethene	29000		1000	170
10061-01-5	cis-1,3-Dichloropropene	1000	U	1000	140
87-68-3	Hexachlorobutadiene	1000	U	1000	300
74-95-3	Dibromomethane	1000	U	1000	280
75-27-4	Bromodichloromethane	1000	U	1000	150
75-71-8	Dichlorodifluoromethane	1000	U	1000	310
100-41-4	Ethylbenzene	360	J	1000	170
106-93-4	1,2-Dibromoethane	1000	U	1000	240
108-20-3	Diisopropyl ether	10000	U	10000	1500
91-20-3	Naphthalene	1000	U	1000	240
179601-23-1	m-Xylene & p-Xylene	420	J	2000	240
104-51-8	n-Butylbenzene	1000	U	1000	120
98-82-8	Isopropylbenzene	1000	U	1000	130
103-65-1	n-Propylbenzene	1000	U	1000	140
78-93-3	2-Butanone	10000	U	10000	570
108-10-1	4-Methyl-2-pentanone	10000	U	10000	320
135-98-8	sec-Butylbenzene	1000	U	1000	130
1634-04-4	Methyl tert-butyl ether	1000	U	1000	170
994-05-8	Tert-amyl-methyl ether (TAME)	5000	U	5000	67
75-09-2	Methylene Chloride	1000	U	1000	330
95-47-6	o-Xylene	250	J	1000	140
100-42-5	Styrene	1000	U	1000	110
637-92-3	Ethyl-t-butyl ether (ETBE)	5000	U	5000	110
98-06-6	tert-Butylbenzene	1000	U	1000	130
127-18-4	Tetrachloroethene	1000	U	1000	290
108-88-3	Toluene	10000		1000	130
156-60-5	trans-1,2-Dichloroethene	1000	U	1000	190
10061-02-6	trans-1,3-Dichloropropene	1000	U	1000	190
79-01-6	Trichloroethene	3700		1000	170
75-69-4	Trichlorofluoromethane	1000	U	1000	210
108-05-4	Vinyl acetate	2000	U	2000	190
75-01-4	Vinyl chloride	5700		1000	220
75-65-0	tert-Butyl alcohol	50000	U	50000	3900
1330-20-7	Xylenes, Total	670	J	2000	140

Report Date: 29-Aug-2013 09:45:44 Chrom Revision: 2.0 01-Apr-2013 21:16:10

Sample Calculation

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A3UX11\20130828-22949.b\UXJ3715.D		
Lims ID:	240-28158-B-6	Client ID:	DR-DPT-43B-15
Inject. Date:	28-Aug-2013 14:29:30	Dil. Factor:	1000.0000
Sample Type:	Client		
Sample ID:	240-0022949-008		
Misc. Info.:	J30828A,8260LLUX11,,43582		
Operator:	43582	Instrument ID:	A3UX11
Purge Vol:	5.000 mL	ALS Bottle#:	11
Lims Batch ID:	99295	Lims Sample ID:	8
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A3UX11\20130828-22949.b\8260_11.m		
Last Update:	29-Aug-2013 09:45:42	Calib Date:	23-Aug-2013 01:03:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A3UX11\20130823-22771.b\UXJ3534.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK030		

First Level Reviewer: evansle Date: 28-Aug-2013 15:18:14

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.466	5.466	0.0	99	1397199	10.0	
* 2 Chlorobenzene-d5	117	8.152	8.152	0.0	81	947933	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.401	10.401	0.001	95	249585	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.886	4.887	-0.001	99	356569	7.43	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.182	5.182	0.0	89	408880	6.61	
$ 6 Toluene-d8 (Surr)	98	6.839	6.839	0.0	92	1125177	7.07	
$ 7 4-Bromofluorobenzene (Surr)	95	9.265	9.265	0.0	86	262310	7.34	
8 Dichlorodifluoromethane	85		1.715					9
9 Chloromethane	50		1.881					9
10 Vinyl chloride	62	1.987	1.988	-0.001	80	227090	5.69	
11 Bromomethane	94		2.307					
12 Chloroethane	64		2.402					9
14 Trichlorofluoromethane	101		2.615					
19 1,1-Dichloroethene	96		3.041					9
17 Acetone	43		3.064					
18 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.076					
23 Carbon disulfide	76	3.254	3.265	-0.011	55	11330	0.1175	
26 Methylene Chloride	84		3.431					
27 2-Methyl-2-propanol	59		3.514					9
29 trans-1,2-Dichloroethene	96	3.668	3.680	-0.012	40	5287	0.1118	
30 Methyl tert-butyl ether	73		3.680					
32 1,1-Dichloroethane	63		4.023					
33 Vinyl acetate	86		4.046					
34 Isopropyl ether	87		4.070					
37 Tert-butyl ethyl ether	59		4.378					9
39 2,2-Dichloropropane	77		4.508					
38 2-Butanone (MEK)	43		4.508					
40 cis-1,2-Dichloroethene	96	4.508	4.508	0.0	72	1489410	29.2	
43 Chlorobromomethane	128		4.697					
45 Chloroform	83		4.756					

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Sample Calculation

Lab Name: TestAmerica Canton Job No.: 240-28158-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0210 0.0156	0.0209	0.0211	0.0210	0.0207	Ave		0.0200				11.0		15.0			
Acrylonitrile	0.1870 0.1457	0.1597	0.1621	0.1513	0.1512	Ave		0.1595				9.2		15.0			
trans-1,2-Dichloroethene	0.3533 0.3481	0.3265	0.3317	0.3389	0.3315	Ave		0.3383				3.1		15.0			
Methyl tert-butyl ether	0.9157 0.7559	0.7542	0.7730	0.7847	0.7711	Ave		0.7924				7.8		15.0			
Hexane	0.0451 0.0680	0.0773	0.0574	0.0681	0.0579	Lin1	-0.010	0.0654							0.9910		0.9900
1,1-Dichloroethane	0.8025 0.7508	0.7293	0.7254	0.7239	0.7105	Ave		0.7404			0.1000	4.5		15.0			
Vinyl acetate	0.0440 0.0495	0.0415	0.0482	0.0494	0.0501	Ave		0.0471				7.5		15.0			
2-Butanone	0.2005 0.1535	0.2003	0.1813	0.1847	0.1769	Ave		0.1829				9.5		15.0			
cis-1,2-Dichloroethene	0.3848 0.3690	0.3500	0.3592	0.3622	0.3649	Ave		0.3650				3.2		15.0			
2,2-Dichloropropane	0.3421 0.3268	0.3667	0.3653	0.3538	0.3552	Ave		0.3517				4.3		15.0			
Bromochloromethane	0.2257 0.2057	0.2118	0.1996	0.2003	0.2019	Ave		0.2075				4.8		15.0			
Tetrahydrofuran	0.1645 0.0965	0.1385	0.1158	0.1182	0.1091	Lin1	0.0767	0.0998							0.9950		0.9900
Chloroform	0.6517 0.6334	0.5981	0.6259	0.6108	0.6111	Ave		0.6218				3.1		15.0			
1,1,1-Trichloroethane	0.5102 0.4815	0.4629	0.4993	0.5043	0.4946	Ave		0.4921				3.5		15.0			
Cyclohexane	0.4992 0.6461	0.6130	0.5552	0.5930	0.5967	Ave		0.5839				8.7		15.0			
1,1-Dichloropropene	0.4438 0.4620	0.4196	0.4258	0.4347	0.4394	Ave		0.4375				3.4		15.0			
Carbon tetrachloride	0.4398 0.4455	0.4494	0.4270	0.4294	0.4398	Ave		0.4385				2.0		15.0			
Benzene	1.4334 1.4434	1.3464	1.3831	1.3517	1.3641	Ave		1.3870				3.0		15.0			
1,2-Dichloroethane	0.6202 0.5720	0.5573	0.5676	0.5564	0.5589	Ave		0.5721				4.3		15.0			
Trichloroethene	0.3938 0.4061	0.3696	0.3948	0.3853	0.4011	Ave		0.3918				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

SAMPLE ID DR-DPT-43B-15

SAMPLE CALC

IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (ug/L)	Final Extract Volume (mL)	AVE RRF	CONCENTRATION PP B
1397199	1000	1489410	10	5	0.3650	29205.40
				Sample Volume (mL)		
				5		

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**T. AVANAVAGE**	**DATE:**	**SEPTEMBER 17, 2013**
FROM:	**A. COGNETTI**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOC**
MSA DUMP ROAD SOURCE AREAS
SAMPLE DELIVERY GROUP (SDG) 240-28193-1

SAMPLES: 8/Aqueous/VOC

DR-DPT-43-25	DR-DPT-43-30	DR-DPT-43-35	DR-DPT-43-40
DR-DPT-70-10	DR-DPT-70-15	DR-DPT-DUP06	TB-082113

Overview

The sample set for MSA Dump Road Source Areas, SDG 240-28193-1 consisted of seven (7) aqueous environmental samples and a trip blank analyzed for volatile organic compounds (VOCs). There is one field duplicate pair included in this SDG: DR-DPT-DUP06 and DR-DPT-70-15.

The samples were collected on August 21, 2013 and analyzed by Test America Laboratories Inc. All analyses were conducted in accordance with SW-846 Methods 8260B for VOCs analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method /preparation blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate, internal standard recoveries, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major

- The initial calibration RRFs for tert-butyl alcohol and vinyl acetate were less than the 0.05 quality control limit on August 16, 2013 for instrument A3UX11. The RRF for tert-butyl alcohol was less than the 0.05 quality control limit in the continuing calibration on August 26, 2013 @ 12:26. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR) in the affected samples.

- The initial calibration relative response factors (RRFs) for tert-butyl alcohol and vinyl acetate were less than the 0.05 quality control limit on August 22, 2013 for instrument A3UX15 and the continuing calibration on August 25, 2013 @ 7:49. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR) in the affected samples.

- The tentatively identified compounds (TICs), containing silanol, were qualified as rejected (R). This compound is indicative of column bleed.

Minor

- Contamination was detected in the VOC laboratory method blank associated with batch 240-98906/5 analyzed on August 26, 2013 on instrument A3UX11.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Toluene	0.342	1.71

  An action level of 5X the maximum concentration of contaminant was established in order to evaluate samples for blank contamination. Sample aliquot and dilution factors were applied. The detected toluene results in sample DR-DPT-43-35 was qualified as (B).

- Several TICs were detected and qualified as presumptively present (NJ) in several samples.

- Field duplicate imprecision was noted in the field duplicate pair DR-DPT-DUP06 and DR-DPT-70-15. The relative percent difference (RPD) was greater than the 30% quality control limit for trichloroethene. The detected trichloroethene results were qualified as estimated (J) in samples DR-DPT-DUP06 and DR-DPT-70-15.

- Positive results reported below the quantitation limit but above the method detection limit (MDL) were qualified as estimated, (J).

- Methylene chloride was detected in sample DR-DPT-43-35 at a high concentration but this concentration is attributed to the sample dilution (the sample was diluted 20,000 times). In the opinion of the data reviewer, the high concentration is not accurate and the concentration is qualified as estimated (J) despite the absence of methylene chloride in the associated method blank.

Notes

All samples were analyzed at dilutions except for samples DR-DPT-70-10 and TB-082113. Elevated nondetected results are reported in all samples that were diluted.

The continuing calibration percent differences (%Ds) for dichlorodifluoromethane, tert-butyl alcohol, bromoform and 1,2-dibromo-3-chloropropane were greater than 20% and less than 50% on August 26, 2013 @ 12:26 on instrument A3UX11. No action was taken on the nondetected dichlorodifluoromethane, tert-butyl alcohol, bromoform and 1,2-dibromo-3-chloropropane results in the affected samples.

The continuing calibration %Ds for trichlorofluoromethane, n-propylbenzene and ethyl acetate were greater than 20% and less than 50% on August 25, 2013 @ 7:49 and 8:14 on instrument A3UX15. No action was taken on the nondetected trichlorofluoromethane, n-propylbenzene and ethyl acetate results in the affected samples.

The matrix spike/ matrix spike duplicate (MS/MSD) %Rs of several compounds were outside quality control limits in samples 240-27932-10 and 240-28018-7. These samples are not included in this SDG. No action was taken.

As noted in the case narrative, samples DR-DPT-43-30 and DR-DPT-43-35 were not properly preserved to a pH of 2 or below. The samples were analyzed within seven days. No action was taken on the sample results.

Nondetected results were reported to the MDL.

Executive Summary

Laboratory Performance: The VOC RRFs for tert-butyl alcohol and vinyl acetate were less than the quality control limit resulting in the rejection of nondetected results. Toluene was detected in a laboratory method blank.

Other Factors Affecting Data Quality: TICs were detected in several samples. Field duplicate imprecision was noted in the field duplicate pair DR-DPT-DUP06 and DR-DPT-70-15. Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Ann Cognetti
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-43-25			DR-DPT-43-30			DR-DPT-43-35			DR-DPT-43-40		
SDG: 240-28193-1	LAB_ID	240-28193-1			240-28193-2			240-28193-3			240-28193-4		
FRACTION: OV	SAMP_DATE	8/21/2013			8/21/2013			8/21/2013			8/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	23	U		58	U		4600	U		580	U	
1,1,1-TRICHLOROETHANE	22	U		55	U		4400	U		550	U	
1,1,2,2-TETRACHLOROETHANE	18	U		45	U		3600	U		450	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	28	U		70	U		5600	U		700	U	
1,1-DICHLOROETHANE	15	U		38	U		3000	U		380	U	
1,1-DICHLOROETHENE	19	U		48	U		3800	U		480	U	
1,1-DICHLOROPROPENE	13	U		33	U		2600	U		330	U	
1,2,3-TRICHLOROBENZENE	17	U		43	U		3400	U		430	U	
1,2,3-TRICHLOROPROPANE	43	U		110	U		8600	U		1100	U	
1,2,3-TRIMETHYLBENZENE	0.59	U		150	J	P	120	U		15	U	
1,2,4-TRICHLOROBENZENE	53	J	P	410			3000	U		380	U	
1,2,4-TRIMETHYLBENZENE	17	J	P	65	J	P	2400	U		300	U	
1,2-DIBROMO-3-CHLOROPROPANE	67	U		170	U		13000	U		1700	U	
1,2-DIBROMOETHANE	24	U		60	U		4800	U		600	U	
1,2-DICHLOROBENZENE	13	U		33	U		2600	U		330	U	
1,2-DICHLOROETHANE	22	U		55	U		4400	U		550	U	
1,2-DICHLOROPROPANE	18	U		45	U		3600	U		450	U	
1,3,5-TRIMETHYLBENZENE												
1,3-DICHLOROBENZENE	14	U		35	U		2800	U		350	U	
1,3-DICHLOROPROPANE	16	U		40	U		3200	U		400	U	
1,4-DICHLOROBENZENE	13	U		33	U		2600	U		330	U	
2,2-DICHLOROPROPANE	13	U		33	U		2600	U		330	U	
2-BUTANONE	57	U		140	U		11000	U		1400	U	
2-CHLOROETHYL VINYL ETHER	99	U		250	U		20000	U		2500	U	
2-CHLOROTOLUENE	11	U		28	U		2200	U		280	U	
2-HEXANONE	41	U		100	U		8200	U		1000	U	
2-METHYLNAPHTHALENE												
4-CHLOROTOLUENE	18	U		45	U		3600	U		450	U	
4-ISOPROPYLTOLUENE	12	U		30	U		2400	U		300	U	
4-METHYL-2-PENTANONE	32	U		80	U		6400	U		800	U	
ACETONE	110	U		280	U		22000	U		2800	U	
BENZENE	13	U		33	U		2600	U		330	U	
BENZENE, 1-ETHYL-3-METHYL-												
BENZENE, 1-METHYL-3-(1-METHYLETHYL)-												
BROMOBENZENE	13	U		33	U		2600	U		330	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-70-10			DR-DPT-70-15			DR-DPT-DUP06			TB-082113		
SDG: 240-28193-1	LAB_ID	240-28193-5			240-28193-6			240-28193-7			240-28193-8		
FRACTION: OV	SAMP_DATE	8/21/2013			8/21/2013			8/21/2013			8/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF							DR-DPT-70-15					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U		1.2	U		1.2	U		0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U		1.1	U		1.1	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U		0.9	U		0.9	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U		1.4	U		1.4	U		0.28	U	
1,1-DICHLOROETHANE	0.15	U		0.75	U		0.75	U		0.15	U	
1,1-DICHLOROETHENE	0.19	U		0.95	U		0.95	U		0.19	U	
1,1-DICHLOROPROPENE	0.13	U		0.65	U		0.65	U		0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U		0.85	U		0.85	U		0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U		2.2	U		2.2	U		0.43	U	
1,2,3-TRIMETHYLBENZENE	3.3	J	P	3	J	P	2.9	J	P	0.0059	U	
1,2,4-TRICHLOROBENZENE	0.84	J	P	0.75	U		0.75	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	3.7			0.64	J	P	0.61	J	P	0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U		3.4	U		3.4	U		0.67	U	
1,2-DIBROMOETHANE	0.24	U		1.2	U		1.2	U		0.24	U	
1,2-DICHLOROBENZENE	1.1			0.65	U		0.65	U		0.13	U	
1,2-DICHLOROETHANE	0.22	U		1.1	U		1.1	U		0.22	U	
1,2-DICHLOROPROPANE	0.18	U		0.9	U		0.9	U		0.18	U	
1,3,5-TRIMETHYLBENZENE	1.6	NJ	Z1									
1,3-DICHLOROBENZENE	1.1			0.7	U		0.7	U		0.14	U	
1,3-DICHLOROPROPANE	0.16	U		0.8	U		0.8	U		0.16	U	
1,4-DICHLOROBENZENE	5.8			0.65	U		0.65	U		0.13	U	
2,2-DICHLOROPROPANE	0.13	U		0.65	U		0.65	U		0.13	U	
2-BUTANONE	0.57	U		39	J	P	33	J	P	0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U		5	U		5	U		0.99	U	
2-CHLOROTOLUENE	0.11	U		0.55	U		0.55	U		0.11	U	
2-HEXANONE	0.41	U		2.1	U		2.1	U		0.41	U	
2-METHYLNAPHTHALENE	0.86	NJ	Z1									
4-CHLOROTOLUENE	0.18	U		0.9	U		0.9	U		0.18	U	
4-ISOPROPYLTOLUENE	0.12	U		0.6	U		0.6	U		0.12	U	
4-METHYL-2-PENTANONE	0.32	U		13	J	P	10	J	P	0.32	U	
ACETONE	1.1	U		43	J	P	35	J	P	1.1	U	
BENZENE	0.94	J	P	1.2	J	P	1.1	J	P	0.13	U	
BENZENE, 1-ETHYL-3-METHYL-	2	NJ	Z1									
BENZENE, 1-METHYL-3-(1-METHYLETHYL)-	1.4	NJ	Z1									
BROMOBENZENE	0.13	U		0.65	U		0.65	U		0.13	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-43-25			DR-DPT-43-30			DR-DPT-43-35			DR-DPT-43-40		
SDG: 240-28193-1	LAB_ID	240-28193-1			240-28193-2			240-28193-3			240-28193-4		
FRACTION: OV	SAMP_DATE	8/21/2013			8/21/2013			8/21/2013			8/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOCHLOROMETHANE	29	U		73	U		5800	U		730	U	
BROMODICHLOROMETHANE	15	U		38	U		3000	U		380	U	
BROMOFORM	64	U		160	U		13000	U		1600	U	
BROMOMETHANE	41	U		100	U		8200	U		1000	U	
CARBON DISULFIDE	32	J	P	33	U		2600	U		330	U	
CARBON TETRACHLORIDE	13	U		33	U		2600	U		330	U	
CHLOROBENZENE	15	U		38	U		3000	U		380	U	
CHLORODIBROMOMETHANE	18	U		45	U		3600	U		450	U	
CHLOROETHANE	29	U		73	U		5800	U		730	U	
CHLOROFORM	16	U		40	U		3200	U		400	U	
CHLOROMETHANE	30	U		75	U		6000	U		750	U	
CIS-1,2-DICHLOROETHENE	1400			1200			3400	U		1100	J	P
CIS-1,3-DICHLOROPROPENE	14	U		35	U		2800	U		350	U	
CYCLOHEXANE												
DIBROMOMETHANE	28	U		70	U		5600	U		700	U	
DICHLORODIFLUOROMETHANE	31	U		78	U		6200	U		780	U	
DIISOPROPYL ETHER	150	U		380	U		30000	U		3800	U	
ETHYL ACETATE												
ETHYL TERT-BUTYL ETHER	11	U		28	U		2200	U		280	U	
ETHYLBENZENE	40	J	P	110	J	P	3400	U		430	U	
HEXACHLOROBUTADIENE	30	U		75	U		6000	U		750	U	
ISOPROPYLBENZENE	13	U		33	U		2600	U		330	U	
M+P-XYLENES	79	J	P	290	J	P	4800	U		600	U	
METHYL TERT-BUTYL ETHER	17	U		43	U		3400	U		430	U	
METHYLCYCLOHEXANE				49	J	P						
METHYLENE CHLORIDE	33	U		83	U		49000	J	AQ	830	U	
NAPHTHALENE	24	U		60	U		4800	U		600	U	
N-BUTYLBENZENE	12	U		30	U		2400	U		300	U	
N-PROPYLBENZENE	14	U		35	U		2800	U		350	U	
O-XYLENE	41	J	P	110	J	P	2800	U		350	U	
SEC-BUTYLBENZENE	13	U		33	U		2600	U		330	U	
SILANOL, TRIMETHYL-												
STYRENE	11	U		28	U		2200	U		280	U	
TERT-AMYL METHYL ETHER	6.7	U		17	U		1300	U		170	U	
TERT-BUTYLBENZENE	13	U		33	U		2600	U		330	U	
TERTIARY-BUTYL ALCOHOL	390	UR	C	980	UR	C	78000	UR	C	9800	UR	C

PROJ_NO: 04882	NSAMPLE	DR-DPT-70-10			DR-DPT-70-15			DR-DPT-DUP06			TB-082113		
SDG: 240-28193-1	LAB_ID	240-28193-5			240-28193-6			240-28193-7			240-28193-8		
FRACTION: OV	SAMP_DATE	8/21/2013			8/21/2013			8/21/2013			8/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF							DR-DPT-70-15					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOCHLOROMETHANE	0.29	U		1.5	U		1.5	U		0.29	U	
BROMODICHLOROMETHANE	0.15	U		0.75	U		0.75	U		0.15	U	
BROMOFORM	0.64	U		3.2	U		3.2	U		0.64	U	
BROMOMETHANE	0.41	U		2.1	U		2.1	U		0.41	U	
CARBON DISULFIDE	0.13	U		0.71	J	P	0.65	J	P	0.13	U	
CARBON TETRACHLORIDE	0.13	U		0.65	U		0.65	U		0.13	U	
CHLOROBENZENE	4			1.8	J	P	2.2	J	P	0.15	U	
CHLORODIBROMOMETHANE	0.18	U		0.9	U		0.9	U		0.18	U	
CHLOROETHANE	0.29	U		1.5	U		1.5	U		0.29	U	
CHLOROFORM	0.16	U		1.4	J	P	0.8	U		0.16	U	
CHLOROMETHANE	0.3	U		1.5	U		1.5	U		0.3	U	
CIS-1,2-DICHLOROETHENE	0.76	J	P	1	J	P	0.85	U		0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U		0.7	U		0.7	U		0.14	U	
CYCLOHEXANE	0.41	NJ	Z1									
DIBROMOMETHANE	0.28	U		1.4	U		1.4	U		0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U		1.6	U		1.6	U		0.31	U	
DIISOPROPYL ETHER	1.5	U		7.5	U		7.5	U		1.5	U	
ETHYL ACETATE				26	NJ	Z1	21	NJ	Z1			
ETHYL TERT-BUTYL ETHER	0.11	U		0.55	U		0.55	U		0.11	U	
ETHYLBENZENE	3.2			2.7	J	P	3	J	P	0.17	U	
HEXACHLOROBUTADIENE	0.3	U		1.5	U		1.5	U		0.3	U	
ISOPROPYLBENZENE	1			0.65	U		0.65	U		0.13	U	
M+P-XYLENES	19			7.9	J	P	8.7	J	P	0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U		0.85	U		0.85	U		0.17	U	
METHYLCYCLOHEXANE	2.5	NJ	Z1	1.3	NJ	Z1	0.8	NJ	Z1			
METHYLENE CHLORIDE	0.33	U		3.4	J	P	2.4	J	P	0.33	U	
NAPHTHALENE	1.9			1.2	U		1.2	U		0.24	U	
N-BUTYLBENZENE	0.12	U		0.6	U		0.6	U		0.12	U	
N-PROPYLBENZENE	0.8	J	P	0.7	U		0.7	U		0.14	U	
O-XYLENE	13			5.3			5.8			0.14	U	
SEC-BUTYLBENZENE	0.49	J	P	0.65	U		0.65	U		0.13	U	
SILANOL, TRIMETHYL-	3.7	R	Z2							2.7	R	Z2
STYRENE	0.11	U		0.55	U		0.55	U		0.11	U	
TERT-AMYL METHYL ETHER	0.067	U		0.34	U		0.34	U		0.067	U	
TERT-BUTYLBENZENE	0.13	U		0.65	U		0.65	U		0.13	U	
TERTIARY-BUTYL ALCOHOL	3.9	UR	C	20	UR	C	20	UR	C	3.9	UR	C

PROJ_NO: 04882	NSAMPLE	DR-DPT-43-25			DR-DPT-43-30			DR-DPT-43-35			DR-DPT-43-40		
SDG: 240-28193-1	LAB_ID	240-28193-1			240-28193-2			240-28193-3			240-28193-4		
FRACTION: OV	SAMP_DATE	8/21/2013			8/21/2013			8/21/2013			8/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TETRACHLOROETHENE		29	U		120	J	P	5800	U		730	U	
TETRAHYDROFURAN					140	J	P						
TOLUENE		1200			2100			31000	B	A	3700		
TOTAL XYLENES		120	J	P	400	J	P	2800	U		350	U	
TRANS-1,2-DICHLOROETHENE		19	U		48	U		3800	U		480	U	
TRANS-1,3-DICHLOROPROPENE		19	U		48	U		3800	U		480	U	
TRICHLOROETHENE		3600			9400			490000			30000		
TRICHLOROFLUOROMETHANE		21	U		53	U		4200	U		530	U	
UNKNOWN													
VINYL ACETATE		19	UR	C	48	UR	C	3800	UR	C	480	UR	C
VINYL CHLORIDE		1100			210	J	P	4400	U		550	U	

PROJ_NO: 04882	NSAMPLE	DR-DPT-70-10			DR-DPT-70-15			DR-DPT-DUP06			TB-082113		
SDG: 240-28193-1	LAB_ID	240-28193-5			240-28193-6			240-28193-7			240-28193-8		
FRACTION: OV	SAMP_DATE	8/21/2013			8/21/2013			8/21/2013			8/21/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF							DR-DPT-70-15					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TETRACHLOROETHENE		0.71	J	P	1.5	U		1.5	U		0.29	U	
TETRAHYDROFURAN					2.9	J	P						
TOLUENE		6.9			130			130			0.13	U	
TOTAL XYLENES		32			13			15			0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.95	U		0.95	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.95	U		0.95	U		0.19	U	
TRICHLOROETHENE		3			41	J	G	81	J	G	0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U		1.1	U		1.1	U		0.21	U	
UNKNOWN		1.4	NJ	Z1									
VINYL ACETATE		0.19	UR	C	0.95	UR	C	0.95	UR	C	0.19	UR	C
VINYL CHLORIDE		0.97	J	P	1.1	U		1.1	U		0.22	U	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-25 | Lab Sample ID: 240-28193-1

Matrix: Water | Lab File ID: UXJ3636.D

Analysis Method: 8260B | Date Collected: 08/21/2013 08:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2013 17:43

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98906 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	100	U	100	23
71-55-6	1,1,1-Trichloroethane	100	U	100	22
79-34-5	1,1,2,2-Tetrachloroethane	100	U	100	18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	100	U	100	28
75-34-3	1,1-Dichloroethane	100	U	100	15
75-35-4	1,1-Dichloroethene	100	U	100	19
563-58-6	1,1-Dichloropropene	100	U	100	13
87-61-6	1,2,3-Trichlorobenzene	100	U	100	17
96-18-4	1,2,3-Trichloropropane	100	U	100	43
526-73-8	1,2,3-Trimethylbenzene	500	U	500	0.59
120-82-1	1,2,4-Trichlorobenzene	53	J	100	15
95-63-6	1,2,4-Trimethylbenzene	17	J	100	12
96-12-8	1,2-Dibromo-3-Chloropropane	200	U	200	67
95-50-1	1,2-Dichlorobenzene	100	U	100	13
107-06-2	1,2-Dichloroethane	100	U	100	22
78-87-5	1,2-Dichloropropane	100	U	100	18
541-73-1	1,3-Dichlorobenzene	100	U	100	14
142-28-9	1,3-Dichloropropane	100	U	100	16
106-46-7	1,4-Dichlorobenzene	100	U	100	13
594-20-7	2,2-Dichloropropane	100	U	100	13
110-75-8	2-Chloroethyl vinyl ether	1000	U	1000	99
95-49-8	2-Chlorotoluene	100	U	100	11
591-78-6	2-Hexanone	1000	U	1000	41
108-86-1	Bromobenzene	100	U	100	13
74-97-5	Bromochloromethane	100	U	100	29
106-43-4	4-Chlorotoluene	100	U	100	18
99-87-6	p-Isopropyltoluene	100	U	100	12
67-64-1	Acetone	1000	U	1000	110
71-43-2	Benzene	100	U	100	13
75-25-2	Bromoform	100	U	100	64
74-83-9	Bromomethane	100	U	100	41
75-15-0	Carbon disulfide	32	J	100	13
56-23-5	Carbon tetrachloride	100	U	100	13
108-90-7	Chlorobenzene	100	U	100	15
75-00-3	Chloroethane	100	U	100	29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-25 | Lab Sample ID: 240-28193-1

Matrix: Water | Lab File ID: UXJ3636.D

Analysis Method: 8260B | Date Collected: 08/21/2013 08:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2013 17:43

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98906 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	100	U	100	16
74-87-3	Chloromethane	100	U	100	30
156-59-2	cis-1,2-Dichloroethene	1400		100	17
10061-01-5	cis-1,3-Dichloropropene	100	U	100	14
87-68-3	Hexachlorobutadiene	100	U	100	30
74-95-3	Dibromomethane	100	U	100	28
75-27-4	Bromodichloromethane	100	U	100	15
75-71-8	Dichlorodifluoromethane	100	U	100	31
100-41-4	Ethylbenzene	40	J	100	17
106-93-4	1,2-Dibromoethane	100	U	100	24
108-20-3	Diisopropyl ether	1000	U	1000	150
91-20-3	Naphthalene	100	U	100	24
179601-23-1	m-Xylene & p-Xylene	79	J	200	24
104-51-8	n-Butylbenzene	100	U	100	12
98-82-8	Isopropylbenzene	100	U	100	13
103-65-1	n-Propylbenzene	100	U	100	14
78-93-3	2-Butanone	1000	U	1000	57
108-10-1	4-Methyl-2-pentanone	1000	U	1000	32
135-98-8	sec-Butylbenzene	100	U	100	13
1634-04-4	Methyl tert-butyl ether	100	U	100	17
994-05-8	Tert-amyl-methyl ether (TAME)	500	U	500	6.7
75-09-2	Methylene Chloride	100	U	100	33
95-47-6	o-Xylene	41	J	100	14
100-42-5	Styrene	100	U	100	11
637-92-3	Ethyl-t-butyl ether (ETBE)	500	U	500	11
98-06-6	tert-Butylbenzene	100	U	100	13
127-18-4	Tetrachloroethene	100	U	100	29
108-88-3	Toluene	1200	B	100	13
156-60-5	trans-1,2-Dichloroethene	100	U	100	19
10061-02-6	trans-1,3-Dichloropropene	100	U	100	19
79-01-6	Trichloroethene	3600		100	17
75-69-4	Trichlorofluoromethane	100	U	100	21
108-05-4	Vinyl acetate	200	U	200	19
75-01-4	Vinyl chloride	1100		100	22
75-65-0	tert-Butyl alcohol	5000	U	5000	390
1330-20-7	Xylenes, Total	120	J	200	14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-25 Lab Sample ID: 240-28193-1

Matrix: Water Lab File ID: UXJ3636.D

Analysis Method: 8260B Date Collected: 08/21/2013 08:40

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 17:43

Soil Aliquot Vol: Dilution Factor: 100

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	100	U	100	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-25 Lab Sample ID: 240-28193-1

Matrix: Water Lab File ID: UXJ3636.D

Analysis Method: 8260B Date Collected: 08/21/2013 08:40

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 17:43

Soil Aliquot Vol: Dilution Factor: 100

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-30 Lab Sample ID: 240-28193-2

Matrix: Water Lab File ID: UXC4394.D

Analysis Method: 8260B Date Collected: 08/21/2013 09:15

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 13:27

Soil Aliquot Vol: Dilution Factor: 250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	250	U	250	58
71-55-6	1,1,1-Trichloroethane	250	U	250	55
79-34-5	1,1,2,2-Tetrachloroethane	250	U	250	45
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	250	U	250	70
75-34-3	1,1-Dichloroethane	250	U	250	38
75-35-4	1,1-Dichloroethene	250	U	250	48
563-58-6	1,1-Dichloropropene	250	U	250	33
87-61-6	1,2,3-Trichlorobenzene	250	U	250	43
96-18-4	1,2,3-Trichloropropane	250	U	250	110
526-73-8	1,2,3-Trimethylbenzene	150	J	1300	1.5
120-82-1	1,2,4-Trichlorobenzene	410		250	38
95-63-6	1,2,4-Trimethylbenzene	65	J	250	30
96-12-8	1,2-Dibromo-3-Chloropropane	500	U	500	170
95-50-1	1,2-Dichlorobenzene	250	U	250	33
107-06-2	1,2-Dichloroethane	250	U	250	55
78-87-5	1,2-Dichloropropane	250	U	250	45
541-73-1	1,3-Dichlorobenzene	250	U	250	35
142-28-9	1,3-Dichloropropane	250	U	250	40
106-46-7	1,4-Dichlorobenzene	250	U	250	33
594-20-7	2,2-Dichloropropane	250	U	250	33
110-75-8	2-Chloroethyl vinyl ether	2500	U	2500	250
95-49-8	2-Chlorotoluene	250	U	250	28
591-78-6	2-Hexanone	2500	U	2500	100
108-86-1	Bromobenzene	250	U	250	33
74-97-5	Bromochloromethane	250	U	250	73
106-43-4	4-Chlorotoluene	250	U	250	45
99-87-6	p-Isopropyltoluene	250	U	250	30
67-64-1	Acetone	2500	U	2500	280
71-43-2	Benzene	250	U	250	33
75-25-2	Bromoform	250	U	250	160
74-83-9	Bromomethane	250	U	250	100
75-15-0	Carbon disulfide	250	U	250	33
56-23-5	Carbon tetrachloride	250	U	250	33
108-90-7	Chlorobenzene	250	U	250	38
75-00-3	Chloroethane	250	U	250	73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-30 Lab Sample ID: 240-28193-2

Matrix: Water Lab File ID: UXC4394.D

Analysis Method: 8260B Date Collected: 08/21/2013 09:15

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 13:27

Soil Aliquot Vol: Dilution Factor: 250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	250	U	250	40
74-87-3	Chloromethane	250	U	250	75
156-59-2	cis-1,2-Dichloroethene	1200		250	43
10061-01-5	cis-1,3-Dichloropropene	250	U	250	35
87-68-3	Hexachlorobutadiene	250	U	250	75
74-95-3	Dibromomethane	250	U	250	70
75-27-4	Bromodichloromethane	250	U	250	38
75-71-8	Dichlorodifluoromethane	250	U	250	78
100-41-4	Ethylbenzene	110	J	250	43
106-93-4	1,2-Dibromoethane	250	U	250	60
108-20-3	Diisopropyl ether	2500	U	2500	380
91-20-3	Naphthalene	250	U	250	60
179601-23-1	m-Xylene & p-Xylene	290	J	500	60
104-51-8	n-Butylbenzene	250	U	250	30
98-82-8	Isopropylbenzene	250	U	250	33
103-65-1	n-Propylbenzene	250	U	250	35
78-93-3	2-Butanone	2500	U	2500	140
108-10-1	4-Methyl-2-pentanone	2500	U	2500	80
135-98-8	sec-Butylbenzene	250	U	250	33
1634-04-4	Methyl tert-butyl ether	250	U	250	43
994-05-8	Tert-amyl-methyl ether (TAME)	1300	U	1300	17
75-09-2	Methylene Chloride	250	U	250	83
95-47-6	o-Xylene	110	J	250	35
100-42-5	Styrene	250	U	250	28
637-92-3	Ethyl-t-butyl ether (ETBE)	1300	U	1300	28
98-06-6	tert-Butylbenzene	250	U	250	33
127-18-4	Tetrachloroethene	120	J	250	73
108-88-3	Toluene	2100		250	33
156-60-5	trans-1,2-Dichloroethene	250	U	250	48
10061-02-6	trans-1,3-Dichloropropene	250	U	250	48
79-01-6	Trichloroethene	9400		250	43
75-69-4	Trichlorofluoromethane	250	U	250	53
108-05-4	Vinyl acetate	500	U	500	48
75-01-4	Vinyl chloride	210	J	250	55
75-65-0	tert-Butyl alcohol	13000	U	13000	980
1330-20-7	Xylenes, Total	400	J	500	35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-30 Lab Sample ID: 240-28193-2

Matrix: Water Lab File ID: UXC4394.D

Analysis Method: 8260B Date Collected: 08/21/2013 09:15

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 13:27

Soil Aliquot Vol: Dilution Factor: 250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	250	U	250	45

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	87		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	90		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-30 Lab Sample ID: 240-28193-2

Matrix: Water Lab File ID: UXC4394.D

Analysis Method: 8260B Date Collected: 08/21/2013 09:15

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 13:27

Soil Aliquot Vol: Dilution Factor: 250

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

Number TICs Found: 2 TIC Result Total: 189

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	4.49	140	J
108-87-2	Methylcyclohexane	5.70	49	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-35 | Lab Sample ID: 240-28193-3

Matrix: Water | Lab File ID: UXJ3637.D

Analysis Method: 8260B | Date Collected: 08/21/2013 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2013 18:07

Soil Aliquot Vol: | Dilution Factor: 20000

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98906 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	20000	U	20000	4600
71-55-6	1,1,1-Trichloroethane	20000	U	20000	4400
79-34-5	1,1,2,2-Tetrachloroethane	20000	U	20000	3600
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	20000	U	20000	5600
75-34-3	1,1-Dichloroethane	20000	U	20000	3000
75-35-4	1,1-Dichloroethene	20000	U	20000	3800
563-58-6	1,1-Dichloropropene	20000	U	20000	2600
87-61-6	1,2,3-Trichlorobenzene	20000	U	20000	3400
96-18-4	1,2,3-Trichloropropane	20000	U	20000	8600
526-73-8	1,2,3-Trimethylbenzene	100000	U	100000	120
120-82-1	1,2,4-Trichlorobenzene	20000	U	20000	3000
95-63-6	1,2,4-Trimethylbenzene	20000	U	20000	2400
96-12-8	1,2-Dibromo-3-Chloropropane	40000	U	40000	13000
95-50-1	1,2-Dichlorobenzene	20000	U	20000	2600
107-06-2	1,2-Dichloroethane	20000	U	20000	4400
78-87-5	1,2-Dichloropropane	20000	U	20000	3600
541-73-1	1,3-Dichlorobenzene	20000	U	20000	2800
142-28-9	1,3-Dichloropropane	20000	U	20000	3200
106-46-7	1,4-Dichlorobenzene	20000	U	20000	2600
594-20-7	2,2-Dichloropropane	20000	U	20000	2600
110-75-8	2-Chloroethyl vinyl ether	200000	U	200000	20000
95-49-8	2-Chlorotoluene	20000	U	20000	2200
591-78-6	2-Hexanone	200000	U	200000	8200
108-86-1	Bromobenzene	20000	U	20000	2600
74-97-5	Bromochloromethane	20000	U	20000	5800
106-43-4	4-Chlorotoluene	20000	U	20000	3600
99-87-6	p-Isopropyltoluene	20000	U	20000	2400
67-64-1	Acetone	200000	U	200000	22000
71-43-2	Benzene	20000	U	20000	2600
75-25-2	Bromoform	20000	U	20000	13000
74-83-9	Bromomethane	20000	U	20000	8200
75-15-0	Carbon disulfide	20000	U	20000	2600
56-23-5	Carbon tetrachloride	20000	U	20000	2600
108-90-7	Chlorobenzene	20000	U	20000	3000
75-00-3	Chloroethane	20000	U	20000	5800

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-35 | Lab Sample ID: 240-28193-3

Matrix: Water | Lab File ID: UXJ3637.D

Analysis Method: 8260B | Date Collected: 08/21/2013 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2013 18:07

Soil Aliquot Vol: | Dilution Factor: 20000

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98906 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	20000	U	20000	3200
74-87-3	Chloromethane	20000	U	20000	6000
156-59-2	cis-1,2-Dichloroethene	20000	U	20000	3400
10061-01-5	cis-1,3-Dichloropropene	20000	U	20000	2800
87-68-3	Hexachlorobutadiene	20000	U	20000	6000
74-95-3	Dibromomethane	20000	U	20000	5600
75-27-4	Bromodichloromethane	20000	U	20000	3000
75-71-8	Dichlorodifluoromethane	20000	U	20000	6200
100-41-4	Ethylbenzene	20000	U	20000	3400
106-93-4	1,2-Dibromoethane	20000	U	20000	4800
108-20-3	Diisopropyl ether	200000	U	200000	30000
91-20-3	Naphthalene	20000	U	20000	4800
179601-23-1	m-Xylene & p-Xylene	40000	U	40000	4800
104-51-8	n-Butylbenzene	20000	U	20000	2400
98-82-8	Isopropylbenzene	20000	U	20000	2600
103-65-1	n-Propylbenzene	20000	U	20000	2800
78-93-3	2-Butanone	200000	U	200000	11000
108-10-1	4-Methyl-2-pentanone	200000	U	200000	6400
135-98-8	sec-Butylbenzene	20000	U	20000	2600
1634-04-4	Methyl tert-butyl ether	20000	U	20000	3400
994-05-8	Tert-amyl-methyl ether (TAME)	100000	U	100000	1300
75-09-2	Methylene Chloride	49000		20000	6600
95-47-6	o-Xylene	20000	U	20000	2800
100-42-5	Styrene	20000	U	20000	2200
637-92-3	Ethyl-t-butyl ether (ETBE)	100000	U	100000	2200
98-06-6	tert-Butylbenzene	20000	U	20000	2600
127-18-4	Tetrachloroethene	20000	U	20000	5800
108-88-3	Toluene	31000	B	20000	2600
156-60-5	trans-1,2-Dichloroethene	20000	U	20000	3800
10061-02-6	trans-1,3-Dichloropropene	20000	U	20000	3800
79-01-6	Trichloroethene	490000		20000	3400
75-69-4	Trichlorofluoromethane	20000	U	20000	4200
108-05-4	Vinyl acetate	40000	U	40000	3800
75-01-4	Vinyl chloride	20000	U	20000	4400
75-65-0	tert-Butyl alcohol	1000000	U	1000000	78000
1330-20-7	Xylenes, Total	40000	U	40000	2800

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-35 Lab Sample ID: 240-28193-3

Matrix: Water Lab File ID: UXJ3637.D

Analysis Method: 8260B Date Collected: 08/21/2013 10:00

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 18:07

Soil Aliquot Vol: Dilution Factor: 20000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	20000	U	20000	3600

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	94		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-35 Lab Sample ID: 240-28193-3

Matrix: Water Lab File ID: UXJ3637.D

Analysis Method: 8260B Date Collected: 08/21/2013 10:00

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 18:07

Soil Aliquot Vol: Dilution Factor: 20000

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-40 Lab Sample ID: 240-28193-4

Matrix: Water Lab File ID: UXC4396.D

Analysis Method: 8260B Date Collected: 08/21/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 14:13

Soil Aliquot Vol: Dilution Factor: 2500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	2500	U	2500	580
71-55-6	1,1,1-Trichloroethane	2500	U	2500	550
79-34-5	1,1,2,2-Tetrachloroethane	2500	U	2500	450
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	2500	U	2500	700
75-34-3	1,1-Dichloroethane	2500	U	2500	380
75-35-4	1,1-Dichloroethene	2500	U	2500	480
563-58-6	1,1-Dichloropropene	2500	U	2500	330
87-61-6	1,2,3-Trichlorobenzene	2500	U	2500	430
96-18-4	1,2,3-Trichloropropane	2500	U	2500	1100
526-73-8	1,2,3-Trimethylbenzene	13000	U	13000	15
120-82-1	1,2,4-Trichlorobenzene	2500	U	2500	380
95-63-6	1,2,4-Trimethylbenzene	2500	U	2500	300
96-12-8	1,2-Dibromo-3-Chloropropane	5000	U	5000	1700
95-50-1	1,2-Dichlorobenzene	2500	U	2500	330
107-06-2	1,2-Dichloroethane	2500	U	2500	550
78-87-5	1,2-Dichloropropane	2500	U	2500	450
541-73-1	1,3-Dichlorobenzene	2500	U	2500	350
142-28-9	1,3-Dichloropropane	2500	U	2500	400
106-46-7	1,4-Dichlorobenzene	2500	U	2500	330
594-20-7	2,2-Dichloropropane	2500	U	2500	330
110-75-8	2-Chloroethyl vinyl ether	25000	U	25000	2500
95-49-8	2-Chlorotoluene	2500	U	2500	280
591-78-6	2-Hexanone	25000	U	25000	1000
108-86-1	Bromobenzene	2500	U	2500	330
74-97-5	Bromochloromethane	2500	U	2500	730
106-43-4	4-Chlorotoluene	2500	U	2500	450
99-87-6	p-Isopropyltoluene	2500	U	2500	300
67-64-1	Acetone	25000	U	25000	2800
71-43-2	Benzene	2500	U	2500	330
75-25-2	Bromoform	2500	U	2500	1600
74-83-9	Bromomethane	2500	U	2500	1000
75-15-0	Carbon disulfide	2500	U	2500	330
56-23-5	Carbon tetrachloride	2500	U	2500	330
108-90-7	Chlorobenzene	2500	U	2500	380
75-00-3	Chloroethane	2500	U	2500	730

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-40 | Lab Sample ID: 240-28193-4

Matrix: Water | Lab File ID: UXC4396.D

Analysis Method: 8260B | Date Collected: 08/21/2013 11:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2013 14:13

Soil Aliquot Vol: | Dilution Factor: 2500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98830 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	2500	U	2500	400
74-87-3	Chloromethane	2500	U	2500	750
156-59-2	cis-1,2-Dichloroethene	1100	J	2500	430
10061-01-5	cis-1,3-Dichloropropene	2500	U	2500	350
87-68-3	Hexachlorobutadiene	2500	U	2500	750
74-95-3	Dibromomethane	2500	U	2500	700
75-27-4	Bromodichloromethane	2500	U	2500	380
75-71-8	Dichlorodifluoromethane	2500	U	2500	780
100-41-4	Ethylbenzene	2500	U	2500	430
106-93-4	1,2-Dibromoethane	2500	U	2500	600
108-20-3	Diisopropyl ether	25000	U	25000	3800
91-20-3	Naphthalene	2500	U	2500	600
179601-23-1	m-Xylene & p-Xylene	5000	U	5000	600
104-51-8	n-Butylbenzene	2500	U	2500	300
98-82-8	Isopropylbenzene	2500	U	2500	330
103-65-1	n-Propylbenzene	2500	U	2500	350
78-93-3	2-Butanone	25000	U	25000	1400
108-10-1	4-Methyl-2-pentanone	25000	U	25000	800
135-98-8	sec-Butylbenzene	2500	U	2500	330
1634-04-4	Methyl tert-butyl ether	2500	U	2500	430
994-05-8	Tert-amyl-methyl ether (TAME)	13000	U	13000	170
75-09-2	Methylene Chloride	2500	U	2500	830
95-47-6	o-Xylene	2500	U	2500	350
100-42-5	Styrene	2500	U	2500	280
637-92-3	Ethyl-t-butyl ether (ETBE)	13000	U	13000	280
98-06-6	tert-Butylbenzene	2500	U	2500	330
127-18-4	Tetrachloroethene	2500	U	2500	730
108-88-3	Toluene	3700		2500	330
156-60-5	trans-1,2-Dichloroethene	2500	U	2500	480
10061-02-6	trans-1,3-Dichloropropene	2500	U	2500	480
79-01-6	Trichloroethene	30000		2500	430
75-69-4	Trichlorofluoromethane	2500	U	2500	530
108-05-4	Vinyl acetate	5000	U	5000	480
75-01-4	Vinyl chloride	2500	U	2500	550
75-65-0	tert-Butyl alcohol	130000	U	130000	9800
1330-20-7	Xylenes, Total	5000	U	5000	350

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-40 Lab Sample ID: 240-28193-4

Matrix: Water Lab File ID: UXC4396.D

Analysis Method: 8260B Date Collected: 08/21/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 14:13

Soil Aliquot Vol: Dilution Factor: 2500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	2500	U	2500	450

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	89		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-40 Lab Sample ID: 240-28193-4

Matrix: Water Lab File ID: UXC4396.D

Analysis Method: 8260B Date Collected: 08/21/2013 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 14:13

Soil Aliquot Vol: Dilution Factor: 2500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-70-10 Lab Sample ID: 240-28193-5

Matrix: Water Lab File ID: UXJ3638.D

Analysis Method: 8260B Date Collected: 08/21/2013 13:55

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 18:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	3.3	J	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	0.84	J	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	3.7		1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.1		1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.1		1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	5.8		1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	0.94	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	4.0		1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-70-10 Lab Sample ID: 240-28193-5

Matrix: Water Lab File ID: UXJ3638.D

Analysis Method: 8260B Date Collected: 08/21/2013 13:55

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 18:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.76	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	3.2		1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.9		1.0	0.24
179601-23-1	m-Xylene & p-Xylene	19		2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0		1.0	0.13
103-65-1	n-Propylbenzene	0.80	J	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	0.49	J	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	13		1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	0.71	J	1.0	0.29
108-88-3	Toluene	6.9	B	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	3.0		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.97	J	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	32		2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-70-10 Lab Sample ID: 240-28193-5

Matrix: Water Lab File ID: UXJ3638.D

Analysis Method: 8260B Date Collected: 08/21/2013 13:55

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 18:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	100		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	96		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-70-10 Lab Sample ID: 240-28193-5

Matrix: Water Lab File ID: UXJ3638.D

Analysis Method: 8260B Date Collected: 08/21/2013 13:55

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 18:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

Number TICs Found: 8 TIC Result Total: 13.87

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.38	3.7	T J N
110-82-7	Cyclohexane	4.99	0.41	J
108-87-2	Methylcyclohexane	5.96	2.5	
620-14-4	Benzene, 1-ethyl-3-methyl-	9.60	2.0	T J N
108-67-8	1,3,5-Trimethylbenzene	9.68	1.6	
	Unknown	10.58	1.4	T J
535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	12.01	1.4	T J N
91-57-6	2-Methylnaphthalene	14.07	0.86	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-70-15 Lab Sample ID: 240-28193-6

Matrix: Water Lab File ID: UXC4398.D

Analysis Method: 8260B Date Collected: 08/21/2013 14:20

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 14:58

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.2
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.90
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	1.4
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.75
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.95
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.65
87-61-6	1,2,3-Trichlorobenzene	5.0	U	5.0	0.85
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	2.2
526-73-8	1,2,3-Trimethylbenzene	3.0	J	25	0.030
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	0.75
95-63-6	1,2,4-Trimethylbenzene	0.64	J	5.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	3.4
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.65
107-06-2	1,2-Dichloroethane	5.0	U	5.0	1.1
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.90
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.70
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.80
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.65
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.65
110-75-8	2-Chloroethyl vinyl ether	50	U	50	5.0
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.55
591-78-6	2-Hexanone	50	U	50	2.1
108-86-1	Bromobenzene	5.0	U	5.0	0.65
74-97-5	Bromochloromethane	5.0	U	5.0	1.5
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.90
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.60
67-64-1	Acetone	43	J	50	5.5
71-43-2	Benzene	1.2	J	5.0	0.65
75-25-2	Bromoform	5.0	U	5.0	3.2
74-83-9	Bromomethane	5.0	U	5.0	2.1
75-15-0	Carbon disulfide	0.71	J	5.0	0.65
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.65
108-90-7	Chlorobenzene	1.8	J	5.0	0.75
75-00-3	Chloroethane	5.0	U	5.0	1.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-70-15 Lab Sample ID: 240-28193-6

Matrix: Water Lab File ID: UXC4398.D

Analysis Method: 8260B Date Collected: 08/21/2013 14:20

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 14:58

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.4	J	5.0	0.80
74-87-3	Chloromethane	5.0	U	5.0	1.5
156-59-2	cis-1,2-Dichloroethene	1.0	J	5.0	0.85
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.70
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.5
74-95-3	Dibromomethane	5.0	U	5.0	1.4
75-27-4	Bromodichloromethane	5.0	U	5.0	0.75
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	1.6
100-41-4	Ethylbenzene	2.7	J	5.0	0.85
106-93-4	1,2-Dibromoethane	5.0	U	5.0	1.2
108-20-3	Diisopropyl ether	50	U	50	7.5
91-20-3	Naphthalene	5.0	U	5.0	1.2
179601-23-1	m-Xylene & p-Xylene	7.9	J	10	1.2
104-51-8	n-Butylbenzene	5.0	U	5.0	0.60
98-82-8	Isopropylbenzene	5.0	U	5.0	0.65
103-65-1	n-Propylbenzene	5.0	U	5.0	0.70
78-93-3	2-Butanone	39	J	50	2.9
108-10-1	4-Methyl-2-pentanone	13	J	50	1.6
135-98-8	sec-Butylbenzene	5.0	U	5.0	0.65
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.85
994-05-8	Tert-amyl-methyl ether (TAME)	25	U	25	0.34
75-09-2	Methylene Chloride	3.4	J	5.0	1.7
95-47-6	o-Xylene	5.3		5.0	0.70
100-42-5	Styrene	5.0	U	5.0	0.55
637-92-3	Ethyl-t-butyl ether (ETBE)	25	U	25	0.55
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.65
127-18-4	Tetrachloroethene	5.0	U	5.0	1.5
108-88-3	Toluene	130		5.0	0.65
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.95
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.95
79-01-6	Trichloroethene	41		5.0	0.85
75-69-4	Trichlorofluoromethane	5.0	U	5.0	1.1
108-05-4	Vinyl acetate	10	U	10	0.95
75-01-4	Vinyl chloride	5.0	U	5.0	1.1
75-65-0	tert-Butyl alcohol	250	U	250	20
1330-20-7	Xylenes, Total	13		10	0.70

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-70-15 Lab Sample ID: 240-28193-6

Matrix: Water Lab File ID: UXC4398.D

Analysis Method: 8260B Date Collected: 08/21/2013 14:20

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 14:58

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	5.0	U	5.0	0.90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-70-15 Lab Sample ID: 240-28193-6

Matrix: Water Lab File ID: UXC4398.D

Analysis Method: 8260B Date Collected: 08/21/2013 14:20

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 14:58

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

Number TICs Found: 3 TIC Result Total: 30.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
141-78-6	Ethyl acetate	4.25	26	
109-99-9	Tetrahydrofuran	4.49	2.9	J
108-87-2	Methylcyclohexane	5.70	1.3	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-DUP06 | Lab Sample ID: 240-28193-7

Matrix: Water | Lab File ID: UXC4399.D

Analysis Method: 8260B | Date Collected: 08/21/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2013 15:20

Soil Aliquot Vol: | Dilution Factor: 5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98830 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.2
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.90
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	1.4
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.75
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.95
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.65
87-61-6	1,2,3-Trichlorobenzene	5.0	U	5.0	0.85
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	2.2
526-73-8	1,2,3-Trimethylbenzene	2.9	J	25	0.030
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	0.75
95-63-6	1,2,4-Trimethylbenzene	0.61	J	5.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	3.4
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.65
107-06-2	1,2-Dichloroethane	5.0	U	5.0	1.1
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.90
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.70
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.80
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.65
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.65
110-75-8	2-Chloroethyl vinyl ether	50	U	50	5.0
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.55
591-78-6	2-Hexanone	50	U	50	2.1
108-86-1	Bromobenzene	5.0	U	5.0	0.65
74-97-5	Bromochloromethane	5.0	U	5.0	1.5
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.90
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.60
67-64-1	Acetone	35	J	50	5.5
71-43-2	Benzene	1.1	J	5.0	0.65
75-25-2	Bromoform	5.0	U	5.0	3.2
74-83-9	Bromomethane	5.0	U	5.0	2.1
75-15-0	Carbon disulfide	0.65	J	5.0	0.65
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.65
108-90-7	Chlorobenzene	2.2	J	5.0	0.75
75-00-3	Chloroethane	5.0	U	5.0	1.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-DUP06 | Lab Sample ID: 240-28193-7

Matrix: Water | Lab File ID: UXC4399.D

Analysis Method: 8260B | Date Collected: 08/21/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2013 15:20

Soil Aliquot Vol: | Dilution Factor: 5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98830 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	5.0	U	5.0	0.80
74-87-3	Chloromethane	5.0	U	5.0	1.5
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.85
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.70
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.5
74-95-3	Dibromomethane	5.0	U	5.0	1.4
75-27-4	Bromodichloromethane	5.0	U	5.0	0.75
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	1.6
100-41-4	Ethylbenzene	3.0	J	5.0	0.85
106-93-4	1,2-Dibromoethane	5.0	U	5.0	1.2
108-20-3	Diisopropyl ether	50	U	50	7.5
91-20-3	Naphthalene	5.0	U	5.0	1.2
179601-23-1	m-Xylene & p-Xylene	8.7	J	10	1.2
104-51-8	n-Butylbenzene	5.0	U	5.0	0.60
98-82-8	Isopropylbenzene	5.0	U	5.0	0.65
103-65-1	n-Propylbenzene	5.0	U	5.0	0.70
78-93-3	2-Butanone	33	J	50	2.9
108-10-1	4-Methyl-2-pentanone	10	J	50	1.6
135-98-8	sec-Butylbenzene	5.0	U	5.0	0.65
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.85
994-05-8	Tert-amyl-methyl ether (TAME)	25	U	25	0.34
75-09-2	Methylene Chloride	2.4	J	5.0	1.7
95-47-6	o-Xylene	5.8		5.0	0.70
100-42-5	Styrene	5.0	U	5.0	0.55
637-92-3	Ethyl-t-butyl ether (ETBE)	25	U	25	0.55
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.65
127-18-4	Tetrachloroethene	5.0	U	5.0	1.5
108-88-3	Toluene	130		5.0	0.65
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.95
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.95
79-01-6	Trichloroethene	81		5.0	0.85
75-69-4	Trichlorofluoromethane	5.0	U	5.0	1.1
108-05-4	Vinyl acetate	10	U	10	0.95
75-01-4	Vinyl chloride	5.0	U	5.0	1.1
75-65-0	tert-Butyl alcohol	250	U	250	20
1330-20-7	Xylenes, Total	15		10	0.70

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-DUP06 Lab Sample ID: 240-28193-7

Matrix: Water Lab File ID: UXC4399.D

Analysis Method: 8260B Date Collected: 08/21/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 15:20

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	5.0	U	5.0	0.90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-DUP06 Lab Sample ID: 240-28193-7

Matrix: Water Lab File ID: UXC4399.D

Analysis Method: 8260B Date Collected: 08/21/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 15:20

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

Number TICs Found: 2 TIC Result Total: 21.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
141-78-6	Ethyl acetate	4.25	21	
108-87-2	Methylcyclohexane	5.68	0.80	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: TB-082113 Lab Sample ID: 240-28193-8

Matrix: Water Lab File ID: UXJ3639.D

Analysis Method: 8260B Date Collected: 08/21/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 18:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: TB-082113 Lab Sample ID: 240-28193-8

Matrix: Water Lab File ID: UXJ3639.D

Analysis Method: 8260B Date Collected: 08/21/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 18:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: TB-082113 Lab Sample ID: 240-28193-8

Matrix: Water Lab File ID: UXJ3639.D

Analysis Method: 8260B Date Collected: 08/21/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 18:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: TB-082113 Lab Sample ID: 240-28193-8

Matrix: Water Lab File ID: UXJ3639.D

Analysis Method: 8260B Date Collected: 08/21/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 18:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

Number TICs Found: 1 TIC Result Total: 2.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.38	2.7	T J N

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-28193-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/22/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.3 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-43-25 (240-28193-1), DR-DPT-43-30 (240-28193-2), DR-DPT-43-35 (240-28193-3), DR-DPT-43-40 (240-28193-4), DR-DPT-70-10 (240-28193-5), DR-DPT-70-15 (240-28193-6), DR-DPT-DUP06 (240-28193-7)and TB-082113 (240-28193-8) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/25/2013 and 08/26/2013.

Toluene was detected in method blank MB 240-98906/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples DR-DPT-43-25 (240-28193-1)[100X], DR-DPT-43-30 (240-28193-2)[250X], DR-DPT-43-35 (240-28193-3)[20000X], DR-DPT-43-40 (240-28193-4)[2500X], DR-DPT-70-15 (240-28193-6)[5X] and DR-DPT-DUP06 (240-28193-7)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample(s) submitted for volatiles analysis was received with insufficient preservation (pH >2): DR-DPT-43-30 (240-28193-2) and DR-DPT-43-35 (240-28193-3).

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

Chain of Custody Record

2.3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact			
Company Name: Tetra Tech	Client Project Manager: Tony Aponavage	Site Contact: Josh Mullis	Lab Contact: Pat O'meara
Address: 20251 Century Blvd. Ste. 200	Telephone: 301-273-8230	Telephone: 410-271-5641	Telephone: 330-497-9396
City/State/Zip: Germantown, MD, 20874	Email: tony.aponavage@tetratech.com	Analysis Turnaround Time (calendar days)	COC No: 1 of 1 COCs
Phone: (301) 528-7000		TAT if different from below 5 days	
Project Name: Dump Road Source Area	Method of Shipment/Carrier: Fed ex	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	
Project Number: 117IC04882.05	Shipping/Tracking No:		
PO #			

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Analyses: VOCs (3x40mL)	Sample Specific Notes / Special Instructions:
OR-DPT-43B-25	8/21/13	0840		X						X							X	
OR-DPT-43B-30	8/21/13	0915		X						X							X	Bad odor
OR-DPT-43B-35	8/21/13	1000		X						X							X	Bad Odor
OR-DPT-43B-40	8/21/13	1105		X						X							X	Bad odor
OR-DPT-70-10	8/21/13	1355		X						X							X	
OR-DPT-70-15	8/21/13	1420		X						X							X	
OR-DPT-DUP06	8/21/13	0000		X						X							X	DPT-70-15 DUP
TB-082113	8/21/13	~~X~~		X									X					

240-28193 Chain of Custody

Page 500 of 501

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if sample
☐ Return to Client ☒ Disposal By Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
5 day TAT * Samples from DPT-43 (No longer DPT-43B)*

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/21/13 1520		TestAmerica	8/21/13 1521
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	8/21/13 1620		IAC	8/22/13 910
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 28193
Canton Facility

Client TETRA TECH Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 8-22-13 Opened on 8-22-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. 2.3 °C	Corrected Cooler Temp. 2.3 °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No TCS

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28193-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-28193-1	DR-DPT-43-25	Water	08/21/2013 0840	08/22/2013 0910
240-28193-2	DR-DPT-43-30	Water	08/21/2013 0915	08/22/2013 0910
240-28193-3	DR-DPT-43-35	Water	08/21/2013 1000	08/22/2013 0910
240-28193-4	DR-DPT-43-40	Water	08/21/2013 1105	08/22/2013 0910
240-28193-5	DR-DPT-70-10	Water	08/21/2013 1355	08/22/2013 0910
240-28193-6	DR-DPT-70-15	Water	08/21/2013 1420	08/22/2013 0910
240-28193-7FD	DR-DPT-DUP06	Water	08/21/2013 0000	08/22/2013 0910
240-28193-8TB	TB-082113	Water	08/21/2013 0000	08/22/2013 0910

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28193-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

HOLDTIME

SDG 240-28193-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	TB-082113	240-28193-8	NM	8/21/2013	8/26/2013	8/26/2013	5	0	5
OV	UG/L	DR-DPT-DUP06	240-28193-7	NM	8/21/2013	8/25/2013	8/25/2013	4	0	4
OV	UG/L	DR-DPT-70-15	240-28193-6	NM	8/21/2013	8/25/2013	8/25/2013	4	0	4
OV	UG/L	DR-DPT-70-10	240-28193-5	NM	8/21/2013	8/26/2013	8/26/2013	5	0	5
OV	UG/L	DR-DPT-43-40	240-28193-4	NM	8/21/2013	8/25/2013	8/25/2013	4	0	4
OV	UG/L	DR-DPT-43-35	240-28193-3	NM	8/21/2013	8/26/2013	8/26/2013	5	0	5
OV	UG/L	DR-DPT-43-30	240-28193-2	NM	8/21/2013	8/25/2013	8/25/2013	4	0	4
OV	UG/L	DR-DPT-43-25	240-28193-1	NM	8/21/2013	8/26/2013	8/26/2013	5	0	5

Field Duplicate Precision				
ANALYTE	**DR-DPT-DUP06**	**DR-DPT-70-15**	**RPD**	**DIFFERENCE**
1,2,3-TRIMETHYLBENZENE	2.9	3	3.39	0.1
1,2,4-TRIMETHYLBENZENE	0.61	0.64	4.80	0.03
2-BUTANONE	33	39	16.67	6
4-METHYL-2-PENTANONE	10	13	26.09	3
ACETONE	35	43	20.51	8
BENZENE	1.1	1.2	8.70	0.1
CARBON DISULFIDE	0.65	0.71	8.82	0.06
CHLOROBENZENE	2.2	1.8	20.00	0.4
CHLOROFORM	ND	1.4	200.00	0.6
CIS-1,2-DICHLOROETHENE	ND	1	200.00	0.15
ETHYLBENZENE	3	2.7	10.53	0.3
M+P-XYLENES	8.7	7.9	9.64	0.8
METHYLENE CHLORIDE	2.4	3.4	34.48	1
O-XYLENE	5.8	5.3	9.01	0.5
TOLUENE	130	130	0.00	0
TOTAL XYLENES	15	13	14.29	2
TRICHLOROETHENE	81	41	65.57	40

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab File ID: BFB182.D BFB Injection Date: 08/16/2013

Instrument ID: A3UX11 BFB Injection Time: 14:53

Analysis Batch No.: 97870

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	27.9	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.0	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	77.0	
175	5.0 - 9.0 % of mass 174	5.6	(7.3)1
176	95.0 - 101.0 % of mass 174	75.2	(97.8)1
177	5.0 - 9.0 % of mass 176	5.4	(7.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97870/2	UXJ3342.D	08/16/2013	15:26
	STD8260 240-97870/3	UXJ3343.D	08/16/2013	15:50
	STD8260 240-97870/4	UXJ3344.D	08/16/2013	16:14
	STD8260 240-97870/5	UXJ3345.D	08/16/2013	16:38
	STD8260 240-97870/6	UXJ3346.D	08/16/2013	17:02
	STD8260 240-97870/7	UXJ3347.D	08/16/2013	17:25
	STD6 240-97870/8	UXJ3348.D	08/16/2013	17:49
	STD5 240-97870/9	UXJ3349.D	08/16/2013	18:13
	STD4 240-97870/10	UXJ3350.D	08/16/2013	18:36
	STD3 240-97870/11	UXJ3351.D	08/16/2013	19:00
	STD2 240-97870/12	UXJ3352.D	08/16/2013	19:23
	STD1 240-97870/13	UXJ3353.D	08/16/2013	19:47
	ICV 240-97870/14	UXJ3354.D	08/16/2013	20:11

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97870/7	UXJ3347.D
Level 2	STD8260 240-97870/6	UXJ3346.D
Level 3	STD8260 240-97870/5	UXJ3345.D
Level 4	STD8260 240-97870/4	UXJ3344.D
Level 5	STD8260 240-97870/3	UXJ3343.D
Level 6	STD8260 240-97870/2	UXJ3342.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2050 0.2069	0.2165	0.1905	0.1835	0.1962	Ave		0.1997				6.0		15.0			
Chloromethane	0.3836 0.3627	0.3744	0.3702	0.3585	0.3773	Ave		0.3711			0.1000	2.5		15.0			
Vinyl chloride	0.2970 0.2796	0.2816	0.2875	0.2788	0.2885	Ave		0.2855				2.4		15.0			
Bromomethane	0.0902 0.0928	0.0896	0.0882	0.0875	0.0852	Ave		0.0889				2.9		15.0			
Chloroethane	0.1253 0.1277	0.1308	0.1309	0.1239	0.1308	Ave		0.1282				2.4		15.0			
Trichlorofluoromethane	0.2678 0.2756	0.3067	0.2866	0.2745	0.2715	Ave		0.2804				5.1		15.0			
Acrolein	0.0410 0.0438	0.0438	0.0475	0.0482	0.0465	Ave		0.0451				6.0		15.0			
1,1-Dichloroethene	0.2532 0.2375	0.2478	0.2468	0.2446	0.2555	Ave		0.2476				2.6		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.0966 0.1399	0.1660	0.1326	0.1231	0.1275	Lin1	-0.014	0.1353							0.9940		0.9900
Acetone	0.3092 0.1071	0.2325	0.1721	0.1479	0.1289	Qua	0.3734	0.1375	0						1.0000		0.9900
Iodomethane	0.4129 0.3606	0.3709	0.3932	0.3933	0.4004	Ave		0.3885				5.0		15.0			
Carbon disulfide	0.7531 0.6075	0.7219	0.6836	0.6918	0.6835	Ave		0.6903				7.1		15.0			
Acetonitrile	0.0421 0.0334	0.0425	0.0426	0.0378	0.0368	Ave		0.0392				9.7		15.0			
Methyl acetate	0.3974 0.3192	0.3727	0.3681	0.3403	0.3439	Ave		0.3569				7.8		15.0			
Methylene Chloride	0.9491 0.2806	0.5689	0.4243	0.3380	0.3142	Lin1	0.6684	0.2703							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0210 0.0156	0.0209	0.0211	0.0210	0.0207	Ave		0.0200				11.0		15.0			
Acrylonitrile	0.1870 0.1457	0.1597	0.1621	0.1513	0.1512	Ave		0.1595				9.2		15.0			
trans-1,2-Dichloroethene	0.3533 0.3481	0.3265	0.3317	0.3389	0.3315	Ave		0.3383				3.1		15.0			
Methyl tert-butyl ether	0.9157 0.7559	0.7542	0.7730	0.7847	0.7711	Ave		0.7924				7.8		15.0			
Hexane	0.0451 0.0680	0.0773	0.0574	0.0681	0.0579	Lin1	-0.010	0.0654							0.9910		0.9900
1,1-Dichloroethane	0.8025 0.7508	0.7293	0.7254	0.7239	0.7105	Ave		0.7404			0.1000	4.5		15.0			
Vinyl acetate	0.0440 0.0495	0.0415	0.0482	0.0494	0.0501	Ave		0.0471				7.5		15.0			
2-Butanone	0.2005 0.1535	0.2003	0.1813	0.1847	0.1769	Ave		0.1829				9.5		15.0			
cis-1,2-Dichloroethene	0.3848 0.3690	0.3500	0.3592	0.3622	0.3649	Ave		0.3650				3.2		15.0			
2,2-Dichloropropane	0.3421 0.3268	0.3667	0.3653	0.3538	0.3552	Ave		0.3517				4.3		15.0			
Bromochloromethane	0.2257 0.2057	0.2118	0.1996	0.2003	0.2019	Ave		0.2075				4.8		15.0			
Tetrahydrofuran	0.1645 0.0965	0.1385	0.1158	0.1182	0.1091	Lin1	0.0767	0.0998							0.9950		0.9900
Chloroform	0.6517 0.6334	0.5981	0.6259	0.6108	0.6111	Ave		0.6218				3.1		15.0			
1,1,1-Trichloroethane	0.5102 0.4815	0.4629	0.4993	0.5043	0.4946	Ave		0.4921				3.5		15.0			
Cyclohexane	0.4992 0.6461	0.6130	0.5552	0.5930	0.5967	Ave		0.5839				8.7		15.0			
1,1-Dichloropropene	0.4438 0.4620	0.4196	0.4258	0.4347	0.4394	Ave		0.4375				3.4		15.0			
Carbon tetrachloride	0.4398 0.4455	0.4494	0.4270	0.4294	0.4398	Ave		0.4385				2.0		15.0			
Benzene	1.4334 1.4434	1.3464	1.3831	1.3517	1.3641	Ave		1.3870				3.0		15.0			
1,2-Dichloroethane	0.6202 0.5720	0.5573	0.5676	0.5564	0.5589	Ave		0.5721				4.3		15.0			
Trichloroethene	0.3938 0.4061	0.3696	0.3948	0.3853	0.4011	Ave		0.3918				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.2867 0.4356	0.3998	0.3263	0.3585	0.3855	Ave		0.3654				15.0		15.0			
1,2-Dichloropropane	0.4686 0.4171	0.4119	0.4140	0.4117	0.4108	Ave		0.4224				5.4		15.0			
Dibromomethane	0.2258 0.1875	0.1961	0.2070	0.1936	0.1955	Ave		0.2009				6.8		15.0			
1,4-Dioxane	0.0021	0.0025	0.0021	0.0024	0.0023	Ave		0.0023				8.1		15.0			
Bromodichloromethane	0.4259 0.4382	0.4007	0.4398	0.4113	0.4323	Ave		0.4247				3.7		15.0			
2-Chloroethyl vinyl ether	0.1674 0.1999	0.1676	0.1836	0.1888	0.1996	Ave		0.1845				7.9		15.0			
cis-1,3-Dichloropropene	0.4258 0.5097	0.4513	0.4726	0.4900	0.4938	Ave		0.4739				6.5		15.0			
4-Methyl-2-pentanone	0.3283 0.3278	0.3102	0.3353	0.3435	0.3475	Ave		0.3321				4.0		15.0			
Toluene	1.9738 2.1996	1.9199	2.0481	1.9932	2.1061	Ave		2.0401				4.9		15.0			
trans-1,3-Dichloropropene	0.5561 0.6042	0.5109	0.5712	0.5535	0.6213	Ave		0.5695				6.9		15.0			
Ethyl methacrylate	0.3733 0.4741	0.3854	0.4094	0.4308	0.5051	Ave		0.4297				12.0		15.0			
1,1,2-Trichloroethane	0.3726 0.3696	0.3942	0.4092	0.3712	0.3880	Ave		0.3841				4.1		15.0			
1,3-Dichloropropane	0.6458 0.6562	0.6480	0.6624	0.6374	0.6625	Ave		0.6520				1.5		15.0			
Tetrachloroethene	0.3366 0.3931	0.3605	0.3772	0.3618	0.3806	Ave		0.3683				5.4		15.0			
2-Hexanone	0.3457 0.2741	0.2638	0.2961	0.2980	0.3086	Ave		0.2977				9.7		15.0			
Dibromochloromethane	0.3797 0.4126	0.4179	0.4031	0.3981	0.4254	Ave		0.4062				4.0		15.0			
1,2-Dibromoethane	0.3707 0.3552	0.3627	0.3824	0.3517	0.3646	Ave		0.3645				3.0		15.0			
Chlorobenzene	1.3056 1.2616	1.2440	1.2606	1.1898	1.2600	Ave		1.2536			0.3000	3.0		15.0			
1,1,1,2-Tetrachloroethane	0.5187 0.4648	0.4407	0.4570	0.4455	0.4642	Ave		0.4652				6.0		15.0			
Ethylbenzene	0.5355 0.6600	0.5148	0.5782	0.6019	0.6572	Ave		0.5913				10.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6035 0.8215	0.6401	0.7252	0.7630	0.8230	Ave		0.7294				13.0		15.0			
o-Xylene	0.4762 0.6977	0.5965	0.6715	0.6753	0.6992	Ave		0.6361				14.0		15.0			
Styrene	0.8804 1.1787	0.9115	1.0905	1.0960	1.1784	Ave		1.0559				12.0		15.0			
Bromoform	0.1460 0.1361	0.1380	0.1257	0.1414	0.1505	Ave		0.1396			0.1000	6.2		15.0			
Isopropylbenzene	1.2466 1.5529	1.2639	1.4086	1.4368	1.5595	Ave		1.4114				9.6		15.0			
1,1,2,2-Tetrachloroethane	0.9587 0.7953	1.0655	0.9025	0.8644	0.8466	Ave		0.9055			0.3000	11.0		15.0			
Bromobenzene	1.1396 1.1159	1.1021	1.1178	1.1227	1.1382	Ave		1.1227				1.3		15.0			
1,2,3-Trichloropropane	0.3575 0.2637	0.3351	0.3244	0.2971	0.3012	Ave		0.3132				11.0		15.0			
trans-1,4-Dichloro-2-butene	0.2307 0.3110	0.3162	0.3231	0.3423	0.3074	Ave		0.3051				13.0		15.0			
n-Propylbenzene	0.9191 1.1733	1.0676	1.1471	1.0923	1.1433	Ave		1.0904				8.5		15.0			
2-Chlorotoluene	0.9723 1.0388	1.0833	0.9766	1.0638	1.0250	Ave		1.0267				4.4		15.0			
1,3,5-Trimethylbenzene	2.2255 3.0948	2.4704	2.7655	2.8790	3.0227	Ave		2.7430				12.0		15.0			
4-Chlorotoluene	0.9022 1.0802	1.0922	1.0204	1.0932	1.1027	Ave		1.0485				7.4		15.0			
tert-Butylbenzene	2.3013 2.5187	2.0190	2.5477	2.3018	2.3935	Ave		2.3470				8.2		15.0			
1,2,4-Trimethylbenzene	2.3778 3.0042	2.4562	2.7519	2.8622	2.8954	Ave		2.7246				9.3		15.0			
sec-Butylbenzene	2.3846 3.2334	2.6094	2.8211	2.9668	3.0465	Ave		2.8437				11.0		15.0			
1,3-Dichlorobenzene	1.8146 1.7530	1.6766	1.7132	1.6859	1.7001	Ave		1.7239				3.0		15.0			
p-Isopropyltoluene	1.7896 2.9109	2.1277	2.3539	2.4650	2.6051	Lin1	-1.400	2.8129							0.9960		0.9900
1,4-Dichlorobenzene	1.7782 1.7983	1.6803	1.7506	1.7134	1.7528	Ave		1.7456				2.5		15.0			
n-Butylbenzene	1.6781 2.1478	1.6030	1.5894	1.7118	1.8847	Ave		1.7691				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.6012 1.7185	1.6454	1.6361	1.6347	1.6381	Ave		1.6456				2.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1173 0.1360	0.1296	0.1578	0.1336	0.1458	Ave		0.1367				10.0		15.0			
1,3,5-Trichlorobenzene	1.0740 1.0627	1.0062	0.9283	0.9748	1.0091	Ave		1.0092				5.4		15.0			
1,2,4-Trichlorobenzene	0.8062 0.9580	0.7810	0.8479	0.8703	0.8928	Ave		0.8593				7.4		15.0			
Hexachlorobutadiene	0.3379 0.3800	0.4642	0.3382	0.3624	0.3737	Ave		0.3761				12.0		15.0			
Naphthalene	1.8724 2.4357	1.9574	2.0186	2.1470	2.4485	Ave		2.1466				11.0		15.0			
1,2,3-Trichlorobenzene	0.6297 0.8837	0.7184	0.7887	0.8500	0.8932	Ave		0.7939				13.0		15.0			
Dibromofluoromethane (Surr)	0.3664 0.3558	0.3145	0.3367	0.3468	0.3406	Ave		0.3435				5.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4791 0.4478	0.3961	0.4397	0.4403	0.4527	Ave		0.4426				6.1		15.0			
Toluene-d8 (Surr)	1.5671 1.8861	1.4287	1.6925	1.6839	1.8197	Ave		1.6797				9.9		15.0			
4-Bromofluorobenzene (Surr)	0.3557 0.3927	0.3559	0.3695	0.3822	0.4071	Ave		0.3772				5.5		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97870/13	UXJ3353.D
Level 2	STD2 240-97870/12	UXJ3352.D
Level 3	STD3 240-97870/11	UXJ3351.D
Level 4	STD4 240-97870/10	UXJ3350.D
Level 5	STD5 240-97870/9	UXJ3349.D
Level 6	STD6 240-97870/8	UXJ3348.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.2683 0.2447	0.2194	0.2342	0.2458	0.2389	Ave		0.2419				6.6		15.0			
Ethyl ether	0.4166 0.3363	0.3272	0.3580	0.3443	0.3257	Ave		0.3513				9.7		15.0			
3-Chloro-1-propene	0.1711 0.1594	0.1649	0.1607	0.1637	0.1626	Ave		0.1637				2.5		15.0			
Diisopropyl ether	0.2951 0.2879	0.2590	0.2753	0.2826	0.2723	Ave		0.2787				4.6		15.0			
2-Chloro-1,3-butadiene	0.8909 0.8067	0.7747	0.8019	0.7869	0.8028	Ave		0.8107				5.1		15.0			
Ethyl-t-butyl ether (ETBE)	1.2969 1.2223	1.0767	1.2033	1.1860	1.1554	Ave		1.1901				6.1		15.0			
Ethyl acetate	0.4121 0.3700	0.3322	0.3751	0.3629	0.3625	Ave		0.3691				7.0		15.0			
Propionitrile	0.0505 0.0472	0.0443	0.0487	0.0440	0.0440	Ave		0.0464				5.9		15.0			
Methacrylonitrile	0.2783 0.2434	0.2519	0.2401	0.2378	0.2377	Ave		0.2482				6.3		15.0			
Isobutyl alcohol	0.0164 0.0113	0.0121	0.0129	0.0136	0.0123	Ave		0.0131				14.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6900 0.7425	0.6114	0.6799	0.6892	0.7000	Ave		0.6855				6.2		15.0			
n-Heptane	0.0493 0.0610	0.0648	0.0455	0.0478	0.0794	Ave		0.0580				22.0	*	15.0			
n-Butanol	0.0080 0.0063	0.0099	0.0087	0.0109	0.0102	Qua	-0.239	0.0143	0						0.9960		0.9900
Methyl methacrylate	0.2857 0.3339	0.2857	0.2922	0.3108	0.3261	Ave		0.3057				6.9		15.0			
2-Nitropropane	0.1138 0.0943	0.0892	0.0956	0.0928	0.0925	Ave		0.0964				9.1		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1426 0.1291	0.1384	0.1537	0.1626	0.1663	Ave		0.1488				9.8		15.0			
1,2,3-Trimethylbenzene	2.0795 3.3094	1.9372	2.2909	2.5402	2.5808	Qua	0.4789	1.9657	0.0331						0.9990		0.9900
2-Methylnaphthalene	0.8153 1.3785	0.8449	0.8722	0.9460	1.0548	Qua	0.3760	0.7406	0.0079						1.0000		0.9900
n-Butyl acetate	0.3377 0.5103	0.3088	0.3478	0.4216	0.4644	Lin1	-0.602	0.4925							0.9930		0.9900

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab File ID: BFB191B.D BFB Injection Date: 08/26/2013

Instrument ID: A3UX11 BFB Injection Time: 10:53

Analysis Batch No.: 98906

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.1	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	85.9	
175	5.0 - 9.0 % of mass 174	7.7	(8.9)1
176	95.0 - 101.0 % of mass 174	85.9	(100.0)1
177	5.0 - 9.0 % of mass 176	4.5	(5.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	LCS 240-98906/4	UXJ3621.D	08/26/2013	11:38
	CCV 240-98906/3	UXJ3622.D	08/26/2013	12:02
	CCVIS 240-98906/2	UXJ3623.D	08/26/2013	12:26
	MB 240-98906/5	UXJ3625.D	08/26/2013	13:13
DR-DPT-43-25	240-28193-1	UXJ3636.D	08/26/2013	17:43
DR-DPT-43-35	240-28193-3	UXJ3637.D	08/26/2013	18:07
DR-DPT-70-10	240-28193-5	UXJ3638.D	08/26/2013	18:29
TB-082113	240-28193-8	UXJ3639.D	08/26/2013	18:53
	240-28018-B-7 MS	UXJ3646.D	08/26/2013	21:39
	240-28018-B-7 MSD	UXJ3647.D	08/26/2013	22:02

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab Sample ID: CCV 240-98906/3 Calibration Date: 08/26/2013 12:02

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3622.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2419	0.2093		2.00	0.0100	-13.5	50.0
Ethyl ether	Ave	0.3513	0.3525		2.00	0.0100	0.3	50.0
3-Chloro-1-propene	Ave	0.1637	0.1620		2.00	0.0100	-1.0	50.0
Diisopropyl ether	Ave	0.2787	0.3087		10.0	0.0500	10.7	50.0
2-Chloro-1,3-butadiene	Ave	0.8107	0.7689		2.00	0.0100	-5.1	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.190	1.232		5.00	0.0100	3.6	50.0
Ethyl acetate	Ave	0.3691	0.3780		4.00	0.0200	2.4	50.0
Propionitrile	Ave	0.0464	0.0472		4.00	0.0200	1.6	50.0
Methacrylonitrile	Ave	0.2482	0.2297		2.00	0.0100	-7.5	50.0
Isobutyl alcohol	Ave	0.0131	0.0121		50.0	0.200	-7.6	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6855	0.6352		5.00	0.0100	-7.3	50.0
n-Heptane	Ave	0.0580	0.0437		1.00	0.0100	-24.6	50.0
n-Butanol	Qua		0.0067		50.0	0.200	-40.1	50.0
Methyl methacrylate	Ave	0.3057	0.2507		2.00	0.0100	-18.0	50.0
2-Nitropropane	Ave	0.0964	0.0803		2.00	0.0200	-16.7	50.0
Cyclohexanone	Ave	0.1488	0.1175		20.0	0.100	-21.0	50.0
1,2,3-Trimethylbenzene	Qua		2.367		0.0101	0.0100	0.9	50.0
2-Methylnaphthalene	Qua		0.6827		5.00	0.0200	-23.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab Sample ID: CCVIS 240-98906/2 Calibration Date: 08/26/2013 12:26

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3623.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.1419		1.00	0.0100	-29.0	50.0
Chloromethane	Ave	0.3711	0.3573	0.1000	1.00	0.0100	-3.7	50.0
Vinyl chloride	Ave	0.2855	0.2673		1.00	0.0100	-6.4	20.0
Bromomethane	Ave	0.0889	0.0924		1.00	0.0100	3.9	50.0
Chloroethane	Ave	0.1282	0.1335		1.00	0.0100	4.1	50.0
Trichlorofluoromethane	Ave	0.2804	0.2737		1.00	0.0100	-2.4	50.0
Acrolein	Ave	0.0451	0.0472		20.0	0.100	4.5	50.0
1,1-Dichloroethene	Ave	0.2476	0.2359		1.00	0.0100	-4.7	20.0
Acetone	Qua		0.1283		10.0	0.0200	-15.7	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1194		1.00	0.0100	-10.7	50.0
Iodomethane	Ave	0.3885	0.3752		1.00	0.0100	-3.4	50.0
Carbon disulfide	Ave	0.6903	0.5658		1.00	0.0100	-18.0	50.0
Acetonitrile	Ave	0.0392	0.0426		20.0	0.100	8.6	50.0
Methyl acetate	Ave	0.3569	0.3905		10.0	0.0200	9.4	50.0
Methylene Chloride	Lin1		0.3723		1.00	0.0100	13.0	50.0
tert-Butyl alcohol	Ave	0.0200	0.0242		50.0	0.200	20.9	50.0
Acrylonitrile	Ave	0.1595	0.1822		20.0	0.0200	14.2	50.0
Methyl tert-butyl ether	Ave	0.7924	0.9462		1.00	0.0100	19.4	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3823		1.00	0.0100	13.0	50.0
Hexane	Lin1		0.0546		1.00	0.0100	-15.0	20.0
1,1-Dichloroethane	Ave	0.7404	0.8281	0.1000	1.00	0.0100	11.8	50.0
Vinyl acetate	Ave	0.0471	0.0546		2.00	0.0100	15.9	50.0
2-Butanone	Ave	0.1829	0.1913		10.0	0.0200	4.6	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.4293		1.00	0.0100	17.6	50.0
2,2-Dichloropropane	Ave	0.3517	0.3918		1.00	0.0100	11.4	50.0
Bromochloromethane	Ave	0.2075	0.2224		1.00	0.0100	7.2	50.0
Chloroform	Ave	0.6218	0.6459		1.00	0.0100	3.9	20.0
Tetrahydrofuran	Lin1		0.0991		5.00	0.0100	-8.4	50.0
1,1,1-Trichloroethane	Ave	0.4921	0.4902		1.00	0.0100	-0.4	50.0
Cyclohexane	Ave	0.5839	0.4800		1.00	0.0100	-17.8	50.0
1,1-Dichloropropene	Ave	0.4375	0.4139		1.00	0.0100	-5.4	50.0
Carbon tetrachloride	Ave	0.4385	0.4383		1.00	0.0100	-0.0	50.0
1,2-Dichloroethane	Ave	0.5721	0.5735		1.00	0.0100	0.2	50.0
Benzene	Ave	1.387	1.320		1.00	0.0100	-4.9	50.0
Trichloroethene	Ave	0.3918	0.4303		1.00	0.0100	9.8	50.0
Methylcyclohexane	Ave	0.3654	0.3149		1.00	0.0100	-13.8	50.0
1,2-Dichloropropane	Ave	0.4224	0.3986		1.00	0.0100	-5.6	20.0
Dibromomethane	Ave	0.2009	0.1951		1.00	0.0100	-2.9	50.0
1,4-Dioxane	Ave	0.0023	0.0013		50.0	0.500	-41.2	50.0
Bromodichloromethane	Ave	0.4247	0.4588		1.00	0.0100	8.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab Sample ID: CCVIS 240-98906/2 Calibration Date: 08/26/2013 12:26

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3623.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1845	0.1570		10.0	0.0200	-14.9	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4773		1.00	0.0100	0.7	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.2892		10.0	0.0200	-12.9	50.0
Toluene	Ave	2.040	2.070		1.00	0.0100	1.5	20.0
trans-1,3-Dichloropropene	Ave	0.5695	0.5672		1.00	0.0100	-0.4	50.0
Ethyl methacrylate	Ave	0.4297	0.4486		1.00	0.0100	4.4	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.4061		1.00	0.0100	5.7	50.0
1,3-Dichloropropane	Ave	0.6520	0.6495		1.00	0.0100	-0.4	50.0
Tetrachloroethene	Ave	0.3683	0.4042		1.00	0.0100	9.7	50.0
2-Hexanone	Ave	0.2977	0.2442		10.0	0.0200	-18.0	50.0
Dibromochloromethane	Ave	0.4062	0.4856		1.00	0.0100	19.5	50.0
1,2-Dibromoethane	Ave	0.3645	0.3699		1.00	0.0100	1.5	50.0
Chlorobenzene	Ave	1.254	1.248	0.3000	1.00	0.0100	-0.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.5020		1.00	0.0100	7.9	50.0
Ethylbenzene	Ave	0.5913	0.6200		1.00	0.0100	4.9	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.8054		2.00	0.0200	10.4	50.0
o-Xylene	Ave	0.6361	0.6990		1.00	0.0100	9.9	50.0
Styrene	Ave	1.056	1.166		1.00	0.0100	10.4	50.0
Bromoform	Ave	0.1396	0.1946	0.1000	1.00	0.0100	39.4	50.0
Isopropylbenzene	Ave	1.411	1.486		1.00	0.0100	5.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.8305	0.3000	1.00	0.0100	-8.3	50.0
Bromobenzene	Ave	1.123	1.253		1.00	0.0100	11.6	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2942		1.00	0.0100	-6.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.1696		1.00	0.0100	-44.4	50.0
n-Propylbenzene	Ave	1.090	1.077		1.00	0.0100	-1.2	50.0
2-Chlorotoluene	Ave	1.027	1.016		1.00	0.0100	-1.1	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.860		1.00	0.0100	4.3	50.0
4-Chlorotoluene	Ave	1.048	1.066		1.00	0.0100	1.7	50.0
tert-Butylbenzene	Ave	2.347	2.276		1.00	0.0100	-3.0	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.769		1.00	0.0100	1.6	50.0
sec-Butylbenzene	Ave	2.844	2.930		1.00	0.0100	3.0	50.0
1,3-Dichlorobenzene	Ave	1.724	1.833		1.00	0.0100	6.3	50.0
p-Isopropyltoluene	Lin1		2.464		1.00	0.0100	-7.4	50.0
1,4-Dichlorobenzene	Ave	1.746	1.821		1.00	0.0100	4.3	50.0
n-Butylbenzene	Ave	1.769	1.683		1.00	0.0100	-4.9	50.0
1,2-Dichlorobenzene	Ave	1.646	1.819		1.00	0.0100	10.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1699		2.00	0.0100	24.3	50.0
1,3,5-Trichlorobenzene	Ave	1.009	0.9680		1.00	0.0100	-4.1	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.8077		1.00	0.0100	-6.0	50.0
Hexachlorobutadiene	Ave	0.3761	0.3445		1.00	0.0100	-8.4	50.0
Naphthalene	Ave	2.147	2.160		1.00	0.0100	0.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab Sample ID: CCVIS 240-98906/2 Calibration Date: 08/26/2013 12:26

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3623.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7939	0.8116		1.00	0.0100	2.2	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.2899		0.00704	0.00834	-15.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3313		0.00624	0.00834	-25.1	50.0
Toluene-d8 (Surr)	Ave	1.680	1.457		0.00723	0.00834	-13.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.3798		0.00840	0.00834	0.7	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab File ID: UXJ3625.D Lab Sample ID: MB 240-98906/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 08/26/2013 13:13

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98906/4	UXJ3621.D	08/26/2013 11:38
DR-DPT-43-25	240-28193-1	UXJ3636.D	08/26/2013 17:43
DR-DPT-43-35	240-28193-3	UXJ3637.D	08/26/2013 18:07
DR-DPT-70-10	240-28193-5	UXJ3638.D	08/26/2013 18:29
TB-082113	240-28193-8	UXJ3639.D	08/26/2013 18:53
	240-28018-B-7 MS	UXJ3646.D	08/26/2013 21:39
	240-28018-B-7 MSD	UXJ3647.D	08/26/2013 22:02

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28193-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98906/5

Matrix: Water | Lab File ID: UXJ3625.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2013 13:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98906 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28193-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98906/5

Matrix: Water | Lab File ID: UXJ3625.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2013 13:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98906 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.342	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98906/5

Matrix: Water Lab File ID: UXJ3625.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 13:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	84		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98906/5

Matrix: Water Lab File ID: UXJ3625.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2013 13:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98906 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab File ID: BFB208A.D BFB Injection Date: 08/22/2013

Instrument ID: A3UX15 BFB Injection Time: 14:12

Analysis Batch No.: 98656

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	48.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.3	(0.3)1
174	50.0 - 120.00 % of mass 95	97.8	
175	5.0 - 9.0 % of mass 174	5.8	(5.9)1
176	95.0 - 101.0 % of mass 174	93.9	(96.1)1
177	5.0 - 9.0 % of mass 176	5.9	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-98656/2	UXC4298.D	08/22/2013	16:48
	STD8260 240-98656/3	UXC4299.D	08/22/2013	17:10
	STD8260 240-98656/4	UXC4300.D	08/22/2013	17:32
	STD8260 240-98656/5	UXC4301.D	08/22/2013	17:55
	STD8260 240-98656/6	UXC4302.D	08/22/2013	18:17
	STD8260 240-98656/7	UXC4303.D	08/22/2013	18:39
	STD 240-98656/8	UXC4304.D	08/22/2013	19:01
	STD 240-98656/9	UXC4305.D	08/22/2013	19:23
	STD 240-98656/10	UXC4306.D	08/22/2013	19:46
	STD 240-98656/11	UXC4307.D	08/22/2013	20:08
	STD 240-98656/12	UXC4308.D	08/22/2013	20:30
	STD 240-98656/13	UXC4309.D	08/22/2013	20:52
	ICV 240-98656/20	UXC4316.D	08/22/2013	23:29

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-98656/7	UXC4303.D
Level 2	STD8260 240-98656/6	UXC4302.D
Level 3	STD8260 240-98656/5	UXC4301.D
Level 4	STD8260 240-98656/4	UXC4300.D
Level 5	STD8260 240-98656/3	UXC4299.D
Level 6	STD8260 240-98656/2	UXC4298.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.4086 0.3921	0.3945	0.3636	0.4031	0.4141	Ave		0.3960				4.5		15.0			
Chloromethane	0.5219 0.4026	0.5299	0.4360	0.4576	0.4543	Ave		0.4670			0.1000	11.0		15.0			
Vinyl chloride	0.4826 0.4161	0.4955	0.4244	0.4441	0.4452	Ave		0.4513				7.0		15.0			
Bromomethane	0.2825 0.1848	0.2719	0.2220	0.2251	0.2207	Ave		0.2345				15.0		15.0			
Chloroethane	0.3072 0.2073	0.2964	0.2445	0.2489	0.2377	Ave		0.2570				15.0		15.0			
Trichlorofluoromethane	0.5068 0.4575	0.4705	0.4276	0.4729	0.4813	Ave		0.4695				5.6		15.0			
Acrolein	0.0311 0.0337	0.0359	0.0330	0.0358	0.0359	Ave		0.0342				5.7		15.0			
1,1-Dichloroethene	0.4321 0.3704	0.4167	0.3738	0.3995	0.4015	Ave		0.3990				6.0		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.3407 0.3025	0.3508	0.2971	0.3203	0.3342	Ave		0.3243				6.6		15.0			
Acetone	0.1195 0.0720	0.1006	0.0781	0.0812	0.0731	Lin1	0.1037	0.0712							0.9990		0.9900
Iodomethane	0.7327 0.6374	0.6949	0.6512	0.6854	0.6906	Ave		0.6820				5.0		15.0			
Carbon disulfide	1.3512 1.1983	1.3360	1.1843	1.2682	1.2832	Ave		1.2702				5.4		15.0			
Acetonitrile	0.0212 0.0274	0.0241	0.0238	0.0269	0.0271	Ave		0.0251				9.9		15.0			
Methyl acetate	0.1978 0.1740	0.1942	0.1756	0.1861	0.1882	Ave		0.1860				5.2		15.0			
Methylene Chloride	0.8395 0.4010	0.6441	0.4784	0.4677	0.4417	Lin1	0.4609	0.4014							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0109 0.0150	0.0126	0.0145	0.0155	0.0164	Ave		0.0141				14.0		15.0			
Acrylonitrile	0.0870 0.0932	0.0941	0.0865	0.0976	0.0962	Ave		0.0924				5.0		15.0			
Methyl tert-butyl ether	0.8438 0.8198	0.8751	0.8092	0.8445	0.8674	Ave		0.8433				3.1		15.0			
trans-1,2-Dichloroethene	0.4671 0.4054	0.4591	0.4324	0.4401	0.4365	Ave		0.4401				4.9		15.0			
Hexane	0.0783 0.0743	0.0784	0.0709	0.0762	0.0797	Ave		0.0763				4.3		15.0			
1,1-Dichloroethane	0.7084 0.6404	0.7270	0.6483	0.6818	0.6915	Ave		0.6829			0.1000	4.9		15.0			
Vinyl acetate	0.0302 0.0382	0.0316	0.0308	0.0366	0.0400	Ave		0.0346				12.0		15.0			
2,2-Dichloropropane	0.3958 0.4009	0.3735	0.3839	0.4008	0.4249	Ave		0.3966				4.4		15.0			
cis-1,2-Dichloroethene	0.4660 0.4187	0.4620	0.4274	0.4484	0.4474	Ave		0.4450				4.2		15.0			
2-Butanone	0.1045 0.0871	0.0892	0.0856	0.0898	0.0881	Ave		0.0907				7.6		15.0			
Bromochloromethane	0.1947 0.1841	0.1961	0.1864	0.1964	0.2028	Ave		0.1934				3.6		15.0			
Tetrahydrofuran	0.0635 0.0588	0.0774	0.0604	0.0602	0.0611	Ave		0.0636				11.0		15.0			
Chloroform	0.6744 0.6305	0.7025	0.6442	0.6657	0.6803	Ave		0.6663				3.9		15.0			
1,1,1-Trichloroethane	0.5450 0.5334	0.5431	0.5073	0.5454	0.5680	Ave		0.5404				3.7		15.0			
Cyclohexane	0.6423 0.6349	0.6599	0.5833	0.6490	0.6763	Ave		0.6410				4.9		15.0			
1,1-Dichloropropene	0.4789 0.4865	0.5165	0.4636	0.4873	0.5075	Ave		0.4900				3.9		15.0			
Carbon tetrachloride	0.4202 0.4681	0.4558	0.4209	0.4739	0.4888	Ave		0.4546				6.3		15.0			
Benzene	1.4584 1.4225	1.4726	1.3976	1.4474	1.4776	Ave		1.4460				2.1		15.0			
1,2-Dichloroethane	0.4014 0.3945	0.4249	0.3869	0.4040	0.4084	Ave		0.4033				3.2		15.0			
Trichloroethene	0.3974 0.3713	0.3745	0.3600	0.3804	0.3838	Ave		0.3779				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.5490 0.5638	0.5676	0.5191	0.5805	0.6022	Ave		0.5637				5.0		15.0			
1,2-Dichloropropane	0.2924 0.3026	0.2999	0.2710	0.3117	0.3082	Ave		0.2976				4.9		15.0			
Dibromomethane	0.1561 0.1655	0.1739	0.1585	0.1659	0.1690	Ave		0.1648				4.0		15.0			
1,4-Dioxane	0.0017 0.0021	0.0024	0.0019	0.0021	0.0024	Ave		0.0021				12.0		15.0			
Bromodichloromethane	0.2858 0.3738	0.3245	0.3253	0.3562	0.3681	Ave		0.3390				9.9		15.0			
2-Chloroethyl vinyl ether	0.0637 0.1165	0.0730	0.0875	0.0969	0.0997	Lin1	-0.140	0.1114							0.9930		0.9900
cis-1,3-Dichloropropene	0.2485 0.4004	0.2728	0.2997	0.3426	0.3620	Lin1	-0.214	0.3880							0.9960		0.9900
4-Methyl-2-pentanone	0.1251 0.1761	0.1569	0.1441	0.1685	0.1717	Ave		0.1571				12.0		15.0			
Toluene	2.4964 2.0082	2.5638	2.0462	2.0392	2.1864	Ave		2.2234				11.0		15.0			
trans-1,3-Dichloropropene	0.3289 0.4446	0.3264	0.3542	0.3786	0.4299	Ave		0.3771				13.0		15.0			
Ethyl methacrylate	0.2604 0.3589	0.2922	0.3068	0.3273	0.3807	Ave		0.3210				14.0		15.0			
1,1,2-Trichloroethane	0.2925 0.2959	0.3077	0.2929	0.3030	0.3114	Ave		0.3006				2.7		15.0			
Tetrachloroethene	0.4133 0.4146	0.4404	0.4027	0.4246	0.4476	Ave		0.4239				4.1		15.0			
1,3-Dichloropropane	0.4880 0.5288	0.5105	0.4996	0.5046	0.5404	Ave		0.5120				3.8		15.0			
2-Hexanone	0.1207 0.1483	0.1358	0.1377	0.1386	0.1554	Ave		0.1394				8.5		15.0			
Dibromochloromethane	0.2911 0.3578	0.2870	0.2947	0.3152	0.3542	Ave		0.3167				10.0		15.0			
1,2-Dibromoethane	0.2566 0.3058	0.2753	0.2844	0.2921	0.3136	Ave		0.2880				7.2		15.0			
Chlorobenzene	1.2828 1.2480	1.2633	1.2272	1.2366	1.3261	Ave		1.2640			0.3000	2.9		15.0			
1,1,1,2-Tetrachloroethane	0.4392 0.4848	0.4850	0.4607	0.4803	0.5401	Ave		0.4817				7.0		15.0			
Ethylbenzene	0.6619 0.6922	0.6533	0.6794	0.6915	0.7531	Ave		0.6886				5.1		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	1.5336 1.4861	1.6352	1.6595	1.7309	1.8773	Ave		1.6538				8.5		15.0			
o-Xylene	0.8230 0.9047	0.8706	0.8915	0.9245	1.0088	Ave		0.9038				6.9		15.0			
Styrene	1.1282 1.3929	1.1899	1.2597	1.3494	1.4622	Ave		1.2970				9.8		15.0			
Bromoform	0.1634 0.2260	0.1790	0.1835	0.1954	0.2249	Ave		0.1954			0.1000	13.0		15.0			
Isopropylbenzene	1.9701 2.3478	2.0502	2.1946	2.3528	2.5810	Ave		2.2494				10.0		15.0			
1,1,2,2-Tetrachloroethane	0.6612 0.6315	0.6452	0.5887	0.6416	0.6406	Ave		0.6348			0.3000	3.9		15.0			
Bromobenzene	0.8873 0.9012	0.8688	0.8194	0.8700	0.9013	Ave		0.8747				3.5		15.0			
1,2,3-Trichloropropane	0.1965 0.1952	0.2146	0.1828	0.1910	0.2080	Ave		0.1980				5.8		15.0			
trans-1,4-Dichloro-2-butene	0.1249 0.1203	0.1232	0.1053	0.1137	0.1164	Ave		0.1173				6.1		15.0			
n-Propylbenzene	0.7511 0.8885	0.8079	0.7930	0.8782	0.9113	Ave		0.8383				7.5		15.0			
2-Chlorotoluene	0.8162 0.8410	0.7903	0.8095	0.8442	0.8659	Ave		0.8278				3.3		15.0			
1,3,5-Trimethylbenzene	2.2799 2.9229	2.3979	2.5338	2.8013	2.9366	Ave		2.6454				11.0		15.0			
4-Chlorotoluene	2.6515 2.7164	2.5944	2.5470	2.6738	2.7232	Ave		2.6510				2.6		15.0			
tert-Butylbenzene	1.8297 2.5112	1.8781	2.0570	2.3874	2.5069	Ave		2.1951				14.0		15.0			
1,2,4-Trimethylbenzene	2.3578 2.9656	2.4916	2.6670	2.8810	2.9934	Ave		2.7261				9.7		15.0			
sec-Butylbenzene	2.7131 3.3725	2.7512	2.9385	3.2729	3.4117	Ave		3.0767				10.0		15.0			
1,3-Dichlorobenzene	1.8155 1.7683	1.8196	1.6936	1.7695	1.8121	Ave		1.7798				2.7		15.0			
p-Isopropyltoluene	2.2226 2.9651	2.4005	2.5470	2.8918	2.9922	Ave		2.6699				12.0		15.0			
1,4-Dichlorobenzene	1.9308 1.8321	1.8364	1.7737	1.8677	1.8955	Ave		1.8560				3.0		15.0			
n-Butylbenzene	2.1121 2.5030	2.1368	2.2000	2.4493	2.5690	Ave		2.3284				8.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 16:48 Calibration End Date: 08/22/2013 18:39 Calibration ID: 17022

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.7483 1.7094	1.7439	1.6963	1.7751	1.8225	Ave		1.7493				2.6		15.0			
1,2-Dibromo-3-Chloropropane	0.0927 0.1171	0.1051	0.0883	0.1129	0.1215	Ave		0.1063				13.0		15.0			
1,3,5-Trichlorobenzene	1.2362 1.2346	1.2878	1.2042	1.3188	1.3360	Ave		1.2696				4.1		15.0			
1,2,4-Trichlorobenzene	0.9557 1.0150	0.9746	0.9417	1.0654	1.1003	Ave		1.0088				6.3		15.0			
Hexachlorobutadiene	0.5783 0.5334	0.5938	0.5590	0.6380	0.6215	Ave		0.5873				6.6		15.0			
Naphthalene	1.4625 2.0692	1.6561	1.6653	2.0093	2.2516	Lin1	-0.899	2.1332							0.9960		0.9900
1,2,3-Trichlorobenzene	0.9002 0.8311	0.9217	0.8176	0.9158	0.9348	Ave		0.8869				5.6		15.0			
Dibromofluoromethane (Surr)	0.3112 0.3193	0.3246	0.3087	0.3413	0.3345	Ave		0.3233				4.0		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3194 0.3179	0.3251	0.3051	0.3223	0.3263	Ave		0.3193				2.4		15.0			
Toluene-d8 (Surr)	1.5842 1.6556	1.6671	1.5555	1.6537	1.7721	Ave		1.6480				4.6		15.0			
4-Bromofluorobenzene (Surr)	0.5415 0.5744	0.5701	0.5631	0.5629	0.6103	Ave		0.5704				4.0		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 19:01 Calibration End Date: 08/22/2013 20:52 Calibration ID: 17024

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-98656/13	UXC4309.D
Level 2	STD 240-98656/12	UXC4308.D
Level 3	STD 240-98656/11	UXC4307.D
Level 4	STD 240-98656/10	UXC4306.D
Level 5	STD 240-98656/9	UXC4305.D
Level 6	STD 240-98656/8	UXC4304.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.6779 0.6367	0.6657	0.6646	0.6374	0.6342	Ave		0.6527				2.9		15.0			
Ethyl ether	0.2477 0.2516	0.2495	0.2526	0.2474	0.2391	Ave		0.2480				1.9		15.0			
3-Chloro-1-propene	0.1914 0.2222	0.1985	0.1893	0.2056	0.2132	Ave		0.2034				6.3		15.0			
Diisopropyl ether	0.2998 0.3561	0.3194	0.3264	0.3307	0.3418	Ave		0.3290				5.8		15.0			
2-Chloro-1,3-butadiene	0.5528 0.6048	0.5476	0.5730	0.5869	0.5906	Ave		0.5759				3.9		15.0			
Ethyl-t-butyl ether (ETBE)	0.8226 0.9697	0.8804	0.8735	0.8939	0.9288	Ave		0.8948				5.6		15.0			
Ethyl acetate	0.1339 0.1475	0.1333	0.1362	0.1297	0.1506	Ave		0.1385				6.1		15.0			
Propionitrile	0.0200 0.0324	0.0312	0.0284	0.0282	0.0293	Ave		0.0283				15.0		15.0			
Methacrylonitrile	0.0994 0.1237	0.1209	0.1029	0.1140	0.1210	Ave		0.1137				9.0		15.0			
Isobutyl alcohol	0.0050 0.0057	0.0048	0.0049	0.0042	0.0055	Ave		0.0050				11.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6038 0.7912	0.6480	0.6872	0.7136	0.7558	Ave		0.6999				9.8		15.0			
n-Heptane	0.0571 0.0694	0.0609	0.0612	0.0680	0.0692	Ave		0.0643				8.1		15.0			
n-Butanol	0.0030 0.0043	0.0038	0.0042	0.0039	0.0045	Ave		0.0039				14.0		15.0			
Methyl methacrylate	0.1090 0.1178	0.1025	0.0908	0.1002	0.1113	Ave		0.1053				9.0		15.0			
2-Nitropropane	0.0255 0.0246	0.0232	0.0198	0.0219	0.0230	Ave		0.0230				8.8		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 98656

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2013 19:01 Calibration End Date: 08/22/2013 20:52 Calibration ID: 17024

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0603 0.1016	0.0697	0.0814	0.0802	0.0914	Lin1	-0.545	0.0978							0.9940		0.9900
1,2,3-Trimethylbenzene	2.1936 3.3662	2.3500	2.7504	2.8092	3.2831	Lin1	-1.702	3.3238							0.9970		0.9900
2-Methylnaphthalene	0.5728 0.8431	0.5680	0.5198	0.8556	0.9803	Qua	-2.945	1.1289	-0.003						0.9950		0.9900
n-Butyl acetate	0.1618 0.2104	0.1591	0.1739	0.1804	0.2013	Ave		0.1812				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab File ID: BFB210.D BFB Injection Date: 08/25/2013

Instrument ID: A3UX15 BFB Injection Time: 06:18

Analysis Batch No.: 98830

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
75	30.0 - 60.0 % of mass 95	51.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.8	
173	Less than 2.0 % of mass 174	0.5	(0.5)1
174	50.0 - 120.00 % of mass 95	89.3	
175	5.0 - 9.0 % of mass 174	6.4	(7.2)1
176	95.0 - 101.0 % of mass 174	85.6	(95.9)1
177	5.0 - 9.0 % of mass 176	6.1	(7.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	LCS 240-98830/4	UXC4378.D	08/25/2013	07:26
	CCVIS 240-98830/2	UXC4379.D	08/25/2013	07:49
	CCV 240-98830/3	UXC4380.D	08/25/2013	08:14
	MB 240-98830/5	UXC4382.D	08/25/2013	08:58
DR-DPT-43-30	240-28193-2	UXC4394.D	08/25/2013	13:27
DR-DPT-43-40	240-28193-4	UXC4396.D	08/25/2013	14:13
DR-DPT-70-15	240-28193-6	UXC4398.D	08/25/2013	14:58
DR-DPT-DUP06	240-28193-7	UXC4399.D	08/25/2013	15:20
	240-27932-D-10 MS	UXC4403.D	08/25/2013	16:50
	240-27932-F-10 MSD	UXC4404.D	08/25/2013	17:12

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab Sample ID: CCVIS 240-98830/2 Calibration Date: 08/25/2013 07:49

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC4379.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3960	0.4276		1.00	0.0100	8.0	50.0
Chloromethane	Ave	0.4670	0.4671	0.1000	1.00	0.0100	0.0	50.0
Vinyl chloride	Ave	0.4513	0.4693		1.00	0.0100	4.0	20.0
Bromomethane	Ave	0.2345	0.2244		1.00	0.0100	-4.3	50.0
Chloroethane	Ave	0.2570	0.2568		1.00	0.0100	-0.0	50.0
Trichlorofluoromethane	Ave	0.4695	0.5891		1.00	0.0100	25.5	50.0
Acrolein	Ave	0.0342	0.0278		20.0	0.100	-18.7	50.0
1,1-Dichloroethene	Ave	0.3990	0.3371		1.00	0.0100	-15.5	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.3243	0.2882		1.00	0.0100	-11.1	50.0
Acetone	Lin1		0.0688		10.0	0.0200	-10.7	50.0
Iodomethane	Ave	0.6820	0.5627		1.00	0.0100	-17.5	50.0
Carbon disulfide	Ave	1.270	1.044		1.00	0.0100	-17.8	50.0
Acetonitrile	Ave	0.0251	0.0272		20.0	0.100	8.2	50.0
Methyl acetate	Ave	0.1860	0.1889		10.0	0.0200	1.6	50.0
Methylene Chloride	Lin1		0.4267		1.00	0.0100	-5.2	50.0
tert-Butyl alcohol	Ave	0.0141	0.0137		50.0	0.200	-2.8	50.0
Acrylonitrile	Ave	0.0924	0.0905		20.0	0.0200	-2.1	50.0
Methyl tert-butyl ether	Ave	0.8433	0.7838		1.00	0.0100	-7.1	50.0
trans-1,2-Dichloroethene	Ave	0.4401	0.3978		1.00	0.0100	-9.6	50.0
Hexane	Ave	0.0763	0.0728		1.00	0.0100	-4.5	20.0
1,1-Dichloroethane	Ave	0.6829	0.6626	0.1000	1.00	0.0100	-3.0	50.0
Vinyl acetate	Ave	0.0346	0.0363		2.00	0.0100	5.0	50.0
2,2-Dichloropropane	Ave	0.3966	0.4019		1.00	0.0100	1.3	50.0
cis-1,2-Dichloroethene	Ave	0.4450	0.4296		1.00	0.0100	-3.5	50.0
2-Butanone	Ave	0.0907	0.0862		10.0	0.0200	-5.0	50.0
Bromochloromethane	Ave	0.1934	0.1861		1.00	0.0100	-3.8	50.0
Tetrahydrofuran	Ave	0.0636	0.0613		5.00	0.0100	-3.6	50.0
Chloroform	Ave	0.6663	0.6689		1.00	0.0100	0.4	20.0
1,1,1-Trichloroethane	Ave	0.5404	0.5417		1.00	0.0100	0.2	50.0
Cyclohexane	Ave	0.6410	0.6232		1.00	0.0100	-2.8	50.0
1,1-Dichloropropene	Ave	0.4900	0.5166		1.00	0.0100	5.4	50.0
Carbon tetrachloride	Ave	0.4546	0.4791		1.00	0.0100	5.4	50.0
Benzene	Ave	1.446	1.481		1.00	0.0100	2.4	50.0
1,2-Dichloroethane	Ave	0.4033	0.4314		1.00	0.0100	7.0	50.0
Trichloroethene	Ave	0.3779	0.4004		1.00	0.0100	6.0	50.0
Methylcyclohexane	Ave	0.5637	0.5716		1.00	0.0100	1.4	50.0
1,2-Dichloropropane	Ave	0.2976	0.3335		1.00	0.0100	12.0	20.0
Dibromomethane	Ave	0.1648	0.1719		1.00	0.0100	4.3	50.0
1,4-Dioxane	Ave	0.0021	0.0021		50.0	0.500	0.0	50.0
Bromodichloromethane	Ave	0.3390	0.3888		1.00	0.0100	14.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab Sample ID: CCVIS 240-98830/2 Calibration Date: 08/25/2013 07:49

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC4379.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Lin1		0.1227		10.0	0.0200	16.4	50.0
cis-1,3-Dichloropropene	Lin1		0.4060		1.00	0.0100	10.2	50.0
4-Methyl-2-pentanone	Ave	0.1571	0.1618		10.0	0.0200	3.0	50.0
Toluene	Ave	2.223	2.138		1.00	0.0100	-3.8	20.0
trans-1,3-Dichloropropene	Ave	0.3771	0.4497		1.00	0.0100	19.3	50.0
Ethyl methacrylate	Ave	0.3210	0.3828		1.00	0.0100	19.2	50.0
1,1,2-Trichloroethane	Ave	0.3006	0.3249		1.00	0.0100	8.1	50.0
Tetrachloroethene	Ave	0.4239	0.4434		1.00	0.0100	4.6	50.0
1,3-Dichloropropane	Ave	0.5120	0.5856		1.00	0.0100	14.4	50.0
2-Hexanone	Ave	0.1394	0.1464		10.0	0.0200	5.0	50.0
Dibromochloromethane	Ave	0.3167	0.3594		1.00	0.0100	13.5	50.0
1,2-Dibromoethane	Ave	0.2880	0.3353		1.00	0.0100	16.5	50.0
Chlorobenzene	Ave	1.264	1.341	0.3000	1.00	0.0100	6.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4817	0.4726		1.00	0.0100	-1.9	50.0
Ethylbenzene	Ave	0.6886	0.7219		1.00	0.0100	4.8	20.0
m-Xylene & p-Xylene	Ave	1.654	1.783		2.00	0.0200	7.8	50.0
o-Xylene	Ave	0.9038	0.8910		1.00	0.0100	-1.4	50.0
Styrene	Ave	1.297	1.418		1.00	0.0100	9.3	50.0
Bromoform	Ave	0.1954	0.2078	0.1000	1.00	0.0100	6.3	50.0
Isopropylbenzene	Ave	2.249	2.258		1.00	0.0100	0.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6348	0.6743	0.3000	1.00	0.0100	6.2	50.0
Bromobenzene	Ave	0.8747	0.999		1.00	0.0100	14.2	50.0
1,2,3-Trichloropropane	Ave	0.1980	0.2224		1.00	0.0100	12.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1173	0.0698		1.00	0.0100	-40.5	50.0
n-Propylbenzene	Ave	0.8383	1.011		1.00	0.0100	20.6	50.0
2-Chlorotoluene	Ave	0.8278	0.9006		1.00	0.0100	8.8	50.0
1,3,5-Trimethylbenzene	Ave	2.645	3.050		1.00	0.0100	15.3	50.0
4-Chlorotoluene	Ave	2.651	3.002		1.00	0.0100	13.2	50.0
tert-Butylbenzene	Ave	2.195	2.599		1.00	0.0100	18.4	50.0
1,2,4-Trimethylbenzene	Ave	2.726	3.151		1.00	0.0100	15.6	50.0
sec-Butylbenzene	Ave	3.077	3.562		1.00	0.0100	15.8	50.0
1,3-Dichlorobenzene	Ave	1.780	1.883		1.00	0.0100	5.8	50.0
p-Isopropyltoluene	Ave	2.670	3.111		1.00	0.0100	16.5	50.0
1,4-Dichlorobenzene	Ave	1.856	1.988		1.00	0.0100	7.1	50.0
n-Butylbenzene	Ave	2.328	2.621		1.00	0.0100	12.5	50.0
1,2-Dichlorobenzene	Ave	1.749	1.823		1.00	0.0100	4.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1063	0.1066		2.00	0.0100	0.3	50.0
1,3,5-Trichlorobenzene	Ave	1.270	1.323		1.00	0.0100	4.2	50.0
1,2,4-Trichlorobenzene	Ave	1.009	1.028		1.00	0.0100	1.9	50.0
Hexachlorobutadiene	Ave	0.5873	0.6335		1.00	0.0100	7.9	50.0
Naphthalene	Lin1		1.818		1.00	0.0100	-10.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab Sample ID: CCVIS 240-98830/2 Calibration Date: 08/25/2013 07:49

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 16:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 18:39

Lab File ID: UXC4379.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.8869	0.8431		1.00	0.0100	-4.9	50.0
Dibromofluoromethane (Surr)	Ave	0.3233	0.2934		0.00808	0.00890	-9.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3193	0.2993		0.00834	0.00890	-6.3	50.0
Toluene-d8 (Surr)	Ave	1.648	1.528		0.00825	0.00890	-7.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5704	0.5323		0.00831	0.00890	-6.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab Sample ID: CCV 240-98830/3 Calibration Date: 08/25/2013 08:14

Instrument ID: A3UX15 Calib Start Date: 08/22/2013 19:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/22/2013 20:52

Lab File ID: UXC4380.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.6527	0.4944		2.00	0.0100	-24.3	50.0
Ethyl ether	Ave	0.2480	0.2326		2.00	0.0100	-6.2	50.0
3-Chloro-1-propene	Ave	0.2034	0.1907		2.00	0.0100	-6.2	50.0
Diisopropyl ether	Ave	0.3290	0.3012		10.0	0.0500	-8.4	50.0
2-Chloro-1,3-butadiene	Ave	0.5759	0.5340		2.00	0.0100	-7.3	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8948	0.7998		5.00	0.0100	-10.6	50.0
Ethyl acetate	Ave	0.1385	0.1704		4.00	0.0200	23.0	50.0
Propionitrile	Ave	0.0283	0.0301		4.00	0.0200	6.6	50.0
Methacrylonitrile	Ave	0.1137	0.1313		2.00	0.0100	15.5	50.0
Isobutyl alcohol	Ave	0.0050	0.0053		50.0	0.200	5.5	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6999	0.6560		5.00	0.0100	-6.3	50.0
n-Heptane	Ave	0.0643	0.0727		1.00	0.0100	13.0	50.0
n-Butanol	Ave	0.0039	0.0040		50.0	0.200	2.7	50.0
Methyl methacrylate	Ave	0.1053	0.1517		2.00	0.0100	44.1	50.0
2-Nitropropane	Ave	0.0230	0.0304		2.00	0.0200	32.1	50.0
Cyclohexanone	Lin1		0.0735		20.0	0.100	-19.3	50.0
1,2,3-Trimethylbenzene	Lin1		3.023		0.00961	0.0100	-3.9	50.0
2-Methylnaphthalene	Qua		0.4485		5.00	0.0200	-45.6	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Lab File ID: UXC4382.D Lab Sample ID: MB 240-98830/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 08/25/2013 08:58

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98830/4	UXC4378.D	08/25/2013 07:26
DR-DPT-43-30	240-28193-2	UXC4394.D	08/25/2013 13:27
DR-DPT-43-40	240-28193-4	UXC4396.D	08/25/2013 14:13
DR-DPT-70-15	240-28193-6	UXC4398.D	08/25/2013 14:58
DR-DPT-DUP06	240-28193-7	UXC4399.D	08/25/2013 15:20
	240-27932-D-10 MS	UXC4403.D	08/25/2013 16:50
	240-27932-F-10 MSD	UXC4404.D	08/25/2013 17:12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98830/5

Matrix: Water Lab File ID: UXC4382.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 08:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98830/5

Matrix: Water Lab File ID: UXC4382.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 08:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98830/5

Matrix: Water Lab File ID: UXC4382.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 08:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	87		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	93		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98830/5

Matrix: Water Lab File ID: UXC4382.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2013 08:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98830 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-43-25	240-28193-1	92	84	84	85
DR-DPT-43-30	240-28193-2	90	101	91	87
DR-DPT-43-35	240-28193-3	94	83	85	82
DR-DPT-43-40	240-28193-4	89	96	89	80
DR-DPT-70-10	240-28193-5	96	80	87	100
DR-DPT-70-15	240-28193-6	91	103	92	86
DR-DPT-DUP06	240-28193-7	91	100	92	85
TB-082113	240-28193-8	93	80	85	86
	MB 240-98830/5	93	101	92	87
	MB 240-98906/5	84	79	87	88
	LCS 240-98830/4	90	94	95	99
	LCS 240-98906/4	87	75	87	103
	240-27932-D-10 MS	91	98	94	95
	240-28018-B-7 MS	88	81	93	99
	240-27932-F-10 MSD	92	100	96	94
	240-28018-B-7 MSD	82	74	94	104

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC4378.D

Lab ID: LCS 240-98830/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	8.95	89	72-116	
1,1,1-Trichloroethane	10.0	9.48	95	74-118	
1,1,2,2-Tetrachloroethane	10.0	10.0	100	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.90	99	74-151	
1,1-Dichloroethane	10.0	9.69	97	82-115	
1,1-Dichloroethene	10.0	8.89	89	78-131	
1,1-Dichloropropene	10.0	9.11	91	83-114	
1,2,3-Trichlorobenzene	10.0	9.04	90	54-126	
1,2,3-Trichloropropane	10.0	10.3	103	73-129	
1,2,3-Trimethylbenzene	10.0	9.85	99	70-130	
1,2,4-Trichlorobenzene	10.0	9.15	91	48-135	
1,2,4-Trimethylbenzene	10.0	11.1	111	76-120	
1,2-Dibromo-3-Chloropropane	10.0	9.79	98	42-136	
1,2-Dichlorobenzene	10.0	9.87	99	81-110	
1,2-Dichloroethane	10.0	10.3	103	71-127	
1,2-Dichloropropane	10.0	10.8	108	81-115	
1,3-Dichlorobenzene	10.0	10.2	102	80-110	
1,3-Dichloropropane	10.0	11.1	111	79-116	
1,4-Dichlorobenzene	10.0	9.90	99	82-110	
2,2-Dichloropropane	10.0	9.81	98	50-129	
2-Chloroethyl vinyl ether	10.0	11.5	115	52-131	
2-Chlorotoluene	10.0	10.8	108	76-116	
2-Hexanone	20.0	20.3	101	55-133	
Bromobenzene	10.0	10.9	109	76-115	
Bromochloromethane	10.0	9.60	96	77-120	
4-Chlorotoluene	10.0	10.8	108	77-115	
p-Isopropyltoluene	10.0	11.3	113	74-120	
Acetone	20.0	18.0	90	43-136	
Benzene	10.0	10.1	101	83-112	
Bromoform	10.0	10.7	107	40-131	
Bromomethane	10.0	7.33	73	11-185	
Carbon disulfide	10.0	9.82	98	62-142	
Carbon tetrachloride	10.0	9.88	99	66-128	
Chlorobenzene	10.0	9.97	100	85-110	
Chloroethane	10.0	8.14	81	25-153	
Chloroform	10.0	9.58	96	79-117	
Chloromethane	10.0	7.77	78	44-126	
cis-1,2-Dichloroethene	10.0	9.18	92	80-113	
cis-1,3-Dichloropropene	10.0	10.6	106	61-115	
Hexachlorobutadiene	10.0	9.54	95	36-134	
Dibromomethane	10.0	10.2	102	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC4378.D

Lab ID: LCS 240-98830/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.5	115	72-121	
Dichlorodifluoromethane	10.0	8.29	83	19-129	
Ethylbenzene	10.0	10.2	102	83-112	
1,2-Dibromoethane	10.0	10.8	108	79-113	
Diisopropyl ether	10.0	9.22 J	92	77-118	
Naphthalene	10.0	8.19	82	32-141	
m-Xylene & p-Xylene	20.0	20.6	103	83-113	
n-Butylbenzene	10.0	10.6	106	66-125	
Isopropylbenzene	10.0	9.23	92	75-114	
n-Propylbenzene	10.0	11.7	117	74-121	
2-Butanone	20.0	18.1	91	60-126	
4-Methyl-2-pentanone	20.0	21.1	105	63-128	
sec-Butylbenzene	10.0	10.9	109	70-117	
Methyl tert-butyl ether	10.0	8.80	88	52-144	
Methylene Chloride	10.0	9.26	93	66-131	
o-Xylene	10.0	9.35	93	83-113	
Styrene	10.0	10.7	107	79-114	
tert-Butylbenzene	10.0	11.1	111	71-115	
Tetrachloroethene	10.0	9.96	100	79-114	
Toluene	10.0	9.10	91	84-111	
trans-1,2-Dichloroethene	10.0	8.84	88	83-117	
trans-1,3-Dichloropropene	10.0	11.6	116	58-117	
Trichloroethene	10.0	10.1	101	76-117	
Trichlorofluoromethane	10.0	9.89	99	49-157	
Vinyl acetate	10.0	10.4	104	46-161	
Vinyl chloride	10.0	8.01	80	53-127	
tert-Butyl alcohol	200	187	94	70-130	
Xylenes, Total	30.0	30.0	100	83-112	
Dibromochloromethane	10.0	11.0	110	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3621.D

Lab ID: LCS 240-98906/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.82	98	72-116	
1,1,1-Trichloroethane	10.0	8.98	90	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.17	82	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.0	110	74-151	
1,1-Dichloroethane	10.0	10.2	102	82-115	
1,1-Dichloroethene	10.0	9.28	93	78-131	
1,1-Dichloropropene	10.0	8.30	83	83-114	
1,2,3-Trichlorobenzene	10.0	9.25	93	54-126	
1,2,3-Trichloropropane	10.0	8.61	86	73-129	
1,2,3-Trimethylbenzene	10.0	10.8	108	70-130	
1,2,4-Trichlorobenzene	10.0	8.63	86	48-135	
1,2,4-Trimethylbenzene	10.0	9.05	91	76-120	
1,2-Dibromo-3-Chloropropane	10.0	9.73	97	42-136	
1,2-Dichlorobenzene	10.0	9.69	97	81-110	
1,2-Dichloroethane	10.0	8.99	90	71-127	
1,2-Dichloropropane	10.0	8.69	87	81-115	
1,3-Dichlorobenzene	10.0	9.60	96	80-110	
1,3-Dichloropropane	10.0	9.48	95	79-116	
1,4-Dichlorobenzene	10.0	9.69	97	82-110	
2,2-Dichloropropane	10.0	10.1	101	50-129	
2-Chloroethyl vinyl ether	10.0	8.03 J	80	52-131	
2-Chlorotoluene	10.0	9.36	94	76-116	
2-Hexanone	20.0	15.3	76	55-133	
Bromobenzene	10.0	9.91	99	76-115	
Bromochloromethane	10.0	10.5	105	77-120	
4-Chlorotoluene	10.0	9.44	94	77-115	
p-Isopropyltoluene	10.0	8.62	86	74-120	
Acetone	20.0	13.7	68	43-136	
Benzene	10.0	8.89	89	83-112	
Bromoform	10.0	12.6	126	40-131	
Bromomethane	10.0	8.47	85	11-185	
Carbon disulfide	10.0	9.07	91	62-142	
Carbon tetrachloride	10.0	9.70	97	66-128	
Chlorobenzene	10.0	9.27	93	85-110	
Chloroethane	10.0	10.1	101	25-153	
Chloroform	10.0	9.55	96	79-117	
Chloromethane	10.0	8.77	88	44-126	
cis-1,2-Dichloroethene	10.0	11.0	110	80-113	
cis-1,3-Dichloropropene	10.0	8.71	87	61-115	
Hexachlorobutadiene	10.0	8.79	88	36-134	
Dibromomethane	10.0	9.08	91	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3621.D

Lab ID: LCS 240-98906/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.88	99	72-121	
Dichlorodifluoromethane	10.0	6.42	64	19-129	
Ethylbenzene	10.0	9.66	97	83-112	
1,2-Dibromoethane	10.0	9.53	95	79-113	
Diisopropyl ether	10.0	11.2	112	77-118	
Naphthalene	10.0	8.67	87	32-141	
m-Xylene & p-Xylene	20.0	19.9	100	83-113	
n-Butylbenzene	10.0	8.59	86	66-125	
Isopropylbenzene	10.0	9.67	97	75-114	
n-Propylbenzene	10.0	9.22	92	74-121	
2-Butanone	20.0	19.7	98	60-126	
4-Methyl-2-pentanone	20.0	16.7	84	63-128	
sec-Butylbenzene	10.0	9.02	90	70-117	
Methyl tert-butyl ether	10.0	10.6	106	52-144	
Methylene Chloride	10.0	9.37	94	66-131	
o-Xylene	10.0	9.78	98	83-113	
Styrene	10.0	9.74	97	79-114	
tert-Butylbenzene	10.0	8.94	89	71-115	
Tetrachloroethene	10.0	9.89	99	79-114	
Toluene	10.0	9.68	97	84-111	
trans-1,2-Dichloroethene	10.0	11.4	114	83-117	
trans-1,3-Dichloropropene	10.0	9.47	95	58-117	
Trichloroethene	10.0	10.1	101	76-117	
Trichlorofluoromethane	10.0	8.65	87	49-157	
Vinyl acetate	10.0	11.1	111	46-161	
Vinyl chloride	10.0	8.62	86	53-127	
tert-Butyl alcohol	200	227	113	70-130	
Xylenes, Total	30.0	29.7	99	83-112	
Dibromochloromethane	10.0	10.9	109	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC4403.D

Lab ID: 240-27932-D-10 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,2,2-Tetrachloroethane	14.3	1.4 U	15.2	106	63-122	
1,1-Dichloroethene	14.3	1.4 U	11.4	80	74-135	
1,2-Dichloroethane	14.3	11	25.4	101	68-129	
Carbon tetrachloride	14.3	1.4 U	12.8	89	59-129	
Chloroform	14.3	0.37 J	13.2	90	76-118	
cis-1,2-Dichloroethene	14.3	6.6	18.1	80	70-120	
Methylene Chloride	14.3	1.4 U	11.9	83	63-128	
Tetrachloroethene	14.3	1.4 U	13.5	94	70-117	
trans-1,2-Dichloroethene	14.3	11	20.4	68	80-119	F
Trichloroethene	14.3	1.0 J	14.9	97	66-120	
Vinyl chloride	14.3	37	39.9	18	49-130	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC4404.D

Lab ID: 240-27932-F-10 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,2,2-Tetrachloroethane	14.3	15.3	107	1	30	63-122	
1,1-Dichloroethene	14.3	11.5	81	1	30	74-135	
1,2-Dichloroethane	14.3	25.5	102	0	30	68-129	
Carbon tetrachloride	14.3	13.2	92	3	30	59-129	
Chloroform	14.3	13.3	90	1	30	76-118	
cis-1,2-Dichloroethene	14.3	18.1	80	0	30	70-120	
Methylene Chloride	14.3	12.1	84	1	30	63-128	
Tetrachloroethene	14.3	13.5	95	1	30	70-117	
trans-1,2-Dichloroethene	14.3	20.8	71	2	30	80-119	F
Trichloroethene	14.3	15.3	100	3	30	66-120	
Vinyl chloride	14.3	37.8	4	5	30	49-130	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3646.D

Lab ID: 240-28018-B-7 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	500	160	647	97	68-121	
1,1,2,2-Tetrachloroethane	500	50 U	435	87	63-122	
1,1-Dichloroethane	500	150	674	105	79-116	
1,1-Dichloroethene	500	15 J	490	95	74-135	
1,2-Dichlorobenzene	500	50 U	487	97	75-111	
1,2-Dichloroethane	500	50 U	477	95	68-129	
1,2-Dichloropropane	500	50 U	437	87	78-115	
1,3-Dichlorobenzene	500	50 U	451	90	73-110	
1,4-Dichlorobenzene	500	61	498	87	75-110	
2-Hexanone	1000	500 U	679	68	47-139	
Acetone	1000	500 U	644	64	33-145	
Benzene	500	75	534	92	72-121	
Bromoform	500	50 U	641	128	32-128	
Bromomethane	500	50 U	372	74	10-186	
Carbon disulfide	500	50 U	444	89	57-147	
Carbon tetrachloride	500	50 U	466	93	59-129	
Chlorobenzene	500	1700	2320	132	80-110	E F
Chloroethane	500	57	546	98	21-165	
Chloroform	500	50 U	479	96	76-118	
Chloromethane	500	50 U	401	80	33-132	
cis-1,2-Dichloroethene	500	730	1230	101	70-120	
cis-1,3-Dichloropropene	500	50 U	420	84	51-110	
Bromodichloromethane	500	50 U	507	101	67-120	
Ethylbenzene	500	53	562	102	75-116	
m-Xylene & p-Xylene	1000	100	1170	107	75-117	
2-Butanone	1000	500 U	774	77	54-129	
4-Methyl-2-pentanone	1000	21 J	774	75	56-131	
Methylene Chloride	500	63	441	76	63-128	
o-Xylene	500	48 J	579	106	76-116	
Styrene	500	50 U	524	105	71-117	
Tetrachloroethene	500	150	711	113	70-117	
Toluene	500	210	709	100	78-114	
trans-1,2-Dichloroethene	500	50 U	524	105	80-119	
trans-1,3-Dichloropropene	500	50 U	451	90	46-116	
Trichloroethene	500	270	791	104	66-120	
Vinyl chloride	500	110	512	80	49-130	
Xylenes, Total	1500	150	1750	107	76-116	
Dibromochloromethane	500	50 U	563	113	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3647.D

Lab ID: 240-28018-B-7 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	500	593	87	9	30	68-121	
1,1,2,2-Tetrachloroethane	500	394	79	10	30	63-122	
1,1-Dichloroethane	500	612	93	10	30	79-116	
1,1-Dichloroethene	500	447	86	9	30	74-135	
1,2-Dichlorobenzene	500	426	85	13	30	75-111	
1,2-Dichloroethane	500	455	91	5	30	68-129	
1,2-Dichloropropane	500	402	80	8	30	78-115	
1,3-Dichlorobenzene	500	425	85	6	30	73-110	
1,4-Dichlorobenzene	500	468	81	6	30	75-110	
2-Hexanone	1000	747	75	9	30	47-139	
Acetone	1000	550	55	16	30	33-145	
Benzene	500	497	84	7	30	72-121	
Bromoform	500	642	128	0	30	32-128	
Bromomethane	500	391	78	5	30	10-186	
Carbon disulfide	500	412	82	8	30	57-147	
Carbon tetrachloride	500	462	92	1	30	59-129	
Chlorobenzene	500	2230	114	4	30	80-110	E F
Chloroethane	500	481	85	13	30	21-165	
Chloroform	500	443	89	8	30	76-118	
Chloromethane	500	365	73	9	30	33-132	
cis-1,2-Dichloroethene	500	1220	98	1	30	70-120	
cis-1,3-Dichloropropene	500	400	80	5	30	51-110	
Bromodichloromethane	500	485	97	4	30	67-120	
Ethylbenzene	500	556	101	1	30	75-116	
m-Xylene & p-Xylene	1000	1080	98	8	30	75-117	
2-Butanone	1000	783	78	1	30	54-129	
4-Methyl-2-pentanone	1000	762	74	2	30	56-131	
Methylene Chloride	500	397	67	11	30	63-128	
o-Xylene	500	562	103	3	30	76-116	
Styrene	500	497	99	5	30	71-117	
Tetrachloroethene	500	693	109	3	30	70-117	
Toluene	500	680	94	4	30	78-114	
trans-1,2-Dichloroethene	500	515	103	2	30	80-119	
trans-1,3-Dichloropropene	500	444	89	2	30	46-116	
Trichloroethene	500	741	94	7	30	66-120	
Vinyl chloride	500	506	79	1	30	49-130	
Xylenes, Total	1500	1640	100	6	30	76-116	
Dibromochloromethane	500	549	110	2	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Sample No.: STD8260 240-97870/4 Date Analyzed: 08/16/2013 16:14

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3344.D Heated Purge: (Y/N) N

Calibration ID: 16865

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1950817	5.47	1433793	8.15	447870	10.40
UPPER LIMIT		3901634	5.97	2867586	8.65	895740	10.90
LOWER LIMIT		975409	4.97	716897	7.65	223935	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-97870/14		1860770	5.47	1316767	8.15	441226	10.40
CCVIS 240-98906/2		1524002	5.47	1111431	8.15	363761	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Sample No.: CCVIS 240-98906/2 Date Analyzed: 08/26/2013 12:26

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3623.D Heated Purge: (Y/N) N

Calibration ID: 17020

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1524002	5.47	1111431	8.15	363761	10.40
UPPER LIMIT		3048004	5.97	2222862	8.65	727522	10.90
LOWER LIMIT		762001	4.97	555716	7.65	181881	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-98906/5		1485425	5.47	1005982	8.15	276398	10.40
240-28193-1	DR-DPT-43-25	1366952	5.47	960674	8.15	258443	10.40
240-28193-3	DR-DPT-43-35	1292329	5.47	911744	8.15	228591	10.40
240-28193-5	DR-DPT-70-10	1329912	5.47	940262	8.15	280609	10.40
240-28193-8	TB-082113	1383150	5.47	949596	8.15	260790	10.40
240-28018-B-7 MS		1431376	5.47	997255	8.15	345434	10.40
240-28018-B-7 MSD		1445060	5.47	986038	8.15	350368	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Sample No.: STD8260 240-98656/4 Date Analyzed: 08/22/2013 17:32

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC4300.D Heated Purge: (Y/N) N

Calibration ID: 17022

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1751146	5.21	1161548	7.89	800526	10.12
UPPER LIMIT		3502292	5.71	2323096	8.39	1601052	10.62
LOWER LIMIT		875573	4.71	580774	7.39	400263	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-98656/20		1748692	5.21	1103221	7.89	799466	10.12
CCVIS 240-98830/2		1717271	5.21	1225556	7.89	746450	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28193-1

SDG No.:

Sample No.: CCVIS 240-98830/2 Date Analyzed: 08/25/2013 07:49

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC4379.D Heated Purge: (Y/N) N

Calibration ID: 17026

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1717271	5.21	1225556	7.89	746450	10.12
UPPER LIMIT		3434542	5.71	2451112	8.39	1492900	10.62
LOWER LIMIT		858636	4.71	612778	7.39	373225	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-98830/3		1798418	5.21	1305604	7.89	718214	10.12
MB 240-98830/5		1632986	5.21	1204033	7.89	645973	10.12
240-28193-2	DR-DPT-43-30	1589779	5.21	1157875	7.89	633218	10.12
240-28193-4	DR-DPT-43-40	1575447	5.21	1091879	7.89	608873	10.12
240-28193-6	DR-DPT-70-15	1641981	5.21	1190841	7.89	636312	10.12
240-28193-7	DR-DPT-DUP06	1607929	5.21	1142741	7.89	623400	10.12
240-27932-D-10 MS		1708625	5.21	1246878	7.89	744352	10.12
240-27932-F-10 MSD		1738867	5.21	1265706	7.89	734758	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

Sample Concentration Calculation

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28193-1

SDG No.:

Client Sample ID: DR-DPT-43-35 | Lab Sample ID: 240-28193-3

Matrix: Water | Lab File ID: UXJ3637.D

Analysis Method: 8260B | Date Collected: 08/21/2013 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2013 18:07

Soil Aliquot Vol: | Dilution Factor: 20000

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 98906 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	20000	U	20000	3200
74-87-3	Chloromethane	20000	U	20000	6000
156-59-2	cis-1,2-Dichloroethene	20000	U	20000	3400
10061-01-5	cis-1,3-Dichloropropene	20000	U	20000	2800
87-68-3	Hexachlorobutadiene	20000	U	20000	6000
74-95-3	Dibromomethane	20000	U	20000	5600
75-27-4	Bromodichloromethane	20000	U	20000	3000
75-71-8	Dichlorodifluoromethane	20000	U	20000	6200
100-41-4	Ethylbenzene	20000	U	20000	3400
106-93-4	1,2-Dibromoethane	20000	U	20000	4800
108-20-3	Diisopropyl ether	200000	U	200000	30000
91-20-3	Naphthalene	20000	U	20000	4800
179601-23-1	m-Xylene & p-Xylene	40000	U	40000	4800
104-51-8	n-Butylbenzene	20000	U	20000	2400
98-82-8	Isopropylbenzene	20000	U	20000	2600
103-65-1	n-Propylbenzene	20000	U	20000	2800
78-93-3	2-Butanone	200000	U	200000	11000
108-10-1	4-Methyl-2-pentanone	200000	U	200000	6400
135-98-8	sec-Butylbenzene	20000	U	20000	2600
1634-04-4	Methyl tert-butyl ether	20000	U	20000	3400
994-05-8	Tert-amyl-methyl ether (TAME)	100000	U	100000	1300
75-09-2	Methylene Chloride	49000		20000	6600
95-47-6	o-Xylene	20000	U	20000	2800
100-42-5	Styrene	20000	U	20000	2200
637-92-3	Ethyl-t-butyl ether (ETBE)	100000	U	100000	2200
98-06-6	tert-Butylbenzene	20000	U	20000	2600
127-18-4	Tetrachloroethene	20000	U	20000	5800
108-88-3	Toluene	31000	B	20000	2600
156-60-5	trans-1,2-Dichloroethene	20000	U	20000	3800
10061-02-6	trans-1,3-Dichloropropene	20000	U	20000	3800
79-01-6	Trichloroethene	490000		20000	3400
75-69-4	Trichlorofluoromethane	20000	U	20000	4200
108-05-4	Vinyl acetate	40000	U	40000	3800
75-01-4	Vinyl chloride	20000	U	20000	4400
75-65-0	tert-Butyl alcohol	1000000	U	1000000	78000
1330-20-7	Xylenes, Total	40000	U	40000	2800

TestAmerica Canton
Target Compound Quantitation Report

Sample Concentration Calculation

Data File: \\Ncchrom\ChromData\A3UX11\20130826-22847.b\UXJ3637.D
Lims ID: 240-28193-B-3 Client ID: DR-DPT-43-35
Inject. Date: 26-Aug-2013 18:07:30 Dil. Factor: ~~20000~~.0000
Sample Type: Client
Sample ID: 240-0022847-021
Misc. Info.: J30826A,8260LLUX11,,43582
Operator: 43582 Instrument ID: A3UX11
Purge Vol: 5.000 mL ALS Bottle#: 18
Lims Batch ID: 98906 Lims Sample ID: 21
Detector: MS SCAN

Method: \\Ncchrom\ChromData\A3UX11\20130826-22847.b\8260_11.m
Last Update: 27-Aug-2013 09:38:14 Calib Date: 23-Aug-2013 01:03:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX11\20130823-22771.b\UXJ3534.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK022

First Level Reviewer: evansle Date: 27-Aug-2013 09:06:08

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.466	5.466	0.0	98	1292329	10.0	
* 2 Chlorobenzene-d5	117	8.152	8.152	0.0	83	911744	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.401	10.400	0.001	95	228591	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.887	4.887	0.0	96	349222	7.87	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.182	5.182	0.0	90	397619	6.95	
$ 6 Toluene-d8 (Surr)	98	6.839	6.827	0.012	94	1082538	7.07	
$ 7 4-Bromofluorobenzene (Surr)	95	9.265	9.265	0.0	90	234112	6.81	
8 Dichlorodifluoromethane	85		1.727					
9 Chloromethane	50		1.881					9
10 Vinyl chloride	62		1.987					9
11 Bromomethane	94		2.295					
12 Chloroethane	64		2.390					9
14 Trichlorofluoromethane	101		2.615					
19 1,1-Dichloroethene	96		3.041					9
17 Acetone	43		3.064					
18 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.076					
23 Carbon disulfide	76	3.265	3.265	0.0	54	10675	0.1197	
26 Methylene Chloride	84	3.443	3.431	0.012	90	171401	2.43	
27 2-Methyl-2-propanol	59		3.514					9
30 Methyl tert-butyl ether	73		3.680					
29 trans-1,2-Dichloroethene	96		3.680					9
32 1,1-Dichloroethane	63		4.023					
33 Vinyl acetate	86		4.058					
34 Isopropyl ether	87		4.070					
37 Tert-butyl ethyl ether	59		4.378					9
38 2-Butanone (MEK)	43		4.496					
40 cis-1,2-Dichloroethene	96		4.496					9
39 2,2-Dichloropropane	77		4.508					9
43 Chlorobromomethane	128		4.697					
45 Chloroform	83		4.756					9

Report Date: 27-Aug-2013 17:39:19 Chrom Revision: 2.0 01-Apr-2013 21:16:10
Data File: \\Ncchrom\ChromData\A3UX11\20130826-22847.b\UXJ3637.D Sample Calculation

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
46 1,1,1-Trichloroethane	97	4.934	4.934	0.0	51	7342	0.1154	
48 1,1-Dichloropropene	75		5.064					
49 Carbon tetrachloride	117		5.076					
51 1,2-Dichloroethane	62	5.253	5.242	0.011	1	8587	0.1161	
52 Benzene	78		5.242					9
53 Tert-amyl methyl ether	73		5.324					
56 Trichloroethene	130	5.786	5.786	0.0	89	1243280	24.6	
59 1,2-Dichloropropane	63		5.975					
61 Dibromomethane	93		6.070					
63 Dichlorobromomethane	83		6.188					
65 2-Chloroethyl vinyl ether	63		6.437					
66 cis-1,3-Dichloropropene	75		6.579					
67 4-Methyl-2-pentanone (MIBK)	43	6.709	6.709	0.0	53	10949	0.2551	
68 Toluene	91	6.898	6.898	0.0	92	287727	1.55	
69 trans-1,3-Dichloropropene	75		7.064					
72 Tetrachloroethene	164		7.395					9
73 1,3-Dichloropropane	76		7.395					
74 2-Hexanone	43		7.454					9
76 Chlorodibromomethane	129		7.608					
77 Ethylene Dibromide	107		7.726					
79 Chlorobenzene	112		8.176					9
80 1,1,1,2-Tetrachloroethane	131		8.247					
81 Ethylbenzene	106		8.271					9
82 m-Xylene & p-Xylene	106		8.377					9
84 Styrene	104		8.768					
83 o-Xylene	106		8.768					9
85 Bromoform	173		8.957					
86 Isopropylbenzene	105		9.111					
88 1,1,2,2-Tetrachloroethane	83		9.383					9
89 Bromobenzene	156		9.419					
90 1,2,3-Trichloropropane	110		9.430					9
92 N-Propylbenzene	120		9.513					
93 2-Chlorotoluene	126		9.608					
95 4-Chlorotoluene	126		9.714					
96 tert-Butylbenzene	119		10.010					
97 1,2,4-Trimethylbenzene	105		10.046					
98 sec-Butylbenzene	105		10.223					
99 1,3-Dichlorobenzene	146		10.342					
100 4-Isopropyltoluene	119		10.365					9
101 1,4-Dichlorobenzene	146		10.424					9
102 1,2,3-Trimethylbenzene	105		10.471					
103 n-Butylbenzene	91		10.768					
104 1,2-Dichlorobenzene	146		10.803					
105 1,2-Dibromo-3-Chloropropane	157		11.560					
107 1,2,4-Trichlorobenzene	180		12.412					9
108 Hexachlorobutadiene	225		12.590					
109 Naphthalene	128		12.673					
110 1,2,3-Trichlorobenzene	180		12.945					
S 114 Xylenes, Total	106		16.530					

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Sample Calculation

Lab Name: TestAmerica Canton Job No.: 240-28193-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0210 0.0156	0.0209	0.0211	0.0210	0.0207	Ave		0.0200				11.0		15.0			
Acrylonitrile	0.1870 0.1457	0.1597	0.1621	0.1513	0.1512	Ave		0.1595				9.2		15.0			
trans-1,2-Dichloroethene	0.3533 0.3481	0.3265	0.3317	0.3389	0.3315	Ave		0.3383				3.1		15.0			
Methyl tert-butyl ether	0.9157 0.7559	0.7542	0.7730	0.7847	0.7711	Ave		0.7924				7.8		15.0			
Hexane	0.0451 0.0680	0.0773	0.0574	0.0681	0.0579	Lin1	-0.010	0.0654							0.9910		0.9900
1,1-Dichloroethane	0.8025 0.7508	0.7293	0.7254	0.7239	0.7105	Ave		0.7404			0.1000	4.5		15.0			
Vinyl acetate	0.0440 0.0495	0.0415	0.0482	0.0494	0.0501	Ave		0.0471				7.5		15.0			
2-Butanone	0.2005 0.1535	0.2003	0.1813	0.1847	0.1769	Ave		0.1829				9.5		15.0			
cis-1,2-Dichloroethene	0.3848 0.3690	0.3500	0.3592	0.3622	0.3649	Ave		0.3650				3.2		15.0			
2,2-Dichloropropane	0.3421 0.3268	0.3667	0.3653	0.3538	0.3552	Ave		0.3517				4.3		15.0			
Bromochloromethane	0.2257 0.2057	0.2118	0.1996	0.2003	0.2019	Ave		0.2075				4.8		15.0			
Tetrahydrofuran	0.1645 0.0965	0.1385	0.1158	0.1182	0.1091	Lin1	0.0767	0.0998							0.9950		0.9900
Chloroform	0.6517 0.6334	0.5981	0.6259	0.6108	0.6111	Ave		0.6218				3.1		15.0			
1,1,1-Trichloroethane	0.5102 0.4815	0.4629	0.4993	0.5043	0.4946	Ave		0.4921				3.5		15.0			
Cyclohexane	0.4992 0.6461	0.6130	0.5552	0.5930	0.5967	Ave		0.5839				8.7		15.0			
1,1-Dichloropropene	0.4438 0.4620	0.4196	0.4258	0.4347	0.4394	Ave		0.4375				3.4		15.0			
Carbon tetrachloride	0.4398 0.4455	0.4494	0.4270	0.4294	0.4398	Ave		0.4385				2.0		15.0			
Benzene	1.4334 1.4434	1.3464	1.3831	1.3517	1.3641	Ave		1.3870				3.0		15.0			
1,2-Dichloroethane	0.6202 0.5720	0.5573	0.5676	0.5564	0.5589	Ave		0.5721				4.3		15.0			
Trichloroethene	0.3938 0.4061	0.3696	0.3948	0.3853	0.4011	Ave		0.3918				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Sample Calculation

SAMPLE ID DR-DPT-43-35

SAMPLE CALC **for trchloroethene**

IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (ug/L)	Final Extract Volume (mL)	AVE RRF	CONCENTRATION PPB
1292329	20000	1243280	10	5	0.3918	491090.37

Sample Volume (mL)

5

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **SEPTEMBER 16, 2013**

FROM: **EDWARD SEDLMYER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN – MARTIN STATE AIRPORT (MSA) – DUMP ROAD SOURCE AREAS
SDG 240-28270-1

SAMPLES: 2/Aqueous/VOC

DR-DPT-70-20 TB-082213

Overview

The sample set for Lockheed Martin – MSA Dump Road Source Areas, SDG 240-28270-1 consists of one (1) aqueous environmental sample and one (1) trip blank. The samples were analyzed for volatile organic compounds (VOCs).

The samples were collected by Tetra Tech on August 22, 2013 and analyzed by Test America (North Canton). All analyses were conducted in accordance with SW-846 Method 8260B analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, internal standard recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

- The VOC initial calibration and associated continuing calibration relative response factors (RRFs) were less than the 0.05 quality control limit for tert-butyl alcohol and vinyl acetate on instrument A3UX11. The non-detected results reported for tert-butyl alcohol and vinyl acetate were rejected (UR).

- Tentatively identified compounds (TICs) which are attributed to column bleed (silanol compounds), were qualified as rejected (UR).

Minor

- Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

- Non-target compounds, reported by the laboratory as TICs, were qualified as presumptively present, (NJ).

Notes

The VOC continuing calibration percent differences (%Ds) were greater than the quality control limit of 20%

and less than 50% for chloromethane, 1,1,2-trichlorotrifluoroethane, bromoform, and 1,2-dibromo-3-chloropropane, for instrument A3UX11 on 08/28/13 @ 11:16. No action was taken on the nondetected results for the aforementioned compounds in the affected samples.

The laboratory control sample (LCS) associated with batch 99295/4 had percent recoveries greater than the quality control limit for bromoform and chlorodibromomethane. No action was taken on this basis because the affected sample results were nondetected for the aforementioned compounds.

Executive Summary

Laboratory Performance: Two VOC compounds had RRF noncompliances resulting in the rejection of data.
Other Factors Affecting Data Quality: Positive results less than the reporting limit (RL) were qualified due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Edward Sedlmyer
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 04882	NSAMPLE	DR-DPT-70-20						DR-DPT-70-20A			TB-082213		
SDG: 240-28270-1	LAB_ID	240-28270-1						240-28270-1			240-28270-2		
FRACTION: OV	SAMP_DATE	8/22/2013						8/22/2013			8/22/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			TIC			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U								0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U								0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U								0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U								0.28	U	
1,1-DICHLOROETHANE		0.35	J	P							0.15	U	
1,1-DICHLOROETHENE		0.19	U								0.19	U	
1,1-DICHLOROPROPENE		0.13	U								0.13	U	
1,2,3-TRICHLOROBENZENE		0.24	J	P							0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U								0.43	U	
1,2,3-TRIMETHYLBENZENE		2	J	P							0.0059	U	
1,2,4-TRICHLOROBENZENE		0.93	J	P							0.15	U	
1,2,4-TRIMETHYLBENZENE		2.5									0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U								0.67	U	
1,2-DIBROMOETHANE		0.24	U								0.24	U	
1,2-DICHLOROBENZENE		0.35	J	P							0.13	U	
1,2-DICHLOROETHANE		0.22	U								0.22	U	
1,2-DICHLOROPROPANE		0.18	U								0.18	U	
1,3,5-TRIMETHYLBENZENE					1.1								
1,3-DICHLOROBENZENE		0.17	J	P							0.14	U	
1,3-DICHLOROPROPANE		0.16	U								0.16	U	
1,4-DICHLOROBENZENE		0.13	U								0.13	U	
1-HEXANOL, 2-ETHYL-					3.3	NJ	Z1						
2,2-DICHLOROPROPANE		0.13	U								0.13	U	
2-BUTANONE		2	J	P							0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U								0.99	U	
2-CHLOROTOLUENE		0.11	U								0.11	U	
2-HEXANONE		0.41	U								0.41	U	
4-CHLOROTOLUENE		0.18	U								0.18	U	
4-ISOPROPYLTOLUENE		0.12	U								0.12	U	
4-METHYL-2-PENTANONE		0.32	U								0.32	U	
ACETONE		4.3	J	P							1.1	U	
BENZENE		1.5									0.13	U	
BROMOBENZENE		0.13	U								0.13	U	
BROMOCHLOROMETHANE		0.29	U								0.29	U	
BROMODICHLOROMETHANE		0.15	U								0.15	U	
BROMOFORM		0.64	U								0.64	U	

PROJ_NO: 04882	NSAMPLE	TB-082213			TB-082213A			TB-082213B		
SDG: 240-28270-1	LAB_ID	240-28270-2			240-28270-2			240-28270-2		
FRACTION: OV	SAMP_DATE	8/22/2013			8/22/2013			8/22/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									

PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE									
1,1,1-TRICHLOROETHANE									
1,1,2,2-TETRACHLOROETHANE									
1,1,2-TRICHLOROTRIFLUOROETHANE									
1,1-DICHLOROETHANE									
1,1-DICHLOROETHENE									
1,1-DICHLOROPROPENE									
1,2,3-TRICHLOROBENZENE									
1,2,3-TRICHLOROPROPANE									
1,2,3-TRIMETHYLBENZENE									
1,2,4-TRICHLOROBENZENE									
1,2,4-TRIMETHYLBENZENE									
1,2-DIBROMO-3-CHLOROPROPANE									
1,2-DIBROMOETHANE									
1,2-DICHLOROBENZENE									
1,2-DICHLOROETHANE									
1,2-DICHLOROPROPANE									
1,3,5-TRIMETHYLBENZENE									
1,3-DICHLOROBENZENE									
1,3-DICHLOROPROPANE									
1,4-DICHLOROBENZENE									
1-HEXANOL, 2-ETHYL-									
2,2-DICHLOROPROPANE									
2-BUTANONE									
2-CHLOROETHYL VINYL ETHER									
2-CHLOROTOLUENE									
2-HEXANONE									
4-CHLOROTOLUENE									
4-ISOPROPYLTOLUENE									
4-METHYL-2-PENTANONE									
ACETONE									
BENZENE									
BROMOBENZENE									
BROMOCHLOROMETHANE									
BROMODICHLOROMETHANE									
BROMOFORM									

PROJ_NO: 04882	NSAMPLE	DR-DPT-70-20						DR-DPT-70-20A			TB-082213		
SDG: 240-28270-1	LAB_ID	240-28270-1						240-28270-1			240-28270-2		
FRACTION: OV	SAMP_DATE	8/22/2013						8/22/2013			8/22/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			TIC			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOMETHANE		0.41	U								0.41	U	
CARBON DISULFIDE		0.55	J	P							0.13	U	
CARBON TETRACHLORIDE		0.13	U								0.13	U	
CHLOROBENZENE		0.53	J	P							0.15	U	
CHLORODIBROMOMETHANE		0.18	U								0.18	U	
CHLOROETHANE		0.29	U								0.29	U	
CHLOROFORM		0.24	J	P							0.16	U	
CHLOROMETHANE		0.3	U								0.3	U	
CIS-1,2-DICHLOROETHENE		0.69	J	P							0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U								0.14	U	
DIBROMOMETHANE		0.28	U								0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U								0.31	U	
DIISOPROPYL ETHER		1.5	U								1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U								0.11	U	
ETHYLBENZENE		2.4									0.17	U	
HEXACHLOROBUTADIENE		0.3	U								0.3	U	
ISOPROPYLBENZENE		0.62	J	P							0.13	U	
M+P-XYLENES		12									0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U								0.17	U	
METHYLENE CHLORIDE		0.33	U								0.33	U	
NAPHTHALENE		1.4									0.24	U	
N-BUTYLBENZENE		0.12	U								0.12	U	
N-PROPYLBENZENE		0.5	J	P							0.14	U	
O-XYLENE		10									0.14	U	
SEC-BUTYLBENZENE		0.18	J	P							0.13	U	
STYRENE		0.49	J	P							0.11	U	
TERT-AMYL METHYL ETHER		0.067	U								0.067	U	
TERT-BUTYLBENZENE		0.13	U								0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C							3.9	UR	C
TETRACHLOROETHENE		0.58	J	P							0.29	U	
TOLUENE		5.5									0.13	U	
TOTAL XYLENES		22									0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U								0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U								0.19	U	
TRICHLOROETHENE		6.2									0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U								0.21	U	

PROJ_NO: 04882	NSAMPLE	TB-082213			TB-082213A			TB-082213B		
SDG: 240-28270-1	LAB_ID	240-28270-2			240-28270-2			240-28270-2		
FRACTION: OV	SAMP_DATE	8/22/2013			8/22/2013			8/22/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOMETHANE										
CARBON DISULFIDE										
CARBON TETRACHLORIDE										
CHLOROBENZENE										
CHLORODIBROMOMETHANE										
CHLOROETHANE										
CHLOROFORM										
CHLOROMETHANE										
CIS-1,2-DICHLOROETHENE										
CIS-1,3-DICHLOROPROPENE										
DIBROMOMETHANE										
DICHLORODIFLUOROMETHANE										
DIISOPROPYL ETHER										
ETHYL TERT-BUTYL ETHER										
ETHYLBENZENE										
HEXACHLOROBUTADIENE										
ISOPROPYLBENZENE										
M+P-XYLENES										
METHYL TERT-BUTYL ETHER										
METHYLENE CHLORIDE										
NAPHTHALENE										
N-BUTYLBENZENE										
N-PROPYLBENZENE										
O-XYLENE										
SEC-BUTYLBENZENE										
STYRENE										
TERT-AMYL METHYL ETHER										
TERT-BUTYLBENZENE										
TERTIARY-BUTYL ALCOHOL										
TETRACHLOROETHENE										
TOLUENE										
TOTAL XYLENES										
TRANS-1,2-DICHLOROETHENE										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE										
TRICHLOROFLUOROMETHANE										

PROJ_NO: 04882	NSAMPLE	DR-DPT-70-20						DR-DPT-70-20A			TB-082213		
SDG: 240-28270-1	LAB_ID	240-28270-1						240-28270-1			240-28270-2		
FRACTION: OV	SAMP_DATE	8/22/2013						8/22/2013			8/22/2013		
MEDIA: WATER	QC_TYPE	NM			TIC			TIC			TB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN					10	NJ	Z1	1.1	NJ	Z1			
VINYL ACETATE		0.19	UR	C							0.19	UR	C
VINYL CHLORIDE		0.22	U								0.22	U	

PROJ_NO: 04882	NSAMPLE	TB-082213			TB-082213A			TB-082213B		
SDG: 240-28270-1	LAB_ID	240-28270-2			240-28270-2			240-28270-2		
FRACTION: OV	SAMP_DATE	8/22/2013			8/22/2013			8/22/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN		10	NJ	Z1	4	NJ	Z1	2	NJ	Z1
VINYL ACETATE										
VINYL CHLORIDE										

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Client Sample ID: DR-DPT-70-20 Lab Sample ID: 240-28270-1

Matrix: Water Lab File ID: UXJ3731.D

Analysis Method: 8260B Date Collected: 08/22/2013 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 20:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	0.35	J	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	0.24	J	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	2.0	J	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	0.93	J	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	2.5		1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	0.35	J	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	0.17	J	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	4.3	J	10	1.1
71-43-2	Benzene	1.5		1.0	0.13
75-25-2	Bromoform	1.0	U *	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.55	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	0.53	J	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Client Sample ID: DR-DPT-70-20 Lab Sample ID: 240-28270-1

Matrix: Water Lab File ID: UXJ3731.D

Analysis Method: 8260B Date Collected: 08/22/2013 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 20:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.24	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.69	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	2.4		1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.4		1.0	0.24
179601-23-1	m-Xylene & p-Xylene	12		2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	0.62	J	1.0	0.13
103-65-1	n-Propylbenzene	0.50	J	1.0	0.14
78-93-3	2-Butanone	2.0	J	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	0.18	J	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	10		1.0	0.14
100-42-5	Styrene	0.49	J	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	0.58	J	1.0	0.29
108-88-3	Toluene	5.5		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	6.2		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	22		2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Client Sample ID: DR-DPT-70-20 Lab Sample ID: 240-28270-1

Matrix: Water Lab File ID: UXJ3731.D

Analysis Method: 8260B Date Collected: 08/22/2013 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 20:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
2037-26-5	Toluene-d8 (Surr)	84		74-115
1868-53-7	Dibromofluoromethane (Surr)	92		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Client Sample ID: DR-DPT-70-20 Lab Sample ID: 240-28270-1

Matrix: Water Lab File ID: UXJ3731.D

Analysis Method: 8260B Date Collected: 08/22/2013 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 20:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

Number TICs Found: 9 TIC Result Total: 32.6

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	1.85	1.1	T J
420-56-4	Silane, fluorotrimethyl-	2.12	5.1	T J N
	Unknown	2.60	10	T J
1066-40-6	Silanol, trimethyl-	4.38	6.2	T J N
620-14-4	Benzene, 1-ethyl-3-methyl-	9.60	2.4	T J N
108-67-8	1,3,5-Trimethylbenzene	9.68	1.1	
611-14-3	Benzene, 1-ethyl-2-methyl-	9.88	1.6	T J N
104-76-7	1-Hexanol, 2-ethyl-	10.59	3.3	T J N
95-93-2	Benzene, 1,2,4,5-tetramethyl-	10.74	1.8	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28270-1

SDG No.:

Client Sample ID: TB-082213 | Lab Sample ID: 240-28270-2

Matrix: Water | Lab File ID: UXJ3732.D

Analysis Method: 8260B | Date Collected: 08/22/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/28/2013 21:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99295 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U *	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Client Sample ID: TB-082213 Lab Sample ID: 240-28270-2

Matrix: Water Lab File ID: UXJ3732.D

Analysis Method: 8260B Date Collected: 08/22/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 21:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Client Sample ID: TB-082213 Lab Sample ID: 240-28270-2

Matrix: Water Lab File ID: UXJ3732.D

Analysis Method: 8260B Date Collected: 08/22/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 21:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U *	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-28270-1

SDG No.:

Client Sample ID: TB-082213 | Lab Sample ID: 240-28270-2

Matrix: Water | Lab File ID: UXJ3732.D

Analysis Method: 8260B | Date Collected: 08/22/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/28/2013 21:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99295 | Units: ug/L

Number TICs Found: 4 | TIC Result Total: 18.1

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	2.76	10	T J
	Unknown	3.08	4.0	T J
	Unknown	3.16	2.0	T J
1066-40-6	Silanol, trimethyl-	4.39	2.1	T J N

Appendix C

Support Documentation

HOLDTIME

SDG 240-27719-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-42-10	240-27831-1	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-31-35	240-28158-2	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-31-40	240-28158-3	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-31-45	240-28158-4	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7
OV	UG/L	DR-DPT-38-15	240-27760-1	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-30	240-27760-2	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-35	240-27760-3	NM	08/08/2013	08/15/2013	08/15/2013	7	0	7
OV	UG/L	DR-DPT-38-40	240-27760-4	NM	08/08/2013	08/16/2013	08/16/2013	8	0	8
OV	UG/L	DR-DPT-40-20	240-27719-4	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-25	240-27719-5	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-30	240-27719-6	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-35	240-27719-7	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-40-40	240-27719-8	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-41-35	240-27719-1	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-31-30	240-28158-1	NM	08/20/2013	08/27/2013	08/27/2013	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	DR-DPT-43B-10	240-28158-5	NM	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	TB-082013	240-28158-8	TB	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	TB-080913	240-27831-7	TB	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	TB-080813	240-27760-5	NM	08/08/2013	08/16/2013	08/16/2013	8	0	8
OV	UG/L	TB-080713	240-27719-9	TB	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-70-20	240-28270-1	NM	08/22/2013	08/28/2013	08/28/2013	6	0	6
OV	UG/L	DR-DPT-41-40	240-27719-2	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-43B-15	240-28158-6	NM	08/20/2013	08/28/2013	08/28/2013	8	0	8
OV	UG/L	DR-DPT-41-45	240-27719-3	NM	08/07/2013	08/15/2013	08/15/2013	8	0	8
OV	UG/L	DR-DPT-42-35	240-27831-6	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-30	240-27831-5	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-25	240-27831-4	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-20	240-27831-3	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	DR-DPT-42-15	240-27831-2	NM	08/09/2013	08/17/2013	08/17/2013	8	0	8
OV	UG/L	TB-082213	240-28270-2	TB	08/22/2013	08/28/2013	08/28/2013	6	0	6
OV	UG/L	DR-DPT-43B-20	240-28158-7	NM	08/20/2013	08/29/2013	08/29/2013	9	0	9

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-28270-1

Job Description: Dump Road Source Area

For:
Tetra Tech, Inc
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Approved for release.
John McFadden
Project Manager I
8/30/2013 1:40 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
08/30/2013

cc: Samantha Brenner
Ms. Kelly Carper
Vanessa Good
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: Dump Road Source Area

Report Number: 240-28270-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/23/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.3 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DR-DPT-70-20 (240-28270-1) and TB-082213 (240-28270-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/28/2013.

The laboratory control sample (LCS) for batch 99295 recovered outside control limits for the following analytes: Chlorodibromomethane, Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The MSD for batch 99295 is out of the 12 hour tune time limit by 8 minutes but is still being reported.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28270-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-28270-1	DR-DPT-70-20	Water	08/22/2013 0920	08/23/2013 0905
240-28270-2TB	TB-082213	Water	08/22/2013 0000	08/23/2013 0905

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28270-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
DR-DPT-70-20	240-28270-1	92	83	84	97
TB-082213	240-28270-2	95	81	86	82
	MB 240-99295/5	96	78	86	88
	LCS 240-99295/4	90	79	93	105
	190-1785-B-1 MS	84	77	88	100
	190-1785-B-1 MSD	84	77	90	101

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Instrument ID: A3UX11 Start Date: 08/16/2013 14:53

Analysis Batch Number: 97870 End Date: 08/16/2013 20:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-97870/1		08/16/2013 14:53	1	BFB182.D	DB-624 0.18(mm)
STD8260 240-97870/2 IC		08/16/2013 15:26	1	UXJ3342.D	DB-624 0.18(mm)
STD8260 240-97870/3 IC		08/16/2013 15:50	1	UXJ3343.D	DB-624 0.18(mm)
STD8260 240-97870/4 ICIS		08/16/2013 16:14	1	UXJ3344.D	DB-624 0.18(mm)
STD8260 240-97870/5 IC		08/16/2013 16:38	1	UXJ3345.D	DB-624 0.18(mm)
STD8260 240-97870/6 IC		08/16/2013 17:02	1	UXJ3346.D	DB-624 0.18(mm)
STD8260 240-97870/7 IC		08/16/2013 17:25	1	UXJ3347.D	DB-624 0.18(mm)
STD6 240-97870/8 IC		08/16/2013 17:49	1	UXJ3348.D	DB-624 0.18(mm)
STD5 240-97870/9 IC		08/16/2013 18:13	1	UXJ3349.D	DB-624 0.18(mm)
STD4 240-97870/10 IC		08/16/2013 18:36	1	UXJ3350.D	DB-624 0.18(mm)
STD3 240-97870/11 IC		08/16/2013 19:00	1	UXJ3351.D	DB-624 0.18(mm)
STD2 240-97870/12 IC		08/16/2013 19:23	1	UXJ3352.D	DB-624 0.18(mm)
STD1 240-97870/13 IC		08/16/2013 19:47	1	UXJ3353.D	DB-624 0.18(mm)
ICV 240-97870/14		08/16/2013 20:11	1	UXJ3354.D	DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Lab File ID: BFB182.D BFB Injection Date: 08/16/2013

Instrument ID: A3UX11 BFB Injection Time: 14:53

Analysis Batch No.: 97870

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	27.9	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.0	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	77.0	
175	5.0 - 9.0 % of mass 174	5.6	(7.3)1
176	95.0 - 101.0 % of mass 174	75.2	(97.8)1
177	5.0 - 9.0 % of mass 176	5.4	(7.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97870/2	UXJ3342.D	08/16/2013	15:26
	STD8260 240-97870/3	UXJ3343.D	08/16/2013	15:50
	STD8260 240-97870/4	UXJ3344.D	08/16/2013	16:14
	STD8260 240-97870/5	UXJ3345.D	08/16/2013	16:38
	STD8260 240-97870/6	UXJ3346.D	08/16/2013	17:02
	STD8260 240-97870/7	UXJ3347.D	08/16/2013	17:25
	STD6 240-97870/8	UXJ3348.D	08/16/2013	17:49
	STD5 240-97870/9	UXJ3349.D	08/16/2013	18:13
	STD4 240-97870/10	UXJ3350.D	08/16/2013	18:36
	STD3 240-97870/11	UXJ3351.D	08/16/2013	19:00
	STD2 240-97870/12	UXJ3352.D	08/16/2013	19:23
	STD1 240-97870/13	UXJ3353.D	08/16/2013	19:47
	ICV 240-97870/14	UXJ3354.D	08/16/2013	20:11

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97870/7	UXJ3347.D
Level 2	STD8260 240-97870/6	UXJ3346.D
Level 3	STD8260 240-97870/5	UXJ3345.D
Level 4	STD8260 240-97870/4	UXJ3344.D
Level 5	STD8260 240-97870/3	UXJ3343.D
Level 6	STD8260 240-97870/2	UXJ3342.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2050 0.2069	0.2165	0.1905	0.1835	0.1962	Ave		0.1997				6.0		15.0			
Chloromethane	0.3836 0.3627	0.3744	0.3702	0.3585	0.3773	Ave		0.3711			0.1000	2.5		15.0			
Vinyl chloride	0.2970 0.2796	0.2816	0.2875	0.2788	0.2885	Ave		0.2855				2.4		15.0			
Bromomethane	0.0902 0.0928	0.0896	0.0882	0.0875	0.0852	Ave		0.0889				2.9		15.0			
Chloroethane	0.1253 0.1277	0.1308	0.1309	0.1239	0.1308	Ave		0.1282				2.4		15.0			
Trichlorofluoromethane	0.2678 0.2756	0.3067	0.2866	0.2745	0.2715	Ave		0.2804				5.1		15.0			
Acrolein	0.0410 0.0438	0.0438	0.0475	0.0482	0.0465	Ave		0.0451				6.0		15.0			
1,1-Dichloroethene	0.2532 0.2375	0.2478	0.2468	0.2446	0.2555	Ave		0.2476				2.6		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.0966 0.1399	0.1660	0.1326	0.1231	0.1275	Lin1	-0.014	0.1353							0.9940		0.9900
Acetone	0.3092 0.1071	0.2325	0.1721	0.1479	0.1289	Qua	0.3734	0.1375	0						1.0000		0.9900
Iodomethane	0.4129 0.3606	0.3709	0.3932	0.3933	0.4004	Ave		0.3885				5.0		15.0			
Carbon disulfide	0.7531 0.6075	0.7219	0.6836	0.6918	0.6835	Ave		0.6903				7.1		15.0			
Acetonitrile	0.0421 0.0334	0.0425	0.0426	0.0378	0.0368	Ave		0.0392				9.7		15.0			
Methyl acetate	0.3974 0.3192	0.3727	0.3681	0.3403	0.3439	Ave		0.3569				7.8		15.0			
Methylene Chloride	0.9491 0.2806	0.5689	0.4243	0.3380	0.3142	Lin1	0.6684	0.2703							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0210 0.0156	0.0209	0.0211	0.0210	0.0207	Ave		0.0200				11.0		15.0			
Acrylonitrile	0.1870 0.1457	0.1597	0.1621	0.1513	0.1512	Ave		0.1595				9.2		15.0			
trans-1,2-Dichloroethene	0.3533 0.3481	0.3265	0.3317	0.3389	0.3315	Ave		0.3383				3.1		15.0			
Methyl tert-butyl ether	0.9157 0.7559	0.7542	0.7730	0.7847	0.7711	Ave		0.7924				7.8		15.0			
Hexane	0.0451 0.0680	0.0773	0.0574	0.0681	0.0579	Lin1	-0.010	0.0654							0.9910		0.9900
1,1-Dichloroethane	0.8025 0.7508	0.7293	0.7254	0.7239	0.7105	Ave		0.7404			0.1000	4.5		15.0			
Vinyl acetate	0.0440 0.0495	0.0415	0.0482	0.0494	0.0501	Ave		0.0471				7.5		15.0			
2-Butanone	0.2005 0.1535	0.2003	0.1813	0.1847	0.1769	Ave		0.1829				9.5		15.0			
cis-1,2-Dichloroethene	0.3848 0.3690	0.3500	0.3592	0.3622	0.3649	Ave		0.3650				3.2		15.0			
2,2-Dichloropropane	0.3421 0.3268	0.3667	0.3653	0.3538	0.3552	Ave		0.3517				4.3		15.0			
Bromochloromethane	0.2257 0.2057	0.2118	0.1996	0.2003	0.2019	Ave		0.2075				4.8		15.0			
Tetrahydrofuran	0.1645 0.0965	0.1385	0.1158	0.1182	0.1091	Lin1	0.0767	0.0998							0.9950		0.9900
Chloroform	0.6517 0.6334	0.5981	0.6259	0.6108	0.6111	Ave		0.6218				3.1		15.0			
1,1,1-Trichloroethane	0.5102 0.4815	0.4629	0.4993	0.5043	0.4946	Ave		0.4921				3.5		15.0			
Cyclohexane	0.4992 0.6461	0.6130	0.5552	0.5930	0.5967	Ave		0.5839				8.7		15.0			
1,1-Dichloropropene	0.4438 0.4620	0.4196	0.4258	0.4347	0.4394	Ave		0.4375				3.4		15.0			
Carbon tetrachloride	0.4398 0.4455	0.4494	0.4270	0.4294	0.4398	Ave		0.4385				2.0		15.0			
Benzene	1.4334 1.4434	1.3464	1.3831	1.3517	1.3641	Ave		1.3870				3.0		15.0			
1,2-Dichloroethane	0.6202 0.5720	0.5573	0.5676	0.5564	0.5589	Ave		0.5721				4.3		15.0			
Trichloroethene	0.3938 0.4061	0.3696	0.3948	0.3853	0.4011	Ave		0.3918				3.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.2867 0.4356	0.3998	0.3263	0.3585	0.3855	Ave		0.3654				15.0		15.0			
1,2-Dichloropropane	0.4686 0.4171	0.4119	0.4140	0.4117	0.4108	Ave		0.4224				5.4		15.0			
Dibromomethane	0.2258 0.1875	0.1961	0.2070	0.1936	0.1955	Ave		0.2009				6.8		15.0			
1,4-Dioxane	0.0021	0.0025	0.0021	0.0024	0.0023	Ave		0.0023				8.1		15.0			
Bromodichloromethane	0.4259 0.4382	0.4007	0.4398	0.4113	0.4323	Ave		0.4247				3.7		15.0			
2-Chloroethyl vinyl ether	0.1674 0.1999	0.1676	0.1836	0.1888	0.1996	Ave		0.1845				7.9		15.0			
cis-1,3-Dichloropropene	0.4258 0.5097	0.4513	0.4726	0.4900	0.4938	Ave		0.4739				6.5		15.0			
4-Methyl-2-pentanone	0.3283 0.3278	0.3102	0.3353	0.3435	0.3475	Ave		0.3321				4.0		15.0			
Toluene	1.9738 2.1996	1.9199	2.0481	1.9932	2.1061	Ave		2.0401				4.9		15.0			
trans-1,3-Dichloropropene	0.5561 0.6042	0.5109	0.5712	0.5535	0.6213	Ave		0.5695				6.9		15.0			
Ethyl methacrylate	0.3733 0.4741	0.3854	0.4094	0.4308	0.5051	Ave		0.4297				12.0		15.0			
1,1,2-Trichloroethane	0.3726 0.3696	0.3942	0.4092	0.3712	0.3880	Ave		0.3841				4.1		15.0			
1,3-Dichloropropane	0.6458 0.6562	0.6480	0.6624	0.6374	0.6625	Ave		0.6520				1.5		15.0			
Tetrachloroethene	0.3366 0.3931	0.3605	0.3772	0.3618	0.3806	Ave		0.3683				5.4		15.0			
2-Hexanone	0.3457 0.2741	0.2638	0.2961	0.2980	0.3086	Ave		0.2977				9.7		15.0			
Dibromochloromethane	0.3797 0.4126	0.4179	0.4031	0.3981	0.4254	Ave		0.4062				4.0		15.0			
1,2-Dibromoethane	0.3707 0.3552	0.3627	0.3824	0.3517	0.3646	Ave		0.3645				3.0		15.0			
Chlorobenzene	1.3056 1.2616	1.2440	1.2606	1.1898	1.2600	Ave		1.2536			0.3000	3.0		15.0			
1,1,1,2-Tetrachloroethane	0.5187 0.4648	0.4407	0.4570	0.4455	0.4642	Ave		0.4652				6.0		15.0			
Ethylbenzene	0.5355 0.6600	0.5148	0.5782	0.6019	0.6572	Ave		0.5913				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6035 0.8215	0.6401	0.7252	0.7630	0.8230	Ave		0.7294				13.0		15.0			
o-Xylene	0.4762 0.6977	0.5965	0.6715	0.6753	0.6992	Ave		0.6361				14.0		15.0			
Styrene	0.8804 1.1787	0.9115	1.0905	1.0960	1.1784	Ave		1.0559				12.0		15.0			
Bromoform	0.1460 0.1361	0.1380	0.1257	0.1414	0.1505	Ave		0.1396			0.1000	6.2		15.0			
Isopropylbenzene	1.2466 1.5529	1.2639	1.4086	1.4368	1.5595	Ave		1.4114				9.6		15.0			
1,1,2,2-Tetrachloroethane	0.9587 0.7953	1.0655	0.9025	0.8644	0.8466	Ave		0.9055			0.3000	11.0		15.0			
Bromobenzene	1.1396 1.1159	1.1021	1.1178	1.1227	1.1382	Ave		1.1227				1.3		15.0			
1,2,3-Trichloropropane	0.3575 0.2637	0.3351	0.3244	0.2971	0.3012	Ave		0.3132				11.0		15.0			
trans-1,4-Dichloro-2-butene	0.2307 0.3110	0.3162	0.3231	0.3423	0.3074	Ave		0.3051				13.0		15.0			
n-Propylbenzene	0.9191 1.1733	1.0676	1.1471	1.0923	1.1433	Ave		1.0904				8.5		15.0			
2-Chlorotoluene	0.9723 1.0388	1.0833	0.9766	1.0638	1.0250	Ave		1.0267				4.4		15.0			
1,3,5-Trimethylbenzene	2.2255 3.0948	2.4704	2.7655	2.8790	3.0227	Ave		2.7430				12.0		15.0			
4-Chlorotoluene	0.9022 1.0802	1.0922	1.0204	1.0932	1.1027	Ave		1.0485				7.4		15.0			
tert-Butylbenzene	2.3013 2.5187	2.0190	2.5477	2.3018	2.3935	Ave		2.3470				8.2		15.0			
1,2,4-Trimethylbenzene	2.3778 3.0042	2.4562	2.7519	2.8622	2.8954	Ave		2.7246				9.3		15.0			
sec-Butylbenzene	2.3846 3.2334	2.6094	2.8211	2.9668	3.0465	Ave		2.8437				11.0		15.0			
1,3-Dichlorobenzene	1.8146 1.7530	1.6766	1.7132	1.6859	1.7001	Ave		1.7239				3.0		15.0			
p-Isopropyltoluene	1.7896 2.9109	2.1277	2.3539	2.4650	2.6051	Lin1	-1.400	2.8129							0.9960		0.9900
1,4-Dichlorobenzene	1.7782 1.7983	1.6803	1.7506	1.7134	1.7528	Ave		1.7456				2.5		15.0			
n-Butylbenzene	1.6781 2.1478	1.6030	1.5894	1.7118	1.8847	Ave		1.7691				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.6012 1.7185	1.6454	1.6361	1.6347	1.6381	Ave		1.6456				2.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1173 0.1360	0.1296	0.1578	0.1336	0.1458	Ave		0.1367				10.0		15.0			
1,3,5-Trichlorobenzene	1.0740 1.0627	1.0062	0.9283	0.9748	1.0091	Ave		1.0092				5.4		15.0			
1,2,4-Trichlorobenzene	0.8062 0.9580	0.7810	0.8479	0.8703	0.8928	Ave		0.8593				7.4		15.0			
Hexachlorobutadiene	0.3379 0.3800	0.4642	0.3382	0.3624	0.3737	Ave		0.3761				12.0		15.0			
Naphthalene	1.8724 2.4357	1.9574	2.0186	2.1470	2.4485	Ave		2.1466				11.0		15.0			
1,2,3-Trichlorobenzene	0.6297 0.8837	0.7184	0.7887	0.8500	0.8932	Ave		0.7939				13.0		15.0			
Dibromofluoromethane (Surr)	0.3664 0.3558	0.3145	0.3367	0.3468	0.3406	Ave		0.3435				5.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4791 0.4478	0.3961	0.4397	0.4403	0.4527	Ave		0.4426				6.1		15.0			
Toluene-d8 (Surr)	1.5671 1.8861	1.4287	1.6925	1.6839	1.8197	Ave		1.6797				9.9		15.0			
4-Bromofluorobenzene (Surr)	0.3557 0.3927	0.3559	0.3695	0.3822	0.4071	Ave		0.3772				5.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97870/7	UXJ3347.D
Level 2	STD8260 240-97870/6	UXJ3346.D
Level 3	STD8260 240-97870/5	UXJ3345.D
Level 4	STD8260 240-97870/4	UXJ3344.D
Level 5	STD8260 240-97870/3	UXJ3343.D
Level 6	STD8260 240-97870/2	UXJ3342.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	37670 1674324	84122	184865	357992	786564	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	70494 2935316	145493	359274	699276	1512643	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	54574 2262678	109459	279030	543815	1156920	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	16572 750741	34822	85591	170614	341479	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	23027 1033182	50818	127009	241697	524498	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	49207 2230636	119184	278147	535414	1088642	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	75423 3547077	170147	460723	940706	1864536	10.0 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	46533 1921917	96297	239541	477179	1024323	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Lin1	17749 1132252	64520	128658	240224	511343	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Qua	113662 1734140	180706	334068	576917	1034013	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	75881 2917862	144130	381607	767301	1605222	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	138407 4916428	280576	663513	1349534	2740530	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Ave	77437 2699262	165253	413849	738064	1477251	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	146068 5166380	289694	714488	1327804	2757559	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	174426 2270466	221105	411795	659284	1259781	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	77048 2519432	162210	409213	820218	1658784	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	68722 2358547	124096	314573	590396	1212261	2.00 80.0	4.00	10.0	20.0	40.0
trans-1,2-Dichloroethene	FB	Ave	64928 2817354	126894	321939	661194	1328990	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	168277 6116802	293099	750273	1530795	3091619	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Lin1	8296 549917	30058	55739	132796	231959	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	147482 6075484	283431	704116	1412184	2848537	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	8093 400919	16132	46765	96307	200899	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	73701 2483660	155725	351977	720573	1418630	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	70711 2986166	136016	348663	706498	1463010	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	62876 2644982	142528	354561	690258	1424210	1.00 40.0	2.00	5.00	10.0	20.0
Bromochloromethane	FB	Ave	41475 1664636	82316	193701	390804	809454	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Lin1	30231 780570	53820	112384	230526	437600	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	119768 5125558	232452	607504	1191585	2450060	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	93760 3896547	179909	484616	983764	1983228	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	91740 5228174	238229	538885	1156861	2392321	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	81567 3738492	163058	413275	848037	1761795	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	80820 3604798	174635	414420	837749	1763281	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	263417 11680428	523278	1342450	2636939	5469144	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	113973 4629229	216595	550937	1085474	2240904	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	72367 3285974	143654	383176	751692	1608372	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	52681 3525260	155391	316752	699361	1545753	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	86119 3374961	160089	401861	803215	1647105	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	41490 1517626	76221	200875	377719	784009	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	19124	48688	101123	230688	459671	50.0	100	250	500	1000
Bromodichloromethane	FB	Ave	78263 3546174	155716	426861	802346	1733123	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	61512 3234747	130272	356352	736496	1600271	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	78260 4124676	175388	458710	955910	1980069	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	120656 5305672	241122	650798	1340043	2786564	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	257780 12709295	528922	1415989	2857792	5914398	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	72624 3490944	140762	394935	793589	1744642	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	48753 2739435	106173	283018	617688	1418374	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	48661 2135382	108611	282872	532200	1089628	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	84344 3791320	178516	457959	913936	1860356	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	43965 2271126	99323	260804	518791	1068939	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	90292 3167859	145328	409397	854553	1733347	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	49596 2384043	115131	278692	570852	1194728	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	48411 2052317	99913	264349	504330	1024030	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	170512 7289570	342712	871537	1705868	3538281	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	67749 2685610	121422	315925	638725	1303618	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	69942 3813487	141838	399717	862971	1845458	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	157648 9492687	352702	1002731	2187887	4622353	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	62196 4031494	164334	464226	968283	1963599	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	114979 6810335	251122	753918	1571426	3309216	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Ave	19073 786582	38030	86870	202689	422572	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	162813 8972591	348217	973861	2060091	4379514	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	37114 1480988	85423	200643	387145	777320	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	44119 2078105	88357	248492	502803	1045086	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	13839 491105	26863	72108	133082	276589	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	8933 579121	25350	71824	153294	282246	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	35582 2184836	85591	255011	489193	1049752	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	37642 1934550	86857	217119	476448	941160	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	86155 5763197	198066	614808	1289424	2775461	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	34928 2011470	87566	226838	489604	1012483	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	89089 4690254	161876	566382	1030908	2197759	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	92052 5594414	196926	611779	1281879	2658607	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	92317 6021335	209209	627165	1328730	2797360	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	70250 3264396	134419	380853	755065	1561054	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Lin1	69280 5420748	170592	523286	1103993	2392065	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	68839 3348735	134715	389185	767374	1609437	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	64966 3999558	128523	353341	766653	1730602	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	61987 3200149	131922	363712	732114	1504119	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	4540 253293	10392	35078	59852	133891	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	41579 1978982	80675	206360	436602	926544	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	31209 1784011	62617	188486	389767	819739	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 15:26 Calibration End Date: 08/16/2013 17:25 Calibration ID: 16865

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Ave	13080 707654	37217	75183	162311	343132	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	72487 4535747	156936	448759	961559	2248245	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	24376 1645664	57597	175337	380680	820127	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	67329 2878964	122232	326806	676518	1365685	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	88055 3623727	153942	426747	858864	1814980	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	204672 10897488	393613	1170106	2414419	5110289	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	46452 2268804	98061	255445	547967	1143107	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97870/13	UXJ3353.D
Level 2	STD2 240-97870/12	UXJ3352.D
Level 3	STD3 240-97870/11	UXJ3351.D
Level 4	STD4 240-97870/10	UXJ3350.D
Level 5	STD5 240-97870/9	UXJ3349.D
Level 6	STD6 240-97870/8	UXJ3348.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.2683 0.2447	0.2194	0.2342	0.2458	0.2389	Ave		0.2419				6.6		15.0			
Ethyl ether	0.4166 0.3363	0.3272	0.3580	0.3443	0.3257	Ave		0.3513				9.7		15.0			
3-Chloro-1-propene	0.1711 0.1594	0.1649	0.1607	0.1637	0.1626	Ave		0.1637				2.5		15.0			
Diisopropyl ether	0.2951 0.2879	0.2590	0.2753	0.2826	0.2723	Ave		0.2787				4.6		15.0			
2-Chloro-1,3-butadiene	0.8909 0.8067	0.7747	0.8019	0.7869	0.8028	Ave		0.8107				5.1		15.0			
Ethyl-t-butyl ether (ETBE)	1.2969 1.2223	1.0767	1.2033	1.1860	1.1554	Ave		1.1901				6.1		15.0			
Ethyl acetate	0.4121 0.3700	0.3322	0.3751	0.3629	0.3625	Ave		0.3691				7.0		15.0			
Propionitrile	0.0505 0.0472	0.0443	0.0487	0.0440	0.0440	Ave		0.0464				5.9		15.0			
Methacrylonitrile	0.2783 0.2434	0.2519	0.2401	0.2378	0.2377	Ave		0.2482				6.3		15.0			
Isobutyl alcohol	0.0164 0.0113	0.0121	0.0129	0.0136	0.0123	Ave		0.0131				14.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6900 0.7425	0.6114	0.6799	0.6892	0.7000	Ave		0.6855				6.2		15.0			
n-Heptane	0.0493 0.0610	0.0648	0.0455	0.0478	0.0794	Ave		0.0580				22.0	*	15.0			
n-Butanol	0.0080 0.0063	0.0099	0.0087	0.0109	0.0102	Qua	-0.239	0.0143	0						0.9960		0.9900
Methyl methacrylate	0.2857 0.3339	0.2857	0.2922	0.3108	0.3261	Ave		0.3057				6.9		15.0			
2-Nitropropane	0.1138 0.0943	0.0892	0.0956	0.0928	0.0925	Ave		0.0964				9.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1426 0.1291	0.1384	0.1537	0.1626	0.1663	Ave		0.1488				9.8		15.0			
1,2,3-Trimethylbenzene	2.0795 3.3094	1.9372	2.2909	2.5402	2.5808	Qua	0.4789	1.9657	0.0331						0.9990		0.9900
2-Methylnaphthalene	0.8153 1.3785	0.8449	0.8722	0.9460	1.0548	Qua	0.3760	0.7406	0.0079						1.0000		0.9900
n-Butyl acetate	0.3377 0.5103	0.3088	0.3478	0.4216	0.4644	Lin1	-0.602	0.4925							0.9930		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-97870/13	UXJ3353.D
Level 2	STD2 240-97870/12	UXJ3352.D
Level 3	STD3 240-97870/11	UXJ3351.D
Level 4	STD4 240-97870/10	UXJ3350.D
Level 5	STD5 240-97870/9	UXJ3349.D
Level 6	STD6 240-97870/8	UXJ3348.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	48122 2041808	82495	225291	482196	960934	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	74729 2806085	123016	344397	675462	1309924	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	30687 1329979	61984	154638	321091	654102	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	264638 12013371	486917	1324389	2772493	5475775	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	159804 6731952	291252	771475	1543917	3228929	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	232617 10200483	404810	1157551	2326763	4647206	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl acetate	FB	Ave	147818 6174971	249785	721741	1423966	2916521	2.00 80.0	4.00	10.0	20.0	40.0
Propionitrile	FB	Ave	18107 788026	33304	93603	172695	354203	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	49913 2031281	94703	230982	466630	956107	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBZ	Ave	40240 1175888	62575	170717	353048	669278	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	123769 6195936	229885	654052	1352156	2815420	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	8844 508978	24378	43747	93794	319406	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	CBZ	Qua	19565 657701	51455	115560	282810	552427	20.0 800	40.0	100	200	400
Methyl methacrylate	FB	Ave	51248 2786779	107415	281105	609726	1311491	1.00 40.0	2.00	5.00	10.0	20.0
2-Nitropropane	FB	Ave	40816 1574387	67099	184016	363952	744495	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	45236 1814690	88426	259220	564736	1197424	10.0 400	20.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-28270-1 Analy Batch No.: 97870

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2013 17:49 Calibration End Date: 08/16/2013 19:47 Calibration ID: 16867

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Qua	65956 4652444	123785	386358	882420	1858013	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Qua	51720 3875813	107974	294203	657279	1518848	2.00 80.0	4.00	10.0	20.0	40.0
n-Butyl acetate	FB	Lin1	121142 8516858	232217	669164	1654201	3735826	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.1287		1.00	0.0100	-35.5	50.0
Chloromethane	Ave	0.3711	0.3145	0.1000	1.00	0.0100	-15.2	50.0
Vinyl chloride	Ave	0.2855	0.2363		1.00	0.0100	-17.2	20.0
Bromomethane	Ave	0.0889	0.0702		1.00	0.0100	-21.1	50.0
Chloroethane	Ave	0.1282	0.1203		1.00	0.0100	-6.1	50.0
Trichlorofluoromethane	Ave	0.2804	0.2325		1.00	0.0100	-17.1	50.0
1,1-Dichloroethene	Ave	0.2476	0.2329		1.00	0.0100	-5.9	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1207		1.00	0.0100	-9.7	50.0
Acetone	Qua		0.1235		10.0	0.0200	-19.6	50.0
Iodomethane	Ave	0.3885	0.3704		1.00	0.0100	-4.7	50.0
Carbon disulfide	Ave	0.6903	0.6294		1.00	0.0100	-8.8	50.0
Methyl acetate	Ave	0.3569	0.3691		10.0	0.0100	3.4	50.0
Methylene Chloride	Lin1		0.3386		1.00	0.0100	0.5	50.0
tert-Butyl alcohol	Ave	0.0200	0.0157		50.0	0.200	-21.5	50.0
Methyl tert-butyl ether	Ave	0.7924	0.7415		1.00	0.0100	-6.4	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3252		1.00	0.0100	-3.9	50.0
Hexane	Lin1		0.0594		1.00	0.0100	-7.6	20.0
1,1-Dichloroethane	Ave	0.7404	0.7131	0.1000	1.00	0.0100	-3.7	50.0
Vinyl acetate	Ave	0.0471	0.0420		2.00	0.0100	-10.9	50.0
2-Butanone	Ave	0.1829	0.1619		10.0	0.0200	-11.5	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.3452		1.00	0.0100	-5.4	50.0
2,2-Dichloropropane	Ave	0.3517	0.3227		1.00	0.0100	-8.2	50.0
Bromochloromethane	Ave	0.2075	0.1929		1.00	0.0100	-7.0	50.0
Tetrahydrofuran	Lin1		0.0971		5.00	0.0100	-10.4	50.0
Chloroform	Ave	0.6218	0.6140		1.00	0.0100	-1.3	20.0
1,1,1-Trichloroethane	Ave	0.4921	0.4673		1.00	0.0100	-5.1	50.0
Cyclohexane	Ave	0.5839	0.5272		1.00	0.0100	-9.7	50.0
1,1-Dichloropropene	Ave	0.4375	0.4181		1.00	0.0100	-4.4	50.0
Carbon tetrachloride	Ave	0.4385	0.4112		1.00	0.0100	-6.2	50.0
1,2-Dichloroethane	Ave	0.5721	0.5534		1.00	0.0100	-3.3	50.0
Benzene	Ave	1.387	1.334		1.00	0.0100	-3.8	50.0
Trichloroethene	Ave	0.3918	0.3865		1.00	0.0100	-1.4	50.0
Methylcyclohexane	Ave	0.3654	0.3113		1.00	0.0100	-14.8	50.0
1,2-Dichloropropane	Ave	0.4224	0.4227		1.00	0.0100	0.0	20.0
Dibromomethane	Ave	0.2009	0.2036		1.00	0.0100	1.3	50.0
Bromodichloromethane	Ave	0.4247	0.4389		1.00	0.0100	3.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1845	0.1633		10.0	0.0100	-11.5	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4471		1.00	0.0100	-5.7	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.3155		10.0	0.0200	-5.0	50.0
Toluene	Ave	2.040	1.986		1.00	0.0100	-2.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
trans-1,3-Dichloropropene	Ave	0.5695	0.5490		1.00	0.0100	-3.6	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.3836		1.00	0.0100	-0.1	50.0
1,3-Dichloropropane	Ave	0.6520	0.6434		1.00	0.0100	-1.3	50.0
Tetrachloroethene	Ave	0.3683	0.3639		1.00	0.0100	-1.2	50.0
2-Hexanone	Ave	0.2977	0.2726		10.0	0.0200	-8.5	50.0
Dibromochloromethane	Ave	0.4062	0.4118		1.00	0.0100	1.4	50.0
1,2-Dibromoethane	Ave	0.3645	0.3367		1.00	0.0100	-7.7	50.0
Chlorobenzene	Ave	1.254	1.199	0.3000	1.00	0.0100	-4.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.4619		1.00	0.0100	-0.7	50.0
Ethylbenzene	Ave	0.5913	0.5816		1.00	0.0100	-1.6	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.7467		2.00	0.0200	2.4	50.0
o-Xylene	Ave	0.6361	0.6473		1.00	0.0100	1.8	50.0
Styrene	Ave	1.056	1.110		1.00	0.0100	5.1	50.0
Bromoform	Ave	0.1396	0.1502	0.1000	1.00	0.0100	7.6	50.0
Isopropylbenzene	Ave	1.411	1.390		1.00	0.0100	-1.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.7574	0.3000	1.00	0.0100	-16.4	50.0
Bromobenzene	Ave	1.123	1.055		1.00	0.0100	-6.0	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2891		1.00	0.0100	-7.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.2829		1.00	0.0200	-7.3	50.0
n-Propylbenzene	Ave	1.090	1.038		1.00	0.0100	-4.8	50.0
2-Chlorotoluene	Ave	1.027	0.9715		1.00	0.0100	-5.4	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.691		1.00	0.0100	-1.9	50.0
4-Chlorotoluene	Ave	1.048	0.9943		1.00	0.0100	-5.2	50.0
tert-Butylbenzene	Ave	2.347	2.193		1.00	0.0100	-6.5	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.528		1.00	0.0100	-7.2	50.0
sec-Butylbenzene	Ave	2.844	2.611		1.00	0.0100	-8.2	50.0
1,3-Dichlorobenzene	Ave	1.724	1.571		1.00	0.0100	-8.9	50.0
p-Isopropyltoluene	Lin1		2.299		1.00	0.0100	-13.3	50.0
1,4-Dichlorobenzene	Ave	1.746	1.652		1.00	0.0100	-5.4	50.0
n-Butylbenzene	Ave	1.769	1.599		1.00	0.0100	-9.6	50.0
1,2-Dichlorobenzene	Ave	1.646	1.501		1.00	0.0100	-8.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1208		2.00	0.0100	-11.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7631		1.00	0.0100	-11.2	50.0
Hexachlorobutadiene	Ave	0.3761	0.2697		1.00	0.0100	-28.3	50.0
Naphthalene	Ave	2.147	1.801		1.00	0.0100	-16.1	50.0
1,2,3-Trichlorobenzene	Ave	0.7939	0.7398		1.00	0.0100	-6.8	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.2912		0.00707	0.00834	-15.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3605		0.00679	0.00834	-18.6	50.0
Toluene-d8 (Surr)	Ave	1.680	1.563		0.00776	0.00834	-7.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.3899		0.00862	0.00834	3.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Lab Sample ID: ICV 240-97870/14 Calibration Date: 08/16/2013 20:11

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3354.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3513	0.3614		2.00	0.0100	2.9	50.0
Diisopropyl ether	Ave	0.2787	0.2903		10.0	0.0100	4.2	50.0
Isobutyl alcohol	Ave	0.0131	0.0096		50.0	0.500	-26.4	50.0
Cyclohexanone	Ave	0.1488	0.0210		20.0	0.200	-85.9*	50.0
1,2,3-Trimethylbenzene	Qua		2.606		0.0110	0.0100	9.8	50.0

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Instrument ID: A3UX11 Start Date: 08/28/2013 09:50

Analysis Batch Number: 99295 End Date: 08/28/2013 21:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-99295/1		08/28/2013 09:50	1	BFB193.D	DB-624 0.18(mm)
CCVIS 240-99295/2		08/28/2013 11:16	1	UXJ3707.D	DB-624 0.18(mm)
LCS 240-99295/4		08/28/2013 11:41	1	UXJ3708.D	DB-624 0.18(mm)
CCV 240-99295/3		08/28/2013 12:04	1	UXJ3709.D	DB-624 0.18(mm)
MB 240-99295/5		08/28/2013 12:52	1	UXJ3711.D	DB-624 0.18(mm)
ZZZZZ		08/28/2013 13:18	3.33		DB-624 0.18(mm)
ZZZZZ		08/28/2013 14:06	1		DB-624 0.18(mm)
ZZZZZ		08/28/2013 14:29	1000		DB-624 0.18(mm)
ZZZZZ		08/28/2013 15:17	1		DB-624 0.18(mm)
ZZZZZ		08/28/2013 15:41	1000		DB-624 0.18(mm)
ZZZZZ		08/28/2013 16:28	1		DB-624 0.18(mm)
ZZZZZ		08/28/2013 16:52	200		DB-624 0.18(mm)
ZZZZZ		08/28/2013 17:16	40		DB-624 0.18(mm)
ZZZZZ		08/28/2013 17:40	100		DB-624 0.18(mm)
ZZZZZ		08/28/2013 18:03	66.67		DB-624 0.18(mm)
ZZZZZ		08/28/2013 18:27	100		DB-624 0.18(mm)
ZZZZZ		08/28/2013 18:51	2.5		DB-624 0.18(mm)
ZZZZZ		08/28/2013 19:15	1		DB-624 0.18(mm)
ZZZZZ		08/28/2013 19:37	1		DB-624 0.18(mm)
240-28270-1	DR-DPT-70-20	08/28/2013 20:48	1	UXJ3731.D	DB-624 0.18(mm)
240-28270-2	TB-082213	08/28/2013 21:11	1	UXJ3732.D	DB-624 0.18(mm)
190-1785-B-1 MS		08/28/2013 21:35	40	UXJ3733.D	DB-624 0.18(mm)
190-1785-B-1 MSD		08/28/2013 21:58	40	UXJ3734.D	DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Lab File ID: BFB193.D BFB Injection Date: 08/28/2013

Instrument ID: A3UX11 BFB Injection Time: 09:50

Analysis Batch No.: 99295

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.1	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.9	
173	Less than 2.0 % of mass 174	1.6	(1.7)1
174	50.0 - 120.00 % of mass 95	89.4	
175	5.0 - 9.0 % of mass 174	6.4	(7.2)1
176	95.0 - 101.0 % of mass 174	89.1	(99.6)1
177	5.0 - 9.0 % of mass 176	5.2	(5.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-99295/2	UXJ3707.D	08/28/2013	11:16
	LCS 240-99295/4	UXJ3708.D	08/28/2013	11:41
	CCV 240-99295/3	UXJ3709.D	08/28/2013	12:04
	MB 240-99295/5	UXJ3711.D	08/28/2013	12:52
DR-DPT-70-20	240-28270-1	UXJ3731.D	08/28/2013	20:48
TB-082213	240-28270-2	UXJ3732.D	08/28/2013	21:11
	190-1785-B-1 MS	UXJ3733.D	08/28/2013	21:35
	190-1785-B-1 MSD	UXJ3734.D	08/28/2013	21:58

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Lab Sample ID: CCVIS 240-99295/2 Calibration Date: 08/28/2013 11:16

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3707.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1997	0.1869		1.00	0.0100	-6.4	50.0
Chloromethane	Ave	0.3711	0.2891	0.1000	1.00	0.0100	-22.1	50.0
Vinyl chloride	Ave	0.2855	0.2491		1.00	0.0100	-12.8	20.0
Bromomethane	Ave	0.0889	0.0763		1.00	0.0100	-14.2	50.0
Chloroethane	Ave	0.1282	0.1228		1.00	0.0100	-4.2	50.0
Trichlorofluoromethane	Ave	0.2804	0.2936		1.00	0.0100	4.7	50.0
Acrolein	Ave	0.0451	0.0406		20.0	0.100	-10.0	50.0
1,1-Dichloroethene	Ave	0.2476	0.2541		1.00	0.0100	2.6	20.0
Acetone	Qua		0.1232		10.0	0.0200	-19.9	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1618		1.00	0.0100	20.6	50.0
Iodomethane	Ave	0.3885	0.4104		1.00	0.0100	5.6	50.0
Carbon disulfide	Ave	0.6903	0.6672		1.00	0.0100	-3.3	50.0
Acetonitrile	Ave	0.0392	0.0400		20.0	0.100	2.0	50.0
Methyl acetate	Ave	0.3569	0.3713		10.0	0.0200	4.0	50.0
Methylene Chloride	Lin1		0.3268		1.00	0.0100	-3.8	50.0
tert-Butyl alcohol	Ave	0.0200	0.0224		50.0	0.200	11.7	50.0
Acrylonitrile	Ave	0.1595	0.1691		20.0	0.0200	6.0	50.0
Methyl tert-butyl ether	Ave	0.7924	0.8228		1.00	0.0100	3.8	50.0
trans-1,2-Dichloroethene	Ave	0.3383	0.3674		1.00	0.0100	8.6	50.0
Hexane	Lin1		0.0764		1.00	0.0100	18.2	20.0
1,1-Dichloroethane	Ave	0.7404	0.7391	0.1000	1.00	0.0100	-0.2	50.0
Vinyl acetate	Ave	0.0471	0.0442		2.00	0.0100	-6.1	50.0
2,2-Dichloropropane	Ave	0.3517	0.3322		1.00	0.0100	-5.6	50.0
2-Butanone	Ave	0.1829	0.1553		10.0	0.0200	-15.1	50.0
cis-1,2-Dichloroethene	Ave	0.3650	0.3567		1.00	0.0100	-2.3	50.0
Bromochloromethane	Ave	0.2075	0.2110		1.00	0.0100	1.7	50.0
Chloroform	Ave	0.6218	0.5857		1.00	0.0100	-5.8	20.0
Tetrahydrofuran	Lin1		0.1044		5.00	0.0100	-3.1	50.0
1,1,1-Trichloroethane	Ave	0.4921	0.4917		1.00	0.0100	-0.0	50.0
Cyclohexane	Ave	0.5839	0.5789		1.00	0.0100	-0.9	50.0
1,1-Dichloropropene	Ave	0.4375	0.4283		1.00	0.0100	-2.1	50.0
Carbon tetrachloride	Ave	0.4385	0.4610		1.00	0.0100	5.1	50.0
1,2-Dichloroethane	Ave	0.5721	0.5333		1.00	0.0100	-6.8	50.0
Benzene	Ave	1.387	1.248		1.00	0.0100	-10.0	50.0
Trichloroethene	Ave	0.3918	0.4050		1.00	0.0100	3.4	50.0
Methylcyclohexane	Ave	0.3654	0.3799		1.00	0.0100	4.0	50.0
1,2-Dichloropropane	Ave	0.4224	0.3779		1.00	0.0100	-10.5	20.0
1,4-Dioxane	Ave	0.0023	0.0012		50.0	0.500	-46.0	50.0
Dibromomethane	Ave	0.2009	0.1958		1.00	0.0100	-2.6	50.0
Bromodichloromethane	Ave	0.4247	0.4352		1.00	0.0100	2.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Lab Sample ID: CCVIS 240-99295/2 Calibration Date: 08/28/2013 11:16

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3707.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1845	0.1556		10.0	0.0200	-15.6	50.0
cis-1,3-Dichloropropene	Ave	0.4739	0.4507		1.00	0.0100	-4.9	50.0
4-Methyl-2-pentanone	Ave	0.3321	0.2877		10.0	0.0200	-13.4	50.0
Toluene	Ave	2.040	2.025		1.00	0.0100	-0.7	20.0
trans-1,3-Dichloropropene	Ave	0.5695	0.5686		1.00	0.0100	-0.2	50.0
Ethyl methacrylate	Ave	0.4297	0.4424		1.00	0.0100	3.0	50.0
1,1,2-Trichloroethane	Ave	0.3841	0.3921		1.00	0.0100	2.1	50.0
1,3-Dichloropropane	Ave	0.6520	0.6553		1.00	0.0100	0.5	50.0
Tetrachloroethene	Ave	0.3683	0.4131		1.00	0.0100	12.1	50.0
2-Hexanone	Ave	0.2977	0.2469		10.0	0.0200	-17.1	50.0
Dibromochloromethane	Ave	0.4062	0.4793		1.00	0.0100	18.0	50.0
1,2-Dibromoethane	Ave	0.3645	0.3921		1.00	0.0100	7.6	50.0
Chlorobenzene	Ave	1.254	1.249	0.3000	1.00	0.0100	-0.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4652	0.4799		1.00	0.0100	3.2	50.0
Ethylbenzene	Ave	0.5913	0.6141		1.00	0.0100	3.9	20.0
m-Xylene & p-Xylene	Ave	0.7294	0.7756		2.00	0.0200	6.3	50.0
o-Xylene	Ave	0.6361	0.6547		1.00	0.0100	2.9	50.0
Styrene	Ave	1.056	1.115		1.00	0.0100	5.6	50.0
Bromoform	Ave	0.1396	0.1995	0.1000	1.00	0.0100	42.9	50.0
Isopropylbenzene	Ave	1.411	1.422		1.00	0.0100	0.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9055	0.8566	0.3000	1.00	0.0100	-5.4	50.0
Bromobenzene	Ave	1.123	1.128		1.00	0.0100	0.5	50.0
1,2,3-Trichloropropane	Ave	0.3132	0.2890		1.00	0.0100	-7.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3051	0.2080		1.00	0.0100	-31.8	50.0
n-Propylbenzene	Ave	1.090	1.144		1.00	0.0100	4.9	50.0
2-Chlorotoluene	Ave	1.027	0.9815		1.00	0.0100	-4.4	50.0
1,3,5-Trimethylbenzene	Ave	2.743	2.784		1.00	0.0100	1.5	50.0
4-Chlorotoluene	Ave	1.048	1.047		1.00	0.0100	-0.1	50.0
tert-Butylbenzene	Ave	2.347	2.213		1.00	0.0100	-5.7	50.0
1,2,4-Trimethylbenzene	Ave	2.725	2.502		1.00	0.0100	-8.2	50.0
sec-Butylbenzene	Ave	2.844	2.872		1.00	0.0100	1.0	50.0
1,3-Dichlorobenzene	Ave	1.724	1.650		1.00	0.0100	-4.3	50.0
p-Isopropyltoluene	Lin1		2.266		1.00	0.0100	-14.5	50.0
1,4-Dichlorobenzene	Ave	1.746	1.672		1.00	0.0100	-4.2	50.0
n-Butylbenzene	Ave	1.769	1.512		1.00	0.0100	-14.6	50.0
1,2-Dichlorobenzene	Ave	1.646	1.656		1.00	0.0100	0.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1367	0.1790		2.00	0.0100	30.9	50.0
1,3,5-Trichlorobenzene	Ave	1.009	0.9183		1.00	0.0100	-9.0	50.0
1,2,4-Trichlorobenzene	Ave	0.8593	0.7732		1.00	0.0100	-10.0	50.0
Hexachlorobutadiene	Ave	0.3761	0.3473		1.00	0.0100	-7.6	50.0
Naphthalene	Ave	2.147	1.967		1.00	0.0100	-8.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Lab Sample ID: CCVIS 240-99295/2 Calibration Date: 08/28/2013 11:16

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 15:26

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 17:25

Lab File ID: UXJ3707.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7939	0.7160		1.00	0.0100	-9.8	50.0
Dibromofluoromethane (Surr)	Ave	0.3435	0.3004		0.00729	0.00834	-12.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4426	0.3550		0.00669	0.00834	-19.8	50.0
Toluene-d8 (Surr)	Ave	1.680	1.617		0.00803	0.00834	-3.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3772	0.4186		0.00926	0.00834	11.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Lab Sample ID: CCV 240-99295/3 Calibration Date: 08/28/2013 12:04

Instrument ID: A3UX11 Calib Start Date: 08/16/2013 17:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/16/2013 19:47

Lab File ID: UXJ3709.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2419	0.2321		2.00	0.0100	-4.0	50.0
Ethyl ether	Ave	0.3513	0.3329		2.00	0.0100	-5.2	50.0
3-Chloro-1-propene	Ave	0.1637	0.1533		2.00	0.0100	-6.4	50.0
Diisopropyl ether	Ave	0.2787	0.2797		10.0	0.0500	0.3	50.0
2-Chloro-1,3-butadiene	Ave	0.8107	0.7364		2.00	0.0100	-9.2	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.190	1.085		5.00	0.0100	-8.8	50.0
Ethyl acetate	Ave	0.3691	0.3312		4.00	0.0200	-10.3	50.0
Propionitrile	Ave	0.0464	0.0484		4.00	0.0200	4.1	50.0
Methacrylonitrile	Ave	0.2482	0.2134		2.00	0.0100	-14.0	50.0
Isobutyl alcohol	Ave	0.0131	0.0128		50.0	0.200	-1.9	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6855	0.6250		5.00	0.0100	-8.8	50.0
n-Heptane	Ave	0.0580	0.0702		1.00	0.0100	21.0	50.0
n-Butanol	Qua		0.0068		50.0	0.200	-39.4	50.0
Methyl methacrylate	Ave	0.3057	0.2677		2.00	0.0100	-12.5	50.0
2-Nitropropane	Ave	0.0964	0.0850		2.00	0.0200	-11.8	50.0
Cyclohexanone	Ave	0.1488	0.1380		20.0	0.100	-7.3	50.0
1,2,3-Trimethylbenzene	Qua		2.292		0.00980	0.0100	-2.0	50.0
2-Methylnaphthalene	Qua		0.7310		5.00	0.0200	-18.1	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Lab File ID: UXJ3711.D Lab Sample ID: MB 240-99295/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 08/28/2013 12:52

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-99295/4	UXJ3708.D	08/28/2013 11:41
DR-DPT-70-20	240-28270-1	UXJ3731.D	08/28/2013 20:48
TB-082213	240-28270-2	UXJ3732.D	08/28/2013 21:11
	190-1785-B-1 MS	UXJ3733.D	08/28/2013 21:35
	190-1785-B-1 MSD	UXJ3734.D	08/28/2013 21:58

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28270-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-99295/5

Matrix: Water | Lab File ID: UXJ3711.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/28/2013 12:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 99295 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99295/5

Matrix: Water Lab File ID: UXJ3711.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 12:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99295/5

Matrix: Water Lab File ID: UXJ3711.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 12:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	96		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-99295/5

Matrix: Water Lab File ID: UXJ3711.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2013 12:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 99295 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3708.D

Lab ID: LCS 240-99295/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.6	106	72-116	
1,1,1-Trichloroethane	10.0	9.40	94	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.91	89	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.8	118	74-151	
1,1-Dichloroethane	10.0	10.5	105	82-115	
1,1-Dichloroethene	10.0	10.7	107	78-131	
1,1-Dichloropropene	10.0	9.08	91	83-114	
1,2,3-Trichlorobenzene	10.0	9.35	94	54-126	
1,2,3-Trichloropropane	10.0	9.79	98	73-129	
1,2,3-Trimethylbenzene	10.0	10.8	108	70-130	
1,2,4-Trichlorobenzene	10.0	8.48	85	48-135	
1,2,4-Trimethylbenzene	10.0	9.40	94	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.3	103	42-136	
1,2-Dichlorobenzene	10.0	10.3	103	81-110	
1,2-Dichloroethane	10.0	9.64	96	71-127	
1,2-Dichloropropane	10.0	9.24	92	81-115	
1,3-Dichlorobenzene	10.0	9.66	97	80-110	
1,3-Dichloropropane	10.0	10.4	104	79-116	
1,4-Dichlorobenzene	10.0	10.1	101	82-110	
2,2-Dichloropropane	10.0	9.95	99	50-129	
2-Chloroethyl vinyl ether	10.0	8.87 J	89	52-131	
2-Chlorotoluene	10.0	9.94	99	76-116	
2-Hexanone	20.0	17.0	85	55-133	
Bromobenzene	10.0	10.3	103	76-115	
Bromochloromethane	10.0	10.7	107	77-120	
4-Chlorotoluene	10.0	9.74	97	77-115	
p-Isopropyltoluene	10.0	8.97	90	74-120	
Acetone	20.0	14.1	70	43-136	
Benzene	10.0	9.40	94	83-112	
Bromoform	10.0	14.1	141	40-131	*
Bromomethane	10.0	8.67	87	11-185	
Carbon disulfide	10.0	9.90	99	62-142	
Carbon tetrachloride	10.0	10.2	102	66-128	
Chlorobenzene	10.0	10.1	101	85-110	
Chloroethane	10.0	9.78	98	25-153	
Chloroform	10.0	9.67	97	79-117	
Chloromethane	10.0	8.23	82	44-126	
cis-1,2-Dichloroethene	10.0	10.8	108	80-113	
cis-1,3-Dichloropropene	10.0	9.52	95	61-115	
Hexachlorobutadiene	10.0	8.76	88	36-134	
Dibromomethane	10.0	9.81	98	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3708.D

Lab ID: LCS 240-99295/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.8	108	72-121	
Dichlorodifluoromethane	10.0	7.62	76	19-129	
Ethylbenzene	10.0	10.8	108	83-112	
1,2-Dibromoethane	10.0	10.9	109	79-113	
Diisopropyl ether	10.0	11.8	118	77-118	
Naphthalene	10.0	9.20	92	32-141	
m-Xylene & p-Xylene	20.0	22.3	111	83-113	
n-Butylbenzene	10.0	9.20	92	66-125	
Isopropylbenzene	10.0	10.4	104	75-114	
n-Propylbenzene	10.0	10.3	103	74-121	
2-Butanone	20.0	17.9	89	60-126	
4-Methyl-2-pentanone	20.0	18.4	92	63-128	
sec-Butylbenzene	10.0	9.46	95	70-117	
Methyl tert-butyl ether	10.0	11.1	111	52-144	
Methylene Chloride	10.0	9.70	97	66-131	
o-Xylene	10.0	10.6	106	83-113	
Styrene	10.0	11.1	111	79-114	
tert-Butylbenzene	10.0	9.01	90	71-115	
Tetrachloroethene	10.0	11.3	113	79-114	
Toluene	10.0	10.4	104	84-111	
trans-1,2-Dichloroethene	10.0	11.2	112	83-117	
trans-1,3-Dichloropropene	10.0	10.2	102	58-117	
Trichloroethene	10.0	10.8	108	76-117	
Trichlorofluoromethane	10.0	9.59	96	49-157	
Vinyl acetate	10.0	12.9	129	46-161	
Vinyl chloride	10.0	8.44	84	53-127	
tert-Butyl alcohol	200	235	117	70-130	
Xylenes, Total	30.0	32.9	110	83-112	
Dibromochloromethane	10.0	12.3	123	64-119	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3733.D

Lab ID: 190-1785-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,2,4-Trimethylbenzene	400	1400	1480	10	67-124	F
1,2-Dichloroethane	400	40 U	345	86	68-129	
Benzene	400	40 U	328	82	72-121	
Ethylbenzene	400	40 U	325	81	75-116	
1,2-Dibromoethane	400	40 U	377	94	74-113	
Naphthalene	400	58	404	87	15-158	
m-Xylene & p-Xylene	800	21 J	747	91	75-117	
Isopropylbenzene	400	13 J	346	83	68-116	
Methyl tert-butyl ether	400	40 U	379	95	46-144	
o-Xylene	400	40 U	348	87	76-116	
Toluene	400	11 J	344	83	78-114	
Xylenes, Total	1200	21 J	1100	90	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ3734.D

Lab ID: 190-1785-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2,4-Trimethylbenzene	400	1560	30	5	30	67-124	F
1,2-Dichloroethane	400	338	85	2	30	68-129	
Benzene	400	333	83	2	30	72-121	
Ethylbenzene	400	345	86	6	30	75-116	
1,2-Dibromoethane	400	366	92	3	30	74-113	
Naphthalene	400	453	99	11	30	15-158	
m-Xylene & p-Xylene	800	734	89	2	30	75-117	
Isopropylbenzene	400	356	86	3	30	68-116	
Methyl tert-butyl ether	400	385	96	2	30	46-144	
o-Xylene	400	355	89	2	30	76-116	
Toluene	400	354	86	3	30	78-114	
Xylenes, Total	1200	1090	89	1	30	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Sample No.: STD8260 240-97870/4 Date Analyzed: 08/16/2013 16:14

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ3344.D Heated Purge: (Y/N) N

Calibration ID: 16865

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1950817	5.47	1433793	8.15	447870	10.40
UPPER LIMIT		3901634	5.97	2867586	8.65	895740	10.90
LOWER LIMIT		975409	4.97	716897	7.65	223935	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-97870/14		1860770	5.47	1316767	8.15	441226	10.40
CCVIS 240-99295/2		1477164	5.47	1016576	8.15	344050	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28270-1

SDG No.:

Sample No.: CCVIS 240-99295/2 Date Analyzed: 08/28/2013 11:16

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): UXJ3707.D Heated Purge: (Y/N) N

Calibration ID: 17020

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1477164	5.47	1016576	8.15	344050	10.40
UPPER LIMIT		2954328	5.97	2033152	8.65	688100	10.90
LOWER LIMIT		738582	4.97	508288	7.65	172025	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-99295/4		1509220	5.47	1036158	8.15	364322	10.40
CCV 240-99295/3		1568830	5.47	1033761	8.15	269843	10.40
MB 240-99295/5		1360992	5.47	943236	8.15	250371	10.40
240-28270-1	DR-DPT-70-20	1347741	5.47	968916	8.15	278150	10.40
240-28270-2	TB-082213	1346207	5.47	918220	8.15	250918	10.40
190-1785-B-1 MS		1460686	5.47	1026361	8.15	354403	10.40
190-1785-B-1 MSD		1456534	5.47	1024923	8.15	337706	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

2.3

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/22/13	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC04882
Germantown, MD 20874	Calendar (C) or Work Days (W) 5 days			
(301) 528-3021 Phone	TAT if different from Below: Standard			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: Dump Road Source Areas	☐ 1 week			Sampler: S. Cameron
Site: MSA	☐ 2 days			
P O #	☐ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs
DR-DPT-70-20	8/22/2013	0920	GW	Water	3		x
DR-DPT-	8/22/2013		GW	Water	3		x
DR-DPT-	8/22/2013		GW	Water	3		x
DR-DPT-	8/22/2013		GW	Water	3		x
DR-DPT-	8/22/2013		GW	Water	3		x
DR-DPT-	8/22/2013		GW	Water	3		x
DR-DPT-	8/22/2013		GW	Water	3		x
DR-DPT-	8/22/2013		GW	Water	3		x
DR-DPT-	8/22/2013		GW	Water	3		x
DR-DPT-	8/22/2013		GW	Water	3		x
DR-DPT-	8/22/2013		GW	Water	3		x
TB-082213	8/22/2013		GW	Water	2		x



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:
5 day TAT

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/22/13 1430		TestAmerica	8/22/13 1440
Relinquished by:	Company: TestAmerica	Date/Time: 8/22/13 1600	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time: 8/23/13 905

TestAmerica Canton Sample Receipt Form/Narrative Login # : 28270
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: CL

Cooler Received on 8/24/13 Opened on 8/23/13

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. 2.3 °C	Corrected Cooler Temp. 2.3 °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity (1) (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC376062
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

SDG 240-28270-1

SAMPLE ID DR-DPT-70-20

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST / IS AMOUNT (NG)	Final Volume (ML)	AVE RRF	CONCENTRATION ug/L
968916	1	847649	10	5	0.7294	11.99

Sample Volume (ML)

5

m&p-Xylene = 12.0 ug/L

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A3UX11\20130828-22949.b\UXJ3731.D		
Lims ID:	240-28270-B-1	Client ID:	DR-DPT-70-20
Inject. Date:	28-Aug-2013 20:48:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0022949-024		
Misc. Info.:	J30828A,8260LLUX11,,43582		
Operator:	43582	Instrument ID:	A3UX11
Purge Vol:	5.000 mL	ALS Bottle#:	27
Lims Batch ID:	99295	Lims Sample ID:	24
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A3UX11\20130828-22949.b\8260_11.m		
Last Update:	29-Aug-2013 09:47:02	Calib Date:	23-Aug-2013 01:03:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A3UX11\20130823-22771.b\UXJ3534.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK030		
First Level Reviewer: evansle		Date:	29-Aug-2013 09:20:08

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.466	5.466	0.0	98	1347741	10.0	
* 2 Chlorobenzene-d5	117	8.152	8.152	0.0	82	968916	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.401	10.401	0.0	94	278150	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.886	4.887	-0.001	96	355606	7.68	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.182	5.182	0.0	86	411387	6.90	
$ 6 Toluene-d8 (Surr)	98	6.839	6.839	0.0	94	1133432	6.96	
$ 7 4-Bromofluorobenzene (Surr)	95	9.265	9.265	0.0	87	295888	8.10	
8 Dichlorodifluoromethane	85		1.715					
9 Chloromethane	50		1.881					
10 Vinyl chloride	62		1.988					
11 Bromomethane	94		2.307					
12 Chloroethane	64		2.402					
14 Trichlorofluoromethane	101		2.615					
19 1,1-Dichloroethene	96		3.041					
17 Acetone	43	3.064	3.064	0.0	93	129290	4.32	
18 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.076					
23 Carbon disulfide	76	3.277	3.265	0.012	97	51322	0.5517	
26 Methylene Chloride	84		3.431					
27 2-Methyl-2-propanol	59	3.549	3.514	0.035	58	6056	2.24	
29 trans-1,2-Dichloroethene	96		3.680					
30 Methyl tert-butyl ether	73		3.680					
32 1,1-Dichloroethane	63	4.023	4.023	0.0	57	35376	0.3545	
33 Vinyl acetate	86		4.046					
34 Isopropyl ether	87		4.070					9
37 Tert-butyl ethyl ether	59		4.378					9
39 2,2-Dichloropropane	77		4.508					9
38 2-Butanone (MEK)	43	4.496	4.508	-0.012	68	49293	2.00	
40 cis-1,2-Dichloroethene	96	4.496	4.508	-0.012	69	34013	0.6914	
43 Chlorobromomethane	128		4.697					
45 Chloroform	83	4.756	4.756	0.0	81	20210	0.2411	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
46 1,1,1-Trichloroethane	97		4.934					9
48 1,1-Dichloropropene	75		5.064					
49 Carbon tetrachloride	117		5.076					
51 1,2-Dichloroethane	62		5.242					
52 Benzene	78	5.241	5.242	-0.001	95	288407	1.54	
53 Tert-amyl methyl ether	73		5.324					9
56 Trichloroethene	130	5.786	5.786	0.0	93	329148	6.23	
59 1,2-Dichloropropane	63		5.975					9
61 Dibromomethane	93		6.070					
63 Dichlorobromomethane	83		6.188					
65 2-Chloroethyl vinyl ether	63		6.437					9
66 cis-1,3-Dichloropropene	75		6.579					9
67 4-Methyl-2-pentanone (MIBK)	43		6.709					9
68 Toluene	91	6.898	6.898	0.0	98	1090290	5.52	
69 trans-1,3-Dichloropropene	75		7.064					
72 Tetrachloroethene	164	7.395	7.395	0.0	82	20720	0.5806	
73 1,3-Dichloropropane	76		7.395					
74 2-Hexanone	43		7.442					9
76 Chlorodibromomethane	129		7.608					
77 Ethylene Dibromide	107		7.726					
79 Chlorobenzene	112	8.188	8.176	0.012	79	64242	0.5289	
80 1,1,1,2-Tetrachloroethane	131		8.247					
81 Ethylbenzene	106	8.271	8.271	0.0	97	138043	2.41	
82 m-Xylene & p-Xylene	106	8.377	8.377	0.0	94	847649	12.0	
83 o-Xylene	106	8.768	8.768	0.0	96	638110	10.4	
84 Styrene	104	8.756	8.768	-0.012	52	50386	0.4925	
85 Bromoform	173		8.957					
86 Isopropylbenzene	105	9.111	9.111	0.0	85	85023	0.6217	
88 1,1,2,2-Tetrachloroethane	83		9.383					9
89 Bromobenzene	156		9.419					
90 1,2,3-Trichloropropane	110		9.430					9
92 N-Propylbenzene	120	9.501	9.513	-0.012	90	15302	0.5045	
93 2-Chlorotoluene	126		9.608					
95 4-Chlorotoluene	126		9.714					
96 tert-Butylbenzene	119		10.010					9
97 1,2,4-Trimethylbenzene	105	10.046	10.058	-0.012	93	191351	2.52	
98 sec-Butylbenzene	105	10.223	10.223	0.0	53	14427	0.1824	
99 1,3-Dichlorobenzene	146	10.341	10.342	-0.001	1	7927	0.1653	
100 4-Isopropyltoluene	119		10.365					9
101 1,4-Dichlorobenzene	146		10.424					9
102 1,2,3-Trimethylbenzene	105	10.472	10.471	0.001	90	128039	2.03	
103 n-Butylbenzene	91		10.768					9
104 1,2-Dichlorobenzene	146	10.803	10.803	0.0	51	15844	0.3461	
105 1,2-Dibromo-3-Chloropropane	157		11.572					
107 1,2,4-Trichlorobenzene	180	12.412	12.412	0.0	63	22319	0.9337	
108 Hexachlorobutadiene	225		12.590					
109 Naphthalene	128	12.672	12.673	-0.001	83	85793	1.44	
110 1,2,3-Trichlorobenzene	180	12.933	12.945	-0.012	16	5195	0.2352	
S 114 Xylenes, Total	106				0		22.3	

APPENDIX E—BORING LOGS, WELL CONSTRUCTION DIAGRAMS, AND WELL DEVELOPMENT LOGS

Tetra Tech
20251 Century Blvd Ste 200
Germantown Maryland/20874

WELL NUMBER MSA-MW-46D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 8/27/13 **COMPLETED** 8/27/13
GROUND ELEVATION 8.76 ft **HOLE SIZE** 6 inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 7.06 ft / Elev 1.70 ft
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 605173.578 ft **EASTING** 1479784.473 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 11.67 (ft) Casing Type: 2-inch PVC
		SM		SAND: silty sand, loose, gray-brown 7.5 YR4/4	PID = 1.8	Cement
4.0						
4.8				CLAY: sandy clay, soft, variegated gray 5YR7/1 and yellow-red 5YR6/6	PID = 0.9	
5		ML				
9.5						
-0.7				SAND: very fine to fine grained, medium loose, varying colors of brown 7.5YR6/8, gray 5YR7/1, and orange 7.5YR7/8		
10						
15		SP				
20						
25						Cement and bentonite grout

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20251 Century Blvd Ste 200
Germantown Maryland/20874

WELL NUMBER MSA-MW-46D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25		SP		26.0 SAND: very fine to fine grained, medium loose, varying colors of brown 7.5YR6/8, gray 5YR7/1, and orange 7.5YR7/8 *(continued)* -17.2	PID = 0	
		SP		SAND: very fine to fine grained, loose, red/brown 7.5YR3/4 28.0 -19.2		
30		ML		CLAY: sandy clay, loose to tight, light brown 10YR7/6, gray 5YR8/11, and orange/brown 7.5YR6/8 34.5 -25.7		
35		CL		CLAY: tight, variegated gray 5YR8/1, orange/brown 7.5YR5/8 37.5 -28.7		
40		SP		SAND: very fine to fine grained, loose, orange 5YR5/8 and light brown 7.5YR7/2 43.5 -34.7		
45		CL		CLAY:tight, variegated white 5YR8/1 and purple 7.5YR3/4 49.0 -40.2	PID = 6.4	Bentonite Chips
50		SP		SAND: very fine to fine grained, medium loose, tan 10YR7/1	PID = 1.4 PID = 1.4	#1 Silica Filter Pack

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Germantown Maryland/20874

WELL NUMBER MSA-MW-46D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
55		SP		SAND: very fine to fine grained, medium loose, tan 10YR7/1 *(continued)*		2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
60				61.0 -52.2		Bottom Cap #1 Silica Filter Pcak

Bottom of borehole at 61.0 feet.

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Germantown Maryland/20874

WELL NUMBER MSA-MW-46S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 8/28/13 **COMPLETED** 8/28/13
GROUND ELEVATION 8.47 ft **HOLE SIZE** 8(S)/6(I) inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 6.43 ft / Elev 2.04 ft Shallow
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 605175.536 ft **EASTING** 1479779.856 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0		SM		SAND: silty sand, loose, gray-brown 7.5 YR4/4	PID = 1.8
4.0					
4.5		ML		CLAY: sandy clay, soft, variegated gray 5YR7/1 and yellow-red 5YR6/6	PID = 0.9
9.5					
-1.0		SP		SAND: very fine to fine grained, medium loose, varying colors of brown 7.5YR6/8, gray 5YR7/1, and orange 7.5YR7/8	

WELL DIAGRAM

Casing Top Elev: 11.19 (ft)
Casing Type: 2-inch PVC

- Cement
- Cement and bentonite grout
- Bentonite Chips
- #1 Silica Filter Pack
- 2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen

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Germantown Maryland/20874

WELL NUMBER MSA-MW-46S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25		SP		26.0 SAND: very fine to fine grained, medium loose, varying colors of brown 7.5YR6/8, gray 5YR7/1, and orange 7.5YR7/8 *(continued)* -17.5	PID = 26	Bottom Cap; #1 Silica Filter Pack
		SP		SAND: very fine to fine grained, loose, red/brown 7.5YR3/4 28.0 -19.5		
30		ML		CLAY: sandy clay, loose to tight, light brown 10YR7/6, gray 5YR8/11, and orange/brown 7.5YR6/8		Bentonite Chips
				34.5 -26.0		#1 Silica Filter Pack
35		CL		CLAY: tight, variegated gray 5YR8/1, orange/brown 7.5YR5/8 37.5 -29.0		
		SP		SAND: very fine to fine grained, loose, orange 5YR5/8 and light brown 7.5YR7/2		2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
40				43.5 -35.0		
		CL		CLAY:tight, variegated white 5YR8/1 and purple 7.5YR3/4		
45				46.0 -37.5		Bottom Cap; #1 Silica Filter Pack

Bottom of borehole at 46.0 feet.

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Tetra Tech
20251 Century Blvd Ste 200
Germantown Maryland/20874

WELL NUMBER MSA-MW-47D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 8/28/13 **COMPLETED** 8/29/13
GROUND ELEVATION 9.46 ft **HOLE SIZE** 6 inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 7.87 ft / Elev 1.59 ft
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 605083.019 ft **EASTING** 1479826.225 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 12.04 (ft) Casing Type: 2-inch PVC
		SW		SAND: sand with silt and some gravel and pieces of brick, loose, brown 7.5YR4/0	PID = 10 PID = 3.1	Cement
					PID = 3 PID = 3.2	
				4.0 5.5		
		SM		SAND: silty sand, loose, light brown 10YR5/6	PID = 4.1	
5				5.0 4.5		
				CLAY: sandy clay, very stiff, gray 7.5YR4/0	PID = 1.8 PID = 1.8	
				▽	PID = 3 PID = 6.5	
					PID = 8.2	
10		ML			PID = 3.5 PID = 4.1	
					PID = 2.5 PID = 0	
					PID = 0.5	
15				15.0 -5.5		
		SP		SAND: sand, very fine to fine, loose, tan 10YR7/4	PID = 2.3	
				16.0 -6.5		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 1.1 PID = 3.9	
				18.0 -8.5		
		SP		18.5 SAND: sand, very fine to fine, loose, orange/brown 7.5YR6/6 -9.0	PID = 4.2	
				CLAY: clay, very stiff, light gray 10YR8/3	PID = 8.2	
20					PID = 10	
		CL			PID = 24	Cement and bentonite grout
				22.5 -13.0	PID = 10.3	
				SAND: sand, loose, tan 10YR7/4	PID = 15.7	
		SP			PID = 12.1	
25						

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20251 Century Blvd Ste 200
Germantown Maryland/20874

WELL NUMBER MSA-MW-47D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25		SP		SAND: sand, loose, tan 10YR7/4 *(continued)*	PID = 5.6	
				26.0 -16.5		
		ML		26.5 CLAY: sandy clay, very stiff, brown/gray 10YR7/2 -17.0	PID = 44.4	
		SP		SAND: sand, loose, lightgray 5YR8/1	PID = 49.2	
				28.0 -18.5		
		CL		CLAY: clay, very stiff, brown 10YR6/8	PID = 9.8	
					PID = 10.7	
30				30.0 -20.5		
		SP		SAND: sand, very fine to fine, loose, orange/brown 7.5YR6/8	PID = 0	
					PID = 0.1	
					PID = 0.7	
					PID = 7	
					PID = 2	
35					PID = 0	
					PID = 0	
					PID = 0	
					PID = 3.2	
					PID = 3.6	
40					PID = 8.1	
					PID = 4	◄Bentonite Chips
					PID = 14	
					PID = 9.3	
				44.0 -34.5		
		CL		CLAY: clay, very stiff, white/gray 10YR8/1	PID = 5.3	◄#1 Silica Filter Pack
45				45.0 -35.5		
		SP		SAND: sand, very fine to fine, loose, orange brown 5YR6/8	PID = 3.3	
					PID = 29.3	
					PID = 26.8	
					PID = 7.2	
					PID = 1	
50				50.0 -40.5		
		CL		CLAY: clay, very stiff, varigated colors of gray 10YR7/2 and red 7.5R3/6	PID = 0.3	◄2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
					PID = 0	
					PID = 0.2	
					PID = 1.9	

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WELL NUMBER MSA-MW-47D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
55		CL		CLAY: clay, very stiff, varigated colors of gray 10YR7/2 and red 7.5R3/6 *(continued)*	PID = 1.5 PID = 2.1	Bottom Cap
56.0				-46.5		#1 Silica Filter Pack
				Bottom of borehole at 56.0 feet.		

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WELL NUMBER MSA-MW-47S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 8/29/13 **COMPLETED** 8/29/13
GROUND ELEVATION 9.36 ft **HOLE SIZE** 8(S)/6(I) inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 7.80 ft / Elev 1.56 ft Intermediate
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 605088.212 ft **EASTING** 1479824.157 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0		SW		SAND: sand with silt and some gravel and pieces of brick, loose, brown 7.5YR4/0	PID = 10	Casing Top Elev: 11.94 (ft) Casing Type: 2-inch PVC
					PID = 3.1	Cement
					PID = 3	
					PID = 3.2	
				4.0 — 5.4		
5		SP		SAND: silty sand, loose, light brown 10YR5/6	PID = 4.1	Cement and bentonite grout
				5.0 — 4.4		
		CL		CLAY: sandy clay, very stiff, gray 7.5YR4/0	PID = 1.8	
					PID = 1.8	
					PID = 3	Bentonite Chips
					PID = 6.5	
					PID = 8.2	#1 Silica Filter Pack
10					PID = 3.5	
					PID = 4.1	
					PID = 2.5	
					PID = 0	
					PID = 0.5	
15				15.0 — -5.6		
		SP		SAND: sand, very fine to fine, loose, tan 10YR7/4	PID = 2.3	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
				16.0 — -6.6		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 1.1	
					PID = 3.9	
				18.0 — -8.6		
		SP		18.5 SAND: sand, very fine to fine, loose, orange/brown 7.5YR6/6 -9.1	PID = 4.2	
				CLAY: clay, very stiff, light gray 10YR8/3	PID = 8.2	
20					PID = 10	Bottom Cap
		CL				#1 Silica Filter Pack
					PID = 24	
				22.5 — -13.1	PID = 10.3	Bentonite Chips
				SAND: sand, loose, tan 10YR7/4	PID = 15.7	
		SP			PID = 12.1	#1 Silica Filter Pack
25						

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WELL NUMBER MSA-MW-47S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25		SP		SAND: sand, loose, tan 10YR7/4 *(continued)*	PID = 5.6	
				26.0 -16.6		
		ML		26.5 CLAY: sandy clay, very stiff, brown/gray 10YR7/2 -17.1	PID = 44.4	
		SP		SAND: sand, loose, lightgray 5YR8/1	PID = 49.2	
				28.0 -18.6		
		CL		CLAY: clay, very stiff, brown 10YR6/8	PID = 9.8	
					PID = 10.7	
30				30.0 -20.6		
		SP		SAND: sand, very fine to fine, loose, orange/brown 7.5YR6/8	PID = 0	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
					PID = 0.1	
					PID = 0.7	
					PID = 7	
					PID = 2	
35					PID = 0	Bottom Cap
				36.0 -26.6		#1 Silica Filter Pack

Bottom of borehole at 36.0 feet.

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WELL NUMBER MSA-MW-48D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 9/3/13 **COMPLETED** 9/4/13
GROUND ELEVATION 17.3 ft **HOLE SIZE** 6 inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 15.53 ft / Elev 1.77 ft
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 604724.216 ft **EASTING** 1479944.125 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 20.12 (ft) Casing Type: 2-inch PVC
		SM		SAND: sand with silt and gravel, loose, brown 7.5YR4/6	PID = 3.4	
1.5					PID = 5	Cement
		CL		CLAY: clay, stiff, red/brown variegated 10YR4/8	PID = 4.7	
3.0				14.3		
		SC		SAND: clayey sand with angular rock fragments, medium loose, brown 10YR8/1, white 5YR4/6, and black 7.5YR5/0	PID = 6.5	
5					PID = 3	
					PID = 0.7	
					PID = 1.9	
					PID = 7.4	
					PID = 3.1	
					PID = 5.2	
10						
10.0				7.3		
10.5		CL		CLAY: clay with rock fragments, very stiff, dark gray 7.5YR4/0	PID = 2.6	
6.8						
		ML		CLAY: sandy clay, stiff, gray 10YR4/1	PID = 12.8	
					PID = 8.5	
					PID = 21.2	
					PID = 19.8	
15						
15.0				2.3		
		SP		SAND: sand, very fine to fine, loose, gray 5YR5/1	PID = 54.8	
					PID = 44.4	
					PID = 43	
					PID = 49.7	
					PID = 25	Cement and bentonite grout
20						
					PID = 78.6	
					PID = 85.9	
					PID = 164.2	
23.0				-5.7		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 88.2	
					PID = 20.1	
25						

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WELL NUMBER MSA-MW-48D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25		CL		CLAY: clay, very stiff, light gray 5YR8/1 *(continued)*	PID = 24.8	
				26.0 -8.7		
		SP		SAND: sand, very fine to fine, loose, light gray 5YR8/1 to brown 5YR7/8	PID = 22.6	
					PID = 44.3	
					PID = 21.1	
30					PID = 8	
					PID = 1.5	
				31.0 -13.7		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 8.3	
				32.0 -14.7		
		SP		SAND: sand, very fine to fine, medium loose, brown 5YR7/8	PID = 7.1	
				33.0 -15.7		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 13.1	
				34.0 -16.7		
		SP		SAND: sand, very fine to fine, medium loose, brown 5YR7/8	PID = 8.9	
35				35.0 -17.7		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 3.5	
				36.0 -18.7		
		SP		SAND: sand, very fine to fine, medium loose, brown 5YR7/8	PID = 0	Bentonite Chips
					PID = 2.3	
					PID = 1.9	
				39.0 -21.7		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 2.7	#1 Silica Filter Pack
40				40.5 -23.2	PID = 3.9	
		SP		SAND: sand, very fine to fine, medium loose, brown 5YR7/8	PID = 2.3	
				41.5 -24.2		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 4.8	
				42.5 -25.2		
		SP		SAND: sand, very fine to fine, medium loose, brown 5YR5/4	PID = 1.3	
				43.5 -26.2		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 4	
45				45.0 -27.7		2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
		SP		SAND: sand, very fine to fine, loose, light tan 7.5YR8/4	PID = 0.3	
					PID = 1.2	
					PID = 2.5	
					PID = 0.3	
					PID = 1	
50						Bottom Cap
				51.0 -33.7		#1 Silica Filter Pack

Bottom of borehole at 51.0 feet.

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WELL NUMBER MSA-MW-48S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 9/4/13 **COMPLETED** 9/4/13
GROUND ELEVATION 17.09 ft **HOLE SIZE** 8(S)/6(I) inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 15.36 ft / Elev 1.73 ft Intermediate
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 604728.191 ft **EASTING** 1479941.342 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 19.94 (ft) Casing Type: 2-inch PVC
		SM		SAND: sand with silt and gravel, loose, brown 7.5YR4/6	PID = 3.4	
1.5					PID = 5	Cement
		CL		CLAY: clay, stiff, red/brown variegated 10YR4/8	PID = 4.7	
3.0						
		SC		SAND: clayey sand with angular rock fragments, medium loose, brown 10YR8/1	PID = 6.5	
					PID = 3	Cement and bentonite grout
5					PID = 0.7	
					PID = 1.9	
					PID = 7.4	Bentonite Chips
					PID = 3.1	
					PID = 5.2	#1 Silica Filter Pack
10						
10.0						
10.5		CL		CLAY: clay with rock fragments, very stiff, dark gray 7.5YR4/0	PID = 2.6	
		ML		CLAY: sandy clay, stiff, gray 10YR4/1	PID = 12.8	
					PID = 8.5	
					PID = 21.2	
					PID = 19.8	
15						
15.0						
		SP		SAND: sand, very fine to fine, loose, gray 5YR5/1	PID = 54.8	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
					PID = 44.4	
					PID = 43	
					PID = 49.7	
					PID = 25	
20						
					PID = 78.6	Bottom Cap
					PID = 85.9	#1 Silica Filter Pack
					PID = 164.2	Bentonite Chips
23.0						
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 88.2	
					PID = 20.1	#1 Silica Filter Pack
25						

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WELL NUMBER MSA-MW-48S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25		CL		CLAY: clay, very stiff, light gray 5YR8/1 *(continued)*	PID = 24.8	
				26.0 -8.9		
		SP		SAND: sand, very fine to fine, loose, light gray 5YR8/1 to brown 5YR7/8	PID = 22.6	
					PID = 44.3	
					PID = 21.1	
					PID = 8	
30					PID = 1.5	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
				31.0 -13.9		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 8.3	
				32.0 -14.9		
		SP		SAND: sand, very fine to fine, medium loose, brown 5YR7/8	PID = 7.1	
				33.0 -15.9		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 13.1	
				34.0 -16.9		
		SP		SAND: sand, very fine to fine, medium loose, brown 5YR7/8	PID = 8.9	
35				35.0 -17.9		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 3.5	Bottom Cap
				36.0 -18.9		#1 Silica Filter Pack

Bottom of borehole at 36.0 feet.

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WELL NUMBER MSA-MW-49D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 9/5/13 **COMPLETED** 9/5/13
GROUND ELEVATION 16.9 ft **HOLE SIZE** 6 inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 15.40 ft / Elev 1.50 ft
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 604615.678 ft **EASTING** 1480070.887 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 19.6 (ft) Casing Type: 2-inch PVC
				SAND: sand with silt and angular gravel, loose, brown, 7.5YR6/6	PID = 0.5	
					PID = 0.2	Cement
					PID = 0.5	
					PID = 0.7	
		SM			PID = 1	
5					PID = 1.5	
					PID = 2.3	
					PID = 1.4	
				8.5 8.4	PID = 1.4	
				CLAY: clay with some sand, very stiff, dark gray 7.5YR3/0	PID = 1.9	
10		CL-ML			PID = 0.5	
					PID = 3.2	
				12.0 4.9		
				SAND: sand, very fine to fine, loose, gray brown 10YR5/3	PID = 5.1	
		SP				
				13.5 3.4	PID = 8.8	
				SAND: clayey sand, dense, brown 7.5YR5/8	PID = 9	
15						
			▼		PID = 3.5	
		SC			PID = 2.4	
					PID = 4.2	
					PID = 3.7	
				19.0 -2.1		
				SAND: sand, very fine to fine, loose, light tan 10YR6/8 to brown 10YR8/3	PID = 1.9	
20					PID = 0.4	
					PID = 1.9	
		SP			PID = 1.7	
					PID = 3.7	
					PID = 4	Cement and bentonite grout
25						

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WELL NUMBER MSA-MW-49D

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CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25		SP		SAND: sand, very fine to fine, loose, light tan 10YR6/8 to brown 10YR8/3 *(continued)*	PID = 2.9	
					PID = 3.7	
					PID = 8.4	
					PID = 6.5	
					PID = 4.2	
30					PID = 3.8	
					PID = 7.6	
					PID = 15.6	
					PID = 10.3	
					PID = 40.9	
35					PID = 18.9	
					PID = 32.6	
					PID = 51.2	
					PID = 53.1	
				39.0 -22.1		
		CL		CLAY: clay, very stiff, light gray 10YR8/1	PID = 33.3	
40				40.0 -23.1		
		SC		SAND: clayey sand, medium dense, tan/brown 10YR7/2	PID = 2.4	
					PID = 3.2	
					PID = 3.4	
					PID = 8.3	
				44.5 -27.6	PID = 7.5	
45		CL		CLAY: clay, very stiff, light gray 10YR8/1	PID = 8.5	
				46.5 -29.6	PID = 18.7	Bentonite Chips
				SAND: clayey sand, medium dense, light brown 10YR6/6	PID = 7.5	
					PID = 31.3	
					PID = 7.4	#1 Silica Filter Pack
50		SC			PID = 4	
					PID = 9.4	
					PID = 10.8	
					PID = 7	

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WELL NUMBER MSA-MW-49D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
55		SC		SAND: clayey sand, medium dense, light brown 10YR6/6 *(continued)*	PID = 9 PID = 17 PID = 16.1 PID = 15.3	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
				58.0 -41.1		
		CL		CLAY: clay, very stiff, light gray 10YR8/1	PID = 9.7	
				59.0 -42.1		
		SP		SAND: sandy, very fine to fine, medium dense, orange/brown 5YR5/6	PID = 5.3	
60				60.0 -43.1		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 14.8	Bottom Cap
				61.0 -44.1		#1 Silica Filter Pack

Bottom of borehole at 61.0 feet.

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WELL NUMBER MSA-MW-49S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 9/5/13 **COMPLETED** 9/5/13
GROUND ELEVATION 16.99 ft **HOLE SIZE** 8(S)/6(I) inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 15.58 ft / Elev 1.41 ft Intermediate
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 604617.551 ft **EASTING** 1480065.85 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 19.59 (ft) Casing Type: 2-inch PVC
				SAND: sand with silt and Angular gravel, loose, brown, 7.5YR6/6	PID = 0.5	
					PID = 0.2	Cement
					PID = 0.5	
					PID = 0.7	
5		SM			PID = 1	
					PID = 1.5	
					PID = 2.3	
					PID = 1.4	
				8.5 8.5	PID = 1.4	
				CLAY: clay with some sand, very stiff, dark gray 7.5YR3/0	PID = 1.9	Cement and bentonite grout
10		CL-ML			PID = 0.5	
					PID = 3.2	
				12.0 5.0		
				SAND: sand, very fine to fine, loose, gray brown 10YR5/3	PID = 5.1	
		SP				
				13.5 3.5	PID = 8.8	
				SAND: clayey sand, dense, brown 7.5YR5/8	PID = 9	
15						
					PID = 3.5	
		SC			PID = 2.4	
					PID = 4.2	Bentonite Chips
					PID = 3.7	
				19.0 -2.0		
				SAND: sand, very fine to fine, loose, light tan 10YR6/8 to brown 10YR8/3	PID = 1.9	#1 Silica Filter Pack
20					PID = 0.4	
					PID = 1.9	
		SP			PID = 1.7	
					PID = 3.7	
					PID = 4	
25						

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20251 Century Blvd Ste 200
Germantown Maryland/20874

WELL NUMBER MSA-MW-49S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25		SP		SAND: sand, very fine to fine, loose, light tan 10YR6/8 to brown 10YR8/3 *(continued)*	PID = 2.9	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
					PID = 3.7	
					PID = 8.4	
					PID = 6.5	
					PID = 4.2	
30					PID = 3.8	Bottom Cap
					PID = 7.6	
					PID = 15.6	Bentonite Chips
					PID = 10.3	
35					PID = 40.9	#1 Silica Filter Pack
					PID = 18.9	
					PID = 32.6	
					PID = 51.2	
					PID = 53.1	
				39.0 -22.0		
		CL		CLAY: clay, very stiff, light gray 10YR8/1	PID = 33.3	
40				40.0 -23.0		
		SC		SAND: clayey sand, medium dense, tan/brown 10YR7/2	PID = 2.4	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
					PID = 3.2	
					PID = 3.4	
					PID = 8.3	
				44.5 -27.5	PID = 7.5	
45		CL		CLAY: clay, very stiff, light gray 10YR8/1	PID = 8.5	Bottom Cap
				46.0 -29.0		#1 Silica Filter Pack

Bottom of borehole at 46.0 feet.

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WELL NUMBER MSA-MW-50D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 9/9/13 **COMPLETED** 9/10/13
GROUND ELEVATION 10.09 ft **HOLE SIZE** 6 inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 8.51 ft / Elev 1.58 ft
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 604445.886 ft **EASTING** 1480246.222 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 13.12 (ft) Casing Type: 2-inch PVC
		SM		SAND: sand with silt and gravel, loose, brown 5YR5/8	PID = 0.3	
					PID = 0.4	Cement
					PID = 0.4	
					PID = 0.6	
					PID = 0.7	
5					PID = 0.6	
					PID = 0.5	
				7.5 2.6	PID = 0.2	
				SAND: sand, very fine to fine, loose, light brown 7.5YR7/4	PID = 0.3	
					PID = 1.2	
10		SP			PID = 2.3	
					PID = 2.3	
					PID = 6.1	
				13.0 -2.9		
		ML		13.5 CLAY: sandy clay, very stiff, brown 5YR6/2 -3.4	PID = 6.6	
				CLAY: clay, very stiff, gray 5YR4/1	PID = 5.3	
15					PID = 4.3	
		CL			PID = 6	
					PID = 9.4	
				18.0 -7.9		
		SP		18.5 SAND: sand, loose, brown 10YR6/4 -8.4	PID = 17.9	
				CLAY: clay, very stiff, dark gray 5YR4/1 to light gray 5YR8/2 to brown 7.5YR5/8	PID = 2.1	
20					PID = 2.5	
					PID = 6.9	
		CL			PID = 10.2	
					PID = 15.1	Cement and bentonite grout
25					PID = 18.4	

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WELL NUMBER MSA-MW-50D

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CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25		CL		CLAY: clay, very stiff, dark gray 5YR4/1 to light gray 5YR8/2 to brown 7.5YR5/8 *(continued)*	PID = 7.9 PID = 11.3	
		SP		27.5 -17.4 SAND: very fine to fine, medium dense, brown 10YR7/6	PID = 1 PID = 1.2	
		CL		28.8 -18.7 29.0 -18.9 CLAY: clay, stiff, light gray 5YR8/1	PID = 5.6	
30		SC		SAND: clayey sand, medium dense, light gray 5YR8/1 to brown 7.5YR6/8	PID = 2.9 PID = 3.5 PID = 4 PID = 8 PID = 6.4 PID = 7.2 PID = 6.7	
35				38.0 -27.9	PID = 9	
		ML		CLAY: sandy clay, very stiff, light gray 5YR8/2	PID = 5.8 PID = 4.1	
40		SP		40.0 -29.9 SAND: sand, very fine to fine, medium dense, brown 10YR6/8	PID = 5.9 PID = 6.1 PID = 5.1 PID = 11.5 PID = 11.1 PID = 1.8 PID = 6	Bentonite Chips
45					PID = 8.1 PID = 10.1	
50		CL		50.0 -39.9 50.4 -40.3 CLAY: clay, stiff, gray/white 5YR8/1	PID = 3.1	#1 Silica Filter Pack
		SC		SAND: clayey sand, medium dense, red 2.5YR4/6 to light brown 10YR7/8		

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WELL NUMBER MSA-MW-50D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
		SC		54.5 -44.4		
55		CL		CLAY: clay, very stiff, variegated red 2.5YR4.6 and white 5YR8/1		2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
60				60.0 -49.9		Bottom Cap
		SP		SAND: sand, very fine to fine, medium dense, light tan 5YR8/2		#1 Silica Filter Pack
				61.0 -50.9		

Bottom of borehole at 61.0 feet.

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WELL NUMBER MSA-MW-50S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 9/11/13 **COMPLETED** 9/11/13
GROUND ELEVATION 9.75 ft **HOLE SIZE** 8(S)/6(I) inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 8.10 ft / Elev 1.65 ft Intermediate
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 604442.375 ft **EASTING** 1480249.736 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 12.64 (ft) Casing Type: 2-inch PVC
		SM		SAND: sand with silt and gravel, loose, brown 5YR5/8	PID = 0.3	
					PID = 0.4	Cement
					PID = 0.4	
					PID = 0.6	
					PID = 0.7	
5					PID = 0.6	
					PID = 0.5	
				7.5 2.3	PID = 0.2	
		SP		SAND: sand, very fine to fine, loose, light brown 7.5YR7/4	PID = 0.3	
					PID = 1.2	Cement and bentonite grout
10					PID = 2.3	
					PID = 2.3	
					PID = 6.1	
				13.0 -3.3		
		ML		13.5 CLAY: sandy clay, very stiff, brown 5YR6/2 -3.8	PID = 6.6	
				CLAY: clay, very stiff, gray 5YR4/1	PID = 5.3	
15					PID = 4.3	
		CL			PID = 6	
					PID = 9.4	Bentonite Chips
				18.0 -8.3		
		SP		18.5 SAND: sand, loose, brown 10YR6/4 -8.8	PID = 17.9	
				CLAY: clay, very stiff, dark gray 5YR4/1	PID = 2.1	#1 Silica Filter Pack
20					PID = 2.5	
					PID = 6.9	
		CL			PID = 10.2	
					PID = 15.1	
					PID = 18.4	
25						

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WELL NUMBER MSA-MW-50S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25		CL		CLAY: clay, very stiff, dark gray 5YR4/1 *(continued)*	PID = 7.9	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
					PID = 11.3	
				27.5 -17.8	PID = 1	
		SP		SAND: very fine to fine, medium dense, brown 10YR7/6	PID = 1.2	
				28.8 -19.1		
		CL		29.0 -19.3 CLAY: clay, stiff, light gray 5YR8/1	PID = 5.6	
30				SAND: clayey sand, medium dense, gray 5YR4/1	PID = 2.9	Bottom Cap
					PID = 3.5	#1 Silica Filter Pack
					PID = 4	Bentonite Chips
		SC			PID = 8	
					PID = 6.4	#1 Silica Filter Pack
35					PID = 7.2	
					PID = 6.7	
					PID = 9	
				38.0 -28.3		
		CL		CLAY: sandy clay, very stiff, light gray 5YR8/2	PID = 5.8	
					PID = 4.1	
40				40.0 -30.3		
		SP		SAND: sand, very fine to fine, medium dense, brown 10YR6/8	PID = 5.9	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
					PID = 6.1	
					PID = 5.1	
					PID = 11.5	
					PID = 11.1	
45					PID = 1.8	Bottom Cap
				46.0 -36.3		#1 Silica Filter Pack

Bottom of borehole at 46.0 feet.

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WELL NUMBER MSA-MW-51D

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CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 9/10/13 **COMPLETED** 9/11/13
GROUND ELEVATION 6.53 ft **HOLE SIZE** 6 inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 5.03 ft / Elev 1.50 ft
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 604373.739 ft **EASTING** 1480296.144 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 9.55 (ft) Casing Type: 2-inch PVC
		SM		SAND: silty sand, loose, orange/brown 2.5YR4/6	PID = 23.7 PID = 47.2 PID = 35.2 PID = 22.9	Cement
5				5.0 ▽ 1.5	PID = 198.5	
		SP		SAND: sand with trace clay, medium dense, brown 5YR6/8	PID = 55.1 PID = 4.5 PID = 7 PID = 9.5 PID = 10.1	
10					PID = 79	
				11.0 -4.5		
		CL		11.5 CLAY: sandy clay, stiff, gray 10YR6/1 -5.0	PID = 62.5	
		SP		SAND: sand with trace gravel, medium dense, brown 7.5YR6/6	PID = 23.6	
				13.0 -6.5		
		CL		13.5 CLAY: clay, stiff, gray 5YR8/1 -7.0	PID = 61.8	
		SC		SAND: clayey sand, medium dense, tan 10YR7/4	PID = 46.1	
15				15.5 -9.0	PID = 25.1	
		CL		CLAY: clay, very stiff, gray 5YR8/1	PID = 63.5	
				17.5 -11.0	PID = 31	
		SC		SAND: clayey sand, dense, brown 10YR8/2	PID = 46.8 PID = 27.8 PID = 38.5	
20					PID = 20.3 PID = 20.5	
				23.0 -16.5		
		SP		SAND: sand, very fine to fine, medium dense, brown 7.5YR6/8 to gray 5YR8/1	PID = 16.4 PID = 26.9	Cement and bentonite grout
25						

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WELL NUMBER MSA-MW-51D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25				SAND: sand, very fine to fine, medium dense, brown 7.5YR6/8 to gray 5YR8/1 *(continued)*	PID = 17.1	
					PID = 16.9	
					PID = 7.9	
					PID = 9.4	
					PID = 6	
30					PID = 4	
					PID = 3	
					PID = 1.5	
					PID = 12.4	
					PID = 11.2	
35					PID = 12.7	
		SP			PID = 10.9	
					PID = 13.9	
					PID = 14.4	
					PID = 17.9	
40					PID = 15	
					PID = 8	
					PID = 3.4	
					PID = 6.3	
					PID = 1.3	
45					PID = 0	
					PID = 1.8	Bentonite Chips
				47.0 -40.5		
		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 5.7	
				48.0 -41.5		
				SAND: sand, medium dense, brown 7.5YR6/8	PID = 2.7	
					PID = 6.8	#1 Silica Filter Pack
50					PID = 8.3	
		SP			PID = 7.1	
					PID = 12.3	
				53.5 -47.0	PID = 20.2	

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WELL NUMBER MSA-MW-51D

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
55		CL		CLAY: clay, very stiff, light gray 5YR8/2 *(continued)*	PID = 17	
55.5				-49.0	PID = 20.9	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
		SP		SAND: sand with trace clay, dense, light gray 5YR8/2	PID = 13.8	
					PID = 3.9	
					PID = 11.7	
59.0				-52.5		
60		CL		CLAY: clay, very stiff, light gray 5YR8/1	PID = 4.1	
					PID = 10.2	Bottom Cap
61.0				-54.5		#1 Silica Filter Pack
				Bottom of borehole at 61.0 feet.		

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WELL NUMBER MSA-MW-51S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland
PROJECT NAME Dump Road Area Source Area Wetland Investigation
PROJECT NUMBER 112IC04882
PROJECT LOCATION Martin State Airport, Middle River, Maryland
DATE STARTED 9/12/13 **COMPLETED** 9/12/13
GROUND ELEVATION 6.55 ft **HOLE SIZE** 8(S)/6(I) inches
DRILLING CONTRACTOR Cascade Drilling Co., Marietta, Ohio
DRILLING METHOD rotosonic with 10 foot core barrell
GROUND WATER LEVELS:
LOGGED BY Joe Tomalavage
AFTER DRILLING 4.91 ft / Elev 1.64 ft Intermediate
DATUM: MD STATE NAD 1983
NOTES Dump Road Area; Surveyed elevations
NORTHING 604378.651 ft **EASTING** 1480293.949 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 9.61 (ft) Casing Type: 2-inch PVC
		SM		SAND: silty sand, loose, orange/brown 2.5YR4/6	PID = 23.7 PID = 47.2 PID = 35.2 PID = 22.9	Cement
5				▽5.0 1.6	PID = 198.5	Cement and bentonite grout
		SP		SAND: sand with trace clay, medium dense, brown 5YR6/8	PID = 55.1 PID = 4.5 PID = 7 PID = 9.5	Bentonite Chips
10					PID = 10.1 PID = 79	#1 Silica Filter Pack
				11.0 -4.5		
		SP		SAND: sand with trace gravel and sandy clay, dense to stiff, brown 7.5YR6/6	PID = 62.5 PID = 23.6	
				13.0 -6.5		
		CL		13.5 CLAY: clay, stiff, gray 5YR8/1 -7.0	PID = 61.8	
		SC		SAND: clayey sand, medium dense, tan 10YR7/4	PID = 46.1	
15				15.5 -9.0	PID = 25.1	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
		CL		CLAY: clay, very stiff, gray 5YR8/1	PID = 63.5	
				17.5 -11.0	PID = 31	
		SC		SAND: clayey sand, dense, brown 10YR8/2	PID = 46.8 PID = 27.8	
20					PID = 38.5	Bottom Cap
						#1 Silica Filter Pack
					PID = 20.3 PID = 20.5	
				23.0 -16.5		
		SP		SAND: sand, very fine to fine, medium dense, brown 7.5YR6/8 to gray 5YR8/1	PID = 16.4	
25					PID = 26.9	Bentonite Chips

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WELL NUMBER MSA-MW-51S/I

CLIENT Lockheed Martin Corporation, Bethesda, Maryland **PROJECT NAME** Dump Road Area Source Area Wetland Investigation

PROJECT NUMBER 112IC04882 **PROJECT LOCATION** Martin State Airport, Middle River, Maryland

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
25				SAND: sand, very fine to fine, medium dense, brown 7.5YR6/8 to gray 5YR8/1 *(continued)*	PID = 17.1	
					PID = 16.9	
					PID = 7.9	
					PID = 9.4	#1 Silica Filter Pack
30					PID = 6	
					PID = 4	
					PID = 3	
					PID = 1.5	
		SP			PID = 12.4	
					PID = 11.2	2-inch dia.,10 feet; 10-slot manufactured continuous slot PVC well screen
35					PID = 12.7	
					PID = 10.9	
					PID = 13.9	
					PID = 14.4	
					PID = 17.9	Bottom Cap
40					PID = 15	#1 Silica Filter Pack
41.0				-34.5		

Bottom of borehole at 41.0 feet.

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BORING LOG

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PROJECT NAME: Lockheed Martin Middle River
PROJECT NUMBER: 112IC04882
DRILLING COMPANY: Ground Zero
DRILLING RIG: Geoprobe
BORING No.: DR-SB-187
DATE: 8/26/13
GEOLOGIST: Chuck Meyer
DRILLER: Jeff Dziemiec

Boring Began 1110

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sample BZ	Borehole**	Drillers BZ**
			4.5			Brn	Sandy Clay		Dry	0.2			
						Brn	Sandy clay		Dry	0.2			
						Brn	Sandy clay		Dry	0.5			
						Blk	clayey sand		Moist	0.3			
			5.0			Blk	clayey Sand		Moist	0.3			
			4.0			Blk	Sandy Clay to Gravel		Moist	0.5			
						Gray	clayey Sand		Moist	2.3			
						Gray	clayey Sand		Moist	1.1			
						Gray	clayey sand		Moist	1.1			
			5.0			Gray	Clay		Dry stiff	0.4			
			4.0			Gray	Clay		Dry stiff	0.4			
						Gray	Clay		Dry stiff	1.3			
						Gray	clayey Sand		Dry stiff	0.4			
						Gray	Fine VF Sand		Wet	0.3			
			5.0			Gray	Fine VF sand		Wet	0.1			
			5.0			Gray	Fine VF Sand		Wet	0.3			
						Gray	Fine VF sand		Wet	0.3			
						Gray	Fine VF sand		Wet	0.0			
						Gray	Silty clay some Fine Sand		Moist	5.7			
			5.0			Gray	Silty clay some Fine Sand		Moist	1.3			
			3.0			Gray	VF sandy clay		Dry	0.4			
						Gray	VF sandy clay		Dry	0.4			
						Gray	Silty sand		Moist	1.8			
			5.0			Gray	Silty sand		Moist	1.0			
						Gray	Silty sand		Moist	0.3			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Samples Collected DR-SB-187-09-10 Sample TIME = 1230 PID Reading Head Space 1.8 ppm DR-SB-187-18-20 Sample TIME 1245 PID = 20.7 ppm Head Space

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: Lockheed Martin Middle Reach
PROJECT NUMBER: 112ECO4882
DRILLING COMPANY: Ground Zero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-187
DATE: 8/26/13
GEOLOGIST: Chuck Meyer
DRILLER: Jeff Dzienic

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
			3.5			Gray	Silty sand		Moist				
						Gray	Silty sand		Moist				
						Gray	Silty sand		Moist				
						Red Brn	VF Sandy Clay		Dry Stiff				
			5.0			Gray	VF sand		Moist				
1225													

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Samples Collected DR-SB-187-08-10 Sample time = 1230 PID = 5.7 DR-SB-187-18-20 Sample Time = 1245 PID = 10.7 ppm Head Space Readings.

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Dump Road Source
PROJECT NUMBER: 112IC04882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-188
DATE: 9/5/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
			0										
							dark brown, sl. moist, silty clay w/ some						
			2				angular gravel, plant litter, sand fill @ 1.5'						
							NO RECOVERY						
			5										
			6										
							dark gray w/ light brown mottles, moist						
							clay w/ some silt, v. plastic, high plast						
			10										
			11				NO RECOVERY						
							dark gray to light gray, wet to moist						
							clay w/ some silt, v. plastic, high plast						
			13.6 / 13.8				black litter fragments, wet, could be asphalt fill						
			15				dk gray to light gray, v. moist, clay w/ some silt, v. plastic, high plast						
			17				NO RECOVERY						
							dark gray to black, wet to moist,						
							silty clay w/ gravel fragments and plant litter @ 20'						
			20				very plastic, high plast						
							NO RECOVERY						
			22.5										
							~~dark gray to black to light gray, wet to moist~~ silty clay w/ some gravel, yellow mottle @ 24'						
			25				high plast + plasticity						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

Page 1 of 2

BORING LOG

PROJECT NAME: Dump Road Sarle
PROJECT NUMBER: 112C08882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DK-SB-188
DATE: 9/5/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (FL) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/FL) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sample BZ	Borehole** BZ	Driller BZ**
			26			NO	RECOVERY						
						dark gray to black, moist, silty clay, some gravel,							
						high plasticity, high plast							
			29										
			30			gray w/ brown mottles, slt moist, silty clay, pliable but stiff, high plast							

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Boring Log Field Sheet

Project Name & Number: Pump Road Source

Geologist: J. Mullis

Driller: J. Soto

Drilling Co: Groundzero

Date: 9/5/13

Boring #: DR-SB-188 PID Blgd:

Boring Depth (ft)	Recovered (Ft)	Color	Density/~~rock hardness~~	Moisture ~~Lithology~~	USCS: Gravels: well graded gravel (GW)	Gravels: poorly graded gravel (GP)	Gravels: Gravel/sand/silt mix (GM)	Gravels: Clayey gravel (GC)	Sands: well graded sand (SW)	Sands: poorly graded sand (SP)	Sands: Silty sand (SM)	Sands: Clayey sand (SC)	Low Plasticity: Inorganic clay/silt/sand (ML)	Low Plasticity: plastic (CL)	Low Plasticity: Org silt/clay low plastic (OL)	High Plasticity: Inorg. silt/sand elastic (MH)	High Plasticity: Inorg. Clay, high plastic (CH)	High Plasticity: Org. clay med/high plastic (OH)	Peat/highly organic (Pt)	Plasticity, H, M, L	PID/FID (ppm)	Remarks
0-2		dark brown		sl. moist					silty clay w/ some angular gravel at surface,													
2-6		No recovery							plant litter and rootlets pliable, some sand fill @ 1.5													
6-10		dark gray w/ light brown mottles		moist					clay w/ some silt, v. pliable											H		
10-11		No recovery	—	—																		
11-13.6		dark gray to light gray		wet to moist					clay w/ some silt, v. pliable											H		
13.6-13.8		black		wet					lithic fragments, could be asphalt/fill													
13.8-14		red		moist					lithic fragments, could be brick													
14-15		dark gray to light gray		v. moist					clay w/ some silt, v. pliable											H		gravel fragments
15-17		No recovery		—																		
17-20		dark gray to black		wet to moist					silty clay w/ gravel fragments and plant litter @ 20'													
20-22.5		No recovery							very pliable, high plast													
22.5-25		dark gray to black to light gray		wet to moist					silty clay w/ some gravel, yellow mottle @ 24'													High plast + plast
25-26		no recovery																				
26-29		dark gray to black		moist					silty clay w/ some gravel, large pliability											H		
29-30		gray w/ brown mottles		sl. moist					silty clay, pliable but stiff											H		

Tetra Tech NUS, Inc.

Page 1 of 2

BORING LOG

PROJECT NAME: Dump Road Source
PROJECT NUMBER: 112G04882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: OK-SB-189
DATE: 9/5/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole** BZ	Driller BZ**
			0			brown to light brown, Sl. moist,	clayey silt w/ plant matter at 0.5', loose at 0.7', soft						
			5				NO RECOVERY						
			8			brown to yellow w/ red mottles,	Sl. moist						
			10			silty clay to clayey silt,	Sl. stiff, low plast						
			13				NO RECOVERY						
			15			light brown w/ black mottles,	Sl. moist, silty clay, pliable, black lithic fragments @ 14.5', gravelly clay		PID: 0.0				
			16.5				NO RECOVERY						
			18			light brown w/ black mottles,	moist, silty sandy clay, pliable, coarse sand fragments, Med plast						
			20			reddish brown,	moist, silty clay w/ rock fragments @ 18.5, gravelly @ 19.5-20' (med sand)						
			23			reddish brown w/ gray	mottles, wet gravelly coarse sand, not well sorted						
			25			light gray to tan/brown,	wet, coarse sand, well sorted, soft,						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks:

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Dump Road Source
PROJECT NUMBER: 112IC04882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-189
DATE: 9/5/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
			25										
							dark gray, wet, silty sandy clay pliable,						
							Med. plast						
			26.5				light gray, coarse sand, well sorted, soft						
			28				light gray/tan, v. moist, sandy clay, stiff, pliable						
							tan/light gray, v. moist, coarse to med sand, soft						
			30				tan/light gray, light brown mottles, v. moist,						
							Coarse sand interfingered w/ stiff clay						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Boring Log Field Sheet

Project Name & Number: Dump Road Source

Geologist: J. Mullis

Driller: J. Soto

Drilling Co: Groundzero

Date: 9/5/13

Boring #: SB-189

Boring Depth (ft)	Recovered (Ft)	Color	Density/rock hardness	Lithology	USCS: Gravels: well graded gravel (GW)	Gravels: poorly graded gravel (GP)	Gravels: Gravel/sand/silt mix (GM)	Gravels: Clayey gravel (GC)	Sands: well graded sand (SW)	Sands: poorly graded sand (SP)	Sands: Silty sand (SM)	Sands: Clayey sand (SC)	Low Plasticity: Inorganic clay/silt/sand (ML)	Low Plasticity: plastic (CL)	Low Plasticity: Org silt/clay low plastic (OL)	High Plasticity: Inorg. silt/sand elastic (MH)	High Plasticity: Inorg. Clay, hihg plastic (CH)	High Plasticity: Org. clay med/high plastic (OH)	Peat/highly organic (Pt)	Plasticity, H, M, L	PID/FID (ppm)	Remarks
0-2		Brown to light brown		Sl. moist					Clayey silt w/ plant litter at 0.5;											L		
2-5		No recovery	—	—					Concrete @ 0.7-1.0 ft, soft													
5-8		No recovery	—	—																		
8-10		brown to yellow w/ red mottles		Sl. moist					Silty clay to clayey silt, sl. stiff											L		
10-13		No recovery	—	—																		
13-15		light brown w/ black @		Sl. moist					Silty clay, pliable, black lithic fragments											M		
15-16.5		14.5 No recovery													@ 14.5, gravelly clay @ 14.7-15.0							
16.5-18		light brown w/ black mottles		moist					Silty sandy clay, pliable, coarse rock fragments, M, pliability													
18-20		reddish brown		moist					silty clay w/ rock fragments @ 18.5, gravelly @ 19.5-20													
20-23		reddish brown w/ gray mottles		wet					gravelly coarse sand, not well sorted												Med. sand	
23-25		light gray to tan/brown		wet						Coarse sand, well sorted, soft												
25-26.5		dark gray		wet						Silty sandy clay, pliable										M		
26.5-27		light gray/tan	v.	moist			Coarse sandy, well sorted, soft															
27-28		light gray/tan	v.	moist					Sandy clay, stiff, pliable											M		
28-29		tan/light gray	v.	moist					Coarse to medium sand, soft													
29-30		tan/light gray, light brown mottles	v.	moist					Coarse sand interfingered with stiff clay													

Tetra Tech, Inc.

BORING LOG

PROJECT NAME: Dump Road Source Area
PROJECT NUMBER: 112EC04882
DRILLING COMPANY: Ground Zero
DRILLING RIG: Geoprobe 6620
BORING No.: DR-SB-190
DATE: 8/23/13
GEOLOGIST: Stuart Cameron
DRILLER: Jeff Dziennik

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Sample Recovery / Sample Length	Lithology change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	USCS	Material Classification	Remarks	PID/FID Reading (PPM)
		0							
		0.5			dk. brown		silty clay, low plast, soft, dry	0	4.2
								2	
					light brown w/ gray mottles		Sandy silty clay med plast, stiff, sl. moist		4.5
		4						4	
		5			light brown/red		Sandy silty clay, soft, dry, low plast		4.6
		6			light brown;		gravel/sand/silt mix, low plast, soft, dry	6	
					white		cement, soft, dry		3.8
		8						8	
		8.5			dk brown/red;		silty clay, soft, sl. moist, med. plast		4.0
		10			light brown w/ dark mottles,		silty clay, sl. stiff, sl. moist, med plast	10	
								12	7.9
					dark brown w/ purple, red, gray mottles				
							clay to silty clay, stiff, sl. moist, high plast		8.0
								14	
		15							6.9
		15.5			NO RECOVERY			16	
		16.5			dark brown,		clay, stiff, sl. moist, high plast		9.8
		17			light brown		poorly graded gravel, clay		
					dark brown w/ red mottles,		stiff, moist	18	
		18.5					clayey silt w/ some sand, high plast		10.2
		20			black,		silty clay with some sand, stiff, wet, high plast	20	
								22	NR
					NO RECOVERY				
									6.9
		23.5			dk brown,		silty sand w/ some clay, some gravel	24	
		25					soft, wet, no plast		

Remarks: Sampled 18-20 and 28-30

Drilling Area Background (PPM): 0.0

Convert to Well: Yes: No:

Well I.D. #:

Tetra Tech, Inc.

BORING LOG

PROJECT NAME: Dump Road Source Area
BORING No.: DR- SB-190
PROJECT NUMBER: 112IC04882
DATE: 8/23/13
DRILLING COMPANY: Ground Zero
GEOLOGIST: Stuart Cameron
DRILLING RIG: Geoprobe 6620
DRILLER: Jeff Dziennik

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Sample Recovery / Sample Length	Lithology change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	USCS	Material Classification	Remarks	PID/FID Reading (PPM)
								26	7.8
					black to dk brown, sand w/ some silt				5.3
		28					soft, wet to sl. moist	28	
					light gray w/ red mottles, clay w/ some silt				24.2
		30					stiff, sl. moist, med plast	30	

Remarks:

Drilling Area Background (PPM): 0.0

Convert to Well: Yes: No:

Well I.D. #:

Boring Log Field Sheet

Project Name & Number: 11XBC01887

Geologist: Stuart Cameron

Driller: Jeff Dziemik

Drilling Co: Ground Zero

Date: 8/23/13

Boring #: SB-190

Big. PID: 0.0

Boring Depth (ft)	Recovered (Ft)	Color	Density/rock hardness	Moisture Lithology	USCS: GW	GP	GM	GC	SW	SP	SM	SC	ML	CL	OL	MH	CH	OH	Pt	Plasticity, H, M, L	PID/FID (ppm)	Remarks
	0.5	dk. brown	soft	dry											X					L		0-2 4.7
	4	light brown w/gray mottles	stiff	slight. moist									X							M		
	5	light brown/red	soft	dry									X							L		2-4 4.5
	6	light brown	soft	dry			X															
	8	white	soft	cement/dry		X																Cement w/gravel 4-6 4.6
	8.5	dk. brown/red	soft	sl. moist									X							M		
	10	light brown w/dark mottles	st. stiff	sl. moist									X									Clayey silt
	~~15~~																					6-8 3.8
		dark brown w/purple, red	stiff	sl. moist													X			H		Clay w/ some silt 8-10 4.0
	15	gray mottles																				10-12 7.9
	15.5	No recovery																				12-14 8.0
	16.5	dark brown	stiff	sl. moist														X		H		Clay 14-16 6.9
	17.0	light brown	soft	dry		X																Sandy silt w/gravel 16-18 9.8
	18.5	dark brown w/red mottles	stiff	Mod. sl																H		Clayey silt w/some sand 18-20 10.2
	20	black	sl. stiff	saturated wet																H		Silty clay w/some sand 20-22 NR
	23.5	No recovery																				22-24 6.9
	25	dk. brown	soft	wet																		Silty sand w/some clay 24-26 7.8
		black to dk. brown	soft	wet							X											some gravel 26-28 5.3
	26																				a	Sand w/some silt 28-30 24.2
		light gray w/red mottles	stiff	sl. moist																		
	30																					Clay w/some silt

Sample 18-20, 28-30
10.2 24.2

Tetra Tech, Inc.

BORING LOG

PROJECT NAME: Dump Road Source Area
PROJECT NUMBER: 112IC04882
DRILLING COMPANY: Ground Zero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-191
DATE: 8/23/13
GEOLOGIST: Josh Mullis
DRILLER: Jeff Dziennik

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Sample Recovery / Sample Length	Lithology change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	USCS	Material Classification	Remarks	PID/FID Reading (PPM)
		0.5			dk. brown		clayey silt w/ some gravel (poorly sorted) low plast, sl. moist soft		4.1
					light brown		w/ tan mottles, silty clay w/ some gravel (poorly sorted), low plast, sl. moist, soft	2	
		2.5							4.7
					dk. brown to lt. brown w/ red mottles, clayey silt, soft, dry low plast, red brick @ 2.7'			4	
		5			light brown/gray with tan mottles, silty clay, soft, dry, low plast				3.4
		6	N/A		NO RECOVERY			6	
					dk gray w/ red, tan, light gray mottles, stiff, sl. moist to moist				4.3
					gray moist clay @ 8-9, silty clay			8	
		9			w/ some clayey silt, med plast				5.5
		10			light gray, clayey sandy silty wet, no plast			10	
			N/A		NO RECOVERY			12	N/A
								14	
		15			dark gray, clayey sandy silty wet, no plast				4.5
			N/A		NO RECOVERY			16	
								18	N/A
									5.0
		20			dk gray w/ tan mottles, silty sand (well sorted) wet, no plast			20	
		21			dk. gray w/ tan mottles, silty sand (well sorted) wet, no plast				17.8
		22			dk. gray to light gray (some black) sand, well sorted coarse to med. grained, wet			22	
					tan to golden, sand (well sorted) med. to fine grained				81.1
					some poorly sorted gravel @ 22.5'			24	
		25			no plast, wet				

Remarks:

Drilling Area Background (PPM): 0.0

Convert to Well: Yes: No:

Well I.D. #:

Tetra Tech, Inc.

BORING LOG

PROJECT NAME: Dump Road Source Area
PROJECT NUMBER: 117C04882
DRILLING COMPANY: Ground Zero
DRILLING RIG: Geoprobe
BORING No.: DR-SB-191
DATE: 8/23/13
GEOLOGIST: Josh Mullis
DRILLER: Jeff Dickmann

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Sample Recovery / Sample Length	Lithology change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: USCS	MATERIAL DESCRIPTION: Material Classification	Remarks	PID/FID Reading (PPM)
		26			blk. to dk. brown		, sand w/ some silt, gravel grained, no plast wet, well sorted	26	45.2
					light gray to tan, white @ 27.5		, sand, med. grained to coarse well sorted		
							wet, no plast	28	50.4
		24							
		30			tan w/ orange		mottles, sand, well sorted med to med fine grained	30	48.2
							sl. moist, no plast		

Remarks:

Drilling Area Background (PPM): 0.2

Convert to Well: Yes: No:

Well I.D. #:

Boring Log Field Sheet

Project Name & Number: 112SC04882

Geologist: Stuart Cameron

Driller: Jeff Dziennik

Drilling Co: Ground Zero

Date: 8/23/13

Boring #: SB-191

Bkgd. PID: 0.0

Boring Depth (ft)	Recovered (Ft)		Color	Density/rock hardness	Moisture Lithology	USCS: GW	GP	GM	GC	SW	SP	SM	SC	ML	CL	OL	MH	CH	OH	Pt	Plasticity, H, M, L	PID/FID (ppm)	Remarks
0.5			dark brown	soft	sl. moist																		0-2 4.1
2.5			lgt. brown w/ tan mottles	stiff	sl. moist																		2-4 4.7
2.7			red brick	Hard	dry																		4-6 3.4
4			dk. to lt. brown w/ red mottles	soft	dry																		6-8 4.3
5			light brown/gray with tan mottles	soft	dry																		8-10 5.5
6			No recovery	—	—																		10-12 —
8 9			dark gray w/ red, tan,	stiff	sl. moist																		12-14
			light gray mottles	↓	to moist																		14-16 4.5
10			light gray	plastic	moist																		16-18
10-14			No recovery	—	—																		18-20 5.0
15			dark gray	plast	wet																		20-22 17.8
19			No recovery	—	—																		22-24 81.1
20			dk. gray w tan mottles	plast	wet																		24-26 45.2
21			dark gray w/ tan mottles	plast	wet																		26-28 50.4
22			dk gray to lgt. gray (black)	plast	wet																		28-30 48.2
25			tan to golden	plast	wet																		
↓			↓	↓	↓																		
26			black to dk. brown	plast	wet																		
29			light gray to tan (lost @ 27.5)	plast	wet																		
30			tan w/ orange mottles	plast	sl. moist																		

8-10 5.5

22-24 81.1

Tetra Tech, Inc.

BORING LOG

PROJECT NAME: Dump Road Source
PROJECT NUMBER:
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe
BORING No.: DR-SB-192
DATE: 9/4/13
GEOLOGIST: J. Mills
DRILLER: J. Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Sample Recovery / Sample Length	Lithology change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	USCS	Material Classification	Remarks	PID/FID Reading (PPM)
		0							
		0.5			NO RECOVERY				0.8
					light brown w/ orange and gray mottles, clayey silt,				
					v. sl. moist, soft, low plast				0.8
		4.5 5			white gravel, poorly sorted, pebble sized				1.4
		6			NO RECOVERY				
					tan to light brown, coarse sand, well sorted, soft,				3.6
		7.75			sl. moist, no plast				
					clayey silt, dk brown w/ orange mottles, sl. moist, friable				2.6
		10							
					light brown/tan, coarse sand, well sorted				4.6
					wet, soft, no plast				
									3.7
		14							
		15			light gray w/ orange mottles, clay w/ some sand, stiff, pliable, high plast, sl. moist				4.7
					tan to brown, coarse sand, well sorted, soft, wet				
		16.5							7.0
					purple to bluish gray, light gray mottles				
					clay w/ some sand lenses, very pliable, high plast				5.7
		20			sl. moist to moist				
									4.6
					tan to light brown, coarse sand, well sorted, soft, clay				
					lenses @ 21', moist				3.9
		24							
		25			Purple w/ gray mottles, clay, stiff, high plast, sl. moist				5.6

Remarks: Refusal @ 25' due to hard clay

Drilling Area Background (PPM):

Convert to Well: Yes: No:

Well I.D. #:

Boring Log Fi[illegible]heet

Project Name & Number: Pump Road Source

Geologist: J. Mills

Driller: J. Soto

Drilling Co: Groundzero

Date: 9/4/13

Boring #: [illegible]-SD-192

Boring Depth (ft)	Recovered (Ft)	Color	Density/rock hardness	Lithology	USCS: Gravels: well graded gravel (GW)	Gravels: poorly graded gravel (GP)	Gravels: Gravel/sand/silt mix (GM)	Gravels: Clayey gravel (GC)	Sands: well graded sand (SW)	Sands: poorly graded sand (SP)	Sands: Silty sand (SM)	Sands: Clayey sand (SC)	Low Plasticity: Inorganic clay/silt/sand (ML)	Low Plasticity: plastic (CL)	Low Plasticity: Org silt/clay low plastic (OL)	High Plasticity: Inorg. silt/sand elastic (MH)	High Plasticity: Inorg. Clay, hihg plastic (CH)	High Plasticity: Org. clay med/high plastic (OH)	Peat/highly organic (Pt)	Plasticity, H, M, L	PID/FID (ppm)	Remarks
0-0.5		No recovery																				
0.5-4.5		light brown w/ orange and gray mottles		v. sl. moist					~~Silty clay~~ to clayey silt, soft											L		
4.5-5		white		N/A					Gravel, poorly sorted, pebble sized													
5-6		No recov																				
6-7.75		dark brown w/ orange mottles		sl. moist					Clayey silt, soft, friable											L		
7.75-10		Tan to light brown		moist to wet					Coarse sand, well sorted, soft											N/A		
10-14		light brown tan		wet					Coarse sand, well sorted, soft											N/A		
14-15		light gray w/ orange mottles		sl. moist					Clay w/ some sand, stiff, [illegible]											H		
15-16.5		tan to brown		wet					Coarse sand, soft, well sorted													
16.5-20		purple to bluish gray, light gray mottles		sl. moist to moist					Clay w/ some sand lenses, very pliable, high plast													
20-24		tan to light brown		moist					Coarse sand, well sorted, soft, clay lenses N/A													
24-25		purple w/ gray mottles		sl. moist					@ 24'													
									Clay, stiff, high plasticity, high plast													
		Refusal @ 25' due to hard clay																				

Tetra Tech NUS, Inc.

Page 1 of 2

BORING LOG

PROJECT NAME: Dump Road Sarle
PROJECT NUMBER: 112-2C09882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DK-SB-193
DATE: 9/4/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sample BZ	Borehole**	Driller BZ**
			0				Brown w/ orange mottles, Sl. moist						
							Clayey silt, w/ gravel @ 0.5' and asphalt @ 2.5'						
			3				mod well sorted, pebble sand gravel						
							NO RECOVERY						
			5										
							light gray w/ brown mottles, Sl. moist, silty						
							clay, pliable, med plast						
			7.5										
							light gray to dark gray, Sl. moist, clay w/some silt						
			10				hard/stiff, pliable when wet, med plast						
							red to brown w/ light gray mottles, dry						
							clay w/some silt, hard, med plast when wet.						
							light gray to white, dry silty clay w/some sand, hard						
			15				wet - light gray, moist, coarse sand, well sorted						
							brown to tan, wet, coarse sand w/some						
							silt, soft, pliable when more silt @ 16.5'						
			18.5				light gray to white, v. moist, med grained sand,						
			20				some silt, soft, silty sand @ 19.5-20, stiff, Sl. moist						
							tan to light brown, wet, coarse sand,						
							soft, well sorted						
							sandy clay, v. pliable, high plast						
			23.5				light gray, v. moist, clayey sand, soft, coarse grained						
			25				light gray, v. moist, clayey sand, soft, well sorted						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Dump Road Source
PROJECT NUMBER: 112IC04882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-193
DATE: 9/4/17
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
			25										
							light brown to tan to light gray to orange						
							wet to v. moist, 25-28 coarse sand, well sorted						
							28-28.5: clay lens, pliable, also @ 29.5-30						
							28.5-29.5: coarse sand, well sorted						
			30										

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks:

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Boring Log Field Sheet

Project Name & Number: Dump Road Source
Geologist: J. Mullis
Driller: J. Soto
Drilling Co: Groundwater
Date: 9/9/13

Boring #: DR-SB-193

Boring Depth (ft)	Recovered (Ft)	Color	Density/rock hardness	Lithology (moisture)	USCS: Gravels: well graded gravel (GW)	Gravels: poorly graded gravel (GP)	Gravels: Gravel/sand/silt mix (GM)	Gravels: Clayey gravel (GC)	Sands: well graded sand (SW)	Sands: poorly graded sand (SP)	Sands: Silty sand (SM)	Sands: Clayey sand (SC)	Low Plasticity: Inorganic clay/silt/sand (ML)	Low Plasticity: plastic (CL)	Low Plasticity: Org silt/clay low plastic (OL)	High Plasticity: Inorg. silt/sand elastic (MH)	High Plasticity: Inorg. Clay, hihg plastic (CH)	High Plasticity: Org. clay med/high plastic (OH)	Peat/highly organic (Pt)	Plasticity, H, M, L	PID/FID (ppm)	Remarks
0-3		Brown w/ orange mottles		Sl. moist			Clayey silt w/ gravel @ 0.5' and asphalt (broken up)															
3.5		No recovery							@ 2.5', not very well sorted, pebble sized gravel													
5-7.5		light gray w/ brown mottles		Sl. moist				Silty clay, pliable												M		
7.5-10		light gray to dk. gray		Sl. moist					Clay w/ some silt, pliable											M		
10-14		red to brown w/ lt. gray mottles		dry					Clay w/ some silt, hard											M when wettened		
14-14.5		light gray to white		dry					Silty clay w/ some sand, altered											L		
14.5-15		white/lt. gray		moist					Coarse sand, well sorted											N/A		
15-18.5		brown to tan		wet				Coarse sand w/ some silt, soft but												N/A		
18.5-20		light gray to white		v. moist					pliable where there is more silt @ 16.5													
								Med. grained sand w/ some silt, soft												NA		
20-23.5		tan to light brown							Silty sand @ 19.5-20, stiff, sl. moist													
				wet				Coarse sand, soft, well sorted														
23.5-24		light gray		v. moist					Sandy clay, v. pliable											H		
24-25		light gray		v. moist					Clayey sand, ~~[illegible]~~ soft, coarse grained, well sorted											L		
25-30		light brown to tan to light		wet to		@ 15-28			Coarse sand, well sorted											NA		
		gray to orange		v. moist			28-28.5 - Clay lens, pliable als. @ 29.5-30 M															
							28.5-29.5		Coarse sand, well sorted											NA		

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Dump Road Source
PROJECT NUMBER: 112IC04882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-194
DATE: 9/3/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
			0										
			1				Brown, dry, clayey silt, soft, low plast		0	5.1			
									1				
							NO RECOVERY						
			5							18.2			
			6		Dry		Brown w/some black soil, Sandy Clayey silt, v. soft						
							NO RECOVERY						
			10										
							NO RECOVERY						
			13										
							dark red/brown, v. sl. moist, clayey silt to silty clay			17.7			
			15				hard, sl. pliable, possible brick chunks			59.4			
			16				dark brown/red, sl. moist, Sandy silty clay, pliable					odor	
										102			
							tan w/orange and white mottles, moist						
							silty Sand, Clay lens @ 17.5-18', soft Sand and			50.4			
			20				pliable clay, med grained Sand, well sorted						
							tan w/blackish mottles, moist to v. moist			40.4			
							Coarse Sand, well sorted, soft						
										33.0			
			25										

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Dump Road Source
PROJECT NUMBER: 112IC04882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-144
DATE: 9/3/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
							light brown, wet, Coarse sand, well sorted, soft			60.2			
			27										
							tan to white w/purple mottles, wet to moist			41.7			
							Coarse sand to clayey sand @ 28.5',						
			30.				well sorted, med sand @ 29.5-30, hard @ 29.5						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Boring Log Field Sheet

Project Name & Number: Dump road source
Geologist: J. Mullis
Driller: J. Soto
Drilling Co: Groundzero
Date: 9/3/13

Boring #: DR-SB-194

Boring Depth (ft)	Recovered (Ft)	Color	Density/rock hardness	Moisture ~~Lithology~~	USCS: Gravels: well graded gravel (GW)	Gravels: poorly graded gravel (GP)	Gravels: Gravel/sand/silt mix (GM)	Gravels: Clayey gravel (GC)	Sands: well graded sand (SW)	Sands: poorly graded sand (SP)	Sands: Silty sand (SM)	Sands: Clayey sand (SC)	Low Plasticity: Inorganic clay/silt/sand (ML)	Low Plasticity: plastic (CL)	Low Plasticity: Org silt/clay low plastic (OL)	High Plasticity: Inorg. silt/sand elastic (MH)	High Plasticity: Inorg. Clay, hihg plastic (CH)	High Plasticity: Org. clay med/high plastic (OH)	Peat/highly organic (Pt)	Plasticity, H, M, L	PID/FID (ppm)	Remarks
0-1		Brown		dry					Clayey silt, soft											L		
1-5		No recovery		—																—		
5-6		Brown w/ some black soil		dry					Sandy clayey silt, v. soft											L		Used when NR
6-10		No recovery	—	—																—		
10-13		No recovery		—																—		
13-15		dark red/brown	—	v. sl. moist					Clayey silt to silty clay,													
		w/ tan @ 14.5-15							hard, sl. pliable, possible brick											L		
15-16		dark brown/dark red		sl. moist	(Odor)				Sandy silty clay, pliable											M		
16-20		tan w/ orange and white		moist					Silty sand, clay lens @ 17.5-18'											[illegible]		
		mottles							Soft sand and pliable clay, med grained sand													
20-25		tan w/ blackish mottles		moist to v. moist					Coarse sand, well sorted, soft											N/A		
25-27		light brown		wet					Coarse sand, well sorted, soft											N/A		
27-30		tan to white w/ purple mottles		wet to moist					Coarse sand to clayey sand @													
									well sorted						28.5					N/A		
									med. sand @ 29.5-30											N/A		
									hard @ 28.5													

Bilge PID 0.1 ppm

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Dump Road Source
PROJECT NUMBER: 112IC04882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-195
DATE: 4/3/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
			0				NO RECOVERY						
							dark brown w/orange mottles,						
							clayey silt to silty clay, pliable,						
			5				med plast, sl. moist						
			6				light brown to tan, clayey sand, fine sand, well sorted, sl. moist						
			6.5				Sand with some clay, same as above						
							orange w/ purple mottles, sandy clay, pliable,						
			9				slightly moist to moist						
			10				NO RECOVERY						
							brown to light gray w/ orange mottles						
							wet to moist, sand to clayey sand, soft						
							coarse grained, well sorted, pliable @						
							13-14'						
			15										
							coarse sand, well sorted, tan, wet						
			18										
							light gray w/ purple mottles, wet to moist,						
			20				clayey sand, well sorted, med. grained						
							light brown w/ orange mottles						
							wet, med grained sand, soft						
			23										
							light gray w/ purple mottles, moist,						
			25				coarse sand, soft, well sorted						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: _____

Drilling Area Background (ppm): _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Dump Road Sample
PROJECT NUMBER: 112-EC04882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-195
DATE: 9/3/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sample/ BZ	Borehole **	Driller BZ **
			7.5				light brown to orange w/ purple mottles						
							orange mottles @ 29.5, light grey @ 29.5-30						
							Coarse Sand @ 28-30, med Sand @ 25-28						
							well sorted sand, wet to moist						
			30										

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks:

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Boring Log Field Sheet

Project Name & Number: Camp Road

Geologist: J. Mulis

Driller: J. Soto

Drilling Co: Ground zero

Date: 9/2/13

Boring #: DL-SB-14S

Boring Depth (ft)	Recovered (Ft)	Color	Density/rock hardness	Lithology	USCS: Gravels: well graded gravel (GW)	Gravels: poorly graded gravel (GP)	Gravels: Gravel/sand/silt mix (GM)	Gravels: Clayey gravel (GC)	Sands: well graded sand (SW)	Sands: poorly graded sand (SP)	Sands: Silty sand (SM)	Sands: Clayey sand (SC)	Low Plasticity: Inorganic clay/silt/sand (ML)	Low Plasticity: plastic (CL)	Low Plasticity: Org silt/clay low plastic (OL)	High Plasticity: Inorg. silt/sand elastic (MH)	High Plasticity: Inorg. Clay, hihg plastic (CH)	High Plasticity: Org. clay med/high plastic (OH)	Peat/highly organic (Pt)	Plasticity, H, M, L	PID/FID (ppm)	Remarks
1-2.5		dk. brown w/orange mottles		Sl. moist					Clayey silt to silty clay, pliable											M		
~~2.5~~ 2.5-5		No recovery																				
5-6		light brown to tan		Sl. moist					Clayey sand, fine sand, well sorted											L		
6-6.5		orange w/ purple mottles		Sl. moist					Sandy clay, pliable											L		
6.5-9		tan w/ light brown		moist					Sand w/ some clay, med grained											L		
9-10		~~NA~~																				
10-15		brown to light gray																				
		w/ orange mottles		wet to					Sand to clayey sand, soft											L at 13-14'		
~~15-18~~		~~tan~~		moist					coarse grained, well sorted													
									Pliable @ 13-14'													
15-18		tan		wet					coarse sand, well sorted, wet											NA		
18-20		light gray ~~w/~~ purple mottles		wet to					Clayey sand, well sorted, med											~~NA~~	L	
20-23		~~light~~		~~moist~~					grained													
↓		light brown w/ orange mottles		wet					med grained sand, soft											NA		
23-25		light gray w/ purple mottles		moist					Coarse grained sand, soft, well											NA		
25-30		light brown to orange		wet					sorted													
		w/ purple mottles		to moist					Coarse sand at 28-30, med sand													
		orange mottles @ 29.5							@ 25-28, well sorted											NA		
		light gray to white @ 29.5-30																				

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Dump Road Source
PROJECT NUMBER: 112IC04882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-196
DATE: 9/3/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
			0										
							light brown w/ gray mottles, v. sl. moist			30.4			
							clayey silt, soft, low plast						
							dk. brown w/ red mottles, sl. moist, silty clay,			32.1			
							rootlets, pliable, med. plast						
			5				NO RECOVERY			7.7			
			5.5				dk. brown w/ red mottles, sl. moist, silty clay, rootlets, pliable						
			7				light brown w/ purple mottles @ 6-7', dry, clayey silt w/ some sand, v. soft			14.0			
							tan w/ orange mottles, dry, clayey silt, soft						
										7.9			
			10										
							light brown w/ white mottles, sl. moist, silty sand			9.4			
			12				to sandy silt, low plast						
							white & light gray w/ purple mottles @ 14.5-15'			8.1			
							wet, sand w/ some silt, medium, well sorted						
			15				soft			7.1			
							tan to white, wet, med. grained sand,						
							well sorted, low plast			4.8			
			17.5				purple w/ tan mottles, moist, med. sand,						
			18.5				well sorted, some clay @ 18', soft			7.4			
			20				gray w/ purple mottles, moist, med. sand, well sorted, soft						
							light brown w/ orange mottles, wet, med sand,			5.2			
			22				soft, well sorted						
							white w/ tan and orange mottles, wet, sand,			3.0			
							coarse grained, well sorted, soft			3			
			25							4.1			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Dump Road Source
PROJECT NUMBER: 112IC04882
DRILLING COMPANY: Groundzero
DRILLING RIG: Geoprobe

BORING No.: DR-SB-196
DATE: 9/3/13
GEOLOGIST: J. Mullis
DRILLER: Jorge Soto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
			25										
							light brown to light gray to white						
							wet to moist			10.1			
							Sand, coarse grained, well sorted, soft,			12			
							in low plast.			6.2			
			30										

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Boring Log Field Sheet

Project Name & Number: Dump Road Source Area
Geologist: J. Mullis
Driller: J. Soto
Drilling Co: Groundzero
Date: 9/3/13

Boring #: DR-SB-196 0953 start

Boring Depth (ft)	Recovered (Ft)	Color	Density/rock hardness	Lithology	USCS: Gravels: well graded gravel (GW)	Gravels: poorly graded gravel (GP)	Gravels: Gravel/sand/silt mix (GM)	Gravels: Clayey gravel (GC)	Sands: well graded sand (SW)	Sands: poorly graded sand (SP)	Sands: Silty sand (SM)	Sands: Clayey sand (SC)	Low Plasticity: Inorganic clay/silt/sand (ML)	Low Plasticity: plastic (CL)	Low Plasticity: Org silt/clay low plastic (OL)	High Plasticity: Inorg. silt/sand elastic (MH)	High Plasticity: Inorg. Clay, hihg plastic (CH)	High Plasticity: Org. clay med/high plastic (OH)	Peat/highly organic (Pt)	Plasticity, H, M, L	PID/FID (ppm)	Remarks
	0-2 ft	light brown w/ gray mottles		sl. moist				clayey silt, soft												L		0-2: 30.4
	2-4 ft	dk. brown w/ red mottles		sl. moist				silty clay, rootlets, pliable												M		2-4: 32.1
	4-5 ft	no recovery		—																—		4-6: 7.7
	5-5.5	dk brown w/ red mottles		sl moist					silty clay, rootlets, pliable											M		6-8: 14.0
	5.5-7	light brown / tan, purple mottles 6-7'		dry					clayey silt w/ some sand, in soft											L		8-10: 7.9
	7-10	tan w orange mottles		dry					clayey silt, soft											L		10-12: 9.4
	10-12	light brown w/ white mottles		sl moist						silty sand to sandy silt										L		12-14: 8.1 8.1
	12-15	white to light gray w/ purple mottles		wet						sand w some silt, medium well sorted										L		14-16: 7.1
	15-17.5	tan to white @ 15-15		wet						sand, medium grained, well sorted										L		16-18: 4.8
	17.5-18.5	purple w tan mottles		moist					sand, medium, well sorted, some clay													18-20: 7.4
	18.5-20	gray w/ purple mottles		moist						@ 18', soft										L		20-22: 5.2
									sand, medium g. well sorted, soft													22-24: 3.0
	20-22	light brown w/ orange mottles		wet					sand, med. grained, soft, well sorted											L		24-26: 4.1
	22-25	white w/ tan and orange mottles		wet					sand, coarse grained, well sorted, soft											L		26-28: 10.4
	25-30	light brown to light gray																				28-30: 6.2
		to white		wet to moist					sand, coarse grained, well sorted soft											L		

26 28, 2 4

Backward PID 0.1

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-465
Site: MSA - Pump Road
Date Installed: 8/28/13
Date Developed: 9/16/13
Dev. Method: Macropurge/Surge
Pump Type: 12v. Submersible

Depth to Bottom (ft.): 25'
Static Water Level Before (ft.): 9.99
Static Water Level After (ft.):
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC

Responsible Personnel: J. Mullis
Drilling Co.: Cascade
Project Name: MSA - Pump Road
Project Number: 172IC04882.05
27.8- 28 [illegible]

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____) DRP/DO	Turbidity (NTU)	Remarks (odor, color, etc.)
1234	0.2'	START	8.86	–	–	–	–	Very turbid
1241	–	~7 (DRY)	–	–	–	–	–	–
1252	–	~9.5 (DRY @ 1254)	–	–	–	–	–	very turbid
1309	–	~10 gal (Dry @ 1310)	–	–	–	–	–	very turbid
	–	–	24.48	–	–	–	–	
1430	–	Start ~12	~24.48					Very turbid, use low flow
1440	–	12 gal	–	14.87	6.47	-33/5.24	>1000	Very turbid DRY @ 1441
		12 gal	END PURGE @ 1440					Too Turbid / heavy sediment removed

11

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-46I
Site: MSA-Dump Road
Date Installed: 8/28/13
Date Developed: 9/16/13
Dev. Method: Macropurge/Surge
Pump Type: 12v. Sub.

Depth to Bottom (ft.): 45'
Static Water Level Before (ft.): 10.62
Static Water Level After (ft.): 10.71
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC

Responsible Personnel: J. Mullis
Drilling Co.: Cascade
Project Name: MSA-Dump Road
Project Number: 112IC04882.05

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____) DRP/DO	Turbidity (NTU)	Remarks (odor, color, etc.)
1242	0.5'	start	10.7'	—	—	—	—	
—	/	/	—	—	—	—	—	—
1302	—	~40	11.08	15.34	6.33	-52/10.17	605	cloudy
1307	—	45	—	14.48	6.19	-27/1.80	255	cloudy
1312	—	50	11.35	14.10	6.03	-12/2.07	163	cloudy to sl. clear
1317	—	55	—	13.95	5.92	-13/1.47	135	" "
1322	—	60	—	13.85	5.99	-11/2.36	121	" "
1327	—	65	—	13.80	5.86	-8/2.06	107	clear
		~68 gal	END	PURGE @	1329			

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Slow wb @ 6

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-46D
Site: MSA-Dump Road
Date Installed: 8/27/13
Date Developed: 9/6/13
Dev. Method: Macropurge/Surge
Pump Type: 12 v. Sub

Depth to Bottom (ft.): 60'
Static Water Level Before (ft.): 10.95
Static Water Level After (ft.): 11.47
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC

Responsible Personnel: J. Mullis
Drilling Co.: Cascade
Project Name: MSA-Dump Road-
Project Number: 112I04882.05

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
1344	0.3'	Start	10.98	—	—	—	—	very turbid
1351	—	35	13.02	—	—	—	—	light brown
1401	—	~58	—	14.70	6.67	-170/1.82	105	cloudy to sl. clear
1406	—	~60	—	14.22	6.78	-151/1.92	80.2	sl. cloudy
1411	—	~64	—	14.10	6.79	-135/1.68	68.8	clear
1416	—	~70	11.47	14.09	6.78	-133/1.45	52.3	clear
		~71 gal	END	PURGE @	1419			

2-3 gal/min

Flow cut to 4/gal/min

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Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-475
Site: MSA Camp Road
Date Installed: 8/29/12
Date Developed: 9/16/12
Dev. Method: Airlifting/Surge
Pump Type: 12V. Sub.
Depth to Bottom (ft.): 20'
Static Water Level Before (ft.): 10.72'
Static Water Level After (ft.): 12.05
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (In.): 2" PVC
Responsible Personnel: J. Mills
Drilling Co.: Cascade
Project Name: MSA - Camp Road
Project Number: 112IC04582.05

ft. 3.5 - Depth to bottom
2.58 - Stick up

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ORP/DO)	Turbidity (NTU)	Remarks (odor, color, etc.)
0832	3.2'	start	9.63'	—	—	—	—	very turbid, ORT @ 0833
0833	<3	2.5	ORT	—	—	—	—	
0893	<2	start 5.0	ORT	-	-	-	-	very turbid
0904	<1	start, ~9.0	ORT	-	—	-	—	very turbid ORT @ 0907
0919	<1	start, ~10.0	ORT @ 0920					" "
0927	<1	start, ~11.0	ORT @ 0928	—	—	-		very turbid
0950	<1"	start, ~12.0	ORT @ 0951	-	-	—	-	turbid
1009	<1"	start, ~14.0	ORT @ 1011	-	—	—	—	light brown (getting less turbid)
1023	<1"	start, ~16.0	ORT @ 1025	—	—	—	—	cloudy / light brown
1050	<1"	start, ~18.5	ORT @ 1052	—	—	—	—	cloudy
1105	<1"	start, ~20.5	ORT @ 1106	—	—	—	—	cloudy
1115	<1"	start, ~21.5	—	14.90	6.75	-50/4.24	>800	reading @ 1121
1125	<1"	22.0	—	not enough well	dry @ 1127	>800		reading @ 1127
1135	<1"	start 22.5	—	15.17	6.77	-47/3.92	267	reading @ 1140
				END PURGE @ 1140				

Low flow ~ 3mL/min

Buckets

(0.5)(0.5)(0.5)(0.5)

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-47I
Site: MSA-Dump Road
Date Installed: 8/29/13
Date Developed: 9/16/13
Dev. Method: Macropurge/Surge
Pump Type: 12V. Sub.

Depth to Bottom (ft.): 35'
Static Water Level Before (ft.): 11.74'
Static Water Level After (ft.): 12.50
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC

Responsible Personnel: J. Mullis
Drilling Co.: Cascade
Project Name: MSA-Dump Road
Project Number: 172IC04882.05

37.56 total

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____) ORP / DO	Turbidity (NTU)	Remarks (odor, color, etc.)
0845	0.56'	START	—	—	—	—	—	very turbid
0853	<0.56	10	33.45'	15.69	6.75	-87/ 6.95	>1000	light brown
0859	<0.25	20	>33.45	—	—	—	—	shut off for recharge
start 0909	<0.25	Start 35	—	—	—	—	—	— Reading, shut off @ 0918
0918	<0.01	@ 35	—	15.10	7.62	-54/ 2.60	66.4	cloudy
0928	<0.01	start	—	—	—	—	—	cloudy to clear
0931	—	40	—	14.31	6.10	-30/ 10.12	26.3	clear
0936	—	~48	34.2'	13.89	6.84	-45/ 3.07	45.0	clear
0941	—	~54	33.15	13.88	6.64	-28/ 2.89	145	cloudy
0948	—	~62		13.69	6.64	-36/ 9.60	9.4	clear
0950		~63.5	END PURGE 0950					

Buckets

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Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-47D
Site: MSA-Dump Road
Date Installed: 8/29/13
Date Developed: 9/16/13
Dev. Method: Macropurge/Surge
Pump Type: 12V Sub

Depth to Bottom (ft.): 55'
Static Water Level Before (ft.): 11.85'
Static Water Level After (ft.): 11.50'
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC

Responsible Personnel: J. Mullins
Drilling Co.: Cascade
Project Name: MSA-Dump Road
Project Number: 112IC04882.05

Stick up: 2.6'
Bottom @: 57.6 if hard

	Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____) ORP/DO	Turbidity (NTU)	Remarks (odor, color, etc.)
2-4 gal/min	1011	0.3'	Start	10.69	—	—	—	—	very turbid
2-4 gal/min	1023	<0.1'	40 gal	—	14.03	6.71	-145/2.21	800	cloudy
slow to 1 gal/min	1032	<0.01	~57.5	—	13.53	6.41	-131/10.20	95.1	clear to sl. cloudy
	1037	<0.01	~64	—	13.49	6.30	-142/1.87	33.3	clear
	1042	<0.01	~70	—	13.45	6.22	-134/7.34	24.6	clear
	1047	<0.01	~76	—	13.40	6.17	-133/1.98	33.4	clear
			85 gal	END PURGE @ 1052					

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-48S
Site: MSA
Date Installed: 9/04/13
Date Developed: 9/12/13
Dev. Method: 12V. Sub
Pump Type: 12V. Sub.

Depth to Bottom (ft.): 20'
Static Water Level Before (ft.): 18.91'
Static Water Level After (ft.): _____
Screen Length (ft.): 10'
Specific Capacity: _____
Casing ID (in.): 2" PVC

Responsible Personnel: Josh Mullis
Drilling Co.: Colcade
Project Name: MSA-Bump Road
Project Number: 112CD4582

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units DOS)	Turbidity (NTU)	Remarks (odor, color, etc.)
0831	~1.1	~1	20'	—	—	—	very turbid	ORY @ 0840
0938	~1.14	~1 (2)	18.98'	—	—	—	very turbid	ORY @ 0939
0958	~0.8	~1 (3)	18.94	—	—	—	very turbid	ORY @ 0959
1020	~0.5	~0.5 (3.5)	—	—	—	—	very turbid	ORY @ 1021
1048	—	~1 (4.5)	—	—	—	—	very turbid	ORY @ 1048
1114	—	~1 (5.5)	—	—	—	—	very turbid	ORY @ 1115
1124	—	~2 (7.5)	18.96	—	—	—	very turbid	ORY @ 1126
1135	—	~2 (9.5)	18.98	—	—	—	light brown	ORY @ 1138
1146	—	~2.5 (12.0)	18.97	—	—	—	light brown	settling clearer. ORY @ 1148
1158	—	~2 (14.0)	18.98	—	—	—	light brown	
1208	—	~2 (16.0)	18.99	18.21	6.58	.95	light brown (644)	ORY @ 1208
				END PURGE @ 1210				

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-48I
Site: MSA
Date Installed: 9/4/13
Date Developed: 9/12/13
Dev. Method: Mag pump
Pump Type: 12v sub.
Depth to Bottom (ft.): 35'
Static Water Level Before (ft.): 18.96'
Static Water Level After (ft.): 19.0'
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" pvc
Responsible Personnel: Josh Mills
Drilling Co.: Cascade
Project Name: MSA Dump Road
Project Number:

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ORP)	Turbidity (NTU)	Remarks (odor, color, etc.)
0845	0.5ft	start	18.96'	—	—	—	—	
0852	very little	~10 gal	20.1'	16.95	5.45	—	light brown	
0858	very little	~20 gal	20.1'	15.03	5.71	100	light brown (>1000)	
0903	very little	~30 gal	20.2'	14.45	5.67	114	light brown (>1000)	
0908	very little	~40 gal	20.3'	14.16	5.57	126	light brown (>1000)	
0915	very little	~50 gal	20.35'	14.20	5.62	108	light brown (>1000)	
0920	very little	~55 gal	20.31'	14.27	5.55	99	cloudy to clear (~99)	
0926	very little	~60 gal	20.28	14.09	5.38	99	cloudy to clear (~105)	
0930	very little	~65 gal	20.25	14.07	5.36	104	cloudy to clear (<50)	
			Stop purge	@ 0930				

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MW-480
Site: MSA - Dump Road
Date Installed: 9/4/13
Date Developed: 9/12/13
Dev. Method:
Pump Type: 12v. Sub.

Depth to Bottom (ft.): 50'
Static Water Level Before (ft.): 19.11'
Static Water Level After (ft.):
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC

Responsible Personnel: Josh Mullis
Drilling Co.: Cascade
Project Name: MSA-Dump Road
Project Number: 112IE04382

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____) DRP	Turbidity (NTU)	Remarks (odor, color, etc.)
1002	0.25'	—	19.03	—	—	—	—	Pump did not start, pull up to rebuy
1028	0.25'	start	19.05	—	—	—	—	
1031	—	~5	19.35	—	—	—	—	very turbid
1037	—	~15	19.34	—	—	—	—	light brown (still >1000)
1042	—	~25	19.35	—	—	—	—	light brown (still >1000)
1046	—	~32	19.31	15.46	5.94	-77	201	cloudy
1052	—	~41	19.31	15.23	5.91	-115	78.3	cloudy
1057	—	~50	19.31	15.15	5.85	-114	38.5	sl. cloudy
1102	—	~60	19.31	15.12	5.79	-113	19.6	v. sl. cloudy to clear
1107	—	~70	19.31	15.10	5.71	-116	11.5	clear
1112	—	~80	19.31	15.09	5.69	-116	10.1	clear
		~82 total	End Purge	1113				

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW495
Site: MSA-Bump Road
Date Installed: 9/5/13
Date Developed: 9/13/13
Dev. Method: Mainpump-Surge
Pump Type: 12v. Sub
Depth to Bottom (ft.): 30'
Static Water Level Before (ft.): 19.27
Static Water Level After (ft.): 19.4
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC
Responsible Personnel: J Mills
Drilling Co.: Cascade
Project Name: MSA-Bump Road
Project Number: 117IC04882

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ~~_____~~ uS)	Turbidity (NTU)	Remarks (odor, color, etc.)
0814	<1"	Start	19.23	—	—	—	—	light brown
0825	little more	~40 gal	19.85	17.15	5.77	-113	500	cloudy
0830	little more	~50 gal	19.86	15.79	5.86	-172	>1000	cloudy & sl. cloudy
0835	N/A	~60	19.86	15.07	5.86	-113	838	cloudy & sl cloudy
0840	N/A	~70	19.86	14.95	5.87	-107	11.6	clear
0843	N/A	~80	19.86	14.83	5.74	-104	3.9	clear
			END PUMP @ 0843					

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Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-49I
Site: MSA-Camp Road
Date Installed: 9/5/17
Date Developed: 9/13/17
Dev. Method: Surge/SA
Pump Type: 12V. Sub.
Depth to Bottom (ft.): 45'
Static Water Level Before (ft.): 18.99
Static Water Level After (ft.): 20.55
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC
Responsible Personnel: T. Mills
Drilling Co.: Cascade
Project Name: MSA-Camp Road
Project Number: 117I04882

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____) OCS	Turbidity (NTU)	Remarks (odor, color, etc.)
0900	<1"	Start	18.65	-	-	-	-	Cloudy
0915	very little	~30 gal	—	15.05	6.04	-23	>1000	light brown
0925	very little	~45 gal	—	14.45	5.84	-6	>770	light brown (Turned down pump flowrate)
0930	very little	~55 gal	—	14.38	5.31	8	231	cloudy
0935	very little	~60 gal	—	14.22	5.34	-14	45.8	SL. cloudy to clear
0940	very little	~65 gal	—	14.20	5.34	-20	39.0	clear
			End purge @	0940				

~2 gal/min
~3 gal/min
~2 gal/min
~1 gal/min

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Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-490
Site: MSA-Dump Road
Date Installed: 9/5/13
Date Developed: 9/13/13
Dev. Method: Macropurge + Surge
Pump Type: 12 v. Submersible

Depth to Bottom (ft.): 60'
Static Water Level Before (ft.): 18.92
Static Water Level After (ft.): 19.1
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC

Responsible Personnel: J. Mullis
Drilling Co.: Cascade
Project Name: MSA-Dump Road
Project Number: 172IC04882

	Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____) ORP/DO	Turbidity (NTU)	Remarks (odor, color, etc.)
2 gal/min	1002	<1"	Start	19.1	-	-	-	-	Very turbid
2 gal/min	1030	very little	~55	20.3	15.30	4.75	35 / 2.58	>1000	brown
Start ~1 gal/min	1040	very little	~65	20.0	14.77	4.66	16 / 1.57	438	light brown/cloudy
	1045	very little	~70	19.7	14.61	4.64	5 / 1.50	304	light brown/cloudy
	1050	very little	~75	19.5	14.55	4.63	11 / 1.51	225	cloudy
	1055	very little	~80	19.3	14.35	4.62	5 / 1.29	201	cloudy
	1100	very little	~85	19.1	14.34	4.6	2 / 1.31	150	sl. cloudy
					END PURGE @ 1100				

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Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-SDS
Site: MSA-Dump Road
Date Installed: 9/11/13
Date Developed: 9/18/13
Dev. Method: Macropurge/SNP
Pump Type: 12 V. Sub.

Depth to Bottom (ft.): 30'
Static Water Level Before (ft.): 12.15
Static Water Level After (ft.): 12.25
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC

Responsible Personnel: Joe T.
Drilling Co.: Cascade
Project Name: MSA-Dump Road
Project Number: 112IC04882.05

Top PVC: 2.8'
Total = 32.8'
Measured 32.5

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____)	Turbidity (NTU)	Remarks (odor, color, etc.)
0740	0.3'	START	—	—	—	—	—	
0757	0	10	—	—	—	—	—	WATER HAS VF SED. TURBID
0758	0	20	17.53	—	—	—	—	HIGH TURBIDITY
0806	0	35	18.30	13.90	5.56	1.01	263	
0812	0	40	—	13.85	5.85	1.02	109	
0816	0	45	18.33	13.74	5.93	1.04	77.6	
0821	0	50	—	13.75	5.90	1.05	51.5	
0826	0	60	18.42	13.57	5.88	1.06	39.0	
0831	0	70	—	13.58	5.73	1.09	16.7	
0836	0	80	18.42	15.59	5.71	1.09	16.6	STOP DEVELOPMENT

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-501 | Depth to Bottom (ft.): 45' | Responsible Personnel: Joe T.
Site: MSA-Quarry Road | Static Water Level Before (ft.): 12.34 | Drilling Co.: Cascade
Date Installed: 9/11/13 | Static Water Level After (ft.): 12.40 | Project Name: MSA Quarry Road
Date Developed: 9/17/13 | Screen Length (ft.): 10' | Project Number: 117IC04882.05
Dev. Method: MacroPurge/Surge | Specific Capacity: | Top PVC: 2.90' | Measured 47.8'
Pump Type: 12V Sub. | Casing ID (in.): 2" PVC | Total: 47.9'

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____)	Turbidity (NTU)	Remarks (odor, color, etc.)
0840	0.1'	START	12.34	—	—	—	—	pump on, HEAVY TURBIDITY
0853	0	25	13.30	13.89	6.38	0.502	552	
0858	0	35	13.30	14.15	6.60	0485	113	
0903	0	45	—	14.05	6.76	0.514	63.2	
0908	0	55	13.30	14.52	6.71	0.540	47.4	
0913	0	65	—	14.49	6.71	0.550	17.4	
0918	0	75	13.30	14.52	6.70	0.552	10	pump off

HH 1/11
HH

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-50D
Site: MSA-Dump Road
Date Installed: 9/10/13
Date Developed: 9/17/13
Dev. Method: Macropurge / Surge
Pump Type: 12v. Sub.
Depth to Bottom (ft.): 60'
Static Water Level Before (ft.): 12.96
Static Water Level After (ft.): 13.12
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC
Responsible Personnel: Joe T.
Drilling Co.: Cascade
Project Name: MSA-Dump Road
Project Number: 117IC04882.05

Stickup: 3.08 Total ft bottom = 63.08
62.7 ft = ~0.3' sediment

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____)	Turbidity (NTU)	Remarks (odor, color, etc.)
0930	0.3'	START	12.96	—	—	—	—	pump on
0950	0	40	13.36	13.51	6.49	0.822	>1000	LOWERED pumping RATE
1002	0	50	13.38	13.43	6.53	0.852	741	
1016	0	60	13.38	14.12	6.54	0.877	556	
1027	0	70	13.38	14.18	6.57	0.898	477	INCREASED pumping RATE
1036	0	80	13.82	14.24	6.48	0.894	991	
1050	0	105	13.82	14.34	6.41	0.926	909	
1103	0	125	13.82	13.90	6.32	0.955	686	
1112	0	140	13.82	14.34	6.28	0.937	531	
1115	0	145	13.82	14.30	6.23	0.967	487	pump off

~~HH HH HH HH HH~~ III

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW515
Site: MSA-Dump Road
Date Installed: 9/10/13
Date Developed: 9/17/13
Dev. Method: Macropurge, Surge
Pump Type: 12 v Sub

Depth to Bottom (ft.): 20'
Static Water Level Before (ft.): 9.55
Static Water Level After (ft.): 14.10
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (In.): 2" PVC

Responsible Personnel: J. Mullis, Jr. T.
Drilling Co.: Eastern
Project Name: MSA - Dump Road
Project Number: 112G04552.05

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____)	Turbidity (NTU)	Remarks (odor, color, etc.)
1756	0.4'	Start	9.55	—	—	—	—	Very turbid
1302	—	12.5	DRY	—	—	—	—	—
1340	—	Start 12.5	—	—	—	—	—	light brown
1347	—	~18 gal	—	15.23	6.51	1.81	204	cloudy
1352	—	~22 gal	15.1	15.17	6.58	1.56	920	cloudy
1358	—	~27	DRY	—	—	—	—	—
1419	Start	27	9.7	15.09	6.44	1.66	320	Cloudy
1429	DRY	37	DRY	—	—	—	—	—
				END RACC @ 1429, 37 gal total				

DRY @

DRY @

~27

1111

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-51I
Site: MSA-Dump Road
Date Installed: 9/12/13
Date Developed: 9/13/13
Dev. Method: Mechanical/Surge
Pump Type: 12V Sub

Depth to Bottom (ft.): 39'
Static Water Level Before (ft.): 9.48
Static Water Level After (ft.): 10.5
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC

Responsible Personnel: Josh Mullis, Joe T
Drilling Co.: Cascade
Project Name: MSA-Pump Road
Project Number: 112I.04882.05

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____)	Turbidity (NTU)	Remarks (odor, color, etc.)
1304	0.1'	START	9.49	—	—	—	—	pump on
1313	0	20	10.60	—	—	—	—	very turbid
1318	0	40	—	14.58	6.25	1.19	169	cloudy
1323	0	50	—	14.68	6.39	1.25	81.3	cloudy to sl clear
1328	0	65	10.7	14.73	6.34	1.29	68.4	clear to cloudy
1333	0	80	—	14.76	6.30	1.31	56.5	clear
1338	0	95	—	14.75	6.23	1.33	72.4	clear
			— END SURGE 1338			95 gal		

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MSA-MW-510
Site: MSA-Camp Road
Date Installed: 9/10/13
Date Developed: 9/19/13
Dev. Method: Macrapump / Surge
Pump Type: 12v. Pump

Depth to Bottom (ft.): 60'
Static Water Level Before (ft.): 9.62
Static Water Level After (ft.): 10.25
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 2" PVC

Responsible Personnel: J. Myers, Joe T.
Drilling Co.: Cascade
Project Name: MSA-Camp Road
Project Number: 112G02488.05

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units _____)	Turbidity (NTU)	Remarks (odor, color, etc.)
1221	0.6'	START	9.6'	—	—	—	—	light brown
1229	—	~28	—	13.93	5.65	1.08	35.4	cloudy
1234	—	~39	10.35	14.32	5.36	1.01	0.0	clear
1239	—	~44	—	14.20	5.41	1.14	0.0	clear
1244	—	~50	—	14.14	5.34	1.14	0.0	clear
			END SURGE @	1244		51 total gal		

APPENDIX F—GROUNDWATER MEASUREMENTS

Tetra Tech, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: MSA Groundwater
Project No.: 112IC04882
Location: MSA
Personnel: S. Cameron, J Mullis
Weather Conditions: Sunny 65°F
Measuring Device: 100' Solinst
Tidally Influenced: Yes ___ No ___
Remarks:

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
46S	10/14/15	0745		27.75	9.22			
46I		0747		47.71	9.58			
46D		0748		62.77	9.97			
47S		0750		22.45	10.21			
47I		0751		37.71	10.38			
47D		0752		57.72	10.45			
14I		0756			10.11			
14D		0755			7.05			
16S		0803			8.70			
16I		0804			7.61			
16D		0805			7.80			
17S		0807		19.61	6.25			
17I		0808		46.15	5.61			
17D		0809		69.80	6.24			
18D		0821		84.50	7.35			
18I		0823			7.32			
18S		0824			7.12			
44S		0825			2.32			
43S		0829			14.11			
39S		0831			13.19			
3I		0835			14.71			
3D		0836			14.52			
3S		0837			11.39			
OMW-2A		0840			20.09			
OMW-2B	↓	0841			19.85			

* All measurements to the nearest 0.01 foot

Tetra Tech, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: MSA Groundwater
Project No.: 112IC04882
Location: MSA
Personnel: S. Gannon, J. Nellis
Weather Conditions: Sunny, 65°F
Measuring Device: 100' Solinst
Tidally Influenced: Yes ___ No ___
Remarks:

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
DMW-2S	10/14/15	0845			20.31			
48S		0854			18.21			
48I		0855			18.21			
48D		0856			18.35			
49S		0857			18.49			
49I		0858			18.18			
49D		0859			18.10			
50S		0900			10.90			
50I		0901			10.99			
50D		0902			11.54			
51S		0903			8.08			
51I		0904			7.97			
51D		0905			8.05			
DMW-4I		0907			18.92			
DMW-4D		0908			19.00			
DMW-4S		0909			19.07			
~~DMW~~5MW5		0913			~~20.67~~			
DMW7-S		0914			19.92			
DMW-7I		0915			20.21			
DMW-7D		0916			20.12			
40S		0917			15.39			
40I		0918			15.66			
5S		0921			20.01			
5I		0922			19.98			
5D	↓	0923			20.04			

* All measurements to the nearest 0.01 foot

Tetra Tech, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: MSA Groundwater
Location: MSA
Weather Conditions: Sunny, 65°F
Tidally Influenced: Yes ___ No ___
Project No.: 112IC04882
Personnel: S. Gaeson, J. Mullis
Measuring Device: 100' S.Inst
Remarks:

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
DMW6S	10/14/13	0927			17.23			
DMW6I		0928			17.21			
DMW6D		0930			17.17			
29D		0935			7.86			
6		0940			13.81			
8S		0943			14.21			
8I		0944			14.41			
8D		0945			14.36			
20S		0948			10.21			
20I		0949			10.15			
20D		0950			10.35			
9S		0951			8.22			
9I		0952			9.20			
9D		0953			9.25			
MW4		0955			7.65			
15S		0957			6.04			
15I		0958			6.19			
15D		0959			6.18			
27D		1000			2.45			
28I		1001			6.11			
33S		1005			6.91			
33I		1006			7.02			
26S		1013			8.87			
26I		1014			9.03			
26D	↓	1015			9.55			

* All measurements to the nearest 0.01 foot

Tetra Tech, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: MS9 Groundwater | **Project No.:** 112IC04882
Location: MSA | **Personnel:** S. Gracon, J. Mullis
Weather Conditions: Sunny 65°F | **Measuring Device:** 100' Solinst
Tidally Influenced: Yes ___ No ___ | **Remarks:**

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
42S	10/14/13	1018			6.55			
42I		1019			6.51			
10S		1021			7.65			
10I		1022			7.75			
21I		1026			8.55			
21D		1027			8.59			
DMW1S		1028			8.58			
41S		1032			7.75			
41I		1033			7.76			
45S		1034			7.55			
DMW1B		1036			9.75			
DMW1A		1037			9.56			
19I		1040			6.02			
19D		1041			~~6.08~~			
MW2		1043			~~6.19~~ 6.19			
32S		1045			5.14			Broken Lid
32I		1046			5.25			↓
31D		1048			3.51			
MW30D		1054			4.25			
MW30I		1056			5.10			
23S		1103			7.45			
23I		1104			7.55			
23D		1105			7.81			
22I		1107			8.59			
22D	↓	1108			8.60			

* All measurements to the nearest 0.01 foot

Tetra Tech

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: MSA Groundwater
Project No.: 112IC04882
Location: MSA
Personnel: S. Cameron, J. Mullis
Weather Conditions: Sunny, 65°F
Measuring Device: 100' Solinst
Tidally Influenced: Yes ___ No ___
Remarks:

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
MW3	10-14-13	1109			8.70			
37S		1113			6.21			
25S		1116			5.62			
25I		1117			7.15			
MW7		1121			7.54			
36S		1124			7.33			
35S		1128			9.55			
34S		1138			5.84			
34I		1139			4.84			
MT-MW2		1219			7.99			
MT-MW7								Covered
MT-MW8S		1222			9.99			
MT-MW1S		1224			4.44			
MT-MW3		1233			2.35			
MT-MW6		1236			1.41			
MT-MW11S		1241			2.46			
MT-MW12S		1243			2.81			
MT-MW4S		1250			5.66			
MT-MW10S		1253			11.41			
MT-MW9S		1257			5.05			
MT-MW5S		1302			6.45			
38S		1331			7.66			
GSP-MW-5		1338			6.31			
GSP-MW-6		1341			4.51			
GSP-MW-8	↓	1344			5.03			

* All measurements to the nearest 0.01 foot

Tetra Tech

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: MSA Groundwater **Project No.:** 112IC04882

Location: MSA **Personnel:** S. Gneron, J. Mullis

Weather Conditions: Sunny, 65° F **Measuring Device:** 100' Sol/Mst

Tidally Influenced: Yes ___ No ___ **Remarks:**

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
GSP-MW-7	10-14-13	1345			4.49			
GSP-MW-10	↓	1350			3.06			
GSP-MW-11		1352			5.31			
GSP-MW-09		1355			8.11			
GSP-MW-13		1400			4.70			
GSP-MW-12		1404			6.31			
GSP-MW-16		1406			6.21			
GSP-MW-15		1409			5.12			
GSP-MW-14	↓	1413			3.68			

* All measurements to the nearest 0.01 foot

APPENDIX G—GEOTECHNICAL TESTING RESULTS

SINCE 1881

FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

10626 York Road, Suites C-D
York Ridge Center North
Cockeysville, MD 21030
T 410-825-4131 I F 321-7384

Novemeber 15, 2013

Tetra Tech, Inc.
240 Continental Drive, Suite 200
Newark, DE 19713
Attention: Tony Apavanage

Re: Falling Head Permeability Testing
Project: Martin State Airport-Lockheed Martin
Location: SD-1,SD-2,SD-3
F & R Lab No.: 201301312
Sample Received: 10/24/13

Falling Head Permeability US Army Corp Method EM1110-2 1906

SAMPLE	WET DENSITY, PCF	MOISTURE %	PERMEABILITY, K(CM/SEC)
SD1(0-1)	104.19	166	$1.08 \times (10)^{-5}$
SD1(1-2)	101.08	117.8	$5.09 \times (10)^{-6}$
SD2(0-1)	100.9	207.9	$7.81 \times (10)^{-6}$
SD2(1-2)	100.4	73.3	$9.30x (10)^{-6}$
SD3(0-1)	102.04	137.5	$1.23 \times (10)^{-5}$
SD3(1-2)	99.96	82.3	$6.50 \times (10)^{-6}$

Respectfully,
Froehling & Robertson, Inc.

Alex Schnaider
Lab Manager

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	4.3	16.9	43.7	35.1

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2.5	100.0		
2	100.0		
1.5	100.0		
1	100.0		
3/4	100.0		
1/2	100.0		
3/8	100.0		
#4	100.0		
#10	100.0		
#20	99.1		
#40	95.6		
#60	89.6		
#100	84.2		
#200	78.6		
0.0387 mm.	66.6		
0.0282 mm.	62.1		
0.0187 mm.	54.7		
0.0112 mm.	48.8		
0.0081 mm.	44.4		
0.0059 mm.	38.4		
0.0043 mm.	32.5		
0.0031 mm.	29.6		
0.0013 mm.	16.2		

* (no specification provided)

Material Description

Gray-brown soil w/organic

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 0.2585 D_{85}= 0.1637 D_{60}= 0.0249
D_{50}= 0.0125 D_{30}= 0.0032 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 10.24.13 **Date Tested:** 10.30.13

Tested By: _____

Checked By: _____

Title: _____

Sample Number: SD-1 **Depth:** 0-1 **Date Sampled:**

FROEHLING & ROBERTSON, INC.

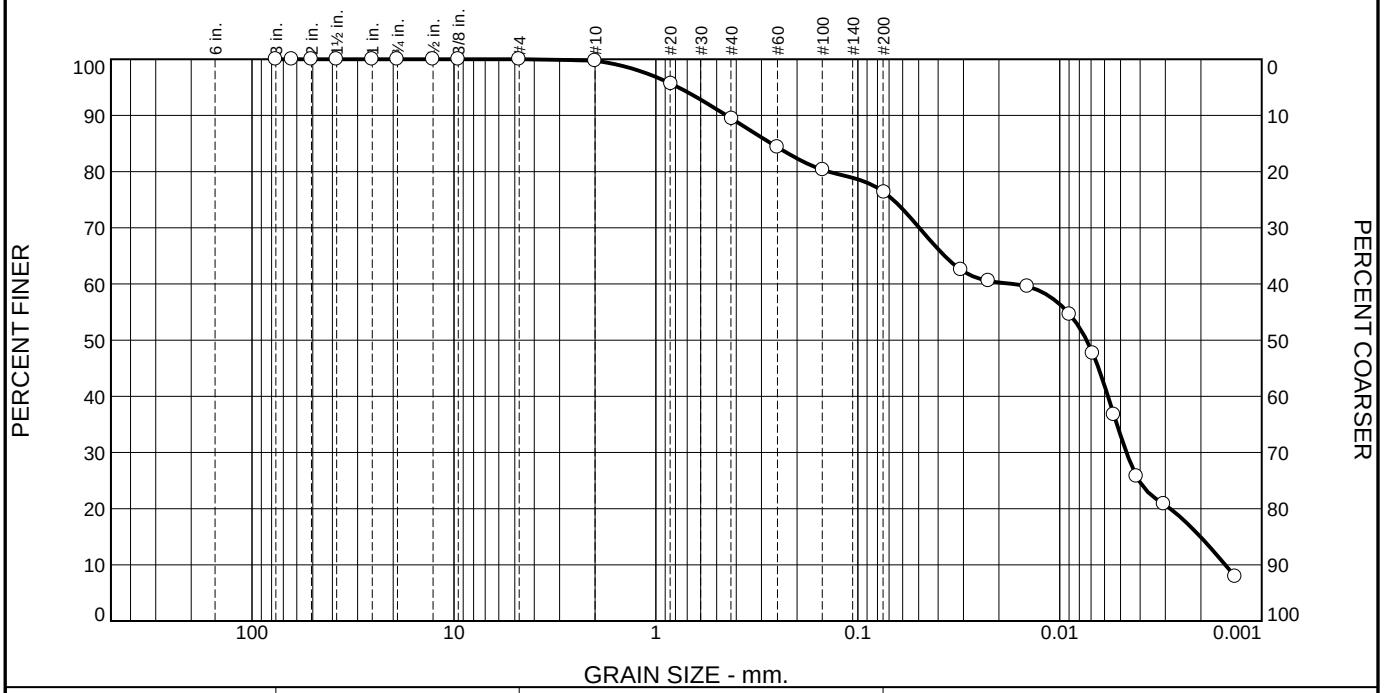
Hunt Valley, Maryland

Client: Tetra Tech,Inc

Project: Martin State Airport-Lockheed Martin

Project No: 75R0051-201301312 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.3	10.2	13.0	43.5	33.0

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2.5	100.0		
2	100.0		
1.5	100.0		
1	100.0		
3/4	100.0		
1/2	100.0		
3/8	100.0		
#4	100.0		
#10	99.7		
#20	95.6		
#40	89.4		
#60	84.3		
#100	80.3		
#200	76.3		
0.0308 mm.	62.5		
0.0225 mm.	60.5		
0.0144 mm.	59.5		
0.0089 mm.	54.6		
0.0069 mm.	47.6		
0.0054 mm.	36.7		
0.0042 mm.	25.8		
0.0031 mm.	20.8		
0.0014 mm.	7.9		

* (no specification provided)

Material Description

Tan-gray soil w/organic

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 0.4466 D_{85}= 0.2680 D_{60}= 0.0170
D_{50}= 0.0074 D_{30}= 0.0047 D_{15}= 0.0020
D_{10}= 0.0015 C_u= 11.23 C_c= 0.85

Remarks

Date Received: 10.24.13 **Date Tested:** 10.30.13

Tested By: _____

Checked By: _____

Title: _____

Sample Number: SD-1 **Depth:** 1-2 **Date Sampled:**

FROEHLING & ROBERTSON, INC.

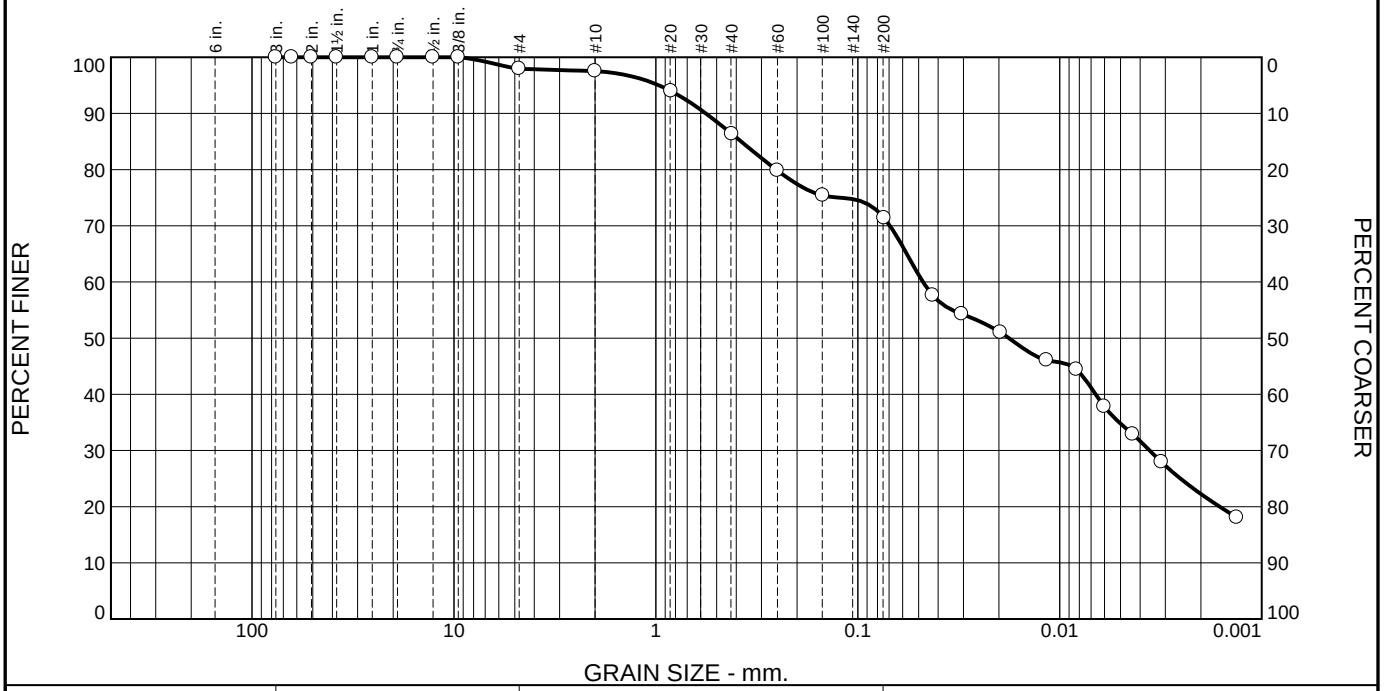
Hunt Valley, Maryland

Client: Tetra Tech,Inc

Project: Martin State Airport-Lockheed Martin

Project No: 75R0051-201301312 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.1	0.4	11.0	14.9	36.8	34.8

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2.5	100.0		
2	100.0		
1.5	100.0		
1	100.0		
3/4	100.0		
1/2	100.0		
3/8	100.0		
#4	97.9		
#10	97.5		
#20	94.0		
#40	86.3		
#60	79.8		
#100	75.4		
#200	71.4		
0.0425 mm.	57.6		
0.0306 mm.	54.3		
0.0196 mm.	51.0		
0.0116 mm.	46.1		
0.0083 mm.	44.4		
0.0060 mm.	37.8		
0.0043 mm.	32.9		
0.0031 mm.	27.9		
0.0013 mm.	18.1		

* (no specification provided)

Material Description

Tan-gray soil w/organic

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 0.5661 D_{85}= 0.3782 D_{60}= 0.0476
D_{50}= 0.0179 D_{30}= 0.0036 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 10.24.13 **Date Tested:** 10.30.13

Tested By: _____

Checked By: _____

Title: _____

Sample Number: SD-2 **Depth:** 0-1 **Date Sampled:**

FROEHLING & ROBERTSON, INC.

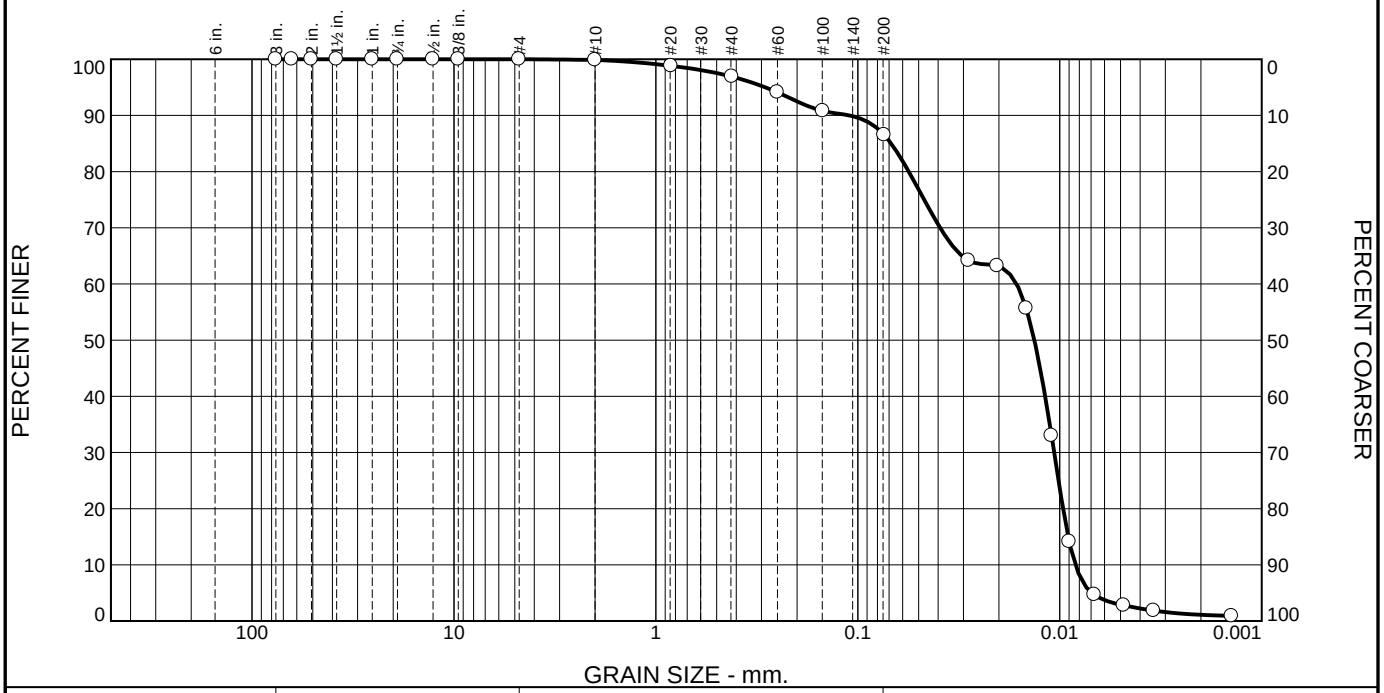
Hunt Valley, Maryland

Client: Tetra Tech,Inc

Project: Martin State Airport-Lockheed Martin

Project No: 75R0051-201301312 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	2.9	10.3	83.8	2.9

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2.5	100.0		
2	100.0		
1.5	100.0		
1	100.0		
3/4	100.0		
1/2	100.0		
3/8	100.0		
#4	100.0		
#10	99.9		
#20	98.8		
#40	96.9		
#60	94.1		
#100	90.8		
#200	86.5		
0.0283 mm.	64.1		
0.0204 mm.	63.2		
0.0147 mm.	55.7		
0.0110 mm.	33.0		
0.0090 mm.	14.1		
0.0067 mm.	4.7		
0.0048 mm.	2.8		
0.0034 mm.	1.8		
0.0014 mm.	0.9		

* (no specification provided)

Material Description

Gra-brown soil w/organic

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 0.1103 D_{85}= 0.0684 D_{60}= 0.0164
D_{50}= 0.0134 D_{30}= 0.0107 D_{15}= 0.0091
D_{10}= 0.0084 C_u= 1.95 C_c= 0.83

Remarks

Date Received: 10.24.13 **Date Tested:** 10.30.13

Tested By: _____

Checked By: _____

Title: _____

Sample Number: SD-2 **Depth:** 1-2 **Date Sampled:**

FROEHLING & ROBERTSON, INC.

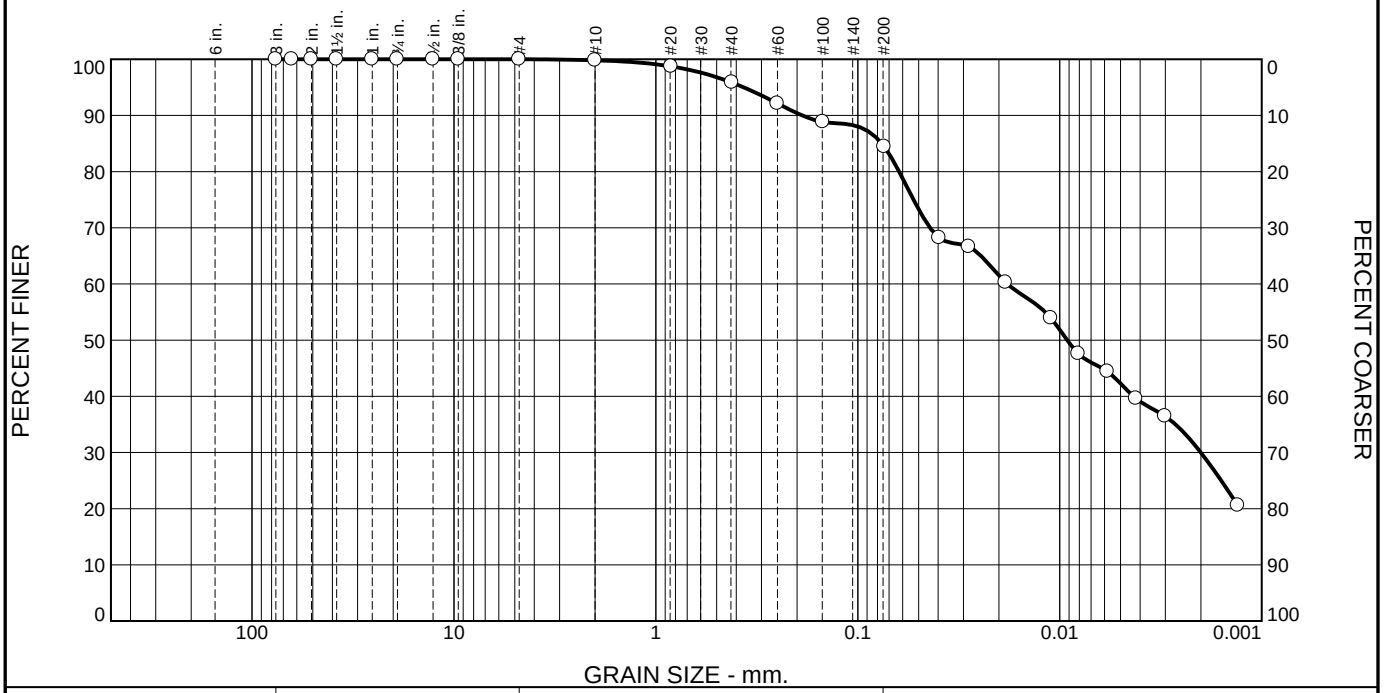
Hunt Valley, Maryland

Client: Tetra Tech,Inc

Project: Martin State Airport-Lockheed Martin

Project No: 75R0051-201301312 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.2	3.9	11.2	42.4	42.3

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2.5	100.0		
2	100.0		
1.5	100.0		
1	100.0		
3/4	100.0		
1/2	100.0		
3/8	100.0		
#4	100.0		
#10	99.8		
#20	98.7		
#40	95.9		
#60	92.1		
#100	88.9		
#200	84.4		
0.0395 mm.	68.2		
0.0282 mm.	66.6		
0.0185 mm.	60.3		
0.0111 mm.	53.9		
0.0081 mm.	47.6		
0.0058 mm.	44.4		
0.0042 mm.	39.6		
0.0030 mm.	36.5		
0.0013 mm.	20.6		

* (no specification provided)

Material Description

Gray-brown soil w/organic

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 0.1885 D_{85}= 0.0761 D_{60}= 0.0182
D_{50}= 0.0092 D_{30}= 0.0020 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 10.24.13 **Date Tested:** 10.31.13

Tested By: _____

Checked By: _____

Title: _____

Sample Number: SD-3 **Depth:** 0-1 **Date Sampled:**

FROEHLING & ROBERTSON, INC.

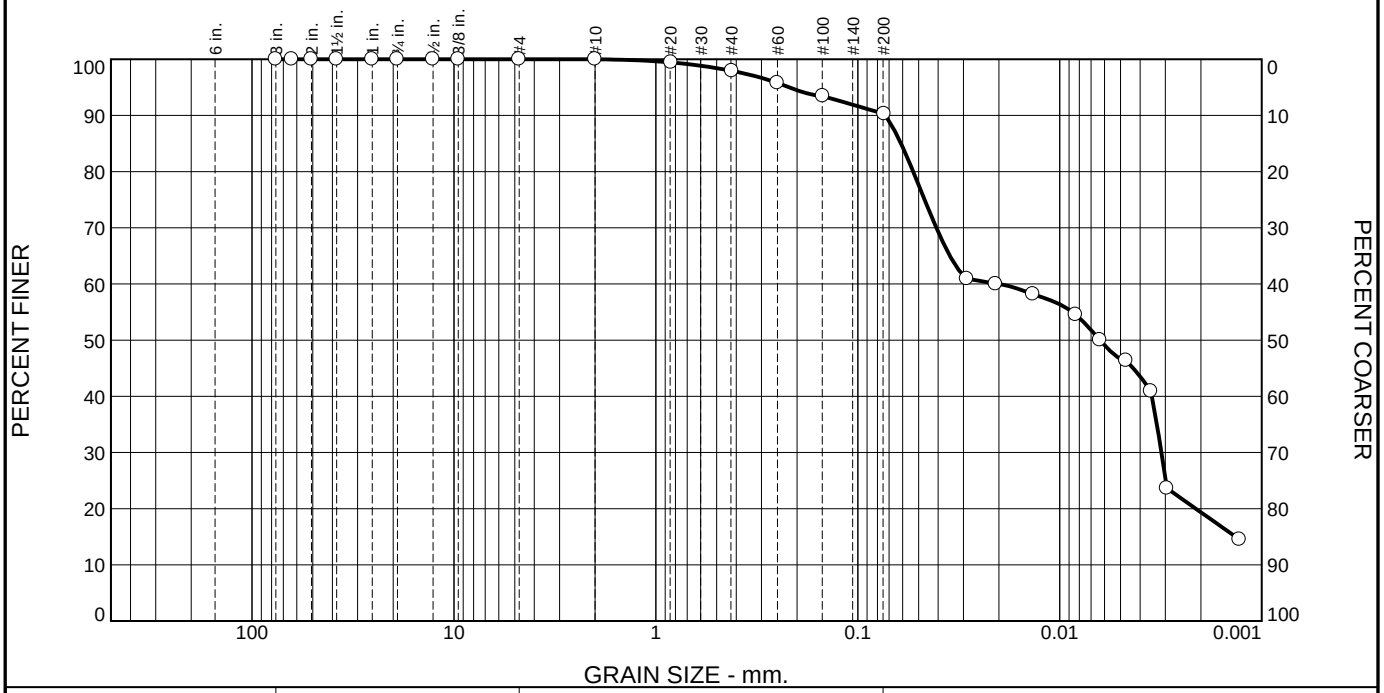
Hunt Valley, Maryland

Client: Tetra Tech,Inc

Project: Martin State Airport-Lockheed Martin

Project No: 75R0051-201301312 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	2.0	7.7	43.6	46.7

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100.0		
2.5	100.0		
2	100.0		
1.5	100.0		
1	100.0		
3/4	100.0		
1/2	100.0		
3/8	100.0		
#4	100.0		
#10	100.0		
#20	99.4		
#40	97.9		
#60	95.8		
#100	93.4		
#200	90.3		
0.0288 mm.	60.9		
0.0207 mm.	60.0		
0.0136 mm.	58.2		
0.0083 mm.	54.5		
0.0063 mm.	50.0		
0.0047 mm.	46.4		
0.0035 mm.	40.9		
0.0029 mm.	23.6		
0.0013 mm.	14.5		

* (no specification provided)

Material Description

Gray-brown soil w/organic

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 0.0730 D_{85}= 0.0611 D_{60}= 0.0207
D_{50}= 0.0063 D_{30}= 0.0031 D_{15}= 0.0013
D_{10}= C_u= C_c=

Remarks

Date Received: 10.24.13 **Date Tested:** 10.31.13

Tested By: _____

Checked By: _____

Title: _____

Sample Number: SD-3 **Depth:** 1-2 **Date Sampled:**

FROEHLING & ROBERTSON, INC.

Hunt Valley, Maryland

Client: Tetra Tech,Inc

Project: Martin State Airport-Lockheed Martin

Project No: 75R0051-201301312 **Figure**

APPENDIX H—LAND SURVEY REPORT

Martin State Airport	Northing Feet-NAD 1983	Easting Feet-NAD 1983	Ground or Outer Casing (Wells) Elevation-Feet NAVD 1988		Well Casing (PVC) Elevation-Feet NAVD 1988	GRD=Ground Elevation PVC = Well PVC casing (S), (I), (D) = Well interval designation	
1	605173.578	1479784.473	11.877	MSA-MW46D	11.67PVC(D)	8.76GRD	
2	605175.536	1479779.856	11.671	MSA-MW46IS	11.19PVC(I)	11.26PVC(S)	8.47GRD
3	605171.151	1479780.675	8.57	DR-DPT-23			
4	605122.872	1479659.875	9.654	DR-TP-A76			
5	605093.291	1479819.592	9.284	DR-DPT-24			
6	605083.019	1479826.225	12.36	MSA-MW47D	12.04PVC(D)	9.46GRD	
7	605088.212	1479824.157	12.61	MSA-MW47IS	11.94PVC(I)	11.96PVC(S)	9.36GRD
8	604939.09	1479863.21	10.197	DR-DPT-25			
9	605087.042	1479820.117	9.123	DR-SB-189			
10	604677.487	1479611.689	14.845	DR-DPT-38			
11	604774.938	1479770.373	18.338	DR-TP-A80			
12	604899.123	1479717.775	10.62	DR-TP-A82			
13	604913.192	1479697.225	8.637	DR-SB-188			
14	604766.985	1479899.46	17.493	DR-SB-190			
15	604721.97	1479946.72	17.192	DR-DPT-26			
16	604724.216	1479944.125	20.297	MSA-MW48D	20.12PVC(D)	17.30GRD	
17	604728.191	1479941.342	20.19	MSA-MW48I/S	19.94PVC(I)	19.92PVC(S)	17.09GRD
18	604621.994	1480071.699	16.83	DR-DPT-27			
19	604615.678	1480070.887	19.898	MSA-MW49D	19.60PVC(D)	16.90GRD	
20	604617.551	1480065.85	19.995	MSA-MW49I/S	19.59PVC(I)	19.84PVC(S)	16.99GRD
21	604399.889	1480245.22	9.341	DR-SB-192			
22	604449.682	1480252.039	9.889	DR-DPT-28			
23	604445.886	1480246.222	13.388	MSA-MW50D	13.12PVC(D)	10.09GRD	
24	604442.375	1480249.736	12.898	MSA-MW50I/S	12.64PVC(I)	12.55PVC(S)	9.75GRD
25	604373.835	1480285.546	5.675	DR-DPT-29			
26	604373.739	1480296.144	9.881	MSA-MW51D	9.55PVC(D)	6.53GRD	
27	604378.651	1480293.949	9.85	MSA-MW51I/S	9.61PVC(I)	9.69PVC(S)	6.55GRD
28	604664.091	1479871.193	18.497	DR-SB-191			
29	604573.717	1479644.062	13.233	DR-DPT-43B			
30	604552.13	1479554.646	11.424	DR-DPT-43A			
31	604317.831	1479823.369	18.214	DR-DPT-40			
32	604246.364	1479793.517	12.439	DR-SB-193			
33	604227.24	1479847.645	14.393	DR-SB194			
34	604261.007	1479889.116	18.964	DR-TP-A79			
35	604307.934	1479969.876	19.662	DR-DPT-41			
36	604743.598	1479264.572	8.394	DR-TP-A78			
37	604857.97	1479289.637	9.535	DR-TP-A81			
38	604866.645	1479372.784	11.772	DR-TP-A77			
39	605115.331	1478650.124	12.634	DR-DPT-30			
40	604976.164	1478905.05	9.671	DR-DPT-33			
41	604647.097	1479132.143	11.466	DR-DPT-34			
42	604543.395	1479396.423	10.319	DR-DPT-35			
43	604218.329	1479540.378	10.695	DR-DPT-37			
44	604177.417	1479775.42	7.879	DR-SB-196			
45	604173.346	1479773.971	7.95	DR-DPT-42			
46	604157.925	1479864.545	7.619	DR-SB-195			
47	604097.581	1479485.781	10.418	DR-DPT-36			
48	604173.733	1479278.432	9.514	DR-DPT-32			
49	604893.527	1478596.437	11.792	DR-SB-187			
50	604892.829	1478599.056	11.801	DR-DTP-31			

APPENDIX I—SOURCE-AREA CHEMICAL DATA

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

SAMPLE ID:	**DMW-1A-081508**	**DMW-1B-081508**	**DMW-1S-081808**	**DMW-2A-082908**	**DMW-2B-082908**	**DMW-2S-082108**	**DMW-3S-082708**
LABORATORY ID:	**A8H160110002**	**A8H160110003**	**A8H190109005**	**A8H300106003**	**A8H300106002**	**A8H220130006**	**A8H280126004**
LOCATION:	**DMW-1A**	**DMW-1B**	**DMW-1S**	**DMW-2A**	**DMW-2B**	**DMW-2S**	**DMW-3S**
SAMPLE DATE:	**8/15/2008**	**8/15/2008**	**8/18/2008**	**8/29/2008**	**8/29/2008**	**8/21/2008**	**8/27/2008**
TRICHLOROETHENE	5300	800	20 B	20000	2.1	2200	170 U
CIS-1,2-DICHLOROETHENE	4800	2400	110	5000	4.5	1000	550
VINYL CHLORIDE	2500	4000	57	840	1 U	530	4400
BENZENE	200 U	140 U	29 U	500 U	1 U	62 U	170 U
TOLUENE	120 J	140 U	29 U	500 U	1 U	62 U	170 U
ETHYLBENZENE	200 U	140 U	29 U	500 U	1 U	62 U	170 U
TOTAL XYLENES	400 U	290 U	57 U	1000 U	2 U	120 U	330 U
1,4-DIOXANE	220	120	4 U	490	1 U	180	150

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

SAMPLE ID:	DMW-3I-082708	DMW-3D-082708	DMW-4S-082508	DMW-4I-082508	DMW-4D-082508	DMW-5S-082608	DMW-5I-082608
LABORATORY ID:	A8H280126003	A8H280126002	A8H260119006	A8H260119002	A8H260119004	A8H270116003	A8H270116002
LOCATION:	DMW-3I	DMW-3D	DMW-4S	DMW-4I	DMW-4D	DMW-5S	DMW-5I
SAMPLE DATE:	8/27/2008	8/27/2008	8/25/2008	8/25/2008	8/25/2008	8/26/2008	8/26/2008
TRICHLOROETHENE	18000	0.36 J	1300	7300	4400	7200	120
CIS-1,2-DICHLOROETHENE	16000	1 U	170	1300	310	960	53
VINYL CHLORIDE	4300	1 U	48 J	74 J	140 U	250 U	3.6 J
BENZENE	500 U	1 U	50 U	250 U	140 U	250 U	4 U
TOLUENE	210 J	0.4 J	50 U	250 U	140 U	250 U	4 U
ETHYLBENZENE	500 U	1 U	50 U	250 U	140 U	250 U	4 U
TOTAL XYLENES	1000 U	2 U	100 U	500 U	290 U	500 U	8 U
1,4-DIOXANE	190	1 U	15	26	8.3	6.7	1.4

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

SAMPLE ID:	DMW-5D-082108	DMW-6S-082108	DMW-6I-082008	DMW-6D-082008	DMW-7I-082808	DMW-7D-082808	DMW-8S-081408
LABORATORY ID:	A8H220130004	A8H220130002	A8H210130002	A8H210130004	A8H290111003	A8H290111002	A8H150118004
LOCATION:	DMW-5D	DMW-6S	DMW-6I	DMW-6D	DMW-7I	DMW-7D	DMW-8S
SAMPLE DATE:	8/21/2008	8/21/2008	8/20/2008	8/20/2008	8/28/2008	8/28/2008	8/14/2008
TRICHLOROETHENE	1.1	5 U	1 U	1 U	360	0.46 J	0.65 B
CIS-1,2-DICHLOROETHENE	1 U	3.6 J	1 U	1 U	370	1 U	5.3
VINYL CHLORIDE	1 U	5 U	1 U	1 U	90	1 U	1 U
BENZENE	1 U	5 U	1 U	1 U	11 U	1 U	1 U
TOLUENE	1 U	5 U	1 U	1 U	11 U	1 U	1 U
ETHYLBENZENE	1 U	5 U	1 U	1 U	11 U	1 U	1 U
TOTAL XYLENES	2 U	10 U	2 U	2 U	22 U	2 U	2 U
1,4-DIOXANE	1 U	0.63 J	1 U	1 U	13	1 U	17

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

SAMPLE ID:	**DMW-8I-081408**	**DMW-8D-081408**	**DMW-9S-082208**	**DMW-9I-082208**	**DMW-9D-082208**	**DMW-10S-080808**	**DMW-10I-081508**
LABORATORY ID:	**A8H150118003**	**A8H150118002**	**A8H230142004**	**A8H230142002**	**A8H230142003**	**A8H090106006**	**A8H160110004**
LOCATION:	**DMW-8I**	**DMW-8D**	**DMW-9S**	**DMW-9I**	**DMW-9D**	**DMW-10S**	**DMW-10I**
SAMPLE DATE:	**8/14/2008**	**8/14/2008**	**8/22/2008**	**8/22/2008**	**8/22/2008**	**8/8/2008**	**8/15/2008**
TRICHLOROETHENE	930	490	1200 U	700	3800	1.4 U	660
CIS-1,2-DICHLOROETHENE	670	410	6600	2900	470	1.4 U	30
VINYL CHLORIDE	320	360	35000	2000	45 J	170	25 U
BENZENE	33 U	20 U	570 J	83 U	120 U	1 U	25 U
TOLUENE	33 U	20 U	4400	83 U	120 U	1 U	25 U
ETHYLBENZENE	33 U	20 U	2100	83 U	120 U	1.4 U	25 U
TOTAL XYLENES	67 U	40 U	16000	170 U	250 U	2.2 U	50 U
1,4-DIOXANE	110	40	42	230	110	12	12

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

SAMPLE ID:	DMW-11S-081108	DMW-11I-081108	DMW-14I-082508	DMW-14D-090308	DMW-16S-082108	DMW-16I-082108	DMW-16D-082508
LABORATORY ID:	A8H120110003	A8H120110005	A8H260119005	A8I040133002	A8H220130005	A8H220130003	A8H260119003
LOCATION:	DMW-11S	DMW-11I	DMW-14I	DMW-14D	DMW-16S	DMW-16I	DMW-16D
SAMPLE DATE:	8/11/2008	8/11/2008	8/25/2008	9/3/2008	8/21/2008	8/21/2008	8/25/2008
TRICHLOROETHENE	29000	0.44 B	50 J	1 UJ	3.3 U	380	1 U
CIS-1,2-DICHLOROETHENE	36000	0.77 J	1700	1 UJ	26	76	1 U
VINYL CHLORIDE	3300	1 U	1000	1 UJ	73	6.8 J	1 U
BENZENE	1700 U	1 U	67 U	1 UJ	5.9	14 U	1 U
TOLUENE	1200 J	1 U	67 U	1 UJ	3.3 U	14 U	1 U
ETHYLBENZENE	1700 U	1 U	67 U	1 UJ	3.3 U	14 U	1 U
TOTAL XYLENES	3300 U	2 U	130 U	2 UJ	6.7 U	29 U	2 U
1,4-DIOXANE	4.6	1 U	32		590	1 U	1 U

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

SAMPLE ID:	DMW-17S-082008	DMW-17I-082008	DMW-17D-090508	DMW-18S-090208	DMW-18I-090208	DMW-18D-090208	DMW-21I-080808
LABORATORY ID:	A8H210130005	A8H210130003	A8I060117002	A8I030112004	A8I030112002	A8I030112003	A8H090106002
LOCATION:	DMW-17S	DMW-17I	DMW-17D	DMW-18S	DMW-18I	DMW-18D	DMW-21I
SAMPLE DATE:	8/20/2008	8/20/2008	9/5/2008	9/2/2008	9/2/2008	9/2/2008	8/8/2008
TRICHLOROETHENE	1 U	92	1 U	500	9300 L	6.9	210
CIS-1,2-DICHLOROETHENE	1 U	290	1 U	59	880	0.43 J	770
VINYL CHLORIDE	0.54 J	22	1 U	36	520	1 U	180
BENZENE	1 U	8 U	1 U	20 U	330 U	1 U	3.2 U
TOLUENE	1 U	8 U	1 U	20 U	330 U	1 U	3.2 U
ETHYLBENZENE	1 U	8 U	1 U	20 U	330 U	1 U	4.2 U
TOTAL XYLENES	2 U	16 U	2 U	40 U	670 U	2 U	7 U
1,4-DIOXANE	1 U	1 U	1 U	11	62	1 U	3

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

SAMPLE ID:	DMW-21D-080808	DMW-23S-081108	DMW-24S-081108	DMW-24I-081108	DMW-27DEEP-080808	DMW-28I-080808	DMW-29DEEP-080808
LABORATORY ID:	A8H090106004	A8H120110007	A8H120110004	A8H120110002	A8H090106005	A8H090106003	A8H090106007
LOCATION:	DMW-21D	DMW-23S	DMW-24S	DMW-24I	DMW-27DEEP	DMW-28I	DMW-29DEEP
SAMPLE DATE:	8/8/2008	8/11/2008	8/11/2008	8/11/2008	8/8/2008	8/8/2008	8/8/2008
TRICHLOROETHENE	0.17 U	1 U	1 U	56	0.17 U	830	0.17 U
CIS-1,2-DICHLOROETHENE	0.17 U	0.85 J	1 U	2.5 U	0.17 U	440	0.17 U
VINYL CHLORIDE	0.22 U	5.6	1 U	2.5 U	0.22 U	54	0.22 U
BENZENE	0.13 U	4.2	1 U	2.5 U	0.13 U	4.3 U	0.13 U
TOLUENE	9.2	1 U	1 U	2.5 U	1.2	4.3 U	0.13 U
ETHYLBENZENE	0.17 U	1 U	1 U	2.5 U	0.17 U	5.7 U	0.17 U
TOTAL XYLENES	0.28 U	2 U	2 U	5 U	0.28 U	9.3 U	0.28 U
1,4-DIOXANE	1.3 U	7.3	1 U	1 U	1.3 U	1.3 U	1.3 U

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

	SAMPLE ID:	MSA-MW15S-080608	MSA-MW15I-080608	MSA-MW15D-080608	MSA-MW19I-080708	MSA-MW19D-080708	MSA-MW20S-080608	MSA-MW20I-080608
	LABORATORY ID:	A8H070118006	A8H070118005	A8H070118002	A8H080117003	A8H080117005	A8H070118003	A8H070118004
	LOCATION:	MSA-MW15S	MSA-MW15I	MSA-MW15D	MSA-MW19I	MSA-MW19D	MSA-MW20S	MSA-MW20I
	SAMPLE DATE:	8/6/2008	8/6/2008	8/6/2008	8/7/2008	8/7/2008	8/6/2008	8/6/2008
TRICHLOROETHENE		45	7300	0.82 B	150	2.4 B	1300	46
CIS-1,2-DICHLOROETHENE		13	1600	0.17 U	170	0.17 U	2100	240
VINYL CHLORIDE		0.65 J	160 J	0.22 U	81	0.22 U	1100	200
BENZENE		0.22 U	43 U	0.13 U	0.87 U	0.13 U	10 U	1.3 U
TOLUENE		0.22 U	43 U	0.13 U	0.87 U	0.13 U	23 J	1.3 U
ETHYLBENZENE		0.28 U	57 U	0.17 U	1.1 U	0.17 U	41 J	1.7 U
TOTAL XYLENES		0.47 U	93 U	0.28 U	1.9 U	0.28 U	22 U	2.8 U
1,4-DIOXANE		0.49 U	0.49 U	0.49 U	18	1.3 U	130	4.8

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

	SAMPLE ID:	MSA-MW20D-080608	MSA-MW22D-081908	MSA-DMW25S-081908	MSA-DMW25I-081908	MSA-MW26S-080708	MSA-MW26I-080708	MSA-MW26D-080708
	LABORATORY ID:	A8H070118007	A8H200234001	A8H200234002	A8H200234003	A8H080117002	A8H080117006	A8H080117004
	LOCATION:	MSA-MW20D	MSA-MW22D	MSA-DMW25S	MSA-DMW25I	MSA-MW26S	MSA-MW26I	MSA-MW26D
	SAMPLE DATE:	8/6/2008	8/19/2008	8/19/2008	8/19/2008	8/7/2008	8/7/2008	8/7/2008
TRICHLOROETHENE		40	1 U	0.53 B	0.34 B	1.1 U	0.33 B	1.4 B
CIS-1,2-DICHLOROETHENE		3.3	0.37 J	3.3	1 U	150	1.2	4.1
VINYL CHLORIDE		0.97 J	1 U	1 U	1 U	160	1.1	0.69 J
BENZENE		0.13 U	1 U	1 U	1 U	22	0.13 U	0.13 U
TOLUENE		0.13 U	6.3	1 U	1 U	1.2 J	0.13 U	0.13 U
ETHYLBENZENE		0.17 U	1 U	1 U	1 U	1.5 J	0.17 U	0.17 U
TOTAL XYLENES		0.28 U	2 U	2 U	2 U	1.9 U	0.33 J	0.28 U
1,4-DIOXANE		1.8	1 U	1 U	1 U	3.1	1.8	1.3 U

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

SAMPLE ID:	**MW-2-081808**	**MW-3-081108**	**MW-4-081808**	**MW-5-082808**	**MW-6-082608**	**MW-22I-081808**	**MW-23D-081808**
LABORATORY ID:	**A8H190109002**	**A8H120110006**	**A8H190109007**	**A8H290111004**	**A8H270116004**	**A8H190109006**	**A8H190109003**
LOCATION:	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-22I**	**MW-23D**
SAMPLE DATE:	**8/18/2008**	**8/11/2008**	**8/18/2008**	**8/28/2008**	**8/26/2008**	**8/18/2008**	**8/18/2008**
TRICHLOROETHENE	6.8	1.2 B	1 U	67 U	1 U	2.7	0.63 B
CIS-1,2-DICHLOROETHENE	13	61	1.5	2300	0.34 J	0.61 J	1 U
VINYL CHLORIDE	9.3	16	3.9	570	1 U	0.23 J	1 U
BENZENE	1 U	2.5 U	5.8	67 U	1 U	1 U	1 U
TOLUENE	1 U	2.5 U	1 U	67 U	1 U	8.2	1 U
ETHYLBENZENE	1 U	2.5 U	1 U	67 U	1 U	1 U	1 U
TOTAL XYLENES	2 U	5 U	2 U	130 U	2 U	2 U	2 U
1,4-DIOXANE	2.2	1 U	0.54 J	7.3	1 U	1.1	1 U

TABLE E-2
ANALYTICAL RESULTS FOR GROUNDWATER
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

SAMPLE ID:	**MW-23I-081808**
LABORATORY ID:	**A8H190109004**
LOCATION:	**MW-23I**
SAMPLE DATE:	**8/18/2008**
TRICHLOROETHENE	14
CIS-1,2-DICHLOROETHENE	36
VINYL CHLORIDE	18
BENZENE	1.4 U
TOLUENE	0.32 J
ETHYLBENZENE	1.4 U
TOTAL XYLENES	2.9 U
1,4-DIOXANE	2.4

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-01A	MSA-DMW-01B	MSA-DMW-01S		MSA-DMW-02A	MSA-DMW-02S	
SAMPLE ID	MSA-DMW1A-050212	MSA-DMW1B-050212	MSA-DMW-01S-20120510	MSA-DMW1S-051012	MSA-DMW2A-050312	MSA-DMW-02S-20120510	MSA-DMW2S-051012
SAMPLE DATE	20120502	20120502	20120510	20120510	20120503	20120510	20120510
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	2300	110	NA	0.17 U	11000	NA	2800
CIS-1,2-DICHLOROETHENE	3100	820	NA	0.84 J	3400	NA	1900
VINYL CHLORIDE	1300	2200	NA	0.33 J	810	NA	640
ETHENE	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	68	38	NA	1.9	300	NA	81
BENZENE	13 U	16 J	NA	0.13 U	54 U	NA	12 U
TOLUENE	43 J	10 U	NA	0.13 U	54 U	NA	12 U
ETHYLBENZENE	17 U	13 U	NA	0.17 U	71 U	NA	15 U
TOTAL XYLENES	28 U	22 U	NA	0.28 U	120 U	NA	25 U

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-03D	MSA-DMW-03I	MSA-DMW-03S		MSA-DMW-04D	MSA-DMW-04I	MSA-DMW-04S
SAMPLE ID	MSA-DMW3D-051412	MSA-DMW3I-051412	MSA-DMW3S-051412	MSA-DMW3S-051512	MSA-DMW4D-050312	MSA-DMW4I-050312	MSA-DMW4S-050312
SAMPLE DATE	20120514	20120514	20120514	20120515	20120503	20120503	20120503
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	0.45 J	10000	28 U	NA	4700	4100	1600
CIS-1,2-DICHLOROETHENE	0.17 U	5800	1200	NA	530	1800	120
VINYL CHLORIDE	0.22 U	1900	5100	NA	31 U	1500	27 J
ETHENE	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	0.49 U	230	140	NA	29	29	21
BENZENE	0.13 U	43 U	22 U	NA	19 U	16 U	5.2 U
TOLUENE	0.13 U	43 U	44 J	NA	19 U	16 U	5.2 U
ETHYLBENZENE	0.17 U	57 U	28 U	NA	24 U	21 U	6.8 U
TOTAL XYLENES	0.28 U	93 U	47 U	NA	40 U	35 U	11 U

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-05I		MSA-DMW-05S		MSA-DMW-06D	MSA-DMW-06I	MSA-DMW-06S
SAMPLE ID	MSA-DMW5I-050412	MSA-DMW5I-050712	MSA-DMW5S-050412	MSA-DMW5S-050712	MSA-DMW6D-050312	MSA-DMW6I-050312	MSA-DMW6S-050312
SAMPLE DATE	20120504	20120507	20120504	20120507	20120503	20120503	20120503
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	99	NA	7500	NA	0.17 U	0.17 U	0.57 J
CIS-1,2-DICHLOROETHENE	49	NA	1300	NA	0.17 U	0.17 U	1.4
VINYL CHLORIDE	6.5	NA	55 U	NA	0.22 U	0.22 U	0.22 U
ETHENE	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	2.4	NA	11	NA	0.47 U	0.48 U	0.48 UL
BENZENE	0.65 U	NA	33 U	NA	0.13 U	0.13 U	0.13 U
TOLUENE	0.65 U	NA	33 U	NA	0.13 U	0.13 U	0.13 U
ETHYLBENZENE	0.85 U	NA	43 U	NA	0.17 U	0.17 U	0.17 U
TOTAL XYLENES	1.4 U	NA	70 U	NA	0.28 U	0.28 U	0.28 U

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-07S	MSA-DMW-08D	MSA-DMW-08I	MSA-DMW-08S	MSA-DMW-09D	MSA-DMW-09I	MSA-DMW-09S
SAMPLE ID	MSA-DMW7S-050312	MSA-DMW8D-050212	MSA-DMW8I-050212	MSA-DMW8S-050212	MSA-DMW9D-050912	MSA-DMW9I-050912	MSA-DMW9S-050912
SAMPLE DATE	20120503	20120502	20120502	20120502	20120509	20120509	20120509
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	4700	570	530	0.33 J	2500	1000	120 J
CIS-1,2-DICHLOROETHENE	15000	530	370	1.2	350	2000	4400
VINYL CHLORIDE	2200	270	210	0.22 U	35 J	700	11000
ETHENE	NA	NA	NA	NA	7.9	98	1900
1,4-DIOXANE	89	47	42	13	46	150	33
BENZENE	54 U	2.9 J	2.2 J	0.13 U	11 J	21 J	280 J
TOLUENE	63 J	2.2 U	2.2 U	0.13 U	11 U	8.7 U	1800
ETHYLBENZENE	71 U	2.8 U	2.8 U	0.17 U	14 U	11 U	1100
TOTAL XYLENES	120 U	4.7 U	4.7 U	0.28 U	23 U	19 U	7400

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-10S		MSA-DMW-11I		MSA-DMW-11S	
SAMPLE ID	MSA-DMW10S-20120510	MSA-DMW-10S-20120510	DMW11I-051112	MSA-MW11I-051412	DMW11S-051112	MSA-MW11S-051412
SAMPLE DATE	20120510	20120510	20120511	20120514	20120511	20120514
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
TRICHLOROETHENE	1.7 U	NA	19	NA	16000	NA
CIS-1,2-DICHLOROETHENE	1.7 U	NA	21	NA	27000	NA
VINYL CHLORIDE	280	NA	1.4	NA	4200	NA
ETHENE	NA	NA	NA	NA	220	NA
1,4-DIOXANE	10	NA	0.47 U	NA	6.4	NA
BENZENE	2.3 J	NA	0.19 U	NA	130 U	NA
TOLUENE	1.3 U	NA	0.19 U	NA	420 J	NA
ETHYLBENZENE	1.7 U	NA	0.24 U	NA	170 U	NA
TOTAL XYLENES	2.8 U	NA	0.4 U	NA	280 U	NA

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-03		MSA-MW-04				
SAMPLE ID	MSA-MW3-051512	MSA-MW3-051612	MSA-MW4-051512	MSA-MW4-051512-11	MSA-MW4-051512-18	MSA-MW4-051512-25	MSA-MW4-060712-
SAMPLE DATE	20120515	20120516	20120515	20120515	20120515	20120515	20120607
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	5.4	NA	NA	0.17 U	0.17 U	0.17 U	0.17 U
CIS-1,2-DICHLOROETHENE	120	NA	NA	0.67 J	0.58 J	0.61 J	0.17 U
VINYL CHLORIDE	14	NA	NA	1.2	0.82 J	0.81 J	0.22 U
ETHENE	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	5.6	NA	0.6 J	NA	NA	NA	NA
BENZENE	0.65 U	NA	NA	1.3	0.79 J	0.65 J	0.13 U
TOLUENE	0.65 U	NA	NA	0.13 U	0.13 U	0.13 U	0.13 U
ETHYLBENZENE	0.85 U	NA	NA	0.17 U	0.17 U	0.17 U	0.17 U
TOTAL XYLENES	1.4 U	NA	NA	0.28 U	0.28 U	0.28 U	0.28 U

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-04		MSA-MW-05				
SAMPLE ID	MSA-MW4-060712-	MSA-MW4-060712-	MSA-MW5-051412	MSA-MW5-051412-25	MSA-MW5-051412-31	MSA-MW5-051412-37	MSA-MW5-060712-
SAMPLE DATE	20120607	20120607	20120514	20120514	20120514	20120514	20120607
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	0.17 U	0.17 U	NA	17 U	17 U	15 U	11 U
CIS-1,2-DICHLOROETHENE	0.8 J	0.86 J	NA	2500	2400	2400	1800
VINYL CHLORIDE	1.4	1.4	NA	440	440	410	230
ETHENE	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	NA	NA	6.1	NA	NA	NA	NA
BENZENE	0.82 J	0.9 J	NA	13 U	13 U	12 U	8.7 U
TOLUENE	0.13 U	0.13 U	NA	13 U	13 U	12 U	8.7 U
ETHYLBENZENE	0.17 U	0.17 U	NA	17 U	17 U	15 U	11 U
TOTAL XYLENES	0.28 U	0.28 U	NA	28 U	28 U	25 U	19 U

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-05		MSA-MW-06		MSA-MW-14D	MSA-MW-14I	MSA-MW-15D	MSA-MW-15I
SAMPLE ID	MSA-MW5-060712-	MSA-MW5-060712-	MSA-MW06-050712	MSA-MW-06-050712	MSA-MW14D-050112	MSA-MW14I-050112	MSA-MW15D-041812	MSA-MW15I-041812
SAMPLE DATE	20120607	20120607	20120507	20120507	20120501	20120501	20120418	20120418
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)								
TRICHLOROETHENE	17 U	17 U	NA	0.17 U	0.17 U	50	0.17 U	580
CIS-1,2-DICHLOROETHENE	2600	2400	NA	0.41 J	0.17 U	1400	0.17 U	150
VINYL CHLORIDE	530	520	NA	0.22 U	0.22 U	910	0.22 U	12 J
ETHENE	NA	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	NA	NA	NA	1.3	0.47 U	61 K	0.47 U	0.49 U
BENZENE	13 U	13 U	NA	0.13 U	0.13 U	12 J	0.13 U	2.6 U
TOLUENE	13 U	13 U	NA	0.13 U	0.13 U	6 J	0.13 U	2.6 U
ETHYLBENZENE	17 U	17 U	NA	0.17 U	0.17 U	6.8 U	0.17 U	3.4 U
TOTAL XYLENES	28 U	28 U	NA	0.28 U	0.28 U	11 U	0.28 U	5.6 U

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-15S	MSA-MW-16D	MSA-MW-16I	MSA-MW-16S	MSA-MW-17I		MSA-M
SAMPLE ID	MSA-MW15S-041812	MSA-MW16D-050912	MSA-MW16I-050912	MSA-MW16S-050912	MSA-MW17I-042012	MSA-MW17I-042312	MSA-MW17S-042012
SAMPLE DATE	20120418	20120509	20120509	20120509	20120420	20120423	20120420
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	37	0.6 J	640	1.1 U	830	NA	0.17 U
CIS-1,2-DICHLOROETHENE	10	0.17 U	140	78	110	NA	1.4
VINYL CHLORIDE	0.5 J	0.22 U	12 J	160	9.1 J	NA	11
ETHENE	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	0.65 J	0.49 U	0.49 U	210	0.47 U	NA	0.94 J
BENZENE	0.13 U	0.13 U	2.9 U	8.9	4.3 U	NA	0.22 J
TOLUENE	0.13 U	0.13 U	2.9 U	0.87 U	4.3 U	NA	0.13 U
ETHYLBENZENE	0.17 U	0.17 U	3.8 U	1.1 U	5.7 U	NA	0.17 U
TOTAL XYLENES	0.28 U	0.28 U	6.2 U	1.9 U	9.3 U	NA	0.28 U

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	W-17S	MSA-MW-18I	MSA-MW-18S	MSA-MW-19D	MSA-MW-19I	MSA-MW-20D	
SAMPLE ID	MSA-MW17S-042312	MSA-MW18I-051012	MSA-MW18S-051012	MSA-MW19D-041912	MSA-MW19I-041912	MSA-MW20D-042012	MSA-MW20D-042312
SAMPLE DATE	20120423	20120510	20120510	20120419	20120419	20120420	20120423
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	NA	11000	1800	8.7	39	15	NA
CIS-1,2-DICHLOROETHENE	NA	1200	180	0.17 U	110	1.4	NA
VINYL CHLORIDE	NA	540	73	0.22 U	52	0.22 U	NA
ETHENE	NA	21	4.9	NA	NA	NA	NA
1,4-DIOXANE	NA	140	45	0.49 U	7.8	1.8	NA
BENZENE	NA	43 U	7.2 U	0.13 U	0.74 J	0.13 U	NA
TOLUENE	NA	43 U	7.2 U	0.13 U	0.65 U	0.13 U	NA
ETHYLBENZENE	NA	57 U	9.4 U	0.17 U	0.85 U	0.17 U	NA
TOTAL XYLENES	NA	93 U	16 U	0.28 U	1.4 U	0.28 U	NA

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-20I		MSA-MW-20S		MSA-MW-22D	MSA-MW-23D	
SAMPLE ID	MSA-MW20I-042012	MSA-MW20I-042312	MSA-MW20S-042012	MSA-MW20S-042312	MSA-MW22D-051512	MSA-MW23D-051112	MSA-MW23D-051412
SAMPLE DATE	20120420	20120423	20120420	20120423	20120515	20120511	20120514
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	60	NA	510	NA	0.24 J	1.7	NA
CIS-1,2-DICHLOROETHENE	510	NA	1700	NA	0.17 U	0.17 U	NA
VINYL CHLORIDE	210	NA	920	NA	0.22 U	0.22 U	NA
ETHENE	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	11	NA	240	NA	0.48 U	0.47 U	NA
BENZENE	2.6 U	NA	23 J	NA	0.13 U	0.13 U	NA
TOLUENE	2.6 U	NA	12 J	NA	0.13 U	0.13 U	NA
ETHYLBENZENE	3.4 U	NA	11 U	NA	0.17 U	0.17 U	NA
TOTAL XYLENES	5.6 U	NA	19 U	NA	0.28 U	0.28 U	NA

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-23S		MSA-MW-24I	MSA-MW-24S	MSA-MW-25I	MSA-MW-25S	MSA-MW-26S
SAMPLE ID	MSA-MW23S-051112	MSA-MW23S-051412	MSA-MW24I-050712	MSA-MW24S-050712	MSA-MW25I-050812	MSA-MW25S-050812	MSA-MW26S-050112
SAMPLE DATE	20120511	20120514	20120507	20120507	20120508	20120508	20120501
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	0.17 U	NA	180	0.17 U	0.27 J	3.3 J	0.38 U
CIS-1,2-DICHLOROETHENE	1.9	NA	1.4 U	0.17 U	0.17 U	190	10
VINYL CHLORIDE	11	NA	1.8 U	0.22 U	0.22 U	7 J	61
ETHENE	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	4.4	NA	0.47 U	1	0.47 U	0.47 U	3.3
BENZENE	2.5	NA	1 U	0.17 J	0.13 U	1.2 U	18
TOLUENE	0.13 U	NA	1 U	0.13 U	0.13 U	1.2 U	0.29 U
ETHYLBENZENE	0.17 U	NA	1.4 U	0.17 U	0.17 U	1.5 U	0.38 U
TOTAL XYLENES	0.28 U	NA	2.2 U	0.28 U	0.28 U	2.5 U	0.62 U

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-27D		MSA-MW-28I		MSA-MW-29D	MSA-MW-30D	MSA-MW-30I
SAMPLE ID	MSA-MW27D-050412	MSA-MW27D-050712	MSA-MW28I-050412	MSA-MW28I-050712	MSA-MW29D-051612	MSA-MW30D-051512	MSA-MW30I-051512
SAMPLE DATE	20120504	20120507	20120504	20120507	20120516	20120515	20120515
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	0.17 U	NA	1100	NA	0.47 J	0.17 U	840
CIS-1,2-DICHLOROETHENE	0.17 U	NA	620	NA	0.17 U	0.17 U	4.9 U
VINYL CHLORIDE	0.22 U	NA	68	NA	0.22 U	0.22 U	6.3 U
ETHENE	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	0.49 UL	NA	0.49 U	NA	0.48 U	0.48 U	0.47 U
BENZENE	0.13 U	NA	8 J	NA	0.13 U	0.13 U	3.7 U
TOLUENE	0.13 U	NA	6.5 U	NA	0.13 U	0.13 U	3.7 U
ETHYLBENZENE	0.17 U	NA	8.5 U	NA	0.17 U	0.17 U	4.9 U
TOTAL XYLENES	0.28 U	NA	14 U	NA	0.28 U	0.28 U	8 U

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-31D	MSA-MW-32I	MSA-MW-32S		MSA-MW-33I	MSA-MW-33S	MSA-MW-34I
SAMPLE ID	MSA-MW31D-051012	MSA-MW32I-050112	MSA-MW32S-050212	MSA-MW32S-050412	MSA-MW33I-050112	MSA-MW33S-050112	MSA-MW34I-041912
SAMPLE DATE	20120510	20120501	20120502	20120504	20120501	20120501	20120419
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)							
TRICHLOROETHENE	0.34 U	0.17 U	NA	0.17 U	0.17 U	110	0.24 U
CIS-1,2-DICHLOROETHENE	0.34 U	0.17 U	NA	0.17 U	0.17 U	130	4.3
VINYL CHLORIDE	0.44 U	0.22 U	NA	0.22 U	0.22 U	16	31
ETHENE	NA	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	0.47 UL	0.48 U	0.48 U	NA	0.48 U	0.48 U	0.47 U
BENZENE	0.26 U	0.13 U	NA	0.13 U	0.13 U	2.8 J	1.2 J
TOLUENE	0.98 J	0.13 U	NA	0.13 U	0.13 U	0.65 U	0.19 U
ETHYLBENZENE	0.34 U	0.17 U	NA	0.17 U	0.17 U	0.85 U	0.24 U
TOTAL XYLENES	0.56 U	0.28 U	NA	0.28 U	0.28 U	1.4 U	10

TABLE C-2

CHEMICAL RESULTS FOR GROUNDWATER SAMPLES-APRIL-MAY, 2012
DUMP ROAD AREA
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-34S	MSA-MW-35S		MSA-MW-37S	MSA-MW-38S	MSA-MW-39S
SAMPLE ID	MSA-MW34S-041912	MSA-MW35S-042012	MSA-MW35S-042312	MSA-MW37S-050812	MSA-MW38S-041812	MSA-MW39S-041912
SAMPLE DATE	20120419	20120420	20120423	20120508	20120418	20120419
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
TRICHLOROETHENE	0.17 U	2.4	NA	0.17 U	0.17 U	5
CIS-1,2-DICHLOROETHENE	2.2	6.4	NA	0.17 U	0.17 U	4.4
VINYL CHLORIDE	1.1	2	NA	0.22 U	0.22 U	3.8
ETHENE	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	0.48 U	3.2	NA	0.48 U	0.47 U	12
BENZENE	0.14 J	0.13 J	NA	0.13 U	0.13 U	1.7
TOLUENE	0.13 U	0.13 U	NA	0.13 U	0.13 U	0.24 J
ETHYLBENZENE	0.17 U	0.17 U	NA	0.17 U	0.17 U	0.21 J
TOTAL XYLENES	0.28 U	0.28 U	NA	0.28 U	0.28 U	1 J

B - Result considered to be from laboratory blank contamination based on USEPA 5 times or 10 times rule.
J - Positive result is considered estimated as a result of technical noncompliance.
K - Positive result is considered to be biased high as a result of technical noncompliance. Result may be lower.
L - Positive result is considered to be biased low as a result of technical noncompliance. Result may be higher.
UG/L - micrograms per liter (i.e., parts per billion).
MG/L - milligrams per liter (i.e., parts per million).
NA - Not analyzed.
NJ - The analyte has been tentatively identified. This qualifier indicates presumptive evidence of a compound. Special methods may be required to confirm its presence or absence.
PCI/L - picoCurries per liter.
R - Result is rejected as a result of technical noncompliance.
U - Not detected at the listed detection limit.
UJ -The analyte was not detected. However, the quantitation or detection limit may be inaccurate or imprecise.
UL - The analyte was not detected. However, the quantitation or detection limit is likely greater than the reported value.
UR - The result is considered qualitatively or quantitatively unreliable.
USEPA - United States Environmental Protection Agency.

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-01A	MSA-DMW-01B	MSA-DMW-01S	MSA-DMW-02A	MSA-DMW-02B	MSA-DMW-02S
SAMPLE ID	MSA-DMW-1A-061713	MSA-DMW-1B-061213	MSA-DMW-1S-061813	MSA-DMW-2A-061313	MSA-DMW-2B-061313	MSA-DMW-2S-061313
SAMPLE DATE	20130617	20130612	20130618	20130613	20130613	20130613
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	58 U	12 U	0.23 U	77 U	0.38 U	19 U
1,1,1-TRICHLOROETHANE	55 U	11 U	0.22 U	73 U	0.37 U	18 U
1,1,2,2-TETRACHLOROETHANE	45 U	9 U	0.18 U	60 U	0.3 U	15 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	70 U	14 U	0.28 U	93 U	0.47 U	23 U
1,1-DICHLOROETHANE	38 U	7.5 U	0.15 U	50 U	0.25 U	12 U
1,1-DICHLOROETHENE	48 U	9.5 U	0.19 U	63 U	0.32 U	16 U
1,1-DICHLOROPROPENE	33 U	6.5 U	0.13 U	43 U	0.22 U	11 U
1,2,3-TRICHLOROBENZENE	43 U	8.5 U	0.17 U	110 J	0.49 J	14 U
1,2,3-TRICHLOROPROPANE	110 U	22 U	0.43 U	140 U	0.72 U	36 U
1,2,3-TRIMETHYLBENZENE	1.5 U	0.3 U	0.0059 U	2 U	0.0098 U	0.49 U
1,2,4-TRICHLOROBENZENE	41 J	11 J	0.15 U	640	3.1	12 U
1,2,4-TRIMETHYLBENZENE	30 U	6 U	0.12 U	40 U	0.2 U	10 U
1,2-DIBROMO-3-CHLOROPROPANE	170 U	34 U	0.67 U	220 U	1.1 U	56 U
1,2-DIBROMOETHANE	60 U	12 U	0.24 U	80 U	0.4 U	20 U
1,2-DICHLOROBENZENE	33 U	6.5 U	0.13 U	43 U	0.22 U	11 U
1,2-DICHLOROETHANE	55 U	11 U	0.22 U	73 J	0.37 U	21 J
1,2-DICHLOROPROPANE	45 U	9 U	0.18 U	60 U	0.3 U	15 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	35 U	7 U	0.14 U	47 U	0.23 U	12 U
1,3-DICHLOROPROPANE	40 U	8 U	0.16 U	53 U	0.27 U	13 U
1,4-DICHLOROBENZENE	33 U	6.5 U	0.13 U	43 U	0.22 U	11 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	33 U	6.5 U	0.13 U	43 U	0.22 U	11 U
2-BUTANONE	140 U	29 U	0.57 U	190 U	0.95 U	47 U
2-CHLOROETHYL VINYL ETHER	250 U	50 UR	0.99 U	330 U	1.7 U	82 U
2-CHLOROTOLUENE	28 U	5.5 U	0.11 U	37 U	0.18 U	9.2 U
2-HEXANONE	100 U	21 U	0.41 U	140 U	0.68 U	34 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	45 U	9 U	0.18 U	60 U	0.3 U	15 U
4-ISOPROPYLTOLUENE	30 U	6 U	0.12 U	40 U	0.2 U	10 U
4-METHYL-2-PENTANONE	80 U	16 U	0.32 U	110 U	0.53 U	27 U
ACETONE	280 U	55 U	1.4 J	370 U	2.3 J	92 U
BENZENE	33 U	14 J	0.13 U	43 U	0.22 U	14 J
BROMOBENZENE	33 U	6.5 U	0.13 U	43 U	0.22 U	11 U
BROMOCHLOROMETHANE	73 U	15 U	0.29 U	97 U	0.48 U	24 U
BROMODICHLOROMETHANE	38 U	7.5 U	0.15 U	50 U	0.25 U	12 U
BROMOFORM	160 U	32 U	0.64 U	210 U	1.1 U	53 U
BROMOMETHANE	100 U	21 U	0.41 U	140 U	0.68 U	34 U
CARBON DISULFIDE	33 U	6.5 U	0.13 U	43 U	0.22 U	11 U
CARBON TETRACHLORIDE	33 U	6.5 U	0.13 U	43 U	0.22 U	11 U
CHLOROBENZENE	38 U	7.5 U	0.31 J	50 U	0.25 U	12 U
CHLORODIBROMOMETHANE	45 U	9 U	0.18 U	60 U	0.3 U	15 U
CHLOROETHANE	73 U	15 U	0.29 U	97 U	0.48 U	24 U
CHLOROFORM	40 U	8 U	0.16 U	55 J	0.27 U	14 J
CHLOROMETHANE	75 U	15 U	0.3 U	100 U	0.5 U	25 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-01A	MSA-DMW-01B	MSA-DMW-01S	MSA-DMW-02A	MSA-DMW-02B	MSA-DMW-02S
SAMPLE ID	MSA-DMW-1A-061713	MSA-DMW-1B-061213	MSA-DMW-1S-061813	MSA-DMW-2A-061313	MSA-DMW-2B-061313	MSA-DMW-2S-061313
SAMPLE DATE	20130617	20130612	20130618	20130613	20130613	20130613
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
CIS-1,2-DICHLOROETHENE	4000	1800	2.7	4200	37	1800
CIS-1,3-DICHLOROPROPENE	35 U	7 U	0.14 U	47 U	0.23 U	12 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	70 U	14 U	0.28 U	93 U	0.47 U	23 U
DICHLORODIFLUOROMETHANE	78 U	16 U	0.31 U	100 U	0.52 U	26 U
DIISOPROPYL ETHER	380 U	75 U	1.5 U	500 U	2.5 U	120 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	28 U	5.5 U	0.11 U	37 U	0.18 U	9.2 U
ETHYLBENZENE	43 U	8.5 U	0.17 U	57 U	0.28 U	14 U
HEXACHLOROBUTADIENE	75 U	15 U	0.3 U	100 U	0.5 U	25 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	33 U	6.5 U	0.13 U	43 U	0.22 U	11 U
M+P-XYLENES	60 U	12 U	0.24 U	80 U	0.4 U	20 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	43 U	8.5 U	0.17 U	57 U	0.28 U	14 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	120 J	22 J	0.33 U	110 U	0.55 U	52 J
NAPHTHALENE	60 U	12 U	0.24 U	80 U	0.4 U	20 U
N-BUTYLBENZENE	30 U	6 U	0.12 U	40 U	0.2 U	10 U
N-PROPYLBENZENE	35 U	7 U	0.14 U	47 U	0.23 U	12 U
O-XYLENE	35 U	7 U	0.14 U	47 U	0.23 U	12 U
SEC-BUTYLBENZENE	33 U	6.5 U	0.13 U	43 U	0.22 U	11 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	28 U	5.5 U	0.11 U	37 U	0.18 U	9.2 U
TERT-AMYL METHYL ETHER	17 U	3.4 U	0.067 U	22 U	0.11 U	5.6 U
TERT-BUTYLBENZENE	33 U	6.5 U	0.13 U	43 U	0.22 U	11 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	980 UR	200 UR	3.9 UR	1300 UR	6.5 UR	320 UR
TETRACHLOROETHENE	73 U	15 U	0.29 U	97 U	0.48 U	24 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	83 J	6.5 U	0.13 U	43 U	0.22 U	11 U
TOTAL XYLENES	70 U	14 U	0.28 U	93 U	0.47 U	23 U
TRANS-1,2-DICHLOROETHENE	48 U	11 J	0.19 U	63 U	2.8	16 U
TRANS-1,3-DICHLOROPROPENE	48 U	9.5 U	0.19 U	63 U	0.32 U	16 U
TRICHLOROETHENE	7000	1200	0.39 J	10000	20	2600
TRICHLOROFLUOROMETHANE	53 U	11 U	0.21 U	70 U	0.35 U	17 U
VINYL ACETATE	48 UR	9.5 UR	0.19 UR	63 UR	0.32 UR	16 UR
VINYL CHLORIDE	1100	1800	1.2	850	0.45 J	890
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-01A MSA-DMW-1A-061713 20130617 NORMAL GW	MSA-DMW-01B MSA-DMW-1B-061213 20130612 NORMAL GW	MSA-DMW-01S MSA-DMW-1S-061813 20130618 NORMAL GW	MSA-DMW-02A MSA-DMW-2A-061313 20130613 NORMAL GW	MSA-DMW-02B MSA-DMW-2B-061313 20130613 NORMAL GW	MSA-DMW-02S MSA-DMW-2S-061313 20130613 NORMAL GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	170 L	46	1.3	410	2.4	200
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-01A	MSA-DMW-01B	MSA-DMW-01S	MSA-DMW-02A	MSA-DMW-02B	MSA-DMW-02S
SAMPLE ID	MSA-DMW-1A-061713	MSA-DMW-1B-061213	MSA-DMW-1S-061813	MSA-DMW-2A-061313	MSA-DMW-2B-061313	MSA-DMW-2S-061313
SAMPLE DATE	20130617	20130612	20130618	20130613	20130613	20130613
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	NA	71 B	NA	NA	1800 R
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	NA	230 U	NA	NA	540
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.11 U	0.24 B	2	0.25 J	0.39 J	0.28 J
ARSENIC	5.7	36	1.9 J	5	1.7 J	6.9
BARIUM	15	25	72	27	42	14
BERYLLIUM	0.69 B	0.44 B	0.59 B	2.1	0.41 B	6.1
CADMIUM	690	150	1.4	700	1.6	240
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	240 J	60	1.1 B	70	40	3.9
COBALT	39	30	0.8 J	510	8.5	230 J
COPPER	12	25	8.6	71	21	48
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.91 B	3.4	4.1	7.2	10	1.4
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.26 K	0.95	0.12 U	0.16 J	0.12 U	0.12 U
MOLYBDENUM	2.8 J	0.81 U	0.86 J	1.9 J	1.1 J	0.81 U
NICKEL	110	35	2	140	18	100
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	13	4.1 J	0.82 J	20	0.53 B	27
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	0.016 B	0.022 B	0.081 B	0.09 B	0.07 B	0.021 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-01A MSA-DMW-1A-061713 20130617 NORMAL GW	MSA-DMW-01B MSA-DMW-1B-061213 20130612 NORMAL GW	MSA-DMW-01S MSA-DMW-1S-061813 20130618 NORMAL GW	MSA-DMW-02A MSA-DMW-2A-061313 20130613 NORMAL GW	MSA-DMW-02B MSA-DMW-2B-061313 20130613 NORMAL GW	MSA-DMW-02S MSA-DMW-2S-061313 20130613 NORMAL GW
TUNGSTEN	0.045 B	0.35 B	0.25 B	1.1 J	2.1 J	0.16 B
VANADIUM	1.6 B	10	3.8 B	34	12	1.3 B
ZINC	290	170	20 B	480	42 B	290
DISSOLVED METALS (UG/L)						
ANTIMONY	0.11 U	0.11 B	1.8 J	0.11 U	0.13 J	0.29 B
ARSENIC	4.9 J	9.1	1.5 J	4.4 J	0.11 B	7
BARIUM	14	17	70	12	16	14
BERYLLIUM	0.73 B	0.28 B	0.29 B	2.1	0.18 B	5.3
CADMIUM	640	130	0.68 J	770	1.3	240
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	99	7.4	0.77 B	5.1	0.49 J	3.7
COBALT	37	31	0.57 J	620	0.79 J	240 J
COPPER	12	14	8.4	31	4 B	44
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.87 B	1.3 B	2.1	4	0.29 B	1.7
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	0.81 U	0.81 J	0.81 U	0.81 U	0.81 U
NICKEL	100	38	4	170	11	110
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	12	2.4 B	0.63 J	23	0.37 B	28
SILVER	0.0083 U	0.013 B	0.027 B	0.0083 U	0.0083 U	0.013 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.017 U	0.017 U	0.13 B	0.019 B	0.038 B	0.2 B
VANADIUM	0.59 B	0.87 B	3.6 B	6.4	0.4 B	1.1 B
ZINC	280	180	19 B	550	20 B	300
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.023 L	NA	0.02 UL	NA	NA	NA
PERCHLORATE	NA	NA	NA	0.13 J	NA	0.11 J
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-01A	MSA-DMW-01B	MSA-DMW-01S	MSA-DMW-02A	MSA-DMW-02B	MSA-DMW-02S
SAMPLE ID	MSA-DMW-1A-061713	MSA-DMW-1B-061213	MSA-DMW-1S-061813	MSA-DMW-2A-061313	MSA-DMW-2B-061313	MSA-DMW-2S-061313
SAMPLE DATE	20130617	20130612	20130618	20130613	20130613	20130613
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-02S MSA-DMW-2S-061413 20130614 NORMAL GW	MSA-DMW-03D MSA-DMW-3D-061713 20130617 NORMAL GW	MSA-DMW-03I MSA-DMW-3I-061913 20130619 NORMAL GW	MSA-DMW-03I MSA-DMW-3I-061913(PDB) 20130619 NORMAL GW	MSA-DMW-03S MSA-DMW-3S-061713 20130617 NORMAL GW	MSA-DMW-03S MSA-DMW-3S-061813 20130618 NORMAL GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	NA	0.23 U	58 U	96 U	38 U	NA
1,1,1-TRICHLOROETHANE	NA	0.22 U	55 U	92 U	37 U	NA
1,1,2,2-TETRACHLOROETHANE	NA	0.18 U	45 U	75 U	30 U	NA
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	NA	0.28 U	70 U	120 U	47 U	NA
1,1-DICHLOROETHANE	NA	0.15 U	38 U	63 U	25 U	NA
1,1-DICHLOROETHENE	NA	0.19 U	48 U	79 U	32 U	NA
1,1-DICHLOROPROPENE	NA	0.13 U	33 U	54 U	22 U	NA
1,2,3-TRICHLOROBENZENE	NA	0.17 U	66 J	71 U	28 U	NA
1,2,3-TRICHLOROPROPANE	NA	0.43 U	110 U	180 U	72 U	NA
1,2,3-TRIMETHYLBENZENE	NA	0.0059 U	1.5 U	2.5 U	0.98 U	NA
1,2,4-TRICHLOROBENZENE	NA	0.15 U	470	520	25 U	NA
1,2,4-TRIMETHYLBENZENE	NA	0.12 U	30 U	50 U	20 U	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	0.67 U	170 U	280 U	110 U	NA
1,2-DIBROMOETHANE	NA	0.24 U	60 U	100 U	40 U	NA
1,2-DICHLOROBENZENE	NA	0.13 U	33 U	54 U	22 U	NA
1,2-DICHLOROETHANE	NA	0.22 U	60 J	92 U	37 U	NA
1,2-DICHLOROPROPANE	NA	0.18 U	45 U	75 U	30 U	NA
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	0.14 U	35 U	58 U	23 U	NA
1,3-DICHLOROPROPANE	NA	0.16 U	40 U	67 U	27 U	NA
1,4-DICHLOROBENZENE	NA	0.13 U	33 U	54 U	22 U	NA
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	0.13 U	33 U	54 U	22 U	NA
2-BUTANONE	NA	0.57 U	140 U	240 UR	95 U	NA
2-CHLOROETHYL VINYL ETHER	NA	0.99 U	250 U	410 U	170 U	NA
2-CHLOROTOLUENE	NA	0.11 U	28 U	46 U	18 U	NA
2-HEXANONE	NA	0.41 U	100 U	170 U	68 U	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	0.18 U	45 U	75 U	30 U	NA
4-ISOPROPYLTOLUENE	NA	0.12 U	30 U	50 U	20 U	NA
4-METHYL-2-PENTANONE	NA	0.32 U	80 U	130 U	53 U	NA
ACETONE	NA	1.1 U	280 U	460 U	180 U	NA
BENZENE	NA	0.13 U	33 U	54 U	22 U	NA
BROMOBENZENE	NA	0.13 U	33 U	54 U	22 U	NA
BROMOCHLOROMETHANE	NA	0.29 U	73 U	120 U	48 U	NA
BROMODICHLOROMETHANE	NA	0.15 U	38 U	63 U	25 U	NA
BROMOFORM	NA	0.64 U	160 U	270 U	110 U	NA
BROMOMETHANE	NA	0.41 U	100 U	170 U	68 U	NA
CARBON DISULFIDE	NA	0.13 U	33 U	54 U	22 U	NA
CARBON TETRACHLORIDE	NA	0.13 U	33 U	54 U	22 U	NA
CHLOROBENZENE	NA	0.15 U	38 U	63 U	25 U	NA
CHLORODIBROMOMETHANE	NA	0.18 U	45 U	75 U	30 U	NA
CHLOROETHANE	NA	0.29 U	73 U	120 U	48 U	NA
CHLOROFORM	NA	0.16 U	40 U	67 U	27 U	NA
CHLOROMETHANE	NA	0.3 U	75 U	130 U	50 U	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-02S MSA-DMW-2S-061413 20130614 NORMAL GW	MSA-DMW-03D MSA-DMW-3D-061713 20130617 NORMAL GW	MSA-DMW-03I MSA-DMW-3I-061913 20130619 NORMAL GW	MSA-DMW-03I MSA-DMW-3I-061913(PDB) 20130619 NORMAL GW	MSA-DMW-03S MSA-DMW-3S-061713 20130617 NORMAL GW	MSA-DMW-03S MSA-DMW-3S-061813 20130618 NORMAL GW
CIS-1,2-DICHLOROETHENE	NA	0.17 U	6600	5800	920	NA
CIS-1,3-DICHLOROPROPENE	NA	0.14 U	35 U	58 U	23 U	NA
CYCLOHEXANE	NA	0.15 NJ	NA	NA	NA	NA
DIBROMOMETHANE	NA	0.28 U	70 U	120 U	47 U	NA
DICHLORODIFLUOROMETHANE	NA	0.31 U	78 U	130 U	52 U	NA
DIISOPROPYL ETHER	NA	1.5 U	380 U	630 U	250 U	NA
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	NA	0.11 U	28 U	46 U	18 U	NA
ETHYLBENZENE	NA	0.17 U	43 U	71 U	28 U	NA
HEXACHLOROBUTADIENE	NA	0.3 U	75 U	130 U	50 U	NA
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	0.13 U	33 U	54 U	22 U	NA
M+P-XYLENES	NA	0.24 U	60 U	100 U	40 U	NA
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	NA	0.17 U	43 U	71 U	28 U	NA
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	NA	0.33 U	83 U	310 B	55 U	NA
NAPHTHALENE	NA	0.24 U	60 U	100 U	40 U	NA
N-BUTYLBENZENE	NA	0.12 U	30 U	50 U	20 U	NA
N-PROPYLBENZENE	NA	0.14 U	35 U	58 U	23 U	NA
O-XYLENE	NA	0.14 U	35 U	58 U	23 U	NA
SEC-BUTYLBENZENE	NA	0.13 U	33 U	54 U	22 U	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	NA	0.11 U	28 U	46 U	18 U	NA
TERT-AMYL METHYL ETHER	NA	0.067 U	17 U	28 U	11 U	NA
TERT-BUTYLBENZENE	NA	0.13 U	33 U	54 U	22 U	NA
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	NA	3.9 UR	980 UR	1600 UR	650 UR	NA
TETRACHLOROETHENE	NA	0.29 U	73 U	120 U	48 U	NA
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	NA	0.13 U	63 J	98 J	29 J	NA
TOTAL XYLENES	NA	0.28 U	70 U	120 U	47 U	NA
TRANS-1,2-DICHLOROETHENE	NA	0.19 U	48 U	79 U	290	NA
TRANS-1,3-DICHLOROPROPENE	NA	0.19 U	48 U	79 U	32 U	NA
TRICHLOROETHENE	NA	0.17 U	10000	11000	28 U	NA
TRICHLOROFLUOROMETHANE	NA	0.21 U	53 U	88 U	35 U	NA
VINYL ACETATE	NA	0.19 UR	48 UR	79 UR	32 UR	NA
VINYL CHLORIDE	NA	0.22 U	2300	2400	3100	NA
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	0.75 U	NA	NA	NA	0.75 U	NA
CHLOROACETIC ACID	0.4 U	NA	NA	NA	0.4 U	NA
DIBROMOACETIC ACID	0.38 U	NA	NA	NA	0.38 U	NA
DICHLOROACETIC ACID	0.98 U	NA	NA	NA	0.98 U	NA
TRICHLOROACETIC ACID	0.38 U	NA	NA	NA	0.38 U	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-02S	MSA-DMW-03D	MSA-DMW-03I	MSA-DMW-03I	MSA-DMW-03S	MSA-DMW-03S
SAMPLE ID	MSA-DMW-2S-061413	MSA-DMW-3D-061713	MSA-DMW-3I-061913	MSA-DMW-3I-061913(PDB)	MSA-DMW-3S-061713	MSA-DMW-3S-061813
SAMPLE DATE	20130614	20130617	20130619	20130619	20130617	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	NA	0.74 U	260	NA	260	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-02S MSA-DMW-2S-061413 20130614 NORMAL GW	MSA-DMW-03D MSA-DMW-3D-061713 20130617 NORMAL GW	MSA-DMW-03I MSA-DMW-3I-061913 20130619 NORMAL GW	MSA-DMW-03I MSA-DMW-3I-061913(PDB) 20130619 NORMAL GW	MSA-DMW-03S MSA-DMW-3S-061713 20130617 NORMAL GW	MSA-DMW-03S MSA-DMW-3S-061813 20130618 NORMAL GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	NA	NA	NA	810	NA
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	NA	NA	NA	NA	1200
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	NA	0.39 B	0.21 J	NA	0.63 J	NA
ARSENIC	NA	4.8 J	3.7 J	NA	11	NA
BARIUM	NA	90	13	NA	50	NA
BERYLLIUM	NA	0.91 B	0.45 B	NA	0.13 B	NA
CADMIUM	NA	4.3	150	NA	0.27 B	NA
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	21 J	2.8 J	NA	2.1 J	NA
COBALT	NA	30	220 J	NA	0.51 B	NA
COPPER	NA	110	4.2	NA	8.1	NA
IRON	NA	NA	NA	NA	NA	NA
LEAD	NA	7.5	0.76 B	NA	9.4	NA
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	NA	0.3 K	0.12 U	NA	0.12 U	NA
MOLYBDENUM	NA	1.4 J	0.81 U	NA	2.4 J	NA
NICKEL	NA	41	71	NA	0.88 B	NA
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	NA	1.4 B	6.8	NA	0.45 B	NA
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	NA	0.037 B	0.026 B	NA	0.16 B	NA
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	NA	0.4 U	0.43 J	NA	0.4 U	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-02S MSA-DMW-2S-061413 20130614 NORMAL GW	MSA-DMW-03D MSA-DMW-3D-061713 20130617 NORMAL GW	MSA-DMW-03I MSA-DMW-3I-061913 20130619 NORMAL GW	MSA-DMW-03I MSA-DMW-3I-061913(PDB) 20130619 NORMAL GW	MSA-DMW-03S MSA-DMW-3S-061713 20130617 NORMAL GW	MSA-DMW-03S MSA-DMW-3S-061813 20130618 NORMAL GW
TUNGSTEN	NA	0.6 B	0.053 B	NA	8.2 J	NA
VANADIUM	NA	26	6.8	NA	3.2 J	NA
ZINC	NA	290	240	NA	35 B	NA
DISSOLVED METALS (UG/L)						
ANTIMONY	NA	0.16 B	0.17 J	NA	0.3 B	NA
ARSENIC	NA	0.89 B	3.7 J	NA	14	NA
BARIUM	NA	59	13	NA	60	NA
BERYLLIUM	NA	0.59 B	0.43 B	NA	0.085 B	NA
CADMIUM	NA	4	120	NA	0.026 U	NA
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	0.63 J	2.3	NA	0.98 J	NA
COBALT	NA	33	230	NA	0.54 B	NA
COPPER	NA	80	1.6 B	NA	0.89 B	NA
IRON	NA	NA	NA	NA	NA	NA
LEAD	NA	1.4 B	0.53 B	NA	0.5 B	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	NA	0.12 U	0.12 U	NA	0.12 U	NA
MOLYBDENUM	NA	0.81 U	0.81 U	NA	5.2 J	NA
NICKEL	NA	45	73	NA	2.2	NA
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	NA	0.43 B	6	NA	0.61 B	NA
SILVER	NA	0.0083 U	0.018 B	NA	0.0083 U	NA
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	NA	0.4 U	0.43 J	NA	0.4 U	NA
TUNGSTEN	NA	0.017 U	0.017 U	NA	16	NA
VANADIUM	NA	1.1 B	6.6	NA	3 J	NA
ZINC	NA	230	240	NA	4.1 B	NA
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	0.02 UL	NA
PERCHLORATE	NA	NA	NA	NA	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	2.66	1.33	NA	NA	NA
RADIUM-228	NA	2.64	8.42	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-02S	MSA-DMW-03D	MSA-DMW-03I	MSA-DMW-03I	MSA-DMW-03S	MSA-DMW-03S
SAMPLE ID	MSA-DMW-2S-061413	MSA-DMW-3D-061713	MSA-DMW-3I-061913	MSA-DMW-3I-061913(PDB)	MSA-DMW-3S-061713	MSA-DMW-3S-061813
SAMPLE DATE	20130614	20130617	20130619	20130619	20130617	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-04D	MSA-DMW-04I	MSA-DMW-04S	MSA-DMW-05I	MSA-DMW-05S	MSA-DMW-06D
SAMPLE ID	MSA-DMW-4D-061113	MSA-DMW-4I-061113	MSA-DMW-4S-061113	MSA-DMW-5I-061113	MSA-DMW-5S-061113	MSA-DMW-6D-061013
SAMPLE DATE	20130611	20130611	20130611	20130611	20130611	20130610
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	46 U	3.5 U	1.3 U	0.23 U	33 U	0.23 U
1,1,1-TRICHLOROETHANE	44 U	56	3 J	0.22 U	31 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	36 U	2.7 U	1 U	0.18 U	26 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	56 U	4.2 U	1.6 U	0.28 U	40 U	0.28 U
1,1-DICHLOROETHANE	30 U	37	5.5 J	0.15 U	21 U	0.15 U
1,1-DICHLOROETHENE	38 U	190	20	0.33 J	27 U	0.19 U
1,1-DICHLOROPROPENE	26 U	2 U	0.72 U	0.13 U	19 U	0.13 U
1,2,3-TRICHLOROBENZENE	34 U	2.6 U	0.94 U	0.17 U	24 U	0.17 U
1,2,3-TRICHLOROPROPANE	86 U	6.5 U	2.4 U	0.43 U	61 U	0.43 U
1,2,3-TRIMETHYLBENZENE	1.2 U	5.9 J	0.033 U	0.0059 U	0.84 U	0.0059 U
1,2,4-TRICHLOROBENZENE	30 U	2.3 U	0.83 U	0.41 B	21 U	0.15 U
1,2,4-TRIMETHYLBENZENE	24 U	1.8 U	0.67 U	0.12 U	17 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	130 U	10 U	3.7 U	0.67 U	96 U	0.67 U
1,2-DIBROMOETHANE	48 U	3.6 U	1.3 U	0.24 U	34 U	0.24 U
1,2-DICHLOROBENZENE	26 U	2 U	0.72 U	0.14 J	19 U	0.13 U
1,2-DICHLOROETHANE	44 U	9.1 J	15	1.1	31 U	0.22 U
1,2-DICHLOROPROPANE	36 U	2.7 U	1 U	0.18 U	26 U	0.18 U
1,3,5-TRIMETHYLBENZENE	NA	2.5 J	NA	NA	NA	NA
1,3-DICHLOROBENZENE	28 U	2.1 U	0.78 U	0.14 J	20 U	0.14 U
1,3-DICHLOROPROPANE	32 U	2.4 U	0.89 U	0.16 U	23 U	0.16 U
1,4-DICHLOROBENZENE	26 U	2 U	0.72 U	0.18 B	19 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	26 U	2 U	0.72 U	0.13 U	19 U	0.13 U
2-BUTANONE	110 U	8.6 U	3.2 U	0.57 U	81 U	0.57 U
2-CHLOROETHYL VINYL ETHER	200 U	15 UR	5.5 UR	0.99 UR	140 U	0.99 UR
2-CHLOROTOLUENE	22 U	1.7 U	0.61 U	0.11 U	16 U	0.11 U
2-HEXANONE	82 U	6.2 U	2.3 U	0.41 U	59 U	0.41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	35 J	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	36 U	2.7 U	1 U	0.18 U	26 U	0.18 U
4-ISOPROPYLTOLUENE	24 U	1.8 U	0.67 U	0.12 U	17 U	0.12 U
4-METHYL-2-PENTANONE	64 U	4.8 U	1.8 U	0.32 U	46 U	0.32 U
ACETONE	220 U	45 B	15 B	3.4 B	160 U	4 B
BENZENE	26 U	4.5 J	1.1 J	0.29 J	19 U	0.13 U
BROMOBENZENE	26 U	2 U	0.72 U	0.13 U	19 U	0.13 U
BROMOCHLOROMETHANE	58 U	4.4 U	1.6 U	0.29 U	41 U	0.29 U
BROMODICHLOROMETHANE	30 U	2.3 U	0.83 U	0.15 U	21 U	0.15 U
BROMOFORM	130 U	9.6 U	3.6 U	0.64 U	91 U	0.64 U
BROMOMETHANE	82 U	6.2 U	2.3 U	0.41 U	59 U	0.41 U
CARBON DISULFIDE	26 U	2 U	0.72 U	0.13 U	19 U	0.13 U
CARBON TETRACHLORIDE	26 U	2 U	0.72 U	0.13 U	19 U	0.13 U
CHLOROBENZENE	30 U	2.4 J	0.83 U	1	21 U	0.15 U
CHLORODIBROMOMETHANE	36 U	2.7 U	1 U	0.18 U	26 U	0.18 U
CHLOROETHANE	58 U	4.4 U	1.6 U	0.29 U	41 U	0.29 U
CHLOROFORM	32 U	2.4 U	0.89 U	0.21 J	23 U	0.16 U
CHLOROMETHANE	60 U	4.5 U	1.7 U	0.3 U	43 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-04D MSA-DMW-4D-061113 20130611 NORMAL GW	MSA-DMW-04I MSA-DMW-4I-061113 20130611 NORMAL GW	MSA-DMW-04S MSA-DMW-4S-061113 20130611 NORMAL GW	MSA-DMW-05I MSA-DMW-5I-061113 20130611 NORMAL GW	MSA-DMW-05S MSA-DMW-5S-061113 20130611 NORMAL GW	MSA-DMW-06D MSA-DMW-6D-061013 20130610 NORMAL GW
CIS-1,2-DICHLOROETHENE	600	1800	110	59	570	0.17 U
CIS-1,3-DICHLOROPROPENE	28 U	2.1 U	0.78 U	0.14 U	20 U	0.14 U
CYCLOHEXANE	NA	NA	NA	0.17 J	NA	NA
DIBROMOMETHANE	56 U	4.2 U	1.6 U	0.28 U	40 U	0.28 U
DICHLORODIFLUOROMETHANE	62 U	4.7 U	1.7 U	0.31 U	44 U	0.31 U
DIISOPROPYL ETHER	300 U	23 U	8.3 U	1.5 U	210 U	1.5 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	22 U	1.7 U	0.61 U	0.11 U	16 U	0.11 U
ETHYLBENZENE	34 U	2.6 U	0.94 U	0.17 U	24 U	0.17 U
HEXACHLOROBUTADIENE	60 U	4.5 U	1.7 U	0.3 U	43 U	0.3 U
HEXANE	NA	NA	1.6 J	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	26 U	2 U	0.72 U	0.13 U	19 U	0.13 U
M+P-XYLENES	48 U	3.6 U	1.3 U	0.24 U	34 U	0.24 U
METHYL ACETATE	NA	10 J	4.7 J	1 J	NA	0.67 B
METHYL CYCLOHEXANE	NA	4.6 J	0.77 J	0.21 J	NA	NA
METHYL TERT-BUTYL ETHER	34 U	2.6 U	0.94 U	0.17 U	24 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	120 B	27 B	9.5 B	1.1 B	63 B	0.83 B
NAPHTHALENE	48 U	3.6 U	1.3 U	0.38 B	34 U	0.24 U
N-BUTYLBENZENE	24 U	1.8 U	0.67 U	0.12 U	17 U	0.12 U
N-PROPYLBENZENE	28 U	2.1 U	0.78 U	0.14 U	20 U	0.14 U
O-XYLENE	28 U	5.7 J	0.78 U	0.14 U	20 U	0.14 U
SEC-BUTYLBENZENE	26 U	2 U	0.72 U	0.13 U	19 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	22 U	1.7 U	0.61 U	0.11 U	16 U	0.11 U
TERT-AMYL METHYL ETHER	13 U	1 U	0.37 U	0.067 U	9.6 U	0.067 U
TERT-BUTYLBENZENE	26 U	2 U	0.72 U	0.13 U	19 U	0.13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	780 UR	59 UR	22 UR	3.9 UR	560 UR	3.9 UR
TETRACHLOROETHENE	58 U	4.9 J	2.5 J	0.36 J	41 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	0.49 B
TOLUENE	26 U	3.4 B	1.5 B	0.45 B	19 U	0.65 B
TOTAL XYLENES	56 U	5.7 J	1.6 U	0.28 U	40 U	0.28 U
TRANS-1,2-DICHLOROETHENE	38 U	25	1.9 J	2.1	27 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	38 U	2.9 U	1.1 U	0.19 U	27 U	0.19 U
TRICHLOROETHENE	4800	3700	1200	91	3200	0.17 U
TRICHLOROFLUOROMETHANE	42 U	3.2 U	1.2 U	0.21 U	30 U	0.21 U
VINYL ACETATE	38 UR	2.9 UR	1.1 UR	0.19 UR	27 UR	0.19 UR
VINYL CHLORIDE	44 U	1100	24	8.6	31 U	0.22 U
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	0.75 U	NA
CHLOROACETIC ACID	NA	NA	NA	NA	0.4 U	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	0.38 U	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	2.2	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	0.38 U	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-04D MSA-DMW-4D-061113 20130611 NORMAL GW	MSA-DMW-04I MSA-DMW-4I-061113 20130611 NORMAL GW	MSA-DMW-04S MSA-DMW-4S-061113 20130611 NORMAL GW	MSA-DMW-05I MSA-DMW-5I-061113 20130611 NORMAL GW	MSA-DMW-05S MSA-DMW-5S-061113 20130611 NORMAL GW	MSA-DMW-06D MSA-DMW-6D-061013 20130610 NORMAL GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	38	58	24	3.4	12	0.49 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-04D MSA-DMW-4D-061113 20130611 NORMAL GW	MSA-DMW-04I MSA-DMW-4I-061113 20130611 NORMAL GW	MSA-DMW-04S MSA-DMW-4S-061113 20130611 NORMAL GW	MSA-DMW-05I MSA-DMW-5I-061113 20130611 NORMAL GW	MSA-DMW-05S MSA-DMW-5S-061113 20130611 NORMAL GW	MSA-DMW-06D MSA-DMW-6D-061013 20130610 NORMAL GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	NA	590 R	NA	1500 R	NA
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	NA	250 J	NA	260 U	NA
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.18 B	0.25 B	0.26 B	0.22 B	0.41 B	0.11 U
ARSENIC	18	9.2	4.1 J	5	7.5	1.1 B
BARIUM	27 J	17	11	17	29	60
BERYLLIUM	4.9	6.2	2	2.4	3.6	0.95 B
CADMIUM	26	14	13	5	11	0.73 J
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	9.8	88	1.1 J	14	34	4.6
COBALT	160	69	77	69	53	32
COPPER	71	110	1.1 B	500	1400	19
IRON	NA	NA	NA	NA	NA	NA
LEAD	2.5 J	4.3	1.3	6.6	14	3
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	4.8	0.12 U	0.12 U	0.12 U	0.12 U	1.6
MOLYBDENUM	0.84 J	2.5 J	0.81 U	1.6 J	1.5 J	0.81 U
NICKEL	120	51	34	69	53	42
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	48	19	6.8	15	18	2.7 J
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	0.062 B	0.14 B	0.027 B	0.027 B	0.17 B	0.033 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 UJ	0.4 U	0.4 U	0.4 U	0.45 J	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-04D MSA-DMW-4D-061113 20130611 NORMAL GW	MSA-DMW-04I MSA-DMW-4I-061113 20130611 NORMAL GW	MSA-DMW-04S MSA-DMW-4S-061113 20130611 NORMAL GW	MSA-DMW-05I MSA-DMW-5I-061113 20130611 NORMAL GW	MSA-DMW-05S MSA-DMW-5S-061113 20130611 NORMAL GW	MSA-DMW-06D MSA-DMW-6D-061013 20130610 NORMAL GW
TUNGSTEN	1.3 J	0.41 B	0.15 B	0.39 B	0.32 B	0.52 J
VANADIUM	9.1 B	19	2.2 B	4.6 B	16	3.6 B
ZINC	360	180	120	270	190	120
DISSOLVED METALS (UG/L)						
ANTIMONY	0.11 UJ	0.11 B	0.33 B	0.11 U	0.11 B	0.11 U
ARSENIC	14	7.9	3.9 J	4.6 J	6.1	0.42 B
BARIUM	20 J	11 J	11	13	13	56
BERYLLIUM	5.3	6.2	2	2.3	3.2	0.8 B
CADMIUM	28	10	8.2	4.1	3.9	0.71 J
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	2.2	6	1.3 J	4.6	4	0.31 J
COBALT	180	71	73	72	60	33
COPPER	74	50	1.6 B	26	44	19
IRON	NA	NA	NA	NA	NA	NA
LEAD	1.2 J	2.7 J	1.8	3.7	3.7	2.1 B
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.52
MOLYBDENUM	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
NICKEL	130	49	34	71	57	42
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	51	19	7	15	17	3 J
SILVER	0.0083 U	0.012 B	0.059 B	0.01 B	0.01 B	0.018 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.13 B	0.07 B	0.2 B	0.047 B	0.046 B	0.017 U
VANADIUM	0.88 B	15	1.9 B	2.9 B	7.7 B	0.75 B
ZINC	370	160	140	260	170	110
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	NA
PERCHLORATE	5.2	1.1	NA	0.082 U	NA	0.14 J
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	2.23
RADIUM-228	NA	NA	NA	NA	NA	8.66

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-04D	MSA-DMW-04I	MSA-DMW-04S	MSA-DMW-05I	MSA-DMW-05S	MSA-DMW-06D
SAMPLE ID	MSA-DMW-4D-061113	MSA-DMW-4I-061113	MSA-DMW-4S-061113	MSA-DMW-5I-061113	MSA-DMW-5S-061113	MSA-DMW-6D-061013
SAMPLE DATE	20130611	20130611	20130611	20130611	20130611	20130610
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	75 NJ
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-06I	MSA-DMW-06S		MSA-DMW-07D	MSA-DMW-07I	MSA-DMW-07S
SAMPLE ID	MSA-DMW-6I-061013	MSA-DMW-6S-061013	MSA-DMW-6S-061113	MSA-DMW-7D-061013	MSA-DMW-7I-061013	MSA-DMW-7S-061013
SAMPLE DATE	20130610	20130610	20130611	20130610	20130610	20130610
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	NA	0.23 U	0.38 U	23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	NA	0.22 U	2.1	48 J
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	NA	0.18 U	0.3 U	18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	NA	0.28 U	0.47 U	28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	NA	0.15 U	0.34 J	29 J
1,1-DICHLOROETHENE	0.19 U	0.19 U	NA	0.19 U	1.5 J	65 J
1,1-DICHLOROPROPENE	0.13 U	0.13 U	NA	0.13 U	0.22 U	13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	NA	0.17 U	0.28 U	17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	NA	0.43 U	0.72 U	43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	NA	0.0059 U	0.4 J	0.59 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.21 B	NA	0.15 U	0.88 B	15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	NA	0.12 U	0.2 U	12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	NA	0.67 U	1.1 U	67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	NA	0.24 U	0.4 U	24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	NA	0.13 U	0.22 U	13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	NA	0.22 U	4.2	22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	NA	0.18 U	0.48 J	18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.14 U	0.14 U	NA	0.14 U	0.23 U	14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	NA	0.16 U	0.27 U	16 U
1,4-DICHLOROBENZENE	0.13 U	0.16 B	NA	0.13 U	0.22 U	13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	NA	0.13 U	0.22 U	13 U
2-BUTANONE	0.57 U	0.57 U	NA	0.57 U	0.95 U	57 U
2-CHLOROETHYL VINYL ETHER	0.99 UR	0.99 UR	NA	0.99 UR	1.7 UR	99 UR
2-CHLOROTOLUENE	0.11 U	0.11 U	NA	0.11 U	0.18 U	11 U
2-HEXANONE	0.41 U	0.41 U	NA	0.41 U	0.68 U	41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	NA	0.18 U	0.3 U	18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	NA	0.12 U	0.2 U	12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	NA	0.32 U	0.53 U	32 U
ACETONE	3.3 B	3.9 B	NA	2.7 B	6.1 B	290 B
BENZENE	0.13 U	0.13 U	NA	0.13 U	1.2 J	13 U
BROMOBENZENE	0.13 U	0.13 U	NA	0.13 U	0.22 U	13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	NA	0.29 U	0.48 U	29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	NA	0.15 U	0.25 U	15 U
BROMOFORM	0.64 U	0.64 U	NA	0.64 U	1.1 U	64 U
BROMOMETHANE	0.41 U	0.41 U	NA	0.41 U	0.68 U	41 U
CARBON DISULFIDE	0.13 U	0.13 U	NA	0.13 U	0.22 U	13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	NA	0.13 U	0.22 U	13 U
CHLOROBENZENE	0.15 U	0.18 J	NA	0.15 U	9.2	15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	NA	0.18 U	0.3 U	18 U
CHLOROETHANE	0.29 U	0.29 U	NA	0.29 U	0.48 U	29 U
CHLOROFORM	0.16 U	0.16 U	NA	0.16 U	0.27 U	16 U
CHLOROMETHANE	0.3 U	0.3 U	NA	0.3 U	0.5 U	30 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-06I	MSA-DMW-06S		MSA-DMW-07D	MSA-DMW-07I	MSA-DMW-07S
SAMPLE ID	MSA-DMW-6I-061013	MSA-DMW-6S-061013	MSA-DMW-6S-061113	MSA-DMW-7D-061013	MSA-DMW-7I-061013	MSA-DMW-7S-061013
SAMPLE DATE	20130610	20130610	20130611	20130610	20130610	20130610
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
CIS-1,2-DICHLOROETHENE	0.17 U	1.8	NA	0.17 U	320	13000
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	NA	0.14 U	0.23 U	14 U
CYCLOHEXANE	NA	NA	NA	NA	0.5 J	NA
DIBROMOMETHANE	0.28 U	0.28 U	NA	0.28 U	0.47 U	28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	NA	0.31 U	0.52 U	31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	NA	1.5 U	2.5 U	150 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	NA	0.11 U	0.18 U	11 U
ETHYLBENZENE	0.17 U	0.17 U	NA	0.17 U	0.28 U	17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	NA	0.3 U	0.5 U	30 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	NA	0.13 U	0.22 U	13 U
M+P-XYLENES	0.24 U	0.24 U	NA	0.24 U	0.4 U	24 U
METHYL ACETATE	0.68 B	0.98 B	NA	0.6 B	1.2 B	70 B
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	NA	0.17 U	0.28 U	17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.74 B	0.95 B	NA	0.53 B	1.9 B	160 B
NAPHTHALENE	0.24 U	0.27 B	NA	0.24 U	0.4 U	24 U
N-BUTYLBENZENE	0.12 U	0.12 U	NA	0.12 U	0.2 U	12 U
N-PROPYLBENZENE	0.14 U	0.14 U	NA	0.14 U	0.23 U	14 U
O-XYLENE	0.14 U	0.14 U	NA	0.14 U	0.23 J	14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	NA	0.13 U	0.22 U	13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	0.11 U	0.11 U	NA	0.11 U	0.18 U	11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	NA	0.067 U	0.11 U	6.7 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	NA	0.13 U	0.22 U	13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	NA	3.9 UR	6.5 UR	390 UR
TETRACHLOROETHENE	0.29 U	0.29 U	NA	0.29 U	0.48 U	29 U
TETRAHYDROFURAN	0.49 B	0.51 B	NA	NA	NA	NA
TOLUENE	0.59 B	0.94 B	NA	0.75 B	0.56 B	54 B
TOTAL XYLENES	0.28 U	0.28 U	NA	0.28 U	0.47 U	28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	NA	0.19 U	5.7	100
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	NA	0.19 U	0.32 U	19 U
TRICHLOROETHENE	0.17 U	0.6 J	NA	0.58 J	160	2200
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	NA	0.21 U	0.35 U	21 U
VINYL ACETATE	0.19 UR	0.19 UR	NA	0.19 UR	0.32 UR	19 UR
VINYL CHLORIDE	0.22 U	0.22 U	NA	0.22 U	120	2200
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-06I	MSA-DMW-06S		MSA-DMW-07D	MSA-DMW-07I	MSA-DMW-07S
SAMPLE ID	MSA-DMW-6I-061013	MSA-DMW-6S-061013	MSA-DMW-6S-061113	MSA-DMW-7D-061013	MSA-DMW-7I-061013	MSA-DMW-7S-061013
SAMPLE DATE	20130610	20130610	20130611	20130610	20130610	20130610
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	0.58 U	0.49 U	NA	0.47 U	15	85
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-06I	MSA-DMW-06S		MSA-DMW-07D	MSA-DMW-07I	MSA-DMW-07S
SAMPLE ID	MSA-DMW-6I-061013	MSA-DMW-6S-061013	MSA-DMW-6S-061113	MSA-DMW-7D-061013	MSA-DMW-7I-061013	MSA-DMW-7S-061013
SAMPLE DATE	20130610	20130610	20130611	20130610	20130610	20130610
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	49 B	NA	NA	NA	7300
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	600	NA	NA	NA	390 J
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.28 J	0.22 J	NA	0.29 J	2.6	0.11 U
ARSENIC	1.7 B	7.4	NA	4.3 J	5.3	2.2 J
BARIUM	12	40	NA	44	46	12
BERYLLIUM	3.7	0.27 B	NA	0.92 B	4.7	0.55 B
CADMIUM	4.5	0.026 U	NA	1.7	34	0.39 J
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	100	0.86 J	NA	55	24	0.3 J
COBALT	70	5.5	NA	12	94	18
COPPER	76	1.7 B	NA	58	1100	3.8
IRON	NA	NA	NA	NA	NA	NA
LEAD	2.3 B	0.6 B	NA	170	32	0.68 B
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	NA	0.22	0.19 J	0.12 U
MOLYBDENUM	3.6 J	0.81 U	NA	1.8 J	7.5 J	0.81 U
NICKEL	61	4.4	NA	23	79	16
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	3.2 J	1.1 J	NA	0.66 J	11	3.5 J
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	0.034 B	0.02 B	NA	0.27 B	0.72 J	0.011 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	NA	0.4 U	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-06I	MSA-DMW-06S		MSA-DMW-07D	MSA-DMW-07I	MSA-DMW-07S
SAMPLE ID	MSA-DMW-6I-061013	MSA-DMW-6S-061013	MSA-DMW-6S-061113	MSA-DMW-7D-061013	MSA-DMW-7I-061013	MSA-DMW-7S-061013
SAMPLE DATE	20130610	20130610	20130611	20130610	20130610	20130610
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TUNGSTEN	0.22 B	0.017 U	NA	0.92 J	3 J	0.017 U
VANADIUM	2.4 B	1.1 B	NA	1.1 B	15	0.83 B
ZINC	190	13 B	NA	89 B	400	17 B
DISSOLVED METALS (UG/L)						
ANTIMONY	0.13 J	0.22 J	NA	0.11 U	0.55 J	0.11 U
ARSENIC	1.4 B	7.3	NA	0.25 B	4 J	1.8 J
BARIUM	12	40	NA	42	14	11
BERYLLIUM	4.2	0.22 B	NA	0.75 B	4.6	0.55 B
CADMIUM	3.9	0.026 U	NA	1.6	22	0.33 J
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	15	0.5 J	NA	0.62 J	6.7	0.27 J
COBALT	75	5.6	NA	12	100	17
COPPER	15	0.47 B	NA	32	98	3 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	2.1 B	0.42 B	NA	4.6	14	0.34 B
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	NA	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	0.81 U	NA	0.81 U	0.81 U	0.81 U
NICKEL	64	4.3	NA	24	82	15
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	3 J	1 J	NA	0.42 J	11	3 J
SILVER	0.03 B	0.022 B	NA	0.019 B	0.045 B	0.012 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	NA	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.032 B	0.017 U	NA	0.017 U	0.16 B	0.017 U
VANADIUM	1.3 B	0.88 B	NA	0.65 B	12	0.76 B
ZINC	220	16 B	NA	87 B	370	16 B
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	0.02 UL	NA	NA	NA
PERCHLORATE	NA	NA	NA	NA	0.082 U	NA
RADIONUCLIDES (PCI/L)						
RADIUM	1.93	0.641 J	NA	NA	NA	NA
RADIUM-228	10.8	1.44	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-06I	MSA-DMW-06S		MSA-DMW-07D	MSA-DMW-07I	MSA-DMW-07S
SAMPLE ID	MSA-DMW-6I-061013	MSA-DMW-6S-061013	MSA-DMW-6S-061113	MSA-DMW-7D-061013	MSA-DMW-7I-061013	MSA-DMW-7S-061013
SAMPLE DATE	20130610	20130610	20130611	20130610	20130610	20130610
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	1.1 NJ	68 NJ
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-08I MSA-DMW-8I-061713 20130617 NORMAL GW	MSA-DMW-09D MSA-DMW-9D-061413 20130614 NORMAL GW	MSA-DMW-09I MSA-DMW-9I-061913 20130619 NORMAL GW	MSA-DMW-09I MSA-DMW-9I-061913(PDB) 20130619 NORMAL GW	MSA-DMW-09S MSA-DMW-9S-061413 20130614 NORMAL GW	MSA-DMW-10I MSA-DMW-10I-061213 20130612 NORMAL GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	5.1 U	15 U	29 U	29 U	120 U	0.23 U
1,1,1-TRICHLOROETHANE	4.9 U	15 U	28 U	28 U	110 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	4 U	12 U	23 U	23 U	90 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	6.2 U	19 U	35 U	35 U	140 U	0.28 U
1,1-DICHLOROETHANE	3.3 U	10 U	19 U	19 U	75 U	0.15 U
1,1-DICHLOROETHENE	4.2 U	13 U	24 U	30 J	95 U	0.19 U
1,1-DICHLOROPROPENE	2.9 U	8.7 U	16 U	16 U	65 U	0.13 U
1,2,3-TRICHLOROBENZENE	3.8 U	11 U	21 U	21 U	85 U	0.17 U
1,2,3-TRICHLOROPROPANE	9.6 U	29 U	54 U	54 U	220 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.13 U	0.39 U	0.74 U	0.74 U	96 J	0.0059 U
1,2,4-TRICHLOROBENZENE	3.3 U	10 U	19 U	19 U	75 U	0.15 U
1,2,4-TRIMETHYLBENZENE	2.7 U	8 U	15 U	15 U	170 J	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	15 U	45 U	84 U	84 U	340 U	0.67 U
1,2-DIBROMOETHANE	5.3 U	16 U	30 U	30 U	120 U	0.24 U
1,2-DICHLOROBENZENE	2.9 U	8.7 U	16 U	16 U	65 U	0.13 U
1,2-DICHLOROETHANE	6.2 J	15 U	28 U	28 U	110 U	0.22 U
1,2-DICHLOROPROPANE	4 U	12 U	23 U	23 U	90 U	0.18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	99 J	NA
1,3-DICHLOROBENZENE	3.1 U	9.3 U	18 U	18 U	70 U	0.14 U
1,3-DICHLOROPROPANE	3.6 U	11 U	20 U	20 U	80 U	0.16 U
1,4-DICHLOROBENZENE	2.9 U	8.7 U	16 U	16 U	65 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	2.9 U	8.7 U	16 U	16 U	65 U	0.13 U
2-BUTANONE	13 U	38 U	71 U	71 U	290 U	0.57 U
2-CHLOROETHYL VINYL ETHER	22 UL	66 U	120 U	120 U	500 U	0.99 U
2-CHLOROTOLUENE	2.4 U	7.3 U	14 U	14 U	55 U	0.11 U
2-HEXANONE	9.1 U	27 U	51 U	51 U	210 U	0.41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	4 U	12 U	23 U	23 U	90 U	0.18 U
4-ISOPROPYLTOLUENE	2.7 U	8 U	15 U	15 U	60 U	0.12 U
4-METHYL-2-PENTANONE	7.1 U	21 U	40 U	40 U	160 U	0.32 U
ACETONE	24 U	73 U	140 U	140 U	550 U	1.6 J
BENZENE	3.5 J	13 J	27 J	45 J	350 J	0.13 U
BROMOBENZENE	2.9 U	8.7 U	16 U	16 U	65 U	0.13 U
BROMOCHLOROMETHANE	6.4 U	19 U	36 U	36 U	150 U	0.29 U
BROMODICHLOROMETHANE	3.3 U	10 U	19 U	19 U	75 U	0.15 U
BROMOFORM	14 U	43 U	80 U	80 U	320 U	0.64 U
BROMOMETHANE	9.1 U	27 U	51 U	51 U	210 U	0.41 U
CARBON DISULFIDE	2.9 U	8.7 U	16 U	16 U	65 U	0.13 U
CARBON TETRACHLORIDE	2.9 U	8.7 U	17 J	16 U	65 U	3.3
CHLOROBENZENE	3.3 U	10 U	19 U	19 U	120 J	0.15 U
CHLORODIBROMOMETHANE	4 U	12 U	23 U	23 U	90 U	0.18 U
CHLOROETHANE	6.4 U	19 U	36 U	36 U	150 U	0.29 U
CHLOROFORM	3.6 U	170	21 J	20 U	80 U	0.55 J
CHLOROMETHANE	6.7 U	20 U	38 U	38 U	150 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-08I MSA-DMW-8I-061713 20130617 NORMAL GW	MSA-DMW-09D MSA-DMW-9D-061413 20130614 NORMAL GW	MSA-DMW-09I MSA-DMW-9I-061913 20130619 NORMAL GW	MSA-DMW-09I MSA-DMW-9I-061913(PDB) 20130619 NORMAL GW	MSA-DMW-09S MSA-DMW-9S-061413 20130614 NORMAL GW	MSA-DMW-10I MSA-DMW-10I-061213 20130612 NORMAL GW
CIS-1,2-DICHLOROETHENE	560	350	2300	4600	6800	5.1
CIS-1,3-DICHLOROPROPENE	3.1 U	9.3 U	18 U	18 U	70 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	6.2 U	19 U	35 U	35 U	140 U	0.28 U
DICHLORODIFLUOROMETHANE	6.9 U	21 U	39 U	39 U	160 U	0.31 U
DIISOPROPYL ETHER	33 U	100 U	190 U	190 U	750 U	1.5 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	2.4 U	7.3 U	14 U	14 U	55 U	0.11 U
ETHYLBENZENE	3.8 U	11 U	21 U	21 U	1600	0.17 U
HEXACHLOROBUTADIENE	6.7 U	20 U	38 U	38 U	150 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	2.9 U	8.7 U	16 U	16 U	65 U	0.13 U
M+P-XYLENES	5.3 U	16 U	30 U	30 U	16000	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	3.8 U	11 U	21 U	21 U	85 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	13 J	26 J	41 U	41 U	170 U	0.33 U
NAPHTHALENE	5.3 U	16 U	30 U	30 U	120 U	0.24 U
N-BUTYLBENZENE	2.7 U	8 U	15 U	15 U	60 U	0.12 U
N-PROPYLBENZENE	3.1 U	9.3 U	18 U	18 U	70 U	0.14 U
O-XYLENE	3.1 U	9.3 U	18 U	18 U	340 J	0.14 U
SEC-BUTYLBENZENE	2.9 U	8.7 U	16 U	16 U	65 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	2.4 U	7.3 U	14 U	14 U	55 U	0.11 U
TERT-AMYL METHYL ETHER	1.5 U	4.5 U	8.4 U	8.4 U	34 U	0.067 U
TERT-BUTYLBENZENE	2.9 U	8.7 U	16 U	16 U	65 U	0.13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	87 UR	260 UR	490 UR	490 UR	2000 UR	3.9 UR
TETRACHLOROETHENE	6.4 U	19 U	36 U	36 U	150 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	2.9 U	9.9 J	16 U	16 U	2700	0.13 U
TOTAL XYLENES	6.2 U	19 U	35 U	35 U	16000	0.28 U
TRANS-1,2-DICHLOROETHENE	4.2 U	13 U	24 U	24 U	95 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	4.2 U	13 U	24 U	24 U	95 U	0.19 U
TRICHLOROETHENE	670	2600	690	910	85 U	13
TRICHLOROFLUOROMETHANE	4.7 U	14 U	26 U	26 U	110 U	0.21 U
VINYL ACETATE	4.2 UR	13 UR	24 UR	24 UR	95 UR	0.19 UR
VINYL CHLORIDE	280	41 J	740	1800	16000	0.22 U
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-08I MSA-DMW-8I-061713 20130617 NORMAL GW	MSA-DMW-09D MSA-DMW-9D-061413 20130614 NORMAL GW	MSA-DMW-09I MSA-DMW-9I-061913 20130619 NORMAL GW	MSA-DMW-09I MSA-DMW-9I-061913(PDB) 20130619 NORMAL GW	MSA-DMW-09S MSA-DMW-9S-061413 20130614 NORMAL GW	MSA-DMW-10I MSA-DMW-10I-061213 20130612 NORMAL GW
VOLATILE GASES (UG/L)						
ETHANE	NA	0.19 U	5 J	NA	28	NA
ETHENE	NA	4.8	61 J	NA	1800	NA
METHANE	NA	150	510 J	NA	660	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	85	61	160	NA	34	0.48 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-08I MSA-DMW-8I-061713 20130617 NORMAL GW	MSA-DMW-09D MSA-DMW-9D-061413 20130614 NORMAL GW	MSA-DMW-09I MSA-DMW-9I-061913 20130619 NORMAL GW	MSA-DMW-09I MSA-DMW-9I-061913(PDB) 20130619 NORMAL GW	MSA-DMW-09S MSA-DMW-9S-061413 20130614 NORMAL GW	MSA-DMW-10I MSA-DMW-10I-061213 20130612 NORMAL GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	NA	NA	NA	42000	NA
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	NA	NA	NA	2700	NA
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.51 B	0.15 J	1.9 J	NA	0.19 J	1.1 J
ARSENIC	14 J	4.3 J	17 J	NA	2.6 J	8
BARIUM	20 J	44	74 J	NA	82	40
BERYLLIUM	6.9 J	0.93 J	2	NA	0.31 B	0.098 J
CADMIUM	120	0.23 J	3.8 J	NA	0.031 J	0.14 J
CALCIUM	NA	10000	52000 L	NA	61000	NA
CHROMIUM	75 J	1.7 J	41 J	NA	1.6 J	3.4
COBALT	200	360	290 J	NA	0.12 B	1.8
COPPER	85	6.8 J	62 J	NA	3.5 B	11
IRON	NA	16000	15000 J	NA	25000	NA
LEAD	7 J	3.2	32	NA	0.39 J	3.2
MAGNESIUM	NA	7500	26000 J	NA	46000	NA
MANGANESE	NA	3100	4200 J	NA	2600	NA
MERCURY	0.14 J	0.12 U	1.9	NA	0.12 U	0.2
MOLYBDENUM	2 J	0.81 U	3.3 J	NA	0.81 U	2.3 J
NICKEL	140	46	77 J	NA	0.32 B	4.9
POTASSIUM	NA	1100 J	10000 J	NA	11000	NA
SELENIUM	56	0.81 B	9.3 J	NA	1.5 B	1.4 B
SILICON DIOXIDE	NA	10000	57000 J	NA	5500	NA
SILVER	0.069 B	0.0083 U	0.24 J	NA	0.0083 U	0.42 J
SODIUM	NA	36000	77000 J	NA	150000	NA
THALLIUM	0.4 U	0.4 U	0.67 J	NA	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-08I MSA-DMW-8I-061713 20130617 NORMAL GW	MSA-DMW-09D MSA-DMW-9D-061413 20130614 NORMAL GW	MSA-DMW-09I MSA-DMW-9I-061913 20130619 NORMAL GW	MSA-DMW-09I MSA-DMW-9I-061913(PDB) 20130619 NORMAL GW	MSA-DMW-09S MSA-DMW-9S-061413 20130614 NORMAL GW	MSA-DMW-10I MSA-DMW-10I-061213 20130612 NORMAL GW
TUNGSTEN	0.37 B	0.056 B	1.8 J	NA	0.034 B	0.051 B
VANADIUM	20 J	3.6 B	61 J	NA	11	22
ZINC	420	110 J	340 J	NA	13 B	24 B
DISSOLVED METALS (UG/L)						
ANTIMONY	0.26 B	0.11 U	0.22 J	NA	0.13 J	0.86 J
ARSENIC	12 J	4.1 J	3.3 J	NA	2 J	7.8
BARIUM	11 J	46	28 J	NA	87	38
BERYLLIUM	7.1 J	0.75 J	0.89 J	NA	0.18 B	0.062 J
CADMIUM	120	0.11 J	0.66 J	NA	0.026 U	0.026 U
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	5.9 J	0.72 J	0.64 J	NA	1.5 J	2.3
COBALT	180	370	280 J	NA	0.11 B	1.6
COPPER	29	1.2 B	2.5 B	NA	1.1 B	6.7
IRON	NA	NA	NA	NA	NA	NA
LEAD	4.6 J	1.3	0.57 J	NA	0.23 J	1.3
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.13 J	0.12 U	0.12 U	NA	0.12 U	0.12 U
MOLYBDENUM	0.81 U	0.81 U	0.81 UJ	NA	0.81 U	2.2 J
NICKEL	120	48	62 J	NA	0.34 B	4.7
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	49	0.73 B	4.6 J	NA	1.3 B	1.3 B
SILVER	0.019 B	0.0083 U	0.0083 UJ	NA	0.0083 U	0.1 J
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	NA	0.4 U	0.4 U
TUNGSTEN	0.19 B	0.017 U	0.042 B	NA	0.017 U	0.032 B
VANADIUM	5 B	2.4 B	0.47 J	NA	12	19
ZINC	440	94 J	110 J	NA	9.3 B	18 B
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	6.8	130	NA	420	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	57	130	NA	180	NA
DISSOLVED ORGANIC CARBON	NA	2.4	8	NA	20	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	0.26	0.023 U	NA	0.12 U	NA
NITRITE-N	NA	0.012 U	0.012 U	NA	0.06 U	NA
ORTHOPHOSPHATE-P	NA	0.98 J	0.044 UL	NA	0.32 B	NA
SULFATE	NA	110	260	NA	52	NA
TOTAL DISSOLVED SOLIDS	NA	NA	680	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.02 UL	NA	NA	NA	NA	NA
PERCHLORATE	NA	NA	NA	NA	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-08I	MSA-DMW-09D	MSA-DMW-09I	MSA-DMW-09I	MSA-DMW-09S	MSA-DMW-10I
SAMPLE ID	MSA-DMW-8I-061713	MSA-DMW-9D-061413	MSA-DMW-9I-061913	MSA-DMW-9I-061913(PDB)	MSA-DMW-9S-061413	MSA-DMW-10I-061213
SAMPLE DATE	20130617	20130614	20130619	20130619	20130614	20130612
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-10S	MSA-DMW-11I	MSA-DMW-11S	MSA-MW-03	MSA-MW-04	MSA-MW-04
SAMPLE ID	MSA-DMW-10S-061213	MSA-DMW-11I-061913	MSA-DMW-11S-061813	MSA-MW-3-061913	MSA-MW4-062013	MSA-MW4D-062013-PDB
SAMPLE DATE	20130612	20130619	20130618	20130619	20130620	20130620
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.58 U	0.77 U	190 U	0.92 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.55 U	0.73 U	180 U	0.88 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.45 U	0.6 U	150 U	0.72 U	0.18 U	0.18 U
1,1,2-TRICHLOROETHANE	2.2 J	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.7 U	0.93 U	230 U	1.1 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.38 U	0.5 U	120 U	0.6 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.48 U	0.75 J	260 J	0.76 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.33 U	0.43 U	110 U	0.52 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.43 U	0.57 U	140 U	0.68 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	1.1 U	1.4 U	360 U	1.7 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.015 U	0.02 U	4.9 U	0.024 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.38 U	0.5 U	120 U	0.6 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.3 U	0.4 U	100 U	0.48 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	1.7 U	2.2 U	560 U	2.7 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.6 U	0.8 U	200 U	0.96 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	1.7 J	0.43 U	110 U	0.52 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.6 J	0.73 U	180 U	0.88 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.45 U	0.6 U	150 U	0.72 U	0.18 U	0.18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.35 U	0.47 U	120 U	0.56 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.61 J	0.53 U	130 U	0.64 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.33 U	0.43 U	110 U	0.52 U	0.13 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.33 U	0.43 U	110 U	0.52 U	0.13 U	0.13 U
2-BUTANONE	1.4 U	1.9 U	470 U	2.3 U	0.57 UR	0.62 J
2-CHLOROETHYL VINYL ETHER	2.5 U	3.3 UR	820 U	4 U	0.99 U	0.99 U
2-CHLOROTOLUENE	0.28 U	0.37 U	92 U	0.44 U	0.11 U	0.11 U
2-HEXANONE	1 U	1.4 U	340 U	1.6 U	0.41 U	0.41 U
2-METHYLBUTANE	9.3 NJ	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.45 U	0.6 U	150 U	0.72 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.3 U	0.4 U	100 U	0.48 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.8 U	1.1 U	270 U	1.3 U	0.32 U	0.32 U
ACETONE	4.7 J	3.7 U	920 U	4.4 U	1.4 B	5.6 B
BENZENE	2.4 J	0.43 U	110 U	0.52 U	0.13 U	0.13 U
BROMOBENZENE	0.33 U	0.43 U	110 U	0.52 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.73 U	0.97 U	240 U	1.2 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.38 U	0.5 U	120 U	0.6 U	0.15 U	0.15 U
BROMOFORM	1.6 U	2.1 U	530 U	2.6 U	0.64 U	0.64 U
BROMOMETHANE	1 U	1.4 U	340 U	1.6 U	0.41 U	0.41 U
CARBON DISULFIDE	0.33 U	0.43 U	110 U	0.52 U	0.13 U	0.13 U
CARBON TETRACHLORIDE	0.33 U	0.43 U	110 U	0.52 U	0.13 U	0.13 U
CHLOROBENZENE	0.38 U	0.5 U	120 U	0.6 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.45 U	0.6 U	150 U	0.72 U	0.18 U	0.18 U
CHLOROETHANE	0.73 U	0.97 U	240 U	1.2 U	0.29 U	0.29 U
CHLOROFORM	0.4 U	1.4 J	130 U	0.64 U	0.16 U	0.16 U
CHLOROMETHANE	0.75 U	1 U	250 U	1.2 U	0.3 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-10S	MSA-DMW-11I	MSA-DMW-11S	MSA-MW-03	MSA-MW-04	MSA-MW-04
SAMPLE ID	MSA-DMW-10S-061213	MSA-DMW-11I-061913	MSA-DMW-11S-061813	MSA-MW-3-061913	MSA-MW4-062013	MSA-MW4D-062013-PDB
SAMPLE DATE	20130612	20130619	20130618	20130619	20130620	20130620
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
CIS-1,2-DICHLOROETHENE	0.43 U	95 J	26000	100	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.35 U	0.47 U	120 U	0.56 U	0.14 U	0.14 U
CYCLOHEXANE	2.3 NJ	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.7 U	0.93 U	230 U	1.1 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.78 U	1 U	260 U	1.2 U	0.31 U	0.31 U
DIISOPROPYL ETHER	3.8 U	5 U	1200 U	6 U	1.5 U	1.5 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	0.28 U	0.37 U	92 U	0.44 U	0.11 UJ	0.11 U
ETHYLBENZENE	0.43 U	0.57 U	140 U	0.68 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.75 U	1 U	250 U	1.2 U	0.3 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.33 U	0.43 U	110 U	0.52 U	0.13 U	0.13 U
M+P-XYLENES	0.6 U	0.8 U	200 U	0.96 U	0.24 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	0.38 J
METHYL CYCLOHEXANE	2 NJ	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.43 U	0.57 U	140 U	0.68 U	0.17 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.83 U	1.1 U	270 U	1.3 U	0.33 U	0.33 U
NAPHTHALENE	0.6 U	0.8 U	200 U	0.96 U	0.24 U	0.24 U
N-BUTYLBENZENE	0.3 U	0.4 U	100 U	0.48 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.35 U	0.47 U	120 U	0.56 U	0.14 U	0.14 U
O-XYLENE	0.35 U	0.47 U	120 U	0.56 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.76 J	0.43 U	110 U	0.52 U	0.13 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	0.28 U	0.37 U	92 U	0.44 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.17 U	0.22 U	56 U	0.27 U	0.067 UJ	0.067 U
TERT-BUTYLBENZENE	0.63 J	0.43 U	110 U	0.52 U	0.13 U	0.13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	9.8 UR	13 UR	3200 UR	16 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.73 U	0.97 U	240 U	1.2 U	0.29 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	0.33 U	0.43 U	550 J	0.52 U	0.13 U	0.13 U
TOTAL XYLENES	0.7 U	0.93 U	230 U	1.1 U	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.95 J	0.63 U	160 U	0.76 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.48 U	0.63 U	160 U	0.76 U	0.19 U	0.19 U
TRICHLOROETHENE	0.43 U	56	8200	6.6	0.17 U	0.17 U
TRICHLOROFLUOROMETHANE	0.53 U	0.7 U	170 U	0.84 U	0.21 U	0.21 U
VINYL ACETATE	0.48 UR	0.63 UR	160 UR	0.76 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	74	8.3	7700	12	0.22 U	0.37 J
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-10S MSA-DMW-10S-061213 20130612 NORMAL GW	MSA-DMW-11I MSA-DMW-11I-061913 20130619 NORMAL GW	MSA-DMW-11S MSA-DMW-11S-061813 20130618 NORMAL GW	MSA-MW-03 MSA-MW-3-061913 20130619 NORMAL GW	MSA-MW-04 MSA-MW4-062013 20130620 NORMAL GW	MSA-MW-04 MSA-MW4D-062013-PDB 20130620 NORMAL GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	40	NA	NA	NA
ETHENE	NA	NA	180	NA	NA	NA
METHANE	NA	NA	340	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	15	0.47 U	8	10	0.49 U	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-10S MSA-DMW-10S-061213 20130612 NORMAL GW	MSA-DMW-11I MSA-DMW-11I-061913 20130619 NORMAL GW	MSA-DMW-11S MSA-DMW-11S-061813 20130618 NORMAL GW	MSA-MW-03 MSA-MW-3-061913 20130619 NORMAL GW	MSA-MW-04 MSA-MW4-062013 20130620 NORMAL GW	MSA-MW-04 MSA-MW4D-062013-PDB 20130620 NORMAL GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	130 B	NA	20000 R	130 B	57 B	NA
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	810	NA	1700	230 U	280 J	NA
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.33 J	0.36 J	0.18 B	0.11 U	2.2	NA
ARSENIC	16	6.6	6.3	1.6 J	1.3 B	NA
BARIUM	34	14	51	71	51	NA
BERYLLIUM	0.11 J	0.78 B	0.25 B	0.22 B	0.13 B	NA
CADMIUM	0.026 U	0.25 J	0.026 U	0.38 J	19	NA
CALCIUM	NA	NA	98000	NA	NA	NA
CHROMIUM	2.6	8.1 J	0.92 B	1.1 J	2	NA
COBALT	2.3	1.8 J	12	9.7 J	5.3	NA
COPPER	2.7 B	7.5	1.1 B	10	91	NA
IRON	NA	NA	34000	NA	NA	NA
LEAD	0.47 B	3.1	0.27 J	0.65 B	7.5	NA
MAGNESIUM	NA	NA	23000	NA	NA	NA
MANGANESE	NA	NA	830	NA	NA	NA
MERCURY	0.12 U	2.2	0.12 U	0.12 U	0.12 U	NA
MOLYBDENUM	0.81 U	1.4 J	0.81 U	0.81 U	5.5 J	NA
NICKEL	0.82 J	2.7	3.3	4.7	96	NA
POTASSIUM	NA	NA	6200	NA	NA	NA
SELENIUM	1.1 B	1 J	1.4 J	0.35 J	0.58 J	NA
SILICON DIOXIDE	NA	NA	3400 J	NA	NA	NA
SILVER	0.032 J	0.051 B	0.011 B	0.023 B	2.1	NA
SODIUM	NA	NA	8800	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-10S MSA-DMW-10S-061213 20130612 NORMAL GW	MSA-DMW-11I MSA-DMW-11I-061913 20130619 NORMAL GW	MSA-DMW-11S MSA-DMW-11S-061813 20130618 NORMAL GW	MSA-MW-03 MSA-MW-3-061913 20130619 NORMAL GW	MSA-MW-04 MSA-MW4-062013 20130620 NORMAL GW	MSA-MW-04 MSA-MW4D-062013-PDB 20130620 NORMAL GW
TUNGSTEN	0.017 U	0.55 J	0.017 U	0.042 B	1.5 J	NA
VANADIUM	2.8 B	19	1.6 B	1.2 B	1.6 B	NA
ZINC	13 B	37 B	150	81 B	2500	NA
DISSOLVED METALS (UG/L)						
ANTIMONY	0.26 J	0.28 J	0.15 B	0.11 U	1.1 J	NA
ARSENIC	16	4.6 J	6.3	1.3 B	1.1 B	NA
BARIUM	33	3.5 B	52	63	49	NA
BERYLLIUM	0.12 J	0.68 B	0.27 B	0.19 B	0.1 B	NA
CADMIUM	0.026 U	0.26 J	0.026 U	0.16 J	11	NA
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	1.2 J	0.74 B	0.91 B	0.71 B	0.44 B	NA
COBALT	2.3	1.8	13	8.4	5.1	NA
COPPER	2.1 B	0.86 B	0.95 B	1.8 B	15	NA
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.26 B	0.78 B	0.23 J	0.33 B	0.75 B	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	NA
MOLYBDENUM	0.81 U	1 J	0.81 U	0.81 U	5.2 J	NA
NICKEL	0.93 J	2.3	5.2	6.5	93	NA
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	0.96 B	0.81 J	1.4 J	0.34 U	0.53 J	NA
SILVER	0.0083 U	0.049 B	0.009 B	0.009 B	0.55 J	NA
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	NA
TUNGSTEN	0.017 U	0.26 B	0.017 U	0.028 B	0.56 J	NA
VANADIUM	1.6 B	2.9 B	1.5 B	0.97 B	0.97 B	NA
ZINC	19 B	26 B	150	74 B	2300	NA
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	210	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	65	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	15	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	0.023 U	NA	NA	NA
NITRITE-N	NA	NA	0.012 U	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	0.044 UJ	NA	NA	NA
SULFATE	NA	NA	130	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	490	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	NA
PERCHLORATE	NA	NA	NA	NA	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-10S MSA-DMW-10S-061213 20130612 NORMAL GW	MSA-DMW-11I MSA-DMW-11I-061913 20130619 NORMAL GW	MSA-DMW-11S MSA-DMW-11S-061813 20130618 NORMAL GW	MSA-MW-03 MSA-MW-3-061913 20130619 NORMAL GW	MSA-MW-04 MSA-MW4-062013 20130620 NORMAL GW	MSA-MW-04 MSA-MW4D-062013-PDB 20130620 NORMAL GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-05	MSA-MW-05
SAMPLE ID	MSA-MW4I-062013	MSA-MW4I-062013-PDB	MSA-MW4S-062013	MSA-MW4S-062013-PDB	MSA-MW5D-062013	MSA-MW5D-062013-PDB
SAMPLE DATE	20130620	20130620	20130620	20130620	20130620	20130620
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	29 U	23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	28 U	22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	23 U	18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	35 U	28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	19 U	15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	24 U	19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	21 U	17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	54 U	43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.74 U	0.59 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	19 U	15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	15 U	12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	84 U	67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	30 U	24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	28 U	22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	23 U	18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	18 U	14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	20 U	16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	26 J	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
2-BUTANONE	0.57 UR	0.57 U	0.66 J	0.57 U	71 U	57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	120 U	99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	14 U	11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	51 U	41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	23 U	18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	15 U	12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	40 U	32 U
ACETONE	1.1 U	7.4 B	5.4 B	3.1 B	140 U	110 U
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	36 U	29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	19 U	15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	80 U	64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	51 U	41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	19 U	15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	23 U	18 U
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	36 U	29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	20 U	16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	38 U	30 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-05	MSA-MW-05
SAMPLE ID	MSA-MW4I-062013	MSA-MW4I-062013-PDB	MSA-MW4S-062013	MSA-MW4S-062013-PDB	MSA-MW5D-062013	MSA-MW5D-062013-PDB
SAMPLE DATE	20130620	20130620	20130620	20130620	20130620	20130620
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
CIS-1,2-DICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U	4000	3800
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	18 U	14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	35 U	28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	39 U	31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	190 U	150 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	0.11 UJ	0.11 U	0.11 U	0.11 U	14 U	11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	21 U	17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	38 U	30 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	30 U	24 U
METHYL ACETATE	NA	NA	NA	0.41 J	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	21 U	17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	78 B	47 B
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	30 U	24 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	15 U	12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	18 U	14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	18 U	14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	14 U	11 U
TERT-AMYL METHYL ETHER	0.067 UJ	0.067 U	0.067 U	0.067 U	8.4 U	6.7 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	4.9 J	490 UR	390 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	36 U	29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	16 U	13 U
TOTAL XYLENES	0.28 U	0.28 U	0.28 U	0.28 U	35 U	28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	68 J	66 J
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	24 U	19 U
TRICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U	21 U	17 U
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	26 U	21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	24 UR	19 UR
VINYL CHLORIDE	0.22 U	0.28 J	0.22 U	0.22 U	590	610
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-05	MSA-MW-05
SAMPLE ID	MSA-MW4I-062013	MSA-MW4I-062013-PDB	MSA-MW4S-062013	MSA-MW4S-062013-PDB	MSA-MW5D-062013	MSA-MW5D-062013-PDB
SAMPLE DATE	20130620	20130620	20130620	20130620	20130620	20130620
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	NA	NA	NA	NA	7	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-05	MSA-MW-05
SAMPLE ID	MSA-MW4I-062013	MSA-MW4I-062013-PDB	MSA-MW4S-062013	MSA-MW4S-062013-PDB	MSA-MW5D-062013	MSA-MW5D-062013-PDB
SAMPLE DATE	20130620	20130620	20130620	20130620	20130620	20130620
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	NA	NA	NA	2000	NA
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	NA	NA	NA	1300	NA
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	NA	NA	NA	NA	0.18 B	NA
ARSENIC	NA	NA	NA	NA	1.5 J	NA
BARIUM	NA	NA	NA	NA	19	NA
BERYLLIUM	NA	NA	NA	NA	0.19 B	NA
CADMIUM	NA	NA	NA	NA	0.22 J	NA
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	2.1	NA
COBALT	NA	NA	NA	NA	0.54 J	NA
COPPER	NA	NA	NA	NA	5.7	NA
IRON	NA	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	1.3	NA
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	NA	NA	NA	NA	0.12 U	NA
MOLYBDENUM	NA	NA	NA	NA	2.1 J	NA
NICKEL	NA	NA	NA	NA	2.2	NA
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	NA	NA	NA	NA	1.2 J	NA
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	NA	NA	NA	NA	0.015 B	NA
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	NA	NA	NA	NA	0.4 U	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-05	MSA-MW-05
SAMPLE ID	MSA-MW4I-062013	MSA-MW4I-062013-PDB	MSA-MW4S-062013	MSA-MW4S-062013-PDB	MSA-MW5D-062013	MSA-MW5D-062013-PDB
SAMPLE DATE	20130620	20130620	20130620	20130620	20130620	20130620
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TUNGSTEN	NA	NA	NA	NA	0.094 B	NA
VANADIUM	NA	NA	NA	NA	3.7 B	NA
ZINC	NA	NA	NA	NA	35 B	NA
DISSOLVED METALS (UG/L)						
ANTIMONY	NA	NA	NA	NA	0.11 B	NA
ARSENIC	NA	NA	NA	NA	1 B	NA
BARIUM	NA	NA	NA	NA	17	NA
BERYLLIUM	NA	NA	NA	NA	0.079 B	NA
CADMIUM	NA	NA	NA	NA	0.026 U	NA
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	0.27 B	NA
COBALT	NA	NA	NA	NA	0.18 B	NA
COPPER	NA	NA	NA	NA	1.2 B	NA
IRON	NA	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	0.28 B	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	NA	NA	NA	NA	0.12 U	NA
MOLYBDENUM	NA	NA	NA	NA	1.7 J	NA
NICKEL	NA	NA	NA	NA	0.56 J	NA
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	NA	NA	NA	NA	0.73 J	NA
SILVER	NA	NA	NA	NA	0.009 B	NA
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	NA	NA	NA	NA	0.4 U	NA
TUNGSTEN	NA	NA	NA	NA	0.017 U	NA
VANADIUM	NA	NA	NA	NA	1.3 B	NA
ZINC	NA	NA	NA	NA	5.5 B	NA
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	NA
PERCHLORATE	NA	NA	NA	NA	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-04	MSA-MW-05	MSA-MW-05
SAMPLE ID	MSA-MW4I-062013	MSA-MW4I-062013-PDB	MSA-MW4S-062013	MSA-MW4S-062013-PDB	MSA-MW5D-062013	MSA-MW5D-062013-PDB
SAMPLE DATE	20130620	20130620	20130620	20130620	20130620	20130620
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-05	MSA-MW-05	MSA-MW-05	MSA-MW-05S	MSA-MW-06	MSA-MW-14D
SAMPLE ID	MSA-MW5I-062013	MSA-MW5I-062013-PDB	MSA-MW5S-062013	MSA-MW5S-062013-PDB	MSA-MW-6-061113	MSA-MW-14D-053013
SAMPLE DATE	20130620	20130620	20130620	20130620	20130611	20130530
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	29 U	12 U	29 U	12 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	28 U	11 U	28 U	11 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	23 U	9 U	23 U	9 U	0.18 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	35 U	14 U	35 U	14 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	19 U	7.5 U	19 U	7.5 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	24 U	9.5 U	24 U	9.5 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	21 U	8.5 U	21 U	8.5 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	54 U	22 U	54 U	22 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.74 U	0.3 U	0.74 U	0.3 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	19 U	7.5 U	19 U	7.5 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	15 U	6 U	15 U	6 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	84 U	34 U	84 U	34 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	30 U	12 U	30 U	12 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	28 U	11 U	28 U	11 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	23 U	9 U	23 U	9 U	0.18 U	0.18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	18 U	7 U	18 U	7 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	20 U	8 U	20 U	8 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	76 J	NA
2,2-DICHLOROPROPANE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
2-BUTANONE	71 UR	29 UR	71 UR	29 UR	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	120 U	50 U	120 U	50 U	0.99 UR	0.99 U
2-CHLOROTOLUENE	14 U	5.5 U	14 U	5.5 U	0.11 U	0.11 U
2-HEXANONE	51 U	21 U	51 U	21 U	0.41 U	0.41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	23 U	9 U	23 U	9 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	15 U	6 U	15 U	6 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	40 U	16 U	40 U	16 U	0.32 U	0.32 U
ACETONE	140 U	55 U	140 U	55 U	3.5 B	1.1 U
BENZENE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
BROMOBENZENE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	36 U	15 U	36 U	15 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	19 U	7.5 U	19 U	7.5 U	0.15 U	0.15 U
BROMOFORM	80 U	32 U	80 U	32 U	0.64 U	0.64 U
BROMOMETHANE	51 U	21 U	51 U	21 U	0.41 U	0.41 U
CARBON DISULFIDE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
CARBON TETRACHLORIDE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
CHLOROBENZENE	19 U	7.5 U	19 U	7.5 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	23 U	9 U	23 U	9 U	0.18 U	0.18 U
CHLOROETHANE	36 U	15 U	36 U	15 U	0.29 U	0.29 U
CHLOROFORM	20 U	8 U	20 U	8 U	0.16 U	0.16 U
CHLOROMETHANE	38 U	15 U	38 U	15 U	0.3 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-05 MSA-MW5I-062013 20130620 NORMAL GW	MSA-MW-05 MSA-MW5I-062013-PDB 20130620 NORMAL GW	MSA-MW-05 MSA-MW5S-062013 20130620 NORMAL GW	MSA-MW-05S MSA-MW5S-062013-PDB 20130620 NORMAL GW	MSA-MW-06 MSA-MW-6-061113 20130611 NORMAL GW	MSA-MW-14D MSA-MW-14D-053013 20130530 NORMAL GW
CIS-1,2-DICHLOROETHENE	3600	3600	3700	3400	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	18 U	7 U	18 U	7 U	0.14 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	35 U	14 U	35 U	14 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	39 U	16 U	39 U	16 U	0.31 U	0.31 U
DIISOPROPYL ETHER	190 U	75 U	190 U	75 U	1.5 U	1.5 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	14 UJ	5.5 UJ	14 UJ	5.5 UJ	0.11 U	0.11 U
ETHYLBENZENE	21 U	8.5 U	21 U	8.5 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	38 U	15 U	38 U	15 U	0.3 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
M+P-XYLENES	30 U	12 U	30 U	12 U	0.24 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	0.67 J	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	21 U	8.5 U	21 U	8.5 U	0.17 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	110 B	44 B	120 B	44 B	0.63 B	0.33 U
NAPHTHALENE	30 U	12 U	30 U	12 U	0.24 U	0.24 U
N-BUTYLBENZENE	15 U	6 U	15 U	6 U	0.12 U	0.12 U
N-PROPYLBENZENE	18 U	7 U	18 U	7 U	0.14 U	0.14 U
O-XYLENE	18 U	7 U	18 U	7 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	2.8 R
STYRENE	14 U	5.5 U	14 U	5.5 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	8.4 UJ	3.4 UJ	8.4 UJ	3.4 UJ	0.067 U	0.067 U
TERT-BUTYLBENZENE	16 U	6.5 U	16 U	6.5 U	0.13 U	0.13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	490 UR	200 UR	490 UR	200 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	36 U	15 U	36 U	15 U	0.29 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	16 U	6.5 U	16 U	6.5 U	0.17 B	0.13 U
TOTAL XYLENES	35 U	14 U	35 U	14 U	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	71 J	73	72 J	71	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	24 U	9.5 U	24 U	9.5 U	0.19 U	0.19 U
TRICHLOROETHENE	36 J	8.5 U	21 U	8.5 U	0.17 U	0.17 U
TRICHLOROFLUOROMETHANE	26 U	11 U	26 U	11 U	0.21 U	0.21 U
VINYL ACETATE	24 UR	9.5 UR	24 UR	9.5 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	680	620	650	560	0.22 U	0.22 U
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-05 MSA-MW5I-062013 20130620 NORMAL GW	MSA-MW-05 MSA-MW5I-062013-PDB 20130620 NORMAL GW	MSA-MW-05 MSA-MW5S-062013 20130620 NORMAL GW	MSA-MW-05S MSA-MW5S-062013-PDB 20130620 NORMAL GW	MSA-MW-06 MSA-MW-6-061113 20130611 NORMAL GW	MSA-MW-14D MSA-MW-14D-053013 20130530 NORMAL GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	NA	NA	NA	NA	1.1	0.47 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-05 MSA-MW5I-062013 20130620 NORMAL GW	MSA-MW-05 MSA-MW5I-062013-PDB 20130620 NORMAL GW	MSA-MW-05 MSA-MW5S-062013 20130620 NORMAL GW	MSA-MW-05S MSA-MW5S-062013-PDB 20130620 NORMAL GW	MSA-MW-06 MSA-MW-6-061113 20130611 NORMAL GW	MSA-MW-14D MSA-MW-14D-053013 20130530 NORMAL GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	NA	NA	NA	68 B	NA
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	NA	NA	NA	380 J	NA
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	NA	NA	NA	NA	0.11 U	0.11 U
ARSENIC	NA	NA	NA	NA	4.2 J	0.6 B
BARIUM	NA	NA	NA	NA	12	7
BERYLLIUM	NA	NA	NA	NA	2.1	0.37 B
CADMIUM	NA	NA	NA	NA	2.2	0.049 J
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	1.4 J	2.3 K
COBALT	NA	NA	NA	NA	61	8.6
COPPER	NA	NA	NA	NA	4.7	5.8
IRON	NA	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	1.4	0.51 B
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	NA	NA	NA	NA	0.12 U	0.12 U
MOLYBDENUM	NA	NA	NA	NA	0.81 U	0.81 U
NICKEL	NA	NA	NA	NA	44	16
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	NA	NA	NA	NA	5.4	0.44 B
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	NA	NA	NA	NA	0.01 B	0.015 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	NA	NA	NA	NA	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-05 MSA-MW5I-062013 20130620 NORMAL GW	MSA-MW-05 MSA-MW5I-062013-PDB 20130620 NORMAL GW	MSA-MW-05 MSA-MW5S-062013 20130620 NORMAL GW	MSA-MW-05S MSA-MW5S-062013-PDB 20130620 NORMAL GW	MSA-MW-06 MSA-MW-6-061113 20130611 NORMAL GW	MSA-MW-14D MSA-MW-14D-053013 20130530 NORMAL GW
TUNGSTEN	NA	NA	NA	NA	0.017 U	0.017 B
VANADIUM	NA	NA	NA	NA	20	1.1 B
ZINC	NA	NA	NA	NA	130	56 B
DISSOLVED METALS (UG/L)						
ANTIMONY	NA	NA	NA	NA	0.11 U	0.11 U
ARSENIC	NA	NA	NA	NA	2.4 B	0.063 U
BARIUM	NA	NA	NA	NA	11	5.8
BERYLLIUM	NA	NA	NA	NA	1.7	0.26 B
CADMIUM	NA	NA	NA	NA	2.1	0.026 U
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	0.91 B	0.2 J
COBALT	NA	NA	NA	NA	63	8.8
COPPER	NA	NA	NA	NA	1.7 B	0.83 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	0.35 B	0.14 U
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	NA	NA	NA	NA	0.12 U	0.12 U
MOLYBDENUM	NA	NA	NA	NA	0.81 U	0.81 U
NICKEL	NA	NA	NA	NA	48	16
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	NA	NA	NA	NA	5	0.34 U
SILVER	NA	NA	NA	NA	0.0083 U	0.0083 U
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	NA	NA	NA	NA	0.4 U	0.4 U
TUNGSTEN	NA	NA	NA	NA	0.017 U	0.017 U
VANADIUM	NA	NA	NA	NA	2.3 B	0.15 U
ZINC	NA	NA	NA	NA	140	32 B
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	0.02 UL
PERCHLORATE	NA	NA	NA	NA	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-05	MSA-MW-05	MSA-MW-05	MSA-MW-05S	MSA-MW-06	MSA-MW-14D
SAMPLE ID	MSA-MW5I-062013	MSA-MW5I-062013-PDB	MSA-MW5S-062013	MSA-MW5S-062013-PDB	MSA-MW-6-061113	MSA-MW-14D-053013
SAMPLE DATE	20130620	20130620	20130620	20130620	20130611	20130530
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-14I MSA-MW14I-052813 20130528 NORMAL GW	MSA-MW-15D MSA-MW-15D-052813 20130528 NORMAL GW	MSA-MW-15I MSA-MW-15I-052813 20130528 NORMAL GW	MSA-MW-16D MSA-MW-16D-052913 20130529 NORMAL GW	MSA-MW-16I MSA-MW-16I-052913 20130529 NORMAL GW	MSA-MW-16S MSA-MW-16S-052913 20130529 NORMAL GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	9.2 U	0.23 U	4.2 U	0.23 U	5.8 U	1.3 U
1,1,1-TRICHLOROETHANE	8.8 U	0.22 U	4 U	0.22 U	5.5 U	1.3 U
1,1,2,2-TETRACHLOROETHANE	7.2 U	0.18 U	3.3 U	0.18 U	4.5 U	1 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	11 U	0.28 U	5.1 U	0.28 U	7 U	1.6 U
1,1-DICHLOROETHANE	6 U	0.15 U	2.7 U	0.15 U	3.8 U	0.86 U
1,1-DICHLOROETHENE	11 J	0.19 U	3.5 U	0.19 U	4.8 U	1.1 U
1,1-DICHLOROPROPENE	5.2 U	0.13 U	2.4 U	0.13 U	3.3 U	0.74 U
1,2,3-TRICHLOROBENZENE	6.8 U	0.17 U	3.1 U	0.17 U	4.3 U	0.97 U
1,2,3-TRICHLOROPROPANE	17 U	0.43 U	7.8 U	0.43 U	11 U	2.5 U
1,2,3-TRIMETHYLBENZENE	0.24 U	0.0059 U	0.11 U	0.0059 U	0.15 U	0.034 U
1,2,4-TRICHLOROBENZENE	6 U	0.15 U	2.7 U	0.15 U	3.8 U	2.5 J
1,2,4-TRIMETHYLBENZENE	4.8 U	0.12 U	2.2 U	0.12 U	3 U	0.69 U
1,2-DIBROMO-3-CHLOROPROPANE	27 U	0.67 U	12 U	0.67 U	17 U	3.8 U
1,2-DIBROMOETHANE	9.6 U	0.24 U	4.4 U	0.24 U	6 U	1.4 U
1,2-DICHLOROBENZENE	5.2 U	0.13 U	2.4 U	0.13 U	3.3 U	3.1 J
1,2-DICHLOROETHANE	8.8 U	0.22 U	4 U	0.22 U	5.5 U	1.3 U
1,2-DICHLOROPROPANE	7.2 U	0.18 U	3.3 U	0.18 U	4.5 U	1 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	5.6 U	0.14 U	2.5 U	0.14 U	3.5 U	1.2 J
1,3-DICHLOROPROPANE	6.4 U	0.16 U	2.9 U	0.16 U	4 U	0.91 U
1,4-DICHLOROBENZENE	5.2 U	0.13 U	2.4 U	0.13 U	3.3 U	1.3 J
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	5.2 U	0.13 U	2.4 U	0.13 U	3.3 U	0.74 U
2-BUTANONE	23 U	0.57 U	10 U	0.57 U	14 U	3.3 U
2-CHLOROETHYL VINYL ETHER	40 U	0.99 U	18 U	0.99 U	25 U	5.7 UR
2-CHLOROTOLUENE	4.4 U	0.11 U	2 U	0.11 U	2.8 U	0.63 U
2-HEXANONE	16 U	0.41 U	7.5 U	0.41 U	10 U	2.3 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	44 J	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	7.2 U	0.18 U	3.3 U	0.18 U	4.5 U	1 U
4-ISOPROPYLTOLUENE	4.8 U	0.12 U	2.2 U	0.12 U	3 U	0.69 U
4-METHYL-2-PENTANONE	13 U	0.32 U	5.8 U	0.32 U	8 U	1.8 U
ACETONE	44 U	1.1 U	20 U	1.1 U	28 U	6.3 U
BENZENE	12 J	0.13 U	2.4 U	0.13 U	3.3 U	8.7
BROMOBENZENE	5.2 U	0.13 U	2.4 U	0.13 U	3.3 U	0.74 U
BROMOCHLOROMETHANE	12 U	0.29 U	5.3 U	0.29 U	7.3 U	1.7 U
BROMODICHLOROMETHANE	6 U	0.15 U	2.7 U	0.15 U	3.8 U	0.86 U
BROMOFORM	26 U	0.64 U	12 U	0.64 U	16 U	3.7 U
BROMOMETHANE	16 U	0.41 U	7.5 U	0.41 U	10 U	2.3 U
CARBON DISULFIDE	5.2 U	0.13 U	2.4 U	0.13 U	3.3 U	0.74 U
CARBON TETRACHLORIDE	5.2 U	0.13 U	2.4 U	0.13 U	3.3 U	0.74 U
CHLOROBENZENE	210	0.15 U	2.7 U	0.15 U	3.8 U	0.86 U
CHLORODIBROMOMETHANE	7.2 U	0.18 U	3.3 U	0.18 U	4.5 U	1 U
CHLOROETHANE	12 U	0.29 U	5.3 U	0.29 U	7.3 U	1.7 U
CHLOROFORM	6.4 U	0.16 U	2.9 U	0.16 U	4 U	0.91 U
CHLOROMETHANE	12 U	0.3 U	5.5 U	0.3 U	7.5 U	1.7 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-14I MSA-MW14I-052813 20130528 NORMAL GW	MSA-MW-15D MSA-MW-15D-052813 20130528 NORMAL GW	MSA-MW-15I MSA-MW-15I-052813 20130528 NORMAL GW	MSA-MW-16D MSA-MW-16D-052913 20130529 NORMAL GW	MSA-MW-16I MSA-MW-16I-052913 20130529 NORMAL GW	MSA-MW-16S MSA-MW-16S-052913 20130529 NORMAL GW
CIS-1,2-DICHLOROETHENE	1300	0.17 U	150	0.17 U	140	51
CIS-1,3-DICHLOROPROPENE	5.6 U	0.14 U	2.5 U	0.14 U	3.5 U	0.8 U
CYCLOHEXANE	5.8 J	NA	NA	NA	NA	NA
DIBROMOMETHANE	11 U	0.28 U	5.1 U	0.28 U	7 U	1.6 U
DICHLORODIFLUOROMETHANE	12 U	0.31 U	5.6 U	0.31 U	7.8 U	1.8 U
DIISOPROPYL ETHER	60 U	1.5 U	27 U	1.5 U	38 U	8.6 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	4.4 U	0.11 U	2 U	0.11 U	2.8 U	0.63 U
ETHYLBENZENE	6.8 U	0.17 U	3.1 U	0.17 U	4.3 U	0.97 U
HEXACHLOROBUTADIENE	12 U	0.3 U	5.5 U	0.3 U	7.5 U	1.7 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	5.2 U	0.13 U	2.4 U	0.13 U	3.3 U	0.74 U
M+P-XYLENES	9.6 U	0.24 U	4.4 U	0.24 U	6 U	1.4 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	6.8 U	0.17 U	3.1 U	0.17 U	4.3 U	0.97 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	0.84 J
METHYLENE CHLORIDE	13 U	0.33 U	6 U	0.33 U	8.3 U	1.9 U
NAPHTHALENE	9.6 U	0.24 U	4.4 U	0.24 U	6 U	1.4 U
N-BUTYLBENZENE	4.8 U	0.12 U	2.2 U	0.12 U	3 U	0.69 U
N-PROPYLBENZENE	5.6 U	0.14 U	2.5 U	0.14 U	3.5 U	0.8 U
O-XYLENE	5.6 U	0.14 U	2.5 U	0.14 U	3.5 U	0.8 U
SEC-BUTYLBENZENE	5.2 U	0.13 U	2.4 U	0.13 U	3.3 U	0.74 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	2.1 R	NA	NA	NA	NA
STYRENE	4.4 U	0.11 U	2 U	0.11 U	2.8 U	0.63 U
TERT-AMYL METHYL ETHER	2.7 U	0.067 U	1.2 U	0.067 U	1.7 U	0.38 U
TERT-BUTYLBENZENE	5.2 U	0.13 U	2.4 U	0.13 U	3.3 U	0.74 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	160 UR	3.9 UR	71 UR	3.9 UR	98 UR	22 UR
TETRACHLOROETHENE	12 U	0.29 U	5.3 U	0.29 U	7.3 U	1.7 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	5.6 J	0.13 U	2.4 U	0.13 U	3.3 U	0.76 B
TOTAL XYLENES	11 U	0.28 U	5.1 U	0.28 U	7 U	1.6 U
TRANS-1,2-DICHLOROETHENE	11 J	0.19 U	3.5 U	0.19 U	4.8 U	1.1 U
TRANS-1,3-DICHLOROPROPENE	7.6 U	0.19 U	3.5 U	0.19 U	4.8 U	1.1 U
TRICHLOROETHENE	8.2 J	0.17 U	510	0.17 U	740	0.97 U
TRICHLOROFLUOROMETHANE	8.4 U	0.21 U	3.8 U	0.21 U	5.3 U	1.2 U
VINYL ACETATE	7.6 UR	0.19 UR	3.5 UR	0.19 UR	4.8 UR	1.1 UR
VINYL CHLORIDE	1000	0.22 U	13 J	0.22 U	14 J	170
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-14I MSA-MW14I-052813 20130528 NORMAL GW	MSA-MW-15D MSA-MW-15D-052813 20130528 NORMAL GW	MSA-MW-15I MSA-MW-15I-052813 20130528 NORMAL GW	MSA-MW-16D MSA-MW-16D-052913 20130529 NORMAL GW	MSA-MW-16I MSA-MW-16I-052913 20130529 NORMAL GW	MSA-MW-16S MSA-MW-16S-052913 20130529 NORMAL GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	63	0.47 U	0.47 U	0.47 U	0.47 U	320
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-14I MSA-MW14I-052813 20130528 NORMAL GW	MSA-MW-15D MSA-MW-15D-052813 20130528 NORMAL GW	MSA-MW-15I MSA-MW-15I-052813 20130528 NORMAL GW	MSA-MW-16D MSA-MW-16D-052913 20130529 NORMAL GW	MSA-MW-16I MSA-MW-16I-052913 20130529 NORMAL GW	MSA-MW-16S MSA-MW-16S-052913 20130529 NORMAL GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	NA	NA	NA	NA	110 B
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	NA	NA	NA	NA	390 J
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.28 J	0.11 U	0.4 J	0.15 J	0.27 J	0.11 U
ARSENIC	23	0.2 B	8.2	1.6 B	32	2.3 J
BARIUM	17	6.6	30	9	30	54
BERYLLIUM	0.2 J	0.17 J	0.47 J	0.24 J	0.92 J	1.1
CADMIUM	0.17 J	0.069 J	0.25 J	0.26 J	0.19 J	0.026 U
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	2.3	1.5 J	8.7	2.6	1.8 J	4.2
COBALT	14	11	26	8.9	30	74
COPPER	2.3 B	5.7	9.6	5.8	2.2 B	0.27 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	1.6	0.22 J	3.7	1.2 B	4.2	0.28 B
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 UL	0.12 U	0.12 U
MOLYBDENUM	0.81 U	0.81 U	2.2 J	0.81 U	0.81 U	0.81 U
NICKEL	11	16	34	12	40	73
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	1.8 J	0.48 J	1.2 J	1.1 B	0.65 J	0.87 J
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	0.025 B	0.0083 U	0.018 B	0.022 B	0.01 B	0.0083 U
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-14I MSA-MW14I-052813 20130528 NORMAL GW	MSA-MW-15D MSA-MW-15D-052813 20130528 NORMAL GW	MSA-MW-15I MSA-MW-15I-052813 20130528 NORMAL GW	MSA-MW-16D MSA-MW-16D-052913 20130529 NORMAL GW	MSA-MW-16I MSA-MW-16I-052913 20130529 NORMAL GW	MSA-MW-16S MSA-MW-16S-052913 20130529 NORMAL GW
TUNGSTEN	0.43 J	0.1 B	0.44 J	0.14 B	0.088 B	0.017 U
VANADIUM	2.3 B	0.96 B	10	4.7 J	2.6 J	3 J
ZINC	23 B	23 B	66 B	55 B	93 B	76 B
DISSOLVED METALS (UG/L)						
ANTIMONY	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ARSENIC	21	0.11 B	0.76 B	0.75 B	23	1.3 J
BARIUM	14	6.3	5.7	5.7	2.8 B	52
BERYLLIUM	0.099 J	0.14 J	0.21 J	0.16 J	0.31 B	0.51 B
CADMIUM	0.033 J	0.069 J	0.11 J	0.049 J	0.026 U	0.026 U
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	0.91 J	0.92 J	1.6 J	0.36 J	0.46 B	2.6
COBALT	14	11	22	8.7	14	70
COPPER	0.49 B	6.1	2.5 B	1.6 B	0.27 B	0.24 U
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.57 J	0.19 J	0.25 J	0.27 B	0.16 B	0.22 B
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 UL	0.12 U	0.12 U
MOLYBDENUM	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
NICKEL	8.6	16	27	12	18	65
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	1.2 J	0.5 J	0.34 U	0.53 B	0.34 U	0.38 B
SILVER	0.0083 U	0.01 B	0.0083 U	0.0083 U	0.0083 U	0.0083 U
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.045 B	0.024 B	0.017 U	0.017 U	0.017 U	0.017 U
VANADIUM	0.56 B	0.27 B	0.65 B	1.7 J	0.36 B	1.6 J
ZINC	3.9 B	27 B	44 B	19 B	34 B	5.9 B
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	0.02 UJ	NA	0.02 UL	NA	NA
PERCHLORATE	NA	0.68	0.28 J	0.43 J	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	0.156 U	0.743 J	0.303 U
RADIUM-228	NA	NA	NA	0.525 J	0.373 U	1.31

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-14I	MSA-MW-15D	MSA-MW-15I	MSA-MW-16D	MSA-MW-16I	MSA-MW-16S
SAMPLE ID	MSA-MW14I-052813	MSA-MW-15D-052813	MSA-MW-15I-052813	MSA-MW-16D-052913	MSA-MW-16I-052913	MSA-MW-16S-052913
SAMPLE DATE	20130528	20130528	20130528	20130529	20130529	20130529
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-17D	MSA-MW-17I	MSA-MW-17S	MSA-MW-18I	MSA-MW-18S	MSA-MW-19D
SAMPLE ID	MSA-DMW-17D-061713	MSA-MW17I-052813	MSA-MW17S-052813	MSA-MW-18I-060613	MSA-MW-18S-060613	MSA-MW-19D-052913
SAMPLE DATE	20130617	20130528	20130528	20130606	20130606	20130529
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	NA	7.7 U	0.23 U	14 U	0.36 U	0.23 U
1,1,1-TRICHLOROETHANE	NA	7.3 U	0.22 U	22 J	0.57 J	0.22 U
1,1,2,2-TETRACHLOROETHANE	NA	6 U	0.18 U	11 U	0.28 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	0.68 J	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	NA	9.3 U	0.28 U	17 U	0.44 U	0.28 U
1,1-DICHLOROETHANE	NA	5 U	0.15 U	9 U	0.24 U	0.15 U
1,1-DICHLOROETHENE	NA	6.3 U	0.19 U	23 J	0.55 J	0.19 U
1,1-DICHLOROPROPENE	NA	4.3 U	0.13 U	7.8 U	0.21 U	0.13 U
1,2,3-TRICHLOROBENZENE	NA	5.7 U	0.17 U	10 U	0.27 U	0.17 U
1,2,3-TRICHLOROPROPANE	NA	14 U	0.43 U	26 U	0.68 U	0.43 U
1,2,3-TRIMETHYLBENZENE	NA	0.2 U	0.0059 U	0.35 U	0.0093 U	0.0059 U
1,2,4-TRICHLOROBENZENE	NA	5 U	0.15 U	130	2 B	0.15 U
1,2,4-TRIMETHYLBENZENE	NA	4 U	0.12 U	7.2 U	0.19 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	NA	22 U	0.67 U	40 U	1.1 U	0.67 U
1,2-DIBROMOETHANE	NA	8 U	0.24 U	14 U	0.38 U	0.24 U
1,2-DICHLOROBENZENE	NA	4.3 U	0.13 U	7.8 U	0.21 U	0.13 U
1,2-DICHLOROETHANE	NA	7.3 U	0.22 U	82	3.3	0.22 U
1,2-DICHLOROPROPANE	NA	6 U	0.18 U	11 U	0.28 U	0.18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	4.7 U	0.14 U	8.4 U	0.22 U	0.14 U
1,3-DICHLOROPROPANE	NA	5.3 U	0.16 U	9.6 U	0.25 U	0.16 U
1,4-DICHLOROBENZENE	NA	4.3 U	0.13 U	9.9 B	0.29 B	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	44 J	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	NA	4.3 U	0.13 U	7.8 U	0.21 U	0.13 U
2-BUTANONE	NA	19 U	0.57 U	34 U	0.9 U	0.57 U
2-CHLOROETHYL VINYL ETHER	NA	33 U	0.99 U	59 UR	1.6 UR	0.99 UR
2-CHLOROTOLUENE	NA	3.7 U	0.11 U	6.6 U	0.17 U	0.11 U
2-HEXANONE	NA	14 U	0.41 U	25 U	0.65 U	0.41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	NA	6 U	0.18 U	11 U	0.28 U	0.18 U
4-ISOPROPYLTOLUENE	NA	4 U	0.12 U	7.2 U	0.19 U	0.12 U
4-METHYL-2-PENTANONE	NA	11 U	0.32 U	19 U	0.51 U	0.32 U
ACETONE	NA	37 U	1.1 U	160 B	6.2 B	1.1 U
BENZENE	NA	4.3 U	0.33 J	22 J	0.51 J	0.13 U
BROMOBENZENE	NA	4.3 U	0.13 U	7.8 U	0.21 U	0.13 U
BROMOCHLOROMETHANE	NA	9.7 U	0.29 U	17 U	0.46 U	0.29 U
BROMODICHLOROMETHANE	NA	5 U	0.15 U	9 U	0.24 U	0.15 U
BROMOFORM	NA	21 U	0.64 U	38 U	1 U	0.64 U
BROMOMETHANE	NA	14 U	0.41 U	25 U	0.65 U	0.41 U
CARBON DISULFIDE	NA	4.3 U	0.13 U	7.8 U	0.21 U	0.13 U
CARBON TETRACHLORIDE	NA	4.3 U	0.13 U	13 J	0.26 J	0.13 U
CHLOROBENZENE	NA	5 U	0.15 U	69	1.5 J	0.15 U
CHLORODIBROMOMETHANE	NA	6 U	0.18 U	11 U	0.28 U	0.18 U
CHLOROETHANE	NA	9.7 U	0.29 U	17 U	0.46 U	0.29 U
CHLOROFORM	NA	5.3 U	0.16 U	45 J	1.2 J	0.16 U
CHLOROMETHANE	NA	10 U	0.3 U	18 U	0.47 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-17D	MSA-MW-17I	MSA-MW-17S	MSA-MW-18I	MSA-MW-18S	MSA-MW-19D
SAMPLE ID	MSA-DMW-17D-061713	MSA-MW17I-052813	MSA-MW17S-052813	MSA-MW-18I-060613	MSA-MW-18S-060613	MSA-MW-19D-052913
SAMPLE DATE	20130617	20130528	20130528	20130606	20130606	20130529
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
CIS-1,2-DICHLOROETHENE	NA	100	1.5	2000	81	0.2 J
CIS-1,3-DICHLOROPROPENE	NA	4.7 U	0.14 U	8.4 U	0.22 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	NA	9.3 U	0.28 U	17 U	0.44 U	0.28 U
DICHLORODIFLUOROMETHANE	NA	10 U	0.31 U	19 U	0.49 U	0.31 U
DIISOPROPYL ETHER	NA	50 U	1.5 U	90 U	2.4 U	1.5 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	NA	3.7 U	0.11 U	6.6 U	0.17 U	0.11 U
ETHYLBENZENE	NA	5.7 U	0.17 U	10 U	0.27 U	0.17 U
HEXACHLOROBUTADIENE	NA	10 U	0.3 U	18 U	0.47 U	0.3 U
HEXANE	NA	NA	NA	19 J	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	NA	4.3 U	0.13 U	7.8 U	0.21 U	0.13 U
M+P-XYLENES	NA	8 U	0.24 U	14 U	0.38 U	0.24 U
METHYL ACETATE	NA	NA	NA	39 J	1.2 J	NA
METHYL CYCLOHEXANE	NA	NA	NA	14 J	0.24 J	NA
METHYL TERT-BUTYL ETHER	NA	5.7 U	0.17 U	10 U	0.27 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	NA	11 U	0.33 U	180 B	3.4 B	0.33 U
NAPHTHALENE	NA	8 U	0.24 U	14 U	0.38 U	0.24 U
N-BUTYLBENZENE	NA	4 U	0.12 U	7.2 U	0.19 U	0.12 U
N-PROPYLBENZENE	NA	4.7 U	0.14 U	8.4 U	0.22 U	0.14 U
O-XYLENE	NA	4.7 U	0.14 U	14 J	0.33 J	0.14 U
SEC-BUTYLBENZENE	NA	4.3 U	0.13 U	7.8 U	0.21 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	1 R	NA	NA	NA
STYRENE	NA	3.7 U	0.11 U	6.6 U	0.17 U	0.11 U
TERT-AMYL METHYL ETHER	NA	2.2 U	0.067 U	4 U	0.11 U	0.067 U
TERT-BUTYLBENZENE	NA	4.3 U	0.13 U	7.8 U	0.21 U	0.13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	NA	130 UR	3.9 UR	230 UR	6.4 J	3.9 UR
TETRACHLOROETHENE	NA	9.7 U	0.29 U	27 J	0.68 J	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	NA	4.3 U	0.13 U	15 B	0.41 B	0.13 U
TOTAL XYLENES	NA	9.3 U	0.28 U	17 U	0.44 U	0.28 U
TRANS-1,2-DICHLOROETHENE	NA	6.3 U	0.19 U	14 J	0.62 J	0.19 U
TRANS-1,3-DICHLOROPROPENE	NA	6.3 U	0.19 U	11 U	0.3 U	0.19 U
TRICHLOROETHENE	NA	840	0.24 J	12000	320	9.9
TRICHLOROFLUOROMETHANE	NA	7 U	0.21 U	13 U	0.33 U	0.21 U
VINYL ACETATE	NA	6.3 UR	0.19 UR	11 UR	0.3 UR	0.19 UR
VINYL CHLORIDE	NA	7.9 J	12	1100	24	0.22 U
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-17D MSA-DMW-17D-061713 20130617 NORMAL GW	MSA-MW-17I MSA-MW17I-052813 20130528 NORMAL GW	MSA-MW-17S MSA-MW17S-052813 20130528 NORMAL GW	MSA-MW-18I MSA-MW-18I-060613 20130606 NORMAL GW	MSA-MW-18S MSA-MW-18S-060613 20130606 NORMAL GW	MSA-MW-19D MSA-MW-19D-052913 20130529 NORMAL GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	9	1.1	NA
ETHENE	NA	NA	NA	88	2.2	NA
METHANE	NA	NA	NA	720	270	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	NA	0.49 U	1.8	230	71	0.49 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-17D MSA-DMW-17D-061713 20130617 NORMAL GW	MSA-MW-17I MSA-MW17I-052813 20130528 NORMAL GW	MSA-MW-17S MSA-MW17S-052813 20130528 NORMAL GW	MSA-MW-18I MSA-MW-18I-060613 20130606 NORMAL GW	MSA-MW-18S MSA-MW-18S-060613 20130606 NORMAL GW	MSA-MW-19D MSA-MW-19D-052913 20130529 NORMAL GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	NA	56 B	NA	230	NA
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	NA	240 J	NA	1100	NA
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	NA	0.11 U	0.11 U	0.32 J	0.18 J	0.12 J
ARSENIC	NA	8.1	8.6	14	2.1 J	2.4 B
BARIUM	NA	12	69	52	52	60
BERYLLIUM	NA	0.26 B	0.12 B	16	0.53 B	2
CADMIUM	NA	0.026 U	0.026 U	220	0.2 B	1.5
CALCIUM	NA	NA	NA	41000	210000	NA
CHROMIUM	NA	0.68 B	1.2 J	11	3.3	8.8
COBALT	NA	21	0.38 J	290	23	250
COPPER	NA	0.79 J	0.95 J	570	2.9 B	0.53 B
IRON	NA	NA	NA	42000	160000	NA
LEAD	NA	0.5 B	0.47 B	7.7	2 B	0.43 B
MAGNESIUM	NA	NA	NA	35000	220000	NA
MANGANESE	NA	NA	NA	3400	3500	NA
MERCURY	NA	0.12 U	0.12 U	0.33	0.12 U	0.12 UL
MOLYBDENUM	NA	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
NICKEL	NA	28	1.3 J	190	14	110
POTASSIUM	NA	NA	NA	6100 J	47000	NA
SELENIUM	NA	0.55 B	0.73 B	35	2.2 B	4.7 J
SILICON DIOXIDE	NA	NA	NA	34000	36000	NA
SILVER	NA	0.0083 U	0.0083 U	0.026 B	0.028 B	0.0083 U
SODIUM	NA	NA	NA	150000	660000	NA
THALLIUM	NA	0.4 U	0.4 U	0.45 J	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-DMW-17D MSA-DMW-17D-061713 20130617 NORMAL GW	MSA-MW-17I MSA-MW17I-052813 20130528 NORMAL GW	MSA-MW-17S MSA-MW17S-052813 20130528 NORMAL GW	MSA-MW-18I MSA-MW-18I-060613 20130606 NORMAL GW	MSA-MW-18S MSA-MW-18S-060613 20130606 NORMAL GW	MSA-MW-19D MSA-MW-19D-052913 20130529 NORMAL GW
TUNGSTEN	NA	0.017 B	0.017 U	0.19 B	0.26 B	0.075 B
VANADIUM	NA	2.8 J	2.9 J	25	4.1 B	6.5
ZINC	NA	53 B	9.8 B	440	39 B	280 J
DISSOLVED METALS (UG/L)						
ANTIMONY	NA	0.11 U	0.11 U	0.11 U	0.14 J	0.11 U
ARSENIC	NA	5.2	7.9	4.7 J	1.7 B	2.3 B
BARIUM	NA	11	64	53	50	62
BERYLLIUM	NA	0.18 B	0.11 B	4	0.36 B	2
CADMIUM	NA	0.026 U	0.026 U	110	0.063 B	1.3
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	0.18 B	0.67 B	1.3 J	1.9 J	8.8
COBALT	NA	19	0.36 J	370	30	260
COPPER	NA	1 J	0.41 J	54	0.84 B	1.2 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	NA	0.21 B	0.21 B	0.72 B	0.81 B	0.36 B
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	NA	0.12 U	0.12 U	0.12 U	0.12 U	0.12 UL
MOLYBDENUM	NA	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
NICKEL	NA	26	0.88 J	250	18	110
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	NA	0.34 U	0.77 B	14	1.6 B	4.3 J
SILVER	NA	0.0083 U	0.0083 U	0.012 B	0.014 B	0.0083 U
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	NA	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	NA	0.017 U	0.017 U	0.029 B	0.017 U	0.017 U
VANADIUM	NA	1.9 J	2.2 J	2 B	2.3 B	6.5
ZINC	NA	45 B	7.6 B	510	18 B	290 J
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	27	330	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	290	800	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	55	51	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	0.11	0.023 U	NA
NITRITE-N	NA	NA	NA	0.012 U	0.24 U	NA
ORTHOPHOSPHATE-P	NA	NA	NA	0.38 K	0.26 K	NA
SULFATE	NA	NA	NA	380	2100	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	1100	3900	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.02 UL	NA	NA	NA	NA	NA
PERCHLORATE	NA	0.17 J	NA	0.13 J	0.082 U	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-DMW-17D	MSA-MW-17I	MSA-MW-17S	MSA-MW-18I	MSA-MW-18S	MSA-MW-19D
SAMPLE ID	MSA-DMW-17D-061713	MSA-MW17I-052813	MSA-MW17S-052813	MSA-MW-18I-060613	MSA-MW-18S-060613	MSA-MW-19D-052913
SAMPLE DATE	20130617	20130528	20130528	20130606	20130606	20130529
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-20D	MSA-MW-20I	MSA-MW-20S	MSA-MW-21D	MSA-MW-21I	MSA-MW-22D
SAMPLE ID	MSA-MW-20D-052313	MSA-MW-20I-052313	MSA-MW-20S-052313	MSA-MW-21D-060313	MSA-MW-21I-060313	MSA-MW-22D-060413
SAMPLE DATE	20130523	20130523	20130523	20130603	20130603	20130604
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	5.8 U	15 U	0.23 U	5.8 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	5.5 U	15 U	0.22 U	5.5 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	4.5 U	12 U	0.18 U	4.5 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	7 U	19 U	0.28 U	7 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	3.8 U	10 U	0.15 U	3.8 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	4.8 U	18 J	0.19 U	6.5 J	0.19 U
1,1-DICHLOROPROPENE	0.13 U	3.3 U	8.7 U	0.13 U	3.3 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	4.3 U	11 U	0.17 U	4.3 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	11 U	29 U	0.43 U	11 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.15 U	0.39 U	0.0059 U	0.15 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	3.8 U	10 U	0.15 U	3.8 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	3 U	8 U	0.12 U	3 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	17 U	45 U	0.67 U	17 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	6 U	16 U	0.24 U	6 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	3.3 U	8.7 U	0.13 U	3.3 U	0.13 U
1,2-DICHLOROETHANE	0.66 J	5.5 U	15 U	0.22 U	5.5 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	4.5 U	12 U	0.18 U	4.5 U	0.18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.14 U	3.5 U	9.3 U	0.14 U	3.5 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	4 U	11 U	0.16 U	4 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	3.3 U	8.7 U	0.13 U	3.3 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	3.3 U	8.7 U	0.13 U	3.3 U	0.13 U
2-BUTANONE	0.57 U	14 U	38 U	0.57 U	14 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	25 U	66 U	0.99 U	25 U	0.99 U
2-CHLOROTOLUENE	0.11 U	2.8 U	7.3 U	0.11 U	2.8 U	0.11 U
2-HEXANONE	0.41 U	10 U	27 U	0.41 U	10 U	0.41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	4.5 U	12 U	0.18 U	4.5 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	3 U	8 U	0.12 U	3 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	8 U	21 U	0.32 U	8 U	0.32 U
ACETONE	1.1 U	28 U	73 U	1.1 U	28 U	1.1 U
BENZENE	0.13 U	3.8 J	23 J	0.13 U	3.3 U	0.13 U
BROMOBENZENE	0.13 U	3.3 U	8.7 U	0.13 U	3.3 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	7.3 U	19 U	0.29 U	7.3 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	3.8 U	10 U	0.15 U	3.8 U	0.15 U
BROMOFORM	0.64 U	16 U	43 U	0.64 U	16 U	0.64 U
BROMOMETHANE	0.41 U	10 U	27 U	0.41 U	10 U	0.41 U
CARBON DISULFIDE	0.13 U	3.3 U	8.7 U	0.13 U	3.3 U	0.13 U
CARBON TETRACHLORIDE	0.13 U	3.3 U	8.7 U	0.13 U	3.3 U	0.13 U
CHLOROBENZENE	0.15 U	35	300	0.15 U	3.8 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	4.5 U	12 U	0.18 U	4.5 U	0.18 U
CHLOROETHANE	0.29 U	7.3 U	19 U	0.29 U	7.3 U	0.29 U
CHLOROFORM	0.16 J	4 U	11 U	0.57 J	4 U	0.16 U
CHLOROMETHANE	0.3 U	7.5 U	20 U	0.3 U	7.5 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-20D MSA-MW-20D-052313 20130523 NORMAL GW	MSA-MW-20I MSA-MW-20I-052313 20130523 NORMAL GW	MSA-MW-20S MSA-MW-20S-052313 20130523 NORMAL GW	MSA-MW-21D MSA-MW-21D-060313 20130603 NORMAL GW	MSA-MW-21I MSA-MW-21I-060313 20130603 NORMAL GW	MSA-MW-22D MSA-MW-22D-060413 20130604 NORMAL GW
CIS-1,2-DICHLOROETHENE	2.2	600	1800	0.17 U	710	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	3.5 U	9.3 U	0.14 U	3.5 U	0.14 U
CYCLOHEXANE	NA	NA	41 J	NA	NA	NA
DIBROMOMETHANE	0.28 U	7 U	19 U	0.28 U	7 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	7.8 U	21 U	0.31 U	7.8 U	0.31 U
DIISOPROPYL ETHER	1.5 U	38 U	100 U	1.5 U	38 U	1.5 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	0.11 U	2.8 U	7.3 U	0.11 U	2.8 U	0.11 U
ETHYLBENZENE	0.17 U	4.3 U	11 U	0.17 U	4.3 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	7.5 U	20 U	0.3 U	7.5 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	3.3 U	8.7 U	0.13 U	3.3 U	0.13 U
M+P-XYLENES	0.24 U	6 U	16 U	0.24 U	6 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	4.3 U	11 U	0.17 U	4.3 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	26 J	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	8.3 U	22 U	0.33 U	8.3 U	0.33 U
NAPHTHALENE	0.24 U	6 U	16 U	0.24 U	6 U	0.24 U
N-BUTYLBENZENE	0.12 U	3 U	8 U	0.12 U	3 U	0.12 U
N-PROPYLBENZENE	0.14 U	3.5 U	9.3 U	0.14 U	3.5 U	0.14 U
O-XYLENE	0.14 U	3.5 U	9.3 U	0.14 U	3.5 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	3.3 U	8.7 U	0.13 U	3.3 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	0.11 U	2.8 U	7.3 U	0.11 U	2.8 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	1.7 U	4.5 U	0.067 U	1.7 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	3.3 U	8.7 U	0.13 U	3.3 U	0.13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	3.9 UR	98 UR	260 UR	3.9 UR	98 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	7.3 U	19 U	0.29 U	7.3 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	0.13 U	3.3 U	13 J	0.13 U	3.3 U	0.13 U
TOTAL XYLENES	0.28 U	7 U	19 U	0.28 U	7 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	4.8 U	25 J	0.19 U	4.8 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	4.8 U	13 U	0.19 U	4.8 U	0.19 U
TRICHLOROETHENE	20	40	550	0.17 U	210	0.47 J
TRICHLOROFLUOROMETHANE	0.21 U	5.3 U	14 U	0.21 U	5.3 U	0.21 U
VINYL ACETATE	0.19 U	4.8 U	13 U	0.19 UR	4.8 UR	0.19 UR
VINYL CHLORIDE	0.22 U	550	900	0.22 U	290	0.22 U
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-20D MSA-MW-20D-052313 20130523 NORMAL GW	MSA-MW-20I MSA-MW-20I-052313 20130523 NORMAL GW	MSA-MW-20S MSA-MW-20S-052313 20130523 NORMAL GW	MSA-MW-21D MSA-MW-21D-060313 20130603 NORMAL GW	MSA-MW-21I MSA-MW-21I-060313 20130603 NORMAL GW	MSA-MW-22D MSA-MW-22D-060413 20130604 NORMAL GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	2.4	0.47 UL	210	0.49 U	0.47 U	0.47 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-20D MSA-MW-20D-052313 20130523 NORMAL GW	MSA-MW-20I MSA-MW-20I-052313 20130523 NORMAL GW	MSA-MW-20S MSA-MW-20S-052313 20130523 NORMAL GW	MSA-MW-21D MSA-MW-21D-060313 20130603 NORMAL GW	MSA-MW-21I MSA-MW-21I-060313 20130603 NORMAL GW	MSA-MW-22D MSA-MW-22D-060413 20130604 NORMAL GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	NA	1600	NA	NA	NA
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	NA	1600	NA	NA	NA
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.11 U	4 J	1.2 J	0.52 J	0.4 J	0.64 J
ARSENIC	0.35 B	14	24	2.9 J	20	2.4 J
BARIUM	160	0.2 B	70	54	22	65
BERYLLIUM	1.2 B	0.026 U	2	0.17 B	0.087 B	1.1
CADMIUM	2.3	NA	1.1	0.026 U	0.026 U	0.031 J
CALCIUM	NA	0.33 J	NA	NA	NA	NA
CHROMIUM	1.6 J	14	16	2.6	1.1 B	2.6
COBALT	120	0.024 U	5.7	13	21	65
COPPER	6.6	NA	14	5.2	1.4 B	1.3 B
IRON	NA	0.41 B	NA	NA	NA	NA
LEAD	0.42 B	NA	35	2.4	130	3.3
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	0.12 U	NA	NA	NA	NA
MERCURY	0.12 U	0.81 U	0.12 J	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	2.3 K	1.3 J	0.84 J	1.6 J	0.81 U
NICKEL	60	NA	5.5	5.8	14	26
POTASSIUM	NA	0.74 J	NA	NA	NA	NA
SELENIUM	1.6 J	NA	12	0.34 U	0.38 J	0.45 J
SILICON DIOXIDE	NA	0.017 B	NA	NA	NA	NA
SILVER	0.0083 U	NA	0.26 J	0.06 J	0.01 J	0.015 B
SODIUM	NA	0.4 U	NA	NA	NA	NA
THALLIUM	0.4 U	0.019 B	0.4 U	0.4 U	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-20D MSA-MW-20D-052313 20130523 NORMAL GW	MSA-MW-20I MSA-MW-20I-052313 20130523 NORMAL GW	MSA-MW-20S MSA-MW-20S-052313 20130523 NORMAL GW	MSA-MW-21D MSA-MW-21D-060313 20130603 NORMAL GW	MSA-MW-21I MSA-MW-21I-060313 20130603 NORMAL GW	MSA-MW-22D MSA-MW-22D-060413 20130604 NORMAL GW
TUNGSTEN	0.017 U	1 B	0.52 J	0.57 J	0.087 B	0.017 U
VANADIUM	0.15 U	4.4 B	37	3.5 B	1.6 B	2.5 J
ZINC	160		76 B	210	65	240
DISSOLVED METALS (UG/L)						
ANTIMONY	0.11 U	0.21 B	0.11 J	0.43 J	0.11 J	0.11 U
ARSENIC	0.3 B	4.6 J	14	2.2 J	15	1.7 J
BARIUM	130	16	16	49	22	66
BERYLLIUM	1.1 B	0.43 B	0.98 B	0.13 B	0.074 B	1.1
CADMIUM	1.7	0.1 J	0.16 J	0.026 U	0.026 U	0.026 U
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	1.4 J	0.48 J	2.5	1.6 B	0.75 B	1.9 J
COBALT	100	16	4.3	12	11	61
COPPER	0.99 B	0.39 J	0.24 U	5.3	0.45 B	0.24 U
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.29 B	0.92 B	0.85 B	0.69 B	0.63 B	0.17 B
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	0.81 U	0.81 U	0.81 U	1 J	0.81 U
NICKEL	50	2.5 K	1.7 J	5.3	4.5	24
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	1.2 J	1.3 J	7	0.34 U	0.34 U	0.44 J
SILVER	0.0083 U	0.027 B	0.0083 U	0.018 B	0.0083 U	0.0083 U
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.017 U	0.15 B	0.027 B	0.46 J	0.031 B	0.017 U
VANADIUM	0.15 U	1.2 B	7 B	2.3 B	1.3 B	1.9 J
ZINC	130	7.9 B	5.5 B	190	16 J	47 B
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	NA
PERCHLORATE	NA	NA	NA	NA	NA	0.082 U
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-20D	MSA-MW-20I	MSA-MW-20S	MSA-MW-21D	MSA-MW-21I	MSA-MW-22D
SAMPLE ID	MSA-MW-20D-052313	MSA-MW-20I-052313	MSA-MW-20S-052313	MSA-MW-21D-060313	MSA-MW-21I-060313	MSA-MW-22D-060413
SAMPLE DATE	20130523	20130523	20130523	20130603	20130603	20130604
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-23D	MSA-MW-23S	MSA-MW-24I	MSA-MW-24S	MSA-MW-25I	MSA-MW-25S
SAMPLE ID	MSA-MW-23D-060413	MSA-MW-23S-060413	MSA-MW-24I-060513	MSA-MW-24S-060513	MSA-MW-25I-060613	MSA-MW-25S-060613
SAMPLE DATE	20130604	20130604	20130605	20130605	20130606	20130606
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.58 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.55 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.45 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.7 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.38 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.48 U	0.19 U	0.19 U	0.6 J
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.33 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.43 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	1.1 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.015 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.38 U	0.15 U	0.15 U	0.23 B
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.3 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	1.7 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.6 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.25 J	0.33 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.45 J	0.55 U	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.45 U	0.18 U	0.18 U	0.18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.35 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.4 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.33 U	0.13 U	0.13 U	0.14 B
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	77 J	77 J
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.33 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	1.4 U	0.57 U	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	2.5 U	0.99 U	0.99 UR	0.99 UR
2-CHLOROTOLUENE	0.11 U	0.11 U	0.28 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	1 U	0.41 U	0.41 U	0.41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	5.7 NJ	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.45 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.3 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.8 U	0.32 U	0.32 U	0.32 U
ACETONE	1.1 U	1.4 J	2.8 U	1.1 J	3.6 B	4.1 B
BENZENE	0.13 U	3.3	0.33 U	0.18 J	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.33 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.73 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.38 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	1.6 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	1 U	0.41 U	0.41 U	0.41 U
CARBON DISULFIDE	0.25 J	0.13 U	0.33 U	0.13 U	0.13 U	0.13 U
CARBON TETRACHLORIDE	8.9	0.13 U	11	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.25 J	0.38 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.45 U	0.18 U	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	0.73 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	3.7	0.16 U	1.5 J	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.75 U	0.3 U	0.3 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-23D	MSA-MW-23S	MSA-MW-24I	MSA-MW-24S	MSA-MW-25I	MSA-MW-25S
SAMPLE ID	MSA-MW-23D-060413	MSA-MW-23S-060413	MSA-MW-24I-060513	MSA-MW-24S-060513	MSA-MW-25I-060613	MSA-MW-25S-060613
SAMPLE DATE	20130604	20130604	20130605	20130605	20130606	20130606
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
CIS-1,2-DICHLOROETHENE	0.17 U	4.4	0.43 U	0.17 U	0.17 U	150
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.35 U	0.14 U	0.14 U	0.14 U
CYCLOHEXANE	NA	0.95 NJ	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.7 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.78 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	3.8 U	1.5 U	1.5 U	1.5 U
DI-SEC-BUTYL ETHER	NA	1.2 NJ	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.28 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.43 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.75 U	0.3 U	0.3 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.33 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.6 U	0.24 U	0.24 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	0.73 J	0.97 J
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.43 U	0.17 U	0.17 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	0.33 U	0.83 U	0.33 U	0.61 B	0.45 B
NAPHTHALENE	0.24 U	0.24 U	0.6 U	0.24 U	0.24 U	0.31 B
N-BUTYLBENZENE	0.12 U	0.12 U	0.3 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.35 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.35 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.33 U	0.13 U	0.13 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	1.4 R	5.8 R	NA	NA	NA	NA
STYRENE	0.11 U	0.11 U	0.28 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.17 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.24 J	0.33 U	0.13 U	0.13 U	0.13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	9.8 UR	3.9 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.73 U	0.29 U	0.29 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	0.13 U	0.13 U	0.33 U	0.13 U	0.72 B	0.44 B
TOTAL XYLENES	0.28 U	0.28 U	0.7 U	0.28 U	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.48 U	0.19 U	0.19 U	7.5
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.48 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	1.4	1	92	0.17 U	0.27 J	0.9 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.53 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.48 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	15	0.55 U	0.22 U	0.22 U	5
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-23D MSA-MW-23D-060413 20130604 NORMAL GW	MSA-MW-23S MSA-MW-23S-060413 20130604 NORMAL GW	MSA-MW-24I MSA-MW-24I-060513 20130605 NORMAL GW	MSA-MW-24S MSA-MW-24S-060513 20130605 NORMAL GW	MSA-MW-25I MSA-MW-25I-060613 20130606 NORMAL GW	MSA-MW-25S MSA-MW-25S-060613 20130606 NORMAL GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	0.48 U	5.6	0.48 U	1.1	0.47 U	0.49 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-23D	MSA-MW-23S	MSA-MW-24I	MSA-MW-24S	MSA-MW-25I	MSA-MW-25S
SAMPLE ID	MSA-MW-23D-060413	MSA-MW-23S-060413	MSA-MW-24I-060513	MSA-MW-24S-060513	MSA-MW-25I-060613	MSA-MW-25S-060613
SAMPLE DATE	20130604	20130604	20130605	20130605	20130606	20130606
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	74.8 J	NA	80 B	NA	150 B
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	1200	NA	240 UJ	NA	230 U
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.56 J	0.26 J	0.11 U	0.11 U	0.11 U	0.12 J
ARSENIC	1.7 J	11	1 B	7.1	14	9.1
BARIUM	71	120	18	27	34	87
BERYLLIUM	1.5	0.21 J	1.6	0.73 B	0.14 B	0.22 B
CADMIUM	0.91 J	0.11 J	0.31 J	0.026 U	0.026 U	0.11 B
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	5.9	3.2	1.7 J	0.6 J	1 J	2
COBALT	33	3.7	30	130	2	8
COPPER	39	1.9 B	18	0.62 B	0.92 B	0.99 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	7.9	1.9	0.59 B	0.46 B	0.24 J	0.71 B
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.86	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.94 J	1.4 J	0.81 U	0.81 U	0.81 U	0.83 J
NICKEL	26	3.6 K	8.2	180	3.3 K	13
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	1.9 J	0.46 J	2.4 J	0.34 U	0.34 U	0.58 B
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	0.081 J	0.038 B	0.014 B	0.016 B	0.015 B	0.026 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-23D MSA-MW-23D-060413 20130604 NORMAL GW	MSA-MW-23S MSA-MW-23S-060413 20130604 NORMAL GW	MSA-MW-24I MSA-MW-24I-060513 20130605 NORMAL GW	MSA-MW-24S MSA-MW-24S-060513 20130605 NORMAL GW	MSA-MW-25I MSA-MW-25I-060613 20130606 NORMAL GW	MSA-MW-25S MSA-MW-25S-060613 20130606 NORMAL GW
TUNGSTEN	0.18 B	0.046 B	0.049 B	0.017 U	0.017 U	0.017 B
VANADIUM	4.8 J	1.7 J	1.1 B	12	3 B	3.3 B
ZINC	82	6.7 B	25 B	210	12 B	16 B
DISSOLVED METALS (UG/L)						
ANTIMONY	0.14 J	0.12 J	0.11 U	0.11 U	0.11 U	0.11 U
ARSENIC	0.48 J	10	0.94 B	2.1 J	14	7.8
BARIUM	60	120	18	26	33	84
BERYLLIUM	1.1	0.13 B	1.4 B	0.7 B	0.14 B	0.22 B
CADMIUM	0.55 J	0.026 U	0.19 J	0.026 U	0.026 U	0.026 U
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	0.36 B	1.8 J	1.1 J	0.27 J	0.81 J	1.3 J
COBALT	26	3.6	31	130	2	7.6
COPPER	4.1	0.26 B	18	1.2 B	0.76 B	0.66 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.43 B	0.38 B	0.44 B	0.24 B	0.16 J	0.31 B
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	1.4 J	0.81 U	0.81 U	0.81 U	0.81 U
NICKEL	23	3.2 K	10	170	4.9	14
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	0.36 J	0.35 J	2.4 J	0.34 U	0.34 U	0.6 B
SILVER	0.0083 U	0.009 B	0.012 B	0.011 B	0.011 B	0.012 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.017 U	0.019 B	0.017 U	0.017 U	0.017 U	0.017 U
VANADIUM	0.39 B	0.58 B	0.72 B	1.2 B	2.5 B	2.7 B
ZINC	52 B	2.7 B	27 B	200	14 B	12 B
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	NA
PERCHLORATE	NA	NA	0.082 U	NA	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-23D	MSA-MW-23S	MSA-MW-24I	MSA-MW-24S	MSA-MW-25I	MSA-MW-25S
SAMPLE ID	MSA-MW-23D-060413	MSA-MW-23S-060413	MSA-MW-24I-060513	MSA-MW-24S-060513	MSA-MW-25I-060613	MSA-MW-25S-060613
SAMPLE DATE	20130604	20130604	20130605	20130605	20130606	20130606
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	4.9 R	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-26S	MSA-MW-27D	MSA-MW-29D	MSA-MW-30D	MSA-MW-30I	MSA-MW-31D
SAMPLE ID	MSA-MW-26S-060313	MSA-MW-27D-052813	MSA-MW-29D-061913	MSA-MW-30D-061813	MSA-MW-30I-060613	MSA-MW-31D-061813
SAMPLE DATE	20130603	20130528	20130619	20130618	20130606	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.75 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.72 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.59 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.91 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.49 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.62 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.42 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.55 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	1.4 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.019 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.49 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.39 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	2.2 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.78 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.42 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.72 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.59 U	0.18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.46 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.52 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.42 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.42 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 U	1.9 U	1.6 J
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	3.2 UR	0.99 UR
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.36 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	1.3 U	0.41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.59 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.39 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	1 U	0.32 U
ACETONE	1.1 U	1.1 U	2.1 B	1.9 J	9.6 B	7.6 J
BENZENE	2	0.13 U	0.13 U	0.13 U	0.42 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.42 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.95 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.49 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	2.1 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	1.3 U	0.41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.42 U	0.26 J
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	1.1 J	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.49 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.59 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.95 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	2.5 J	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.98 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-26S	MSA-MW-27D	MSA-MW-29D	MSA-MW-30D	MSA-MW-30I	MSA-MW-31D
SAMPLE ID	MSA-MW-26S-060313	MSA-MW-27D-052813	MSA-MW-29D-061913	MSA-MW-30D-061813	MSA-MW-30I-060613	MSA-MW-31D-061813
SAMPLE DATE	20130603	20130528	20130619	20130618	20130606	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
CIS-1,2-DICHLOROETHENE	24	0.17 U	0.17 U	0.17 U	2.2 J	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.46 U	0.14 U
CYCLOHEXANE	0.24 J	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.91 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	1 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	4.9 U	1.5 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.36 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.55 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.98 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.42 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.78 U	0.24 U
METHYL ACETATE	NA	NA	NA	NA	2.2 J	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	0.55 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	6.4 B	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.78 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.39 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.46 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.46 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.42 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	1.4 R	4.5 R	NA	NA	NA	NA
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.36 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.22 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.42 U	0.13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR	13 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.95 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	1.2 B	0.13 U
TOTAL XYLENES	0.28 U	0.28 U	0.28 U	0.28 U	0.91 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.62 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.62 U	0.19 U
TRICHLOROETHENE	0.46 J	0.17 U	0.17 U	0.17 U	670	0.17 U
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.68 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.62 UR	0.19 UR
VINYL CHLORIDE	30	0.22 U	0.22 U	0.22 U	0.72 U	0.22 U
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-26S	MSA-MW-27D	MSA-MW-29D	MSA-MW-30D	MSA-MW-30I	MSA-MW-31D
SAMPLE ID	MSA-MW-26S-060313	MSA-MW-27D-052813	MSA-MW-29D-061913	MSA-MW-30D-061813	MSA-MW-30I-060613	MSA-MW-31D-061813
SAMPLE DATE	20130603	20130528	20130619	20130618	20130606	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	0.48 U	0.49 U	0.47 U	0.47 U	0.48 U	0.47 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-26S	MSA-MW-27D	MSA-MW-29D	MSA-MW-30D	MSA-MW-30I	MSA-MW-31D
SAMPLE ID	MSA-MW-26S-060313	MSA-MW-27D-052813	MSA-MW-29D-061913	MSA-MW-30D-061813	MSA-MW-30I-060613	MSA-MW-31D-061813
SAMPLE DATE	20130603	20130528	20130619	20130618	20130606	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	61 B	NA	NA	NA	NA	NA
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	240 UJ	NA	NA	NA	NA	NA
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	1.5 J	0.11 U	0.37 J	1.1 J	0.11 U	0.76 J
ARSENIC	1.8 J	0.12 B	1.2 B	0.89 B	1.8 J	4.2 J
BARIUM	90	17	13	89	56	55
BERYLLIUM	0.16 B	0.14 J	0.92 B	0.47 B	0.85 J	0.48 B
CADMIUM	1.7	0.057 J	0.54 J	3.1	0.12 J	0.91 J
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	1 B	0.42 J	3.9 J	10 J	4.2	4.4
COBALT	3.9	4 J	2.4 J	31 J	36	11
COPPER	7.5	3.6 J	3.7 B	15	1.9 J	48
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.81 B	0.15 J	1.5	4.4	0.35 J	5.8
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.54
MOLYBDENUM	2.3 J	0.81 UJ	0.81 U	0.81 U	0.81 U	0.97 J
NICKEL	9.9	8.9 J	4	13 J	37	7.8
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	0.34 U	0.34 UJ	1.5 J	0.71 J	0.7 J	1.1 J
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	0.042 J	0.0083 U	0.073 B	0.17 B	0.011 B	0.79 J
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-26S MSA-MW-26S-060313 20130603 NORMAL GW	MSA-MW-27D MSA-MW-27D-052813 20130528 NORMAL GW	MSA-MW-29D MSA-MW-29D-061913 20130619 NORMAL GW	MSA-MW-30D MSA-MW-30D-061813 20130618 NORMAL GW	MSA-MW-30I MSA-MW-30I-060613 20130606 NORMAL GW	MSA-MW-31D MSA-MW-31D-061813 20130618 NORMAL GW
TUNGSTEN	0.34 B	0.017 U	0.31 B	0.096 B	0.017 U	0.19 B
VANADIUM	2.5 B	0.29 B	4.1 B	4.8 B	6.9	5.6 B
ZINC	74	43 B	52 B	2000 J	170	230
DISSOLVED METALS (UG/L)						
ANTIMONY	1.4 J	0.11 U	0.13 J	0.79 J	0.11 U	0.58 B
ARSENIC	1.7 J	0.079 B	0.35 B	0.45 B	1.7 J	2.5 J
BARIUM	87	15	4.8 B	52	53	55
BERYLLIUM	0.13 B	0.14 J	0.42 B	0.27 B	0.78 J	0.47 B
CADMIUM	0.85 J	0.045 J	0.036 J	2.1	0.13 J	0.23 J
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	2.1	0.14 J	0.4 B	3.3	4.1	3.1
COBALT	3.7	3.7	1.6	6.8	35	11
COPPER	5.8	4.2	1.6 B	7.9	0.56 B	5.2 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.45 B	0.14 U	0.31 B	0.22 J	0.25 J	0.89 J
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	2.1 J	0.81 U	0.81 U	0.81 U	0.81 U	0.86 J
NICKEL	11	8	2.6	10	38	9.4
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	0.34 U	0.34 U	0.49 J	0.39 J	0.37 J	0.86 J
SILVER	0.017 B	0.0083 U	0.032 B	0.044 B	0.0083 U	0.11 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.2 B	0.017 U	0.023 B	0.035 B	0.017 U	0.15 B
VANADIUM	2.1 B	0.24 B	1.6 B	1.9 B	6.5 B	3.5 B
ZINC	76	35 B	9.8 B	1600	170	23 B
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	0.02 UJ	0.212 J	0.172 L	NA	0.037 L
PERCHLORATE	NA	0.082 U	0.09 J	0.098 J	NA	0.082 U
RADIONUCLIDES (PCI/L)						
RADIUM	NA	0.156 U	1.21	NA	NA	NA
RADIUM-228	NA	0.0214 U	0.481 U	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-26S	MSA-MW-27D	MSA-MW-29D	MSA-MW-30D	MSA-MW-30I	MSA-MW-31D
SAMPLE ID	MSA-MW-26S-060313	MSA-MW-27D-052813	MSA-MW-29D-061913	MSA-MW-30D-061813	MSA-MW-30I-060613	MSA-MW-31D-061813
SAMPLE DATE	20130603	20130528	20130619	20130618	20130606	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-32I	MSA-MW-32S	MSA-MW-33I	MSA-MW-33S	MSA-MW-34I	MSA-MW-34S
SAMPLE ID	MSA-MW-32I-060313	MSA-MW-32S-060313	MSA-MW-33I-052213	MSA-MW-33S-052213	MSA-MW34I-052313	MSA-MW34S-052313
SAMPLE DATE	20130603	20130603	20130522	20130522	20130523	20130523
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.77 U	0.29 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.73 U	0.28 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.6 U	0.23 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.93 U	0.35 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.5 U	0.19 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.63 U	0.24 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.43 U	0.16 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.57 U	0.21 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	1.4 U	0.54 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.02 U	0.0074 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.5 U	0.19 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.4 U	0.15 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	2.2 U	0.84 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.8 U	0.3 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.43 U	0.16 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.73 U	1.6	0.33 J
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.6 U	0.23 U	0.18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.47 U	0.18 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.53 U	0.2 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.43 U	0.16 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.43 U	0.16 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	2.1 J	1.9 U	0.71 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	3.3 U	1.2 U	0.99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.37 U	0.14 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	1.4 U	0.51 U	0.41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	2.2 NJ	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.6 U	0.23 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.4 U	0.15 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	1.1 U	0.4 U	0.32 U
ACETONE	1.1 U	1.1 U	6.1 J	3.7 J	2.1 B	1.1 U
BENZENE	0.13 U	0.13 U	0.13 U	1.3 J	1.6	0.16 J
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.43 U	0.16 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.97 U	0.36 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.5 U	0.19 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	2.1 U	0.8 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	1.4 U	0.51 U	0.41 U
CARBON DISULFIDE	0.16 J	0.13 U	0.16 J	0.43 U	0.16 U	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.43 U	0.16 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.5 U	0.21 J	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.6 U	0.23 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.97 U	0.36 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.53 U	0.2 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	1 U	0.38 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-32I MSA-MW-32I-060313 20130603 NORMAL GW	MSA-MW-32S MSA-MW-32S-060313 20130603 NORMAL GW	MSA-MW-33I MSA-MW-33I-052213 20130522 NORMAL GW	MSA-MW-33S MSA-MW-33S-052213 20130522 NORMAL GW	MSA-MW-34I MSA-MW34I-052313 20130523 NORMAL GW	MSA-MW-34S MSA-MW34S-052313 20130523 NORMAL GW
CIS-1,2-DICHLOROETHENE	0.17 U	0.17 U	0.17 U	86	6.3	2.2
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.47 U	0.18 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.93 U	0.35 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	1 U	0.39 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	5 U	1.9 U	1.5 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.37 U	0.14 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.57 U	0.21 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	1 U	0.38 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.43 U	0.16 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.8 U	9.1	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.57 U	0.21 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	1.1 U	0.41 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.8 U	0.3 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.4 U	0.15 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.47 U	0.18 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.47 U	3.2	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.43 U	0.16 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	1.7 R	NA	NA	NA	NA
STYRENE	0.11 U	0.11 U	0.11 U	0.37 U	0.14 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.22 U	0.084 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.43 U	0.16 U	0.13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	2.2 R	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	13 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.97 U	0.36 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	2.5 J	NA
TOLUENE	0.13 U	0.13 U	0.13 U	0.43 U	0.16 J	0.13 U
TOTAL XYLENES	0.28 U	0.28 U	0.28 U	0.93 U	12	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.63 U	0.24 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.63 U	0.24 U	0.19 U
TRICHLOROETHENE	0.17 U	0.17 U	0.17 U	93	0.21 J	0.17 U
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.7 U	0.26 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.63 UR	0.24 UR	0.19 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	8.8	45	1.6
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-32I	MSA-MW-32S	MSA-MW-33I	MSA-MW-33S	MSA-MW-34I	MSA-MW-34S
SAMPLE ID	MSA-MW-32I-060313	MSA-MW-32S-060313	MSA-MW-33I-052213	MSA-MW-33S-052213	MSA-MW34I-052313	MSA-MW34S-052313
SAMPLE DATE	20130603	20130603	20130522	20130522	20130523	20130523
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	0.47 U	0.48 U	0.47 U	0.47 U	0.49 U	0.48 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-32I	MSA-MW-32S	MSA-MW-33I	MSA-MW-33S	MSA-MW-34I	MSA-MW-34S
SAMPLE ID	MSA-MW-32I-060313	MSA-MW-32S-060313	MSA-MW-33I-052213	MSA-MW-33S-052213	MSA-MW34I-052313	MSA-MW34S-052313
SAMPLE DATE	20130603	20130603	20130522	20130522	20130523	20130523
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	NA	67 B	NA	150 B	NA	41 J
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	NA	230 UJ	NA	230 U	NA	230 U
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.23 J	0.11 U	0.31 J	0.46 J	0.11 U	0.23 B
ARSENIC	1.9 J	3.6 J	3.4 J	3.7 J	0.9 B	2.1 J
BARIUM	67	27	47	34	56	75
BERYLLIUM	0.52 B	0.97 J	0.17 B	0.26 B	3.4	1.1 B
CADMIUM	0.22 J	0.064 J	0.026 U	0.25 J	0.31 J	0.96 J
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	1.2 B	3.3	0.38 J	1.5 J	0.8 J	2.5
COBALT	100	150	15	8.3	230	110
COPPER	10	0.28 B	4	6.6	18	22
IRON	NA	NA	NA	NA	NA	NA
LEAD	1 B	0.35 B	0.44 B	1.1 B	0.67 B	0.91 B
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	0.81 U	0.91 J	0.81 U	0.81 U	0.81 U
NICKEL	46	56	18	7.1	310	150
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	1.1 J	4.6 J	0.34 U	0.34 U	0.34 U	0.34 U
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	0.023 J	0.01 J	0.027 B	0.065 B	0.0083 U	0.0083 U
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-32I MSA-MW-32I-060313 20130603 NORMAL GW	MSA-MW-32S MSA-MW-32S-060313 20130603 NORMAL GW	MSA-MW-33I MSA-MW-33I-052213 20130522 NORMAL GW	MSA-MW-33S MSA-MW-33S-052213 20130522 NORMAL GW	MSA-MW-34I MSA-MW34I-052313 20130523 NORMAL GW	MSA-MW-34S MSA-MW34S-052313 20130523 NORMAL GW
TUNGSTEN	0.017 U	0.017 U	0.029 B	0.017 U	0.017 U	0.017 U
VANADIUM	2.1 B	5.2 B	2.3 B	2.9 B	2 B	20
ZINC	9300	270	280	3100	510	360
DISSOLVED METALS (UG/L)						
ANTIMONY	0.15 J	0.11 U	0.29 J	0.51 J	0.11 U	0.11 U
ARSENIC	1.5 J	3.7 J	2.4 J	3.7 J	0.94 J	1.4 J
BARIUM	62	27	42	35	66	68
BERYLLIUM	0.45 J	1.1	0.19 B	0.18 B	3.1	1.1 B
CADMIUM	0.041 J	0.07 J	0.026 U	0.24 J	0.18 J	0.13 B
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	0.84 B	2.7	0.14 J	1.2 J	0.61 J	1.3 J
COBALT	100	150	2.7	8.6	270	110
COPPER	1.3 B	0.66 B	2.1 B	5.2	6.2	2 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.34 B	0.27 B	0.29 B	0.61 B	0.47 B	0.25 B
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	0.81 U	0.86 J	0.81 U	0.81 U	0.81 U
NICKEL	47	57	9.5	7.6	360	140
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	1.1 J	5.1	0.34 U	0.34 U	0.34 U	0.34 U
SILVER	0.011 B	0.014 B	0.013 B	0.026 B	0.0083 U	0.0083 U
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.017 U	0.017 U	0.032 B	0.017 U	0.017 U	0.017 U
VANADIUM	0.76 B	5 B	0.91 B	2.4 B	1.7 B	11
ZINC	8500	270	14 B	3200	540	230
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	0.036 B	NA	NA	NA
PERCHLORATE	NA	NA	NA	NA	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-32I	MSA-MW-32S	MSA-MW-33I	MSA-MW-33S	MSA-MW-34I	MSA-MW-34S
SAMPLE ID	MSA-MW-32I-060313	MSA-MW-32S-060313	MSA-MW-33I-052213	MSA-MW-33S-052213	MSA-MW34I-052313	MSA-MW34S-052313
SAMPLE DATE	20130603	20130603	20130522	20130522	20130523	20130523
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-35S	MSA-MW-36S	MSA-MW-37S	MSA-MW-38S	MSA-MW-39S	MSA-MW-40I
SAMPLE ID	MSA-MW35S-052313	MSA-MW-36S-060513	MSA-MW-37S-060513	MSA-MW38S-062013	MSA-MW39S-052213	MSA-MW40I-052213
SAMPLE DATE	20130523	20130605	20130605	20130620	20130522	20130522
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	38 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	56 J
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	30 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	47 U
1,1-DICHLOROETHANE	0.65 J	0.15 U	0.15 U	0.15 U	0.15 U	25 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	32 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	22 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	28 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	72 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.98 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	25 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	26 J
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	110 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	40 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.16 J	22 U
1,2-DICHLOROETHANE	0.23 J	0.22 U	0.22 U	0.22 U	0.36 J	37 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	30 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	23 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	27 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	22 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	22 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	95 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	170 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	18 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	68 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	0.97 J	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	30 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	20 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	53 U
ACETONE	2.2 B	1.1 U	1.1 U	4.4 B	1.6 J	180 U
BENZENE	0.14 J	0.13 U	0.13 U	0.13 U	1.5	22 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	22 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	48 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	25 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	110 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	68 U
CARBON DISULFIDE	0.3 J	0.13 U	0.13 U	0.13 U	0.13 U	22 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	22 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	4.5	25 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	30 U
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	48 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	27 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	50 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-35S MSA-MW35S-052313 20130523 NORMAL GW	MSA-MW-36S MSA-MW-36S-060513 20130605 NORMAL GW	MSA-MW-37S MSA-MW-37S-060513 20130605 NORMAL GW	MSA-MW-38S MSA-MW38S-062013 20130620 NORMAL GW	MSA-MW-39S MSA-MW39S-052213 20130522 NORMAL GW	MSA-MW-40I MSA-MW40I-052213 20130522 NORMAL GW
CIS-1,2-DICHLOROETHENE	7.8	0.17 U	0.17 U	0.17 U	4	4900
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	23 U
CYCLOHEXANE	NA	NA	NA	NA	0.33 J	NA
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	47 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	52 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	250 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	1.7 NJ	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	18 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.18 J	28 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	50 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	2.2 NJ	NA
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	22 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	40 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.2 J	0.17 U	0.17 U	0.17 U	0.17 U	28 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	55 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	40 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	20 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	23 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	23 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	22 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	1.7 R	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	18 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	11 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.14 J	22 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	650 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	48 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.14 J	27 J
TOTAL XYLENES	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	47 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.29 J	70 J
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	32 U
TRICHLOROETHENE	2.1	0.17 U	0.17 U	0.17 U	5	810
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	35 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	32 UR
VINYL CHLORIDE	3	0.22 U	0.22 U	0.22 U	3.8	94 J
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-35S MSA-MW35S-052313 20130523 NORMAL GW	MSA-MW-36S MSA-MW-36S-060513 20130605 NORMAL GW	MSA-MW-37S MSA-MW-37S-060513 20130605 NORMAL GW	MSA-MW-38S MSA-MW38S-062013 20130620 NORMAL GW	MSA-MW-39S MSA-MW39S-052213 20130522 NORMAL GW	MSA-MW-40I MSA-MW40I-052213 20130522 NORMAL GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	2.4	0.48 U	0.47 U	0.49 U	13	9.7
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-35S MSA-MW35S-052313 20130523 NORMAL GW	MSA-MW-36S MSA-MW-36S-060513 20130605 NORMAL GW	MSA-MW-37S MSA-MW-37S-060513 20130605 NORMAL GW	MSA-MW-38S MSA-MW38S-062013 20130620 NORMAL GW	MSA-MW-39S MSA-MW39S-052213 20130522 NORMAL GW	MSA-MW-40I MSA-MW40I-052213 20130522 NORMAL GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	39 J	72 B	61 B	62 B	75 B	NA
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	340 J	230 UJ	230 J	280 J	1300	NA
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.19 B	0.11 UJ	0.11 J	0.11 U	0.31 J	0.2 J
ARSENIC	1.2 J	37 J	0.98 B	17	34	15
BARIUM	68	16 J	34	49	24	17
BERYLLIUM	5.1	8.3 J	0.18 B	0.4 B	0.63 B	2.4
CADMIUM	0.16 B	6	0.034 J	0.12 J	0.17 J	0.37 J
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	1.5 J	23 J	0.38 J	1.4 J	1.5 J	9.1
COBALT	370	610	15	14	5.1	13
COPPER	5.1	460	1.4 J	3.8 B	1.3 B	1 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	1.1 B	1.9 J	0.28 B	0.23 B	1.4	1.3 K
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	0.81 UJ	0.81 U	0.81 U	0.81 U	0.81 U
NICKEL	170	810	2.1 K	7.8	3.6 K	20
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	0.51 J	130 J	0.34 U	0.61 J	0.94 J	9.4
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	0.0083 U	0.033 B	0.014 B	0.01 B	0.034 B	0.016 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.85 J	0.4 U	0.4 U	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-35S MSA-MW35S-052313 20130523 NORMAL GW	MSA-MW-36S MSA-MW-36S-060513 20130605 NORMAL GW	MSA-MW-37S MSA-MW-37S-060513 20130605 NORMAL GW	MSA-MW-38S MSA-MW38S-062013 20130620 NORMAL GW	MSA-MW-39S MSA-MW39S-052213 20130522 NORMAL GW	MSA-MW-40I MSA-MW40I-052213 20130522 NORMAL GW
TUNGSTEN	0.017 U	0.43 U	0.017 U	0.017 U	0.075 B	0.024 B
VANADIUM	3.9 J	240	7.3	6.7	2.2 B	8.7
ZINC	130	2900	3 B	40 B	220	64
DISSOLVED METALS (UG/L)						
ANTIMONY	0.11 U	0.11 UJ	0.11 J	0.11 U	0.12 J	0.13 J
ARSENIC	0.99 J	38 J	0.68 B	16	33	14
BARIUM	68	16 J	36	51	24	15
BERYLLIUM	5.3	8.6 J	0.15 B	0.27 B	0.27 B	2.3
CADMIUM	0.074 B	5.9	0.28 J	0.026 U	0.03 J	0.27 J
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	0.87 J	23 J	0.2 J	0.42 B	1.1 J	7.4
COBALT	380	620	16	15	5.1	13
COPPER	0.55 B	430	2.6	0.61 B	0.44 B	0.43 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.35 B	1.6 B	0.29 B	0.14 U	0.6 B	0.83 B
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	0.81 UJ	0.81 U	0.81 U	0.81 U	0.81 U
NICKEL	180	830	5	8	3.4 K	19
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	0.62 J	130 J	0.34 U	0.57 J	0.41 J	8.9
SILVER	0.0083 U	0.025 B	0.016 B	0.0083 U	0.018 B	0.016 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.88 J	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.017 U	0.43 U	0.017 U	0.017 U	0.017 U	0.022 B
VANADIUM	1.8 B	210	2.4 B	1.4 B	1.3 B	6.3 B
ZINC	130	3000	12 B	21 B	190	59
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	NA
PERCHLORATE	NA	NA	NA	NA	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-35S	MSA-MW-36S	MSA-MW-37S	MSA-MW-38S	MSA-MW-39S	MSA-MW-40I
SAMPLE ID	MSA-MW35S-052313	MSA-MW-36S-060513	MSA-MW-37S-060513	MSA-MW38S-062013	MSA-MW39S-052213	MSA-MW40I-052213
SAMPLE DATE	20130523	20130605	20130605	20130620	20130522	20130522
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	5.3 R	3.2 R	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-40S MSA-MW40S-052213 20130522 NORMAL GW	MSA-MW-41I MSA-MW-41I-052913 20130529 NORMAL GW	MSA-MW-41S MSA-MW-41S-052913 20130529 NORMAL GW	MSA-MW-42I MSA-MW-42I-053013 20130530 NORMAL GW	MSA-MW-42S MSA-MW-42S-053013 20130530 NORMAL GW	MSA-MW-43S MSA-MW-43S-060613 20130606 NORMAL GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	33 U	7.7 U	15 U	1.5 U	58 U	0.23 U
1,1,1-TRICHLOROETHANE	31 U	7.3 U	15 U	1.5 U	55 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	26 U	6 U	12 U	1.2 U	45 U	0.18 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	40 U	9.3 U	19 U	1.9 U	70 U	0.28 U
1,1-DICHLOROETHANE	21 U	5 U	10 U	1 U	38 U	0.15 U
1,1-DICHLOROETHENE	27 U	6.3 U	13 U	1.3 U	48 U	0.19 U
1,1-DICHLOROPROPENE	19 U	4.3 U	8.7 U	0.87 U	33 U	0.13 U
1,2,3-TRICHLOROBENZENE	24 U	5.7 U	11 U	1.1 U	43 U	0.17 U
1,2,3-TRICHLOROPROPANE	61 U	14 U	29 U	2.9 U	110 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.84 U	0.2 U	0.39 U	0.039 U	190 J	0.0059 U
1,2,4-TRICHLOROBENZENE	21 U	5 U	10 U	1 U	38 U	0.15 U
1,2,4-TRIMETHYLBENZENE	17 U	4 U	8 U	0.8 U	230 J	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	96 U	22 U	45 U	4.5 U	170 U	0.67 U
1,2-DIBROMOETHANE	34 U	8 U	16 U	1.6 U	60 U	0.24 U
1,2-DICHLOROBENZENE	19 U	4.3 U	8.7 U	0.87 U	33 U	0.13 U
1,2-DICHLOROETHANE	31 U	14 J	46 J	1.5 U	55 U	0.28 J
1,2-DICHLOROPROPANE	26 U	6 U	12 U	1.2 U	45 U	0.18 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	200 NJ	NA
1,3-DICHLOROBENZENE	20 U	4.7 U	9.3 U	0.93 U	35 U	0.14 U
1,3-DICHLOROPROPANE	23 U	5.3 U	11 U	1.1 U	40 U	0.16 U
1,4-DICHLOROBENZENE	19 U	4.3 U	8.7 U	0.87 U	33 U	0.13 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	76 J
2,2-DICHLOROPROPANE	19 U	4.3 U	8.7 U	0.87 U	33 U	0.13 U
2-BUTANONE	81 U	19 U	38 U	3.8 U	140 U	0.57 U
2-CHLOROETHYL VINYL ETHER	140 U	33 U	66 U	6.6 U	250 U	0.99 UR
2-CHLOROTOLUENE	16 U	3.7 U	7.3 U	0.73 U	28 U	0.11 U
2-HEXANONE	59 U	14 U	27 U	2.7 U	100 U	0.41 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	26 U	6 U	12 U	1.2 U	45 U	0.18 U
4-ISOPROPYLTOLUENE	17 U	4 U	8 U	0.8 U	30 U	0.12 U
4-METHYL-2-PENTANONE	46 U	11 U	21 U	2.1 U	80 U	0.32 U
ACETONE	160 U	37 U	73 U	7.3 U	280 U	7 B
BENZENE	19 U	17 J	18 J	0.87 U	39 J	0.13 U
BROMOBENZENE	19 U	4.3 U	8.7 U	0.87 U	33 U	0.13 U
BROMOCHLOROMETHANE	41 U	9.7 U	19 U	1.9 U	73 U	0.29 U
BROMODICHLOROMETHANE	21 U	5 U	10 U	1 U	38 U	0.15 U
BROMOFORM	91 U	21 U	43 U	4.3 U	160 U	0.64 U
BROMOMETHANE	59 U	14 U	27 U	2.7 U	100 U	0.41 U
CARBON DISULFIDE	19 U	4.3 U	8.7 U	0.87 U	33 U	0.13 U
CARBON TETRACHLORIDE	19 U	4.3 U	8.7 U	0.87 U	33 U	0.13 U
CHLOROBENZENE	21 U	11 J	10 U	1 U	38 U	0.15 U
CHLORODIBROMOMETHANE	26 U	6 U	12 U	1.2 U	45 U	0.18 U
CHLOROETHANE	41 U	16 J	19 U	1.9 U	73 U	0.29 U
CHLOROFORM	23 U	5.3 U	11 U	1.1 U	40 U	0.16 U
CHLOROMETHANE	43 U	10 U	20 U	2 U	75 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-40S MSA-MW40S-052213 20130522 NORMAL GW	MSA-MW-41I MSA-MW-41I-052913 20130529 NORMAL GW	MSA-MW-41S MSA-MW-41S-052913 20130529 NORMAL GW	MSA-MW-42I MSA-MW-42I-053013 20130530 NORMAL GW	MSA-MW-42S MSA-MW-42S-053013 20130530 NORMAL GW	MSA-MW-43S MSA-MW-43S-060613 20130606 NORMAL GW
CIS-1,2-DICHLOROETHENE	3900	800	710	190	1300	0.69 J
CIS-1,3-DICHLOROPROPENE	20 U	4.7 U	9.3 U	0.93 U	35 U	0.14 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	40 U	9.3 U	19 U	1.9 U	70 U	0.28 U
DICHLORODIFLUOROMETHANE	44 U	10 U	21 U	2.1 U	78 U	0.31 U
DIISOPROPYL ETHER	210 U	50 U	100 U	10 U	380 U	1.5 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	16 U	3.7 U	7.3 U	0.73 U	28 U	0.11 U
ETHYLBENZENE	24 U	5.7 U	11 U	1.1 U	710	0.17 U
HEXACHLOROBUTADIENE	43 U	10 U	20 U	2 U	75 U	0.3 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	19 U	4.3 U	8.7 U	0.87 U	33 U	0.13 U
M+P-XYLENES	34 U	8 U	16 U	7.1 J	14000	0.24 U
METHYL ACETATE	NA	NA	NA	NA	NA	0.7 J
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	24 U	5.7 U	11 U	1.1 U	43 U	0.17 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	47 U	11 U	210	2.2 U	83 U	0.53 B
NAPHTHALENE	34 U	8 U	16 U	1.6 U	60 U	0.24 U
N-BUTYLBENZENE	17 U	4 U	8 U	0.8 U	30 U	0.12 U
N-PROPYLBENZENE	20 U	4.7 U	9.3 U	0.93 U	35 U	0.14 U
O-XYLENE	20 U	4.7 U	9.3 U	0.97 J	1300	0.14 U
SEC-BUTYLBENZENE	19 U	4.3 U	8.7 U	0.87 U	33 U	0.13 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	16 U	3.7 U	7.3 U	0.73 U	28 U	0.11 U
TERT-AMYL METHYL ETHER	9.6 U	2.2 U	4.5 U	0.45 U	17 U	0.067 U
TERT-BUTYLBENZENE	19 U	4.3 U	8.7 U	0.87 U	33 U	0.13 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	560 UR	130 UR	260 UR	26 UR	980 UR	3.9 UR
TETRACHLOROETHENE	41 U	9.7 U	19 U	1.9 U	73 U	0.29 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	19 U	4.3 U	8.7 U	1 J	950	0.82 B
TOTAL XYLENES	40 U	9.3 U	19 U	8.1 J	15000	0.28 U
TRANS-1,2-DICHLOROETHENE	90 J	6.3 U	13 U	1.3 U	48 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	27 U	6.3 U	13 U	1.3 U	48 U	0.19 U
TRICHLOROETHENE	360	240	2200	1.3 J	43 U	0.17 U
TRICHLOROFLUOROMETHANE	30 U	7 U	14 U	1.4 U	53 U	0.21 U
VINYL ACETATE	27 UR	6.3 UR	13 UR	1.3 UR	48 UR	0.19 UR
VINYL CHLORIDE	45 J	990	590	31	940	0.22 U
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-40S	MSA-MW-41I	MSA-MW-41S	MSA-MW-42I	MSA-MW-42S	MSA-MW-43S
SAMPLE ID	MSA-MW40S-052213	MSA-MW-41I-052913	MSA-MW-41S-052913	MSA-MW-42I-053013	MSA-MW-42S-053013	MSA-MW-43S-060613
SAMPLE DATE	20130522	20130529	20130529	20130530	20130530	20130606
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	NA	NA	NA	NA
1,4-DIOXANE	13	220	190	9.9	4.8	1.8
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-40S MSA-MW40S-052213 20130522 NORMAL GW	MSA-MW-41I MSA-MW-41I-052913 20130529 NORMAL GW	MSA-MW-41S MSA-MW-41S-052913 20130529 NORMAL GW	MSA-MW-42I MSA-MW-42I-053013 20130530 NORMAL GW	MSA-MW-42S MSA-MW-42S-053013 20130530 NORMAL GW	MSA-MW-43S MSA-MW-43S-060613 20130606 NORMAL GW
DIBENZOFURAN	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	2300	NA	1400 R	NA	26000	58 B
TPH (C10-C20)	NA	NA	NA	NA	NA	NA
TPH (C10-C32)	420 J	NA	250 J	NA	2100	1400
TPH (C20-C34)	NA	NA	NA	NA	NA	NA
METALS (UG/L)						
ANTIMONY	0.33 J	0.11 U	0.37 J	0.36 J	0.11 U	0.24 J
ARSENIC	3.4 J	8.3	1.1 B	3.9 J	13	1.3 B
BARIUM	22	29	110	79	760	62
BERYLLIUM	0.44 B	0.041 J	0.26 J	0.23 B	0.031 U	0.14 B
CADMIUM	0.16 J	0.026 U	29	0.22 J	0.026 U	0.058 B
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	0.97 J	0.88 J	0.73 J	2.2	1 J	0.57 B
COBALT	20	21	76	9.6	1.7 K	0.58 B
COPPER	5.4	0.35 B	3.7 B	3.2 B	0.24 U	2 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	2 K	0.35 B	0.33 B	2.3	0.16 B	0.59 B
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 UL	0.12 UL	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	1.2 J	4.2 J	3.5 J	1.5 J	0.81 U
NICKEL	5.9	10	76	3.9 K	0.29 J	0.79 J
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	1.8 J	0.96 B	3.6 J	0.84 B	1.1 B	0.82 B
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	0.034 B	0.0083 U	0.0083 U	0.047 B	0.0083 U	0.014 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE SAMPLE CODE MATRIX	MSA-MW-40S MSA-MW40S-052213 20130522 NORMAL GW	MSA-MW-41I MSA-MW-41I-052913 20130529 NORMAL GW	MSA-MW-41S MSA-MW-41S-052913 20130529 NORMAL GW	MSA-MW-42I MSA-MW-42I-053013 20130530 NORMAL GW	MSA-MW-42S MSA-MW-42S-053013 20130530 NORMAL GW	MSA-MW-43S MSA-MW-43S-060613 20130606 NORMAL GW
TUNGSTEN	0.099 B	0.017 U	0.017 U	0.19 B	0.017 U	0.017 U
VANADIUM	3.3 B	2.2 J	2.3 J	3.1 J	2.1 B	2.5 B
ZINC	4.4 B	42 B	970 J	330	2.1 U	24 B
DISSOLVED METALS (UG/L)						
ANTIMONY	0.17 J	0.11 U	0.39 J	0.25 J	0.11 U	0.21 J
ARSENIC	3.2 J	8.6	1.2 B	4.2 J	13	1 B
BARIUM	20	32	110	87	770	66
BERYLLIUM	0.33 B	0.048 J	0.26 J	0.17 B	0.031 U	0.14 B
CADMIUM	0.033 J	0.026 U	29	0.28 J	0.026 U	0.033 B
CALCIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	0.34 J	0.79 J	0.6 J	1 B	0.95 J	0.41 B
COBALT	20	22	74	11	1.8 K	0.54 B
COPPER	0.35 B	0.31 B	6.1	1.8 B	0.24 U	2.1 B
IRON	NA	NA	NA	NA	NA	NA
LEAD	0.93 B	0.17 B	0.23 B	0.64 B	0.14 U	0.26 B
MANGANESE	NA	NA	NA	NA	NA	NA
MERCURY	0.12 U	0.12 UL	0.12 UL	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	1.3 J	4.3 J	3.9 J	1.6 J	0.81 U
NICKEL	3.1 K	11	74	4.6	0.42 J	2.6 K
POTASSIUM	NA	NA	NA	NA	NA	NA
SELENIUM	1.1 J	0.82 B	3 J	0.86 B	1.2 B	0.58 B
SILVER	0.016 B	0.0083 U	0.0083 U	0.027 B	0.0083 U	0.01 B
SODIUM	NA	NA	NA	NA	NA	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.017 U	0.017 U	0.017 U	0.17 B	0.017 U	0.017 U
VANADIUM	2.4 B	2 J	2.6 J	1.6 J	1.8 B	2.2 B
ZINC	7.7 B	28 B	910 J	40	3.1 B	3.7 B
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	NA	NA	NA	NA
BROMIDE	NA	NA	NA	NA	NA	NA
CHEMICAL OXYGEN DEMAND	NA	NA	NA	NA	NA	NA
CHLORIDE	NA	NA	NA	NA	NA	NA
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA
NITRATE-N	NA	NA	NA	NA	NA	NA
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	NA	NA	NA	NA	NA	NA
TOTAL ORGANIC CARBON	NA	NA	NA	NA	NA	NA
TOTAL SUSPENDED SOLIDS	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	NA
PERCHLORATE	NA	NA	NA	NA	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-40S	MSA-MW-41I	MSA-MW-41S	MSA-MW-42I	MSA-MW-42S	MSA-MW-43S
SAMPLE ID	MSA-MW40S-052213	MSA-MW-41I-052913	MSA-MW-41S-052913	MSA-MW-42I-053013	MSA-MW-42S-053013	MSA-MW-43S-060613
SAMPLE DATE	20130522	20130529	20130529	20130530	20130530	20130606
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-44S	MSA-MW-45S	RW-01I			
SAMPLE ID	MSA-MW-44S-060413	MSA-MW-45S-052213	MSA-RW-1I-030713	MSA-RW-1I-030713-D	MSA-RW-1I-061213	MSA-RW-1I-COMP
SAMPLE DATE	20130604	20130522	20130307	20130307	20130612	20130507
SAMPLE CODE	NORMAL	NORMAL	ORIG	DUP	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	2.1 U	290 U	120 U	120 U	NA	33 U
1,1,1-TRICHLOROETHANE	2 U	280 U	110 U	110 U	NA	31 U
1,1,2,2-TETRACHLOROETHANE	1.6 U	230 U	90 U	90 U	NA	26 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	2.5 U	350 U	140 U	140 U	NA	40 U
1,1-DICHLOROETHANE	59	190 U	75 U	75 U	NA	21 U
1,1-DICHLOROETHENE	1.7 U	240 U	95 U	95 U	NA	27 U
1,1-DICHLOROPROPENE	1.2 U	160 U	65 U	65 U	NA	19 U
1,2,3-TRICHLOROBENZENE	1.5 U	210 U	85 U	85 U	NA	24 U
1,2,3-TRICHLOROPROPANE	3.9 U	540 U	220 U	220 U	NA	61 U
1,2,3-TRIMETHYLBENZENE	0.054 U	7.4 U	3 U	3 U	NA	0.84 U
1,2,4-TRICHLOROBENZENE	1.4 U	860 J	360 J	360 J	NA	21 U
1,2,4-TRIMETHYLBENZENE	1.1 U	150 U	60 U	60 U	NA	17 U
1,2-DIBROMO-3-CHLOROPROPANE	6.1 U	840 U	340 U	340 U	NA	96 U
1,2-DIBROMOETHANE	2.2 U	300 U	120 U	120 U	NA	34 U
1,2-DICHLOROBENZENE	1.2 U	160 U	65 U	65 U	NA	19 U
1,2-DICHLOROETHANE	2 U	460 J	130 J	130 J	NA	66 J
1,2-DICHLOROPROPANE	1.6 U	230 U	90 U	90 U	NA	26 U
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	2.7 J	180 U	70 U	70 U	NA	20 U
1,3-DICHLOROPROPANE	1.5 U	200 U	80 U	80 U	NA	23 U
1,4-DICHLOROBENZENE	2.5 J	160 U	65 U	65 U	NA	19 U
1,4-DIOXANE	NA	NA	NA	NA	NA	NA
1-BUTANOL	NA	NA	NA	NA	NA	NA
2,2-DICHLOROPROPANE	1.2 U	160 U	65 U	65 U	NA	19 U
2-BUTANONE	5.2 U	710 U	290 U	290 U	NA	81 U
2-CHLOROETHYL VINYL ETHER	9 U	1200 U	500 U	500 U	NA	140 U
2-CHLOROTOLUENE	1 U	140 U	55 U	55 U	NA	16 U
2-HEXANONE	3.7 U	510 U	210 U	210 U	NA	59 U
2-METHYLBUTANE	NA	NA	NA	NA	NA	NA
2-NITROPROPANE	NA	NA	NA	NA	NA	NA
2-OCTANONE	NA	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	1.6 U	230 U	90 U	90 U	NA	26 U
4-ISOPROPYLTOLUENE	1.1 U	150 U	60 U	60 U	NA	17 U
4-METHYL-2-PENTANONE	2.9 U	400 U	160 U	160 U	NA	46 U
ACETONE	10 U	1400 U	550 U	550 U	NA	160 UR
BENZENE	1.2 U	230 J	65 U	65 U	NA	19 U
BROMOBENZENE	1.2 U	160 U	65 U	65 U	NA	19 U
BROMOCHLOROMETHANE	2.6 U	360 U	150 U	150 U	NA	41 U
BROMODICHLOROMETHANE	1.4 U	190 U	75 U	75 U	NA	21 U
BROMOFORM	5.8 U	800 U	320 U	320 U	NA	91 U
BROMOMETHANE	3.7 U	510 U	210 U	210 U	NA	59 U
CARBON DISULFIDE	1.2 U	160 U	65 U	65 U	NA	19 U
CARBON TETRACHLORIDE	1.2 U	160 U	65 U	65 U	NA	19 U
CHLOROBENZENE	1.4 U	190 U	75 U	75 U	NA	21 U
CHLORODIBROMOMETHANE	1.6 U	230 U	90 U	90 U	NA	26 U
CHLOROETHANE	4 J	360 U	150 U	150 U	NA	41 U
CHLOROFORM	1.5 U	200 U	80 U	80 U	NA	30 J
CHLOROMETHANE	2.7 U	380 U	150 U	150 U	NA	43 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-44S	MSA-MW-45S	RW-01I			
SAMPLE ID	MSA-MW-44S-060413	MSA-MW-45S-052213	MSA-RW-1I-030713	MSA-RW-1I-030713-D	MSA-RW-1I-061213	MSA-RW-1I-COMP
SAMPLE DATE	20130604	20130522	20130307	20130307	20130612	20130507
SAMPLE CODE	NORMAL	NORMAL	ORIG	DUP	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
CIS-1,2-DICHLOROETHENE	27	34000	8300	8200	NA	3400
CIS-1,3-DICHLOROPROPENE	1.3 U	180 U	70 U	70 U	NA	20 U
CYCLOHEXANE	NA	NA	NA	NA	NA	NA
DIBROMOMETHANE	2.5 U	350 U	140 U	140 U	NA	40 U
DICHLORODIFLUOROMETHANE	2.8 U	390 U	160 U	160 U	NA	44 U
DIISOPROPYL ETHER	14 U	1900 U	750 U	750 U	NA	210 U
DI-SEC-BUTYL ETHER	NA	NA	NA	NA	NA	NA
ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	NA	NA	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	1 U	140 U	55 U	55 U	NA	16 U
ETHYLBENZENE	1.9 J	210 U	85 U	85 U	NA	24 U
HEXACHLOROBUTADIENE	2.7 U	380 U	150 U	150 U	NA	43 U
HEXANE	NA	NA	NA	NA	NA	NA
INDANE	NA	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	1.2 U	160 U	65 U	65 U	NA	19 U
M+P-XYLENES	2.2 U	300 U	120 U	120 U	NA	34 U
METHYL ACETATE	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	1.5 U	210 U	85 U	85 U	NA	24 U
METHYLCYCLOHEXANE	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	3 U	1600	170 U	170 U	NA	47 U
NAPHTHALENE	150	300 U	120 U	120 U	NA	34 U
N-BUTYLBENZENE	1.1 U	150 U	60 U	60 U	NA	17 U
N-PROPYLBENZENE	1.3 U	180 U	70 U	70 U	NA	20 U
O-XYLENE	1.3 U	180 U	70 U	70 U	NA	20 U
SEC-BUTYLBENZENE	1.2 U	160 U	65 U	65 U	NA	19 U
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
STYRENE	1 U	140 U	55 U	55 U	NA	16 U
TERT-AMYL METHYL ETHER	0.61 U	84 U	34 U	34 U	NA	9.6 U
TERT-BUTYLBENZENE	1.2 U	160 U	65 U	65 U	NA	19 U
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA
TERTIARY-BUTYL ALCOHOL	35 UR	4900 UR	2000 UR	2000 UR	NA	560 UR
TETRACHLOROETHENE	2.6 U	360 U	150 U	150 U	NA	41 U
TETRAHYDROFURAN	NA	NA	NA	NA	NA	NA
TOLUENE	1.3 B	1200 J	65 U	65 U	NA	19 U
TOTAL XYLENES	2.5 U	350 U	140 U	140 U	NA	40 U
TRANS-1,2-DICHLOROETHENE	1.8 J	240 U	95 U	95 U	NA	27 U
TRANS-1,3-DICHLOROPROPENE	1.7 U	240 U	95 U	95 U	NA	27 U
TRICHLOROETHENE	2.2 J	35000	14000 J	14000 J	NA	3700
TRICHLOROFLUOROMETHANE	1.9 U	260 U	110 U	110 U	NA	30 U
VINYL ACETATE	1.7 UR	240 UR	95 UR	95 UR	NA	27 U
VINYL CHLORIDE	16	22000	2100	2100	NA	500
HALOACETIC ACIDS (UG/L)						
BROMOACETIC ACID	NA	NA	NA	NA	NA	NA
CHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
DIBROMOACETIC ACID	NA	NA	NA	NA	NA	NA
DICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA
TRICHLOROACETIC ACID	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-44S	MSA-MW-45S	RW-01I			
SAMPLE ID	MSA-MW-44S-060413	MSA-MW-45S-052213	MSA-RW-1I-030713	MSA-RW-1I-030713-D	MSA-RW-1I-061213	MSA-RW-1I-COMP
SAMPLE DATE	20130604	20130522	20130307	20130307	20130612	20130507
SAMPLE CODE	NORMAL	NORMAL	ORIG	DUP	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
VOLATILE GASES (UG/L)						
ETHANE	NA	NA	NA	NA	NA	NA
ETHENE	NA	NA	NA	NA	NA	NA
METHANE	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)						
1,1-BIPHENYL	NA	NA	9.8 U	9.5 U	NA	15 U
1,4-DIOXANE	15	1600	400	390	NA	590
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	4.9 U	4.8 U	NA	7.6 U
2,4,5-TRICHLOROPHENOL	NA	NA	3.7 U	3.6 U	NA	5.7 U
2,4,6-TRICHLOROPHENOL	NA	NA	9.8 U	9.5 U	NA	15 U
2,4-DICHLOROPHENOL	NA	NA	9.8 U	9.5 U	NA	15 U
2,4-DIMETHYLPHENOL	NA	NA	9.8 U	9.5 U	NA	15 U
2,4-DINITROPHENOL	NA	NA	29 U	29 U	NA	46 U
2,4-DINITROTOLUENE	NA	NA	3.3 U	3.2 U	NA	5.1 U
2,6-DINITROTOLUENE	NA	NA	9.8 U	9.5 U	NA	15 U
2-CHLORONAPHTHALENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
2-CHLOROPHENOL	NA	NA	3.6 U	3.5 U	NA	5.5 U
2-METHYLNAPHTHALENE	NA	NA	3.8	3.8	NA	1.9 U
2-METHYLPHENOL	NA	NA	9.8 U	9.5 U	NA	15 U
2-NITROANILINE	NA	NA	9.8 U	9.5 U	NA	15 U
2-NITROPHENOL	NA	NA	3.4 U	3.3 U	NA	5.3 U
3&4-METHYLPHENOL	NA	NA	9.2 U	8.9 U	NA	14 U
3,3'-DICHLOROBENZIDINE	NA	NA	4.5 U	4.4 U	NA	7 U
3-NITROANILINE	NA	NA	3.4 U	3.3 U	NA	5.3 U
4,6-DINITRO-2-METHYLPHENOL	NA	NA	29 U	29 U	NA	46 U
4-BROMOPHENYL PHENYL ETHER	NA	NA	9.8 U	9.5 U	NA	15 U
4-CHLORO-3-METHYLPHENOL	NA	NA	9.8 U	9.5 U	NA	15 U
4-CHLOROANILINE	NA	NA	9.8 U	9.5 U	NA	15 U
4-CHLOROPHENYL PHENYL ETHER	NA	NA	3.7 U	3.6 U	NA	5.7 U
4-NITROANILINE	NA	NA	9.8 U	9.5 U	NA	15 U
4-NITROPHENOL	NA	NA	29 U	29 U	NA	46 U
ACENAPHTHENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
ACENAPHTHYLENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
ACETOPHENONE	NA	NA	4.2 U	4 U	NA	6.5 U
ANTHRACENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
ATRAZINE	NA	NA	4.2 U	4 U	NA	6.5 U
BENZALDEHYDE	NA	NA	4.8 U	4.6 U	NA	7.4 U
BENZO(A)ANTHRACENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
BENZO(A)PYRENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
BENZO(B)FLUORANTHENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
BENZO(G,H,I)PERYLENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
BENZO(K)FLUORANTHENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
BIS(2-CHLOROETHOXY)METHANE	NA	NA	3.9 U	3.8 U	NA	6.1 U
BIS(2-CHLOROETHYL)ETHER	NA	NA	1.2 U	1.2 U	NA	1.9 U
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	9.8 U	9.5 U	NA	15 U
BUTYL BENZYL PHTHALATE	NA	NA	9.8 U	9.5 U	NA	15 U
CAPROLACTAM	NA	NA	9.8 U	9.5 U	NA	15 U
CARBAZOLE	NA	NA	3.4 U	3.3 U	NA	5.3 U
CHRYSENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
DIBENZO(A,H)ANTHRACENE	NA	NA	1.2 U	1.2 U	NA	1.9 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-44S	MSA-MW-45S	RW-01I			
SAMPLE ID	MSA-MW-44S-060413	MSA-MW-45S-052213	MSA-RW-1I-030713	MSA-RW-1I-030713-D	MSA-RW-1I-061213	MSA-RW-1I-COMP
SAMPLE DATE	20130604	20130522	20130307	20130307	20130612	20130507
SAMPLE CODE	NORMAL	NORMAL	ORIG	DUP	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
DIBENZOFURAN	NA	NA	1.2 U	1.2 U	NA	1.9 U
DIETHYL PHTHALATE	NA	NA	7.4 U	7.1 U	NA	11 U
DIMETHYL PHTHALATE	NA	NA	3.6 U	3.5 U	NA	5.5 U
DI-N-BUTYL PHTHALATE	NA	NA	8.2 U	8 U	NA	13 U
DI-N-OCTYL PHTHALATE	NA	NA	9.8 U	9.5 U	NA	15 U
FLUORANTHENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
FLUORENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
HEXACHLOROBENZENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
HEXACHLOROBUTADIENE	NA	NA	3.3 U	3.2 U	NA	5.1 U
HEXACHLOROCYCLOPENTADIENE	NA	NA	9.8 U	9.5 U	NA	15 U
HEXACHLOROETHANE	NA	NA	9.8 U	9.5 U	NA	15 U
INDENO(1,2,3-CD)PYRENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
ISOPHORONE	NA	NA	3.3 U	3.2 U	NA	5.1 U
NAPHTHALENE	NA	NA	3.5	3.6	NA	1.9 U
NITROBENZENE	NA	NA	0.49 U	0.48 U	NA	0.76 U
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	9.8 U	9.5 U	NA	15 U
N-NITROSODIPHENYLAMINE	NA	NA	3.8 U	3.7 U	NA	5.9 U
PENTACHLOROPHENOL	NA	NA	29 U	29 U	NA	46 U
PHENANTHRENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
PHENOL	NA	NA	7.4 U	7.1 U	NA	11 U
PYRENE	NA	NA	1.2 U	1.2 U	NA	1.9 U
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	97 J	31000	10000	10000	NA	3500
TPH (C10-C20)	NA	NA	1100	1200	NA	230 J
TPH (C10-C32)	1100	1200	NA	NA	NA	NA
TPH (C20-C34)	NA	NA	330 J	430 J	NA	230 U
METALS (UG/L)						
ANTIMONY	0.24 J	0.32 J	0.33 B	0.28 B	1.8 U	0.27 B
ARSENIC	0.82 J	2.5 J	0.79 J	0.35 J	3.2 U	3 J
BARIUM	120	25	NA	NA	18 J	32
BERYLLIUM	0.08 B	0.53 B	1	0.83 J	0.66 J	1.1
CADMIUM	0.049 J	3600	530	540	340 J	380
CALCIUM	NA	NA	NA	NA	NA	29000
CHROMIUM	2.2	6500	63	63	3.8 J	2.7 K
COBALT	0.36 B	31	NA	NA	410	370
COPPER	1.1 B	9	31	30	4.8 J	8.8
IRON	NA	NA	55000	55000	NA	40000
LEAD	1.7	0.7 B	1.9	1.9	1.9 B	1.3
MAGNESIUM	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	8000	8000	NA	6000
MERCURY	0.12 U	0.12 U	0.06 J	0.092 J	0.12 U	0.12 U
MOLYBDENUM	0.81 U	2.6 J	NA	NA	1.3 U	0.81 U
NICKEL	1.1 B	200	140 J	140 J	110	99
POTASSIUM	NA	NA	NA	NA	NA	3400
SELENIUM	0.41 J	6.5	2.4 B	1.4 B	4.1 U	10
SILICON DIOXIDE	NA	NA	NA	NA	NA	NA
SILVER	0.015 B	0.01 B	0.036 U	0.036 U	2.2 U	0.054 B
SODIUM	NA	NA	NA	NA	NA	140000
THALLIUM	0.4 U	0.4 U	0.21 B	0.21 B	12 J	0.4 U

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-44S	MSA-MW-45S	RW-01I			
SAMPLE ID	MSA-MW-44S-060413	MSA-MW-45S-052213	MSA-RW-1I-030713	MSA-RW-1I-030713-D	MSA-RW-1I-061213	MSA-RW-1I-COMP
SAMPLE DATE	20130604	20130522	20130307	20130307	20130612	20130507
SAMPLE CODE	NORMAL	NORMAL	ORIG	DUP	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TUNGSTEN	0.5 J	0.017 U	NA	NA	NA	NA
VANADIUM	11	1.7 B	NA	NA	9.4 J	9 J
ZINC	51 B	760	420	420	350 J	320
DISSOLVED METALS (UG/L)						
ANTIMONY	0.21 J	0.33 J	0.14 B	0.078 B	1.8 U	0.22 B
ARSENIC	0.68 J	2.4 J	0.29 U	0.29 U	3.2 U	2.4 J
BARIUM	120	25	NA	NA	18 J	33
BERYLLIUM	0.063 B	0.47 B	1.1	0.93 J	0.69 J	1.1
CADMIUM	0.026 U	3600	500	490	340 J	370
CALCIUM	NA	NA	NA	NA	NA	29000
CHROMIUM	0.9 B	6500	5.8	5.7	3.6 J	1.6 J
COBALT	0.29 B	30	NA	NA	400	370
COPPER	0.24 U	8.9	14	13	5.2 J	8.5
IRON	NA	NA	52000	51000	NA	39000
LEAD	0.27 B	0.61 B	0.69 J	0.67 J	2.4 B	0.72 B
MANGANESE	NA	NA	7700	7600	NA	6100
MERCURY	0.12 U	0.12 U	0.038 U	0.038 U	0.12 U	0.12 U
MOLYBDENUM	0.81 U	2.6 J	NA	NA	1.3 U	0.81 U
NICKEL	0.59 B	200	110 J	110 J	110	100
POTASSIUM	NA	NA	NA	NA	NA	3500
SELENIUM	0.34 U	6.5	1.6 B	1.4 B	4.1 U	10
SILVER	0.0083 U	0.0083 U	0.036 U	0.036 U	2.2 U	0.021 B
SODIUM	NA	NA	NA	NA	NA	140000
THALLIUM	0.4 U	0.4 U	0.19 B	0.18 B	12 J	0.4 U
TUNGSTEN	0.46 J	0.023 B	NA	NA	NA	NA
VANADIUM	10	1.4 B	NA	NA	9.4 J	0.2 B
ZINC	2.2 B	770	400	400	350 J	320
MISCELLANEOUS PARAMETERS (MG/L)						
ALKALINITY	NA	NA	5.9	3.1 J	6.6	4.3 J
BROMIDE	NA	NA	0.92	0.78	NA	0.71
CHEMICAL OXYGEN DEMAND	NA	NA	68	66	NA	38
CHLORIDE	NA	NA	160	160	NA	140
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	250	250	NA	210
NITRATE-N	NA	NA	0.023 U	0.023 U	NA	0.023 U
NITRITE-N	NA	NA	NA	NA	NA	NA
ORTHOPHOSPHATE-P	NA	NA	NA	NA	NA	NA
SULFATE	NA	NA	580	580	NA	390
TOTAL DISSOLVED SOLIDS	NA	NA	1100	1000	NA	850
TOTAL ORGANIC CARBON	NA	NA	7.9	8	7.5	5.9
TOTAL SUSPENDED SOLIDS	NA	NA	27	24	5	5
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA	NA
PERCHLORATE	NA	NA	NA	NA	NA	NA
RADIONUCLIDES (PCI/L)						
RADIUM	NA	NA	NA	NA	NA	NA
RADIUM-228	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	MSA-MW-44S	MSA-MW-45S	RW-01I			
SAMPLE ID	MSA-MW-44S-060413	MSA-MW-45S-052213	MSA-RW-1I-030713	MSA-RW-1I-030713-D	MSA-RW-1I-061213	MSA-RW-1I-COMP
SAMPLE DATE	20130604	20130522	20130307	20130307	20130612	20130507
SAMPLE CODE	NORMAL	NORMAL	ORIG	DUP	NORMAL	NORMAL
MATRIX	GW	GW	GW	GW	GW	GW
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)						
1-BUTANOL	NA	NA	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR DUMP ROAD AREA GROUNDWATER SAMPLES, 2013
LOCKHEED MARTIN, MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

B - Laboratory blank contamination.
J - Positive result is considered estimated as a result of technical noncompliance.
K - Positive result is considered to be biased high as a result of technical noncompliance.
L - Positive result is considered to be biased low as a result of technical noncompliance.
NA - Not analyzed
MG/L - milligrams per liter.
R - Result rejected as a result of technical noncompliance.
U - Not detected at listed detection limit.
UG/L - micrograms per liter.
UJ - Nondetected value considered to be estimated as a result of technical noncompliance.
UL - Nondetected value considered to be biased low as a result of technical noncompliance.
UR - Nondetected value rejected as a result of technical noncompliance.

TABLE 4-2
POSITIVE RESULTS FOR SOIL SAMPLES
TAXIWAY TANGO SOIL BORINGS
2013 SOIL CHARACTERIZATION
MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	Vadose Zone/Unsaturated Soils (0 to 10 feet below gravel sub-base)							
	DR-SB-200	DR-SB-200	DR-SB-201	DR-SB-201	DR-SB-202	DR-SB-202	DR-SB-203	DR-SB-203
SAMPLE ID	DR-SB-200-04-06	DR-SB-200-10-12	DR-SB-201-02-04	DR-SB-201-08-10	DR-SB-202-02-04	DR-SB-202-06-08	DR-SB-203-02-04	DR-SB-203-10-12
SAMPLE DATE	20130826	20130826	20130826	20130826	20130827	20130827	20130826	20130826
TRICHLOROETHENE	--	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--	--
TOLUENE	0.37 B	--	--	--	--	--	--	--
ETHYLBENZENE	--	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--	--
TOTAL BTEX	--	--	--	--	--	--	--	--

TABLE 4-2
POSITIVE RESULTS FOR SOIL SAMPLES
TAXIWAY TANGO SOIL BORINGS
2013 SOIL CHARACTERIZATION
MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

	Vadose Zone/Unsaturated Soils (0 to 10 feet below gravel sub-base)							
LOCATION	DR-SB-204	DR-SB-204	DR-SB-205	DR-SB-205	DR-SB-206	DR-SB-206	DR-SB-207	DR-SB-207
SAMPLE ID	DR-SB-204-02-04	DR-SB-204-08-10	DR-SB-205-06-08	DR-SB-205-10-12	DR-SB-206-04-06	DR-SB-206-08-10	DR-SB-207-02-04	DR-SB-207-10-12
SAMPLE DATE	20130827	20130827	20130827	20130827	20130827	20130827	20130827	20130827
TRICHLOROETHENE	--	35	--	--	--	--	--	--
BENZENE	--	1.3 J	1.1 J	0.33 J	--	0.19 J	0.37 J	0.29 J
TOLUENE	0.48 J	--	1.5 J	--	--	0.74 J	0.34 J	1.8 J
ETHYLBENZENE	--	--	0.59 J	--	--	--	0.33 J	--
TOTAL XYLENES	0.5 J	0.72 J	10	--	--	0.5 J	1.1 J	0.72 J
TOTAL BTEX	0.98 J	2.02 J	13.19	--	--	1.43 J	2.14 J	2.81 J

TABLE 4-2
POSITIVE RESULTS FOR SOIL SAMPLES
TAXIWAY TANGO SOIL BORINGS
2013 SOIL CHARACTERIZATION
MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

	Vadose Zone/Unsaturated Soils (0 to 10 feet below gravel sub-base)							
LOCATION	DR-SB-208	DR-SB-208	DR-SB-209	DR-SB-209	DR-SB-210	DR-SB-210	DR-SB-211	DR-SB-211
SAMPLE ID	DR-SB-208-04-06	DR-SB-208-08-10	DR-SB-209-04-06	DR-SB-209-08-10	DR-SB-210-04-06	DR-SB-210-12-13	DR-SB-211-04-06	DR-SB-211-08-10
SAMPLE DATE	20130827	20130827	20130827	20130827	20130827	20130827	20130827	20130827
TRICHLOROETHENE	--	--	--	--	--	--	--	--
BENZENE	0.22 J	--	--	--	--	--	--	--
TOLUENE	0.53 J	--	--	--	--	6.7	0.38 J	--
ETHYLBENZENE	0.34 J	--	--	--	--	--	--	--
TOTAL XYLENES	0.57 J	--	--	--	--	--	--	--
TOTAL BTEX	1.66 J	--	--	--	--	--	0.38	--

TABLE 4-2
POSITIVE RESULTS FOR SOIL SAMPLES
TAXIWAY TANGO SOIL BORINGS
2013 SOIL CHARACTERIZATION
MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

LOCATION	Vadose Zone/Unsaturated Soils (0 to 10 feet below sub-base)							
	DR-SB-212	**DR-SB-212**	**DR-SB-213**	**DR-SB-213**	**DR-SB-214**	**DR-SB-214**	**DR-SB-215**	**DR-SB-215**
SAMPLE ID	**DR-SB-212-04-06**	**DR-SB-212-11-13**	**DR-SB-213-04-06**	**DR-SB-213-10-12**	**DR-SB-214-0-02**	**DR-SB-214-10-12**	**DR-SB-215-0-02**	**DR-SB-215-06-08**
SAMPLE DATE	**20130827**	**20130827**	**20130828**	**20130828**	**20130828**	**20130828**	**20130828**	**20130828**
TRICHLOROETHENE	--	190000	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--	--
TOLUENE	--	1900 J	--	1.4 B	--	--	--	0.56 B
ETHYLBENZENE	--	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--	--
TOTAL BTEX	--	1900	--	--	--	--	--	--

TABLE 4-2
POSITIVE RESULTS FOR SOIL SAMPLES
TAXIWAY TANGO SOIL BORINGS
2013 SOIL CHARACTERIZATION
MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

	Vadose Zone/Unsaturated Soils (0 to 10 feet below gravel sub-base)							
LOCATION	DR-SB-216	DR-SB-216	DR-SB-217	DR-SB-217	DR-SB-218	DR-SB-218	DR-SB-219	DR-SB-219
SAMPLE ID	DR-SB-216-02-04	DR-SB-216-06-08	DR-SB-217-02-04	DR-SB-217-06-08	DR-SB-218-02-04	DR-SB-218-06-08	DR-SB-219-02-04	DR-SB-219-08-10
SAMPLE DATE	20130828	20130828	20130828	20130828	20130828	20130828	20130829	20130829
TRICHLOROETHENE	--	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--	--
TOLUENE	--	--	0.22 B	0.47 B	--	1.5 B	--	--
ETHYLBENZENE	--	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--	--
TOTAL BTEX	--	--	--	--	--	--	--	--

TABLE 4-2
POSITIVE RESULTS FOR SOIL SAMPLES
TAXIWAY TANGO SOIL BORINGS
2013 SOIL CHARACTERIZATION
MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

	Vadose Zone/Unsaturated Soils (0 to 10 feet below gravel sub-base)							
LOCATION	DR-SB-220	DR-SB-220	DR-SB-221	DR-SB-221	DR-SB-222	DR-SB-222	DR-SB-223	DR-SB-223
SAMPLE ID	DR-SB-220-02-04	DR-SB-220-04-06	DR-SB-221-04-06	DR-SB-221-08-10	DR-SB-222-02-04	DR-SB-222-08-10	DR-SB-223-04-06	DR-SB-223-06-08
SAMPLE DATE	20130829	20130829	20130829	20130829	20130829	20130829	20130829	20130829
TRICHLOROETHENE	--	--	--	--	--	0.59 J	--	0.41 J
BENZENE	--	--	--	--	--	--	--	--
TOLUENE	--	--	--	1.9 J	--	--	--	--
ETHYLBENZENE	--	--	--	--	--	--	--	--
TOTAL XYLENES	--	--	--	--	--	--	--	--
TOTAL BTEX	--	--	--	1.9	--	--	--	--

TABLE 4-2
POSITIVE RESULTS FOR SOIL SAMPLES
TAXIWAY TANGO SOIL BORINGS
2013 SOIL CHARACTERIZATION
MARTIN STATE AIRPORT, MIDDLE RIVER, MARYLAND

	Vadose Zone/Unsaturated Soils (0 to 10 feet below gravel sub-base)			
LOCATION	DR-SB-224	DR-SB-224	DR-SB-225	DR-SB-225
SAMPLE ID	DR-SB-224-02-04	DR-SB-224-06-08	DR-SB-225-02-04	DR-SB-225-04-06
SAMPLE DATE	20130829	20130829	20130829	20130829
TRICHLOROETHENE	--	--	8.5	--
BENZENE	--	--	--	--
TOLUENE	--	--	--	--
ETHYLBENZENE	--	--	--	--
TOTAL XYLENES	--	--	--	--
TOTAL BTEX	--	--	--	--